

Greenhouse Gas Emissions Assessment

Bridge Point Upland Project City of Upland, California

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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 |
| CO ₂ | carbon dioxide |
| CO ₂ e | 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 |
| CH ₄ | Methane |
| MMTCO ₂ e | million metric tons of carbon dioxide equivalent |
| MTCO ₂ e | million tons of carbon dioxide equivalent |
| NHTSA | National Highway Traffic Safety Administration |
| NF ₃ | nitrogen trifluoride |
| N ₂ O | 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 |
| SF ₆ | sulfur hexafluoride |
| TAC | toxic air contaminants |

1 INTRODUCTION

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

1.1 Project Location

The Bridge Point Upland Project (proposed Project) is located in the City of Upland north of Interstate 10 (I-10), south of State Route 210 (SR-210), west of Interstate 15 (I-15), and east of State Route 57 (SR-57) as depicted in [Exhibit 1: Regional Vicinity](#). The overall Project site is located on approximately 50.25 acres northeast of Central Avenue and Foothill Boulevard, as depicted in [Exhibit 2: Site Vicinity](#).

The Project site is in a predominately industrial and commercial area. The land uses surrounding the Project site consist of a mix of uses including industrial, commercial, residential, an airport, and a major transportation corridor. Properties zoned for Highway Commercial uses are located immediately south of the site. Foothill Boulevard is located farther south of the site. Foothill Boulevard is located further south of the site. Cable Airport is located directly north of the site and a portion of the airport, along with industrial uses are located west of the site. Commercial uses, including a Lowe's Home Improvement Store and a commercial shopping center, are located east of the site.

1.2 Project Description

The proposed Project is comprised of one warehouse/ parcel delivery service building with an ancillary office/retail space on approximately 50.25 acres as shown in [Exhibit 3: Site Plan](#). The Project site is located on Assessor Parcel Nos. (APN) 1006-351-09, 1006-351-10, 1006-572-11, 1006-551-12, 1006-551-22, and 1006-574-10. Project entitlement includes a Design Review and Site Plan Review application; a Lot Line Adjustment; and a determination from the Airport Land Use Committee that the Project is compatible with the Cable Airport Land Use Compatibility Plan.

The Project building is proposed to be one level and total approximately 201,096 square feet (sf), of which approximately 191,096 sf would be warehouse/parcel delivery uses and 10,000 sf would be office/retail uses. The office/retail component would include an office area for employees, and a small area for visitors to pick up pre-ordered packages. To be conservative, this analysis evaluates a maximum development scenario that includes a 276,250 sf building.

The western building frontage would include 16 dock-hi doors for trucks, and 8 van loading doors would be located on both the northern and southern building frontages. The Project would require a minimum of 220 automobile parking spaces. Trailer parking for the warehouse building would include approximately 12 stalls and an additional 1,104 van parking stalls would be located on-site.

Building Design

The warehouse/parcel delivery service building is designed as a class A building. The building architecture features a modern aesthetic including glazing with brow projections to focus attention on the entries and street frontages. The major building material is concrete which lends itself to a modern palette with

reveals to enhance the building architecture. The building would have a maximum height of approximately 44 feet with parapets and façade, which would provide depth and shadowing and points of visual interest for the architecture. This relief in the design also provides locations for accents in the landscape design.

Access and Parking

Vehicular access to the Project would be provided via 13th Street, the north leg of Central Avenue/Foothill Boulevard, and two right-in/right-out driveways on Foothill Boulevard. The driveway on 13th Street would provide access to automobiles and vans only; trucks would access the site only via the driveway at the north leg of Central Avenue/Foothill Boulevard. Street improvements would be provided along Foothill Boulevard at the Project frontage to include improvements to curbs, gutters, sidewalks, street lights, traffic signal equipment and signing and striping as required. Street improvements would also be made to Central Avenue and 13th Street.

Landscaping

The Project would be landscaped along all four frontages of the site, including landscaped slopes along the western and southern portions of the site. Landscaping would also be installed throughout the parking areas. The conceptual landscape design would feature California drought tolerant and native species in an aesthetically pleasing and colorful palette.

The Project building would include 455,380 sf of landscaping, which would account for more than 21 percent in landscape coverage, more than four times the City's minimum requirement of 5 percent. The warehouse/parcel delivery service building would be setback more than 200 feet on the southern building frontage and would exceed minimum setback requirements of 5 feet for front and side setbacks and rear setbacks of 10 feet.

Construction

Construction of the proposed Project is expected to commence in the first quarter of 2020 with a construction duration of approximately 7 months. Project construction would be completed in one phase with buildout by the third quarter of 2020. Total excavation and fill of soils for the proposed Project is mostly balanced with approximately 431 cubic yards (cy) of exported soil.

Existing Project Site

The Project site consists of both disturbed land on the western portion of the site and undeveloped land on the eastern portion of the site. The disturbed portion of the land is used for outdoor dirt, sand, gravel and rock stockpiling, processing and crushing; the existing stockpiles are being processed and removed by the current operator as part of existing operations, and the removal of those materials is not a part of the Project. No structures are currently located on the site. There is existing utility access (water, sewer, electricity, gas) located in the immediate vicinity of the proposed Project and these services would be extended to the site to serve the proposed Project.

A map of Southern California highlighting the project site location. The map shows major cities including Los Angeles, Palmdale, San Bernardino, Riverside, Santa Ana, Temecula, San Clemente, and Escondido. A red star marks the "PROJECT SITE" near Upland. Major highways are shown with their respective shields (Interstates 5, 10, 15, 210, 405, 605, 780; State Routes 91, 94, 148). The map also includes a north arrow and a scale indicator stating "Not to Scale".

Exhibit 2: Site Vicinity



Source: Google Maps, 2018.

Exhibit 3: Site Plan



Source: Herdman Architecture and Design, 2019.

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 (CO₂), methane (CH₄), and nitrous oxide (N₂O). 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 (SF₆), and nitrogen trifluoride (NF₃); 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 atmosphere¹. Table 1: Description of Greenhouse Gases describes the primary GHGs attributed to global climate change, including their physical properties.

¹ 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.

Table 1: Description of Greenhouse Gases

| Greenhouse Gas | Description |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Carbon Dioxide (CO ₂) | 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. |
| Nitrous Oxide (N ₂ O) | N ₂ O is largely attributable to agricultural practices and soil management. Primary human-related sources of N ₂ O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N ₂ O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. The Global Warming Potential of N ₂ O is 298. |
| Methane (CH ₄) | 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. |
| Hydrofluorocarbons (HFCs) | 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. |
| Perfluorocarbons (PFCs) | 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. |
| Chlorofluorocarbons (CFCs) | 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. |
| Sulfur Hexafluoride (SF ₆) | 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. |
| Hydrochlorofluorocarbons (HCFCs) | 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. |
| Nitrogen Trifluoride (NF ₃) | 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, <i>Overview of Greenhouse Gases</i> , April 11, 2018 (https://www.epa.gov/ghgemissions/overview-greenhouse-gases); U.S. EPA, <i>Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016</i> , 2018; Intergovernmental Panel on Climate Change, <i>Climate Change 2007: The Physical Science Basis</i> , 2007; National Research Council, <i>Advancing the Science of Climate Change</i> , 2010; U.S. EPA, <i>Methane and Nitrous Oxide Emission from Natural Sources</i> , 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 (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) 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 CO₂ 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.

Clean Power Plan and New Source Performance Standards for Electric Generating Units. On October 23, 2015, the EPA published a final rule (effective December 22, 2015) establishing the carbon pollution emission guidelines for existing stationary sources: electric utility generating units (80 Federal Register [FR] 64510–64660), also known as the Clean Power Plan (CPP). These guidelines prescribe how states must develop plans to reduce GHG emissions from existing fossil-fuel-fired electric generating units. The guidelines establish CO₂ emission performance rates representing the best system of emission reduction for two subcategories of existing fossil-fuel-fired electric generating units: one fossil-fuel-fired electric utility steam-generating unit and two stationary combustion turbines. Concurrently, the EPA published a final rule (effective October 23, 2015) establishing standards of performance for GHG emissions from new, modified, and reconstructed stationary sources: electric utility generating units (80 FR 64661–65120). The rule prescribes CO₂ emission standards for newly constructed, modified, and reconstructed affected fossil-fuel-fired electric utility generating units. The U.S. Supreme Court stayed implementation of the CPP pending resolution of several lawsuits. Additionally, in March 2017, the federal government directed the EPA Administrator to review the CPP to determine whether it is consistent with current executive policies concerning GHG emissions, climate change, and energy.

Presidential Executive Order 13783. Presidential Executive Order 13783, *Promoting Energy Independence and Economic Growth* issued on March 28, 2017, orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of CO₂, N₂O, and CH₄.

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")². 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 program³. 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).

² 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.

³ 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.

- 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 (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 Plan⁴. 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

⁴ 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.

transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

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 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 smog-forming 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.

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 greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas 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 CO₂e (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.

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. The 2016 Building Energy Efficiency Standards approved on January 19, 2016 went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018 and take effect on January 1, 2020. Under the 2019 standards, homes will use about 53 percent less energy and nonresidential buildings will use about 30 percent less energy than buildings under the 2016 standards.

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. The most recent update to the CALGreen Code went into effect January 1, 2017.

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 million tons of CO₂e (MTCO₂e) per year. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

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, the 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.

GHG efficiency metrics are utilized as thresholds to assess the GHG efficiency of a project on a per capita basis or on a service population basis (the sum of the number of jobs and the number of residents provided by a project) such that the project would allow for consistency with the goals of AB 32 (i.e., 1990 GHG emissions levels by 2020 and 2035). GHG efficiency thresholds can be determined by dividing the GHG emissions inventory goal of the State, by the estimated 2035 population and employment. This method allows highly efficient projects with higher mass emissions to meet the overall reduction goals of AB 32, and is appropriate, because the threshold can be applied evenly to all project types (residential or commercial/retail only and mixed use).

As the Project involves the construction of a new warehouse, the 10,000 MTCO₂e per year industrial screening threshold has been selected as the significance threshold, as it is most applicable to the proposed Project.

Southern California Association of Governments

On April 7, 2016, the Southern California Association of Governments (SCAG) Regional Council adopted the *2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy* (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 Upland General Plan

The City of Upland General Plan (UGP) is a roadmap that encompasses the hopes, aspirations, values and dreams of the community. Project-relevant policies specific to GHG emissions are mentioned in this section. Where inconsistencies exist, if any, they are addressed in the respective impact analysis below. UGP policies that address GHG emissions impacts include the following:

Goal LU-2: A community with stable and livable residential neighborhoods.

Policy LU-2.3: Provide healthy, affordable and desirable living environments consistent with adopted code requirements that set forth the acceptable health and safety standards for the occupancy of housing.

Goal LU-4: A community whose land use patterns focus growth in ways that are sustainable and environmentally responsible, including the implementation of smart growth practices and the reduction of greenhouse gas emissions consistent with Assembly Bill (AB) 32, Senate Bill (SB) 375, the Regional Transportation Plan and Sustainable Community Strategy.

Policy LU-4.4: Work to identify and support financial and administrative incentives (i.e., fee reductions) to encourage desired land uses, development patterns, and alternative modes of transportation that reduce greenhouse gas emissions.

Goal OSC-5: Greenhouse gas emissions will be at 1990 levels by 2020.

Policy OSC-5.1: Comply with pertinent State regulations to assess citywide greenhouse gas emissions for existing land uses and the adopted General Plan buildout.

Policy OSC-5.2: Reduce greenhouse gas emissions from new development by promoting water conservation and recycling; promoting development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; improving the jobs/housing ratio; and other methods of reducing emissions.

Policy OSC-5.3: Assess and monitor the effects of climate change on an ongoing basis with periodic inventories of greenhouse gas emissions in the City and compare those to historical levels to monitor the efficacy of climate change mitigation efforts.

Policy OSC-5.4: Evaluate greenhouse gas emission impacts from proposed development projects as required by the California Environmental Quality Act.

Policy OSC-5.5: Require development projects that exceed AQMD ROG and NOX operational thresholds to incorporate design or operational features that reduce emissions equal to 15 percent from the level that would be produced by an unmitigated project.

- Policy OSC-5.8: Encourage the use of zero emission vehicles, low-emission vehicles, non-motorized vehicles and bicycles, and carsharing programs by requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.
- Policy OSC-5.9: Give preference to professional maintenance providers using reduced emission equipment for contracts for services (e.g., landscape maintenance), as well as businesses which practice sustainable operations, to the extent that it is economically feasible to do so.
- Policy OSC-5.11: Require new development to comply with the California Green Building Code (CalGreen) adopted by the California Building Standards Commission at the time of building permit application.

City of Upland Climate Action Plan

The City of Upland has developed a Climate Action Plan (UCAP) to address potential global climate change impacts and incorporate more sustainable practices throughout the City. The UCAP provides a framework for the reduction of greenhouse gas (GHG) emissions by providing emission reduction targets consistent with state and federal strategies. Within the UCAP, the City's main sources of emissions are addressed, guidance is provided regarding development, and implementation of UGP policies is described.

The City will implement reduction strategies to achieve its goals for emissions reduction. Project-relevant strategies are mentioned in this section. Any inconsistencies are addressed in the impact analysis below. UCAP climate action strategies include the following:

- Measure T-2: Encourage the use of zero emission vehicles, low-emission vehicles, non-motorized vehicles and bicycles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.
- Measure T-3: Give preference to professional maintenance providers using reduced emission equipment for contracts for services (e.g., landscape maintenance), as well as businesses which practice sustainable operations, to the extent that it is economically feasible to do so.
- Measure T-11: Reduce commute times for Upland residents and employees by providing more local employment near transit.
- Measure T-34: Promote expansion of employment opportunities within Upland to reduce commuting to areas outside of the City.
- Measure E-1: Reduce greenhouse gas emissions from new development by; promoting water conservation and recycling; promoting development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; improving the jobs/housing ratio; and other methods of reducing emissions.

- Measure E-4: Require that deciduous trees be planted on the south- and west-facing sides of new buildings onsite to reduce energy use in the summer and winter months.
- Measure E-10: Promote green building practices that support healthy indoor living and working environments that are well ventilated and contaminant-free.
- Measure E-11: Require new development to comply with the California Green Building Code (CalGreen) adopted by the California Building Standards Commission at the time of building permit application.
- Measure E-13: Encourage the installation and construction of renewable energy systems and facilities such as wind, solar, hydropower, geothermal, and biomass facilities.
- Measure W-1: Establish water demand reduction standards for new development and redevelopment to reduce per capita and total demand for water.
- Measure W-2: Require new development projects to adopt best management practices for water use efficiency and demonstrate specific water conservation measures.
- Measure W-3: Implement cost-effective water conservation programs, such as the existing rebates and grants for water efficiency and conservation, and enforce the Upland Municipal Code water conservation standards, to improve water-use efficiency, reduce water demand, and preserve the City's supplies.
- Measure W-5: Encourage new and existing public and private development to incorporate California-friendly and drought tolerant vegetation into landscape plans to reduce water demand.
- Measure W-6: As appropriate, require all businesses and industries to use recycled water for irrigation.
- Measure W-8: Review new development projects to determine which are appropriate for recycled water piping systems ("purple pipe") and require these projects to incorporate dual potable and recycled water facilities into their design.
- Measure W-9: Encourage new industrial/commercial and residential developers to construct recycled water backbone facilities for their development. Additionally, continue to work with the IEUA to provide facilities for recycled water distribution.
- Measure SW-5: Encourage the use of recycled materials in new construction.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Thresholds and significant 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 emissions⁵.

Multiple expert agencies throughout the state have drafted or adopted varying threshold approaches and guidelines for analyzing 2020 operational GHG emissions in CEQA documents. The different thresholds include compliance with a qualified GHG reduction strategy, performance-based reductions, numeric bright-line thresholds, and efficiency-based thresholds. The California Supreme Court decision in the *Centers for Biological Diversity et al. v. California Department of Fish and Wildlife*, the Newhall Land and Farming Company (November 30, 2015, Case S217763) (hereafter Newhall Ranch)⁶ confirmed that when an "agency chooses to rely completely on a single quantitative method to justify a no-significance finding, CEQA demands the agency research and document the quantitative parameters essential to that method."

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 greenhouse gas 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 greenhouse gases.

South Coast Air Quality Management District Thresholds

The SCAQMD has not announced when staff is expecting to present a finalized version of its GHG thresholds to the governing board. On September 28, 2010, the SCAQMD recommended an interim screening level numeric "bright-line" threshold of 10,000 metric tons per year of CO₂e for industrial land uses. These efficiency-based thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in the SCAB, various utilities such as sanitation and power companies throughout the SCAB, industry groups, and environmental and professional organizations. The numeric "bright line" was developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners in determining whether GHG emissions from a proposed project are significant.

⁵ 14 California Code of Regulations, Section 15064.4a

⁶ Association of Environmental Professionals, 2016.

4.2 Methodology

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2016.3.2 (CalEEMod). Details of the modeling assumptions and emission factors are provided in Appendix A: Greenhouse Gas Emissions Data. 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. 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.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 Greenhouse Gas Emissions

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

Short-Term Construction Greenhouse Gas Emissions

The proposed 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 proposed Project is depicted in [Table 2: Construction-Related Greenhouse Gas Emissions](#).

| Table 2: Construction-Related Greenhouse Gas Emissions | |
|---------------------------------------------------------------------------|---------------------|
| Category | MTCO ₂ e |
| Total Construction Emissions | 1,012 |
| 30- Year Amortized Construction | 34 |
| Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs. | |

As shown, Project construction would result in the generation of approximately 1,012 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 emissions⁷. The amortized Project construction emissions would be 34 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 proposed 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 site, the emissions associated with solid waste generated from the Project site, and any fugitive refrigerants from air conditioning or refrigerators.

The Project site is currently occupied with a sand and gravel processing plant. The sand and gravel processing plant uses eight pieces off-road heavy-duty diesel equipment, such as rubber tired loaders, stackers, static and mobile screens, cone and crushers, and water trucks. Additionally, the existing sand and gravel processing operations include approximately 78 trucks per day to off-haul materials processed on-site. [Table 10](#) shows the existing emissions that are generated from the current on-site operations as well as the net increase in maximum daily emissions that would occur with implementation of the Project.

⁷ 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).

Total GHG emissions associated with proposed Project are summarized in [Table 3: Project Greenhouse Gas Emissions](#). [Table 3](#) shows the existing emissions that are generated from the current on-site operations as well as the net emissions increase that would occur with implementation of the Project. As shown in [Table 3](#), the Project would generate approximately 6,121 MTCO₂e annually from both construction and operations and the proposed Project. The net increase of emissions would be 5,222 MTCO₂e per year and would not exceed the SCAQMD GHG threshold of 10,000 MTCO₂e per year. Therefore, Project-related GHG emissions would be less than significant and no mitigation measures are required.

| Table 3: Project Greenhouse Gas Emissions | |
|---------------------------------------------------------------------------|-----------------------------------|
| Emissions Source | MTCO₂e per Year |
| Construction Amortized Over 30 Years | 34 |
| Area Source | 0.03 |
| Energy | 418 |
| Mobile | 5,114 |
| Off-road | 211 |
| Waste | 66 |
| Water and Wastewater | 278 |
| <i>Total</i> | <i>6,121</i> |
| Existing Emissions | 899 |
| Net Increase | 5,222 |
| SCAQMD Industrial Project Threshold | 10,000 |
| Exceeds SCAQMD Threshold? | No |
| Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs. | |

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 greenhouse gas emissions?

Upland Climate Action Plan Consistency

The City of Upland has prepared a Climate Action Plan (UCAP) to identify opportunities for a cleaner city. The UCAP serves as a long-term vision for how Upland can be more environmentally friendly and provides guidance for residents, City staff, and decision makers in the community on how to achieve future sustainability goals. The goals outlined in the UCAP target GHG emissions in 2035; see [Table 4: City of Upland Climate Action Plan Consistency](#) for Project consistency with these goals. As shown in [Table 4](#), the Project would not conflict with City's goals within the UCAP.

| Table 4: City of Upland Climate Action Plan Consistency | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Upland Goals | Compliance |
| GOAL 1: Encourage the use of zero emission vehicles, low-emission vehicles, non-motorized vehicles and bicycles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in employment centers to accommodate these vehicles. | Consistent: The current CalGreen Code would require six percent of the project's parking spaces to be electric vehicle charging spaces. |
| GOAL 2: Give preference to professional maintenance providers using reduced emission equipment for contracts for services (e.g., landscape maintenance), as well as businesses which practice sustainable operations, to the extent that it is economically feasible to do so. | N/A: This is not a project-specific goal and is therefore not applicable. The City does not have a policy in place to provide guidance or regulate the selection of contracts for services between private entities. |
| GOAL 3: Reduce commute times for Upland residents and employees by providing more local employment near transit. | Consistent: The Project provides employment opportunities for Upland residents. There are several bus stops located adjacent to the project site. |
| GOAL 4: Promote expansion of employment opportunities within Upland to reduce commuting to areas outside of the City. | Consistent: The Project provides employment opportunities within the City for Upland residents. |
| GOAL 5: Reduce greenhouse gas emissions from new development by; promoting water conservation and recycling; promoting development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; improving the jobs/housing ratio; and other methods of reducing emissions. | Consistent: Project would comply with the General Plan Update and the 2014 Zoning Code Update to facilitate reductions in GHG emissions. The Project would also meet CalGreen and Title 24 energy standards to use energy efficiently and to include drought-tolerant landscaping and water efficient irrigation systems. The Project is also located adjacent to several bus stops along Foothill Boulevard and Central Avenue. |
| GOAL 6: Require that deciduous trees be planted on the south- and west-facing sides of new buildings onsite to reduce energy use in the summer and winter months. | Consistent: The Project complies with Chapter 17.12 Landscaping in the City of Upland Municipal Code. |
| GOAL 7: Promote green building practices that support healthy indoor living and working environments that are well ventilated and contaminant-free. | Consistent: The Project would comply with CalGreen and Title 24 energy standards and will use energy efficiently. |
| GOAL 8: Require new development to comply with the California Green Building Code (CalGreen) adopted by the California Building Standards Commission at the time of building permit application. | Consistent: See response to UCAP Goal 7. |
| GOAL 9: Encourage the installation and construction of renewable energy systems and facilities such as wind, solar, hydropower, geothermal, and biomass facilities. | N/A: This is not a project-specific policy and is therefore not applicable. Project would comply with the 2014 Zoning Code Update. |
| GOAL 10: Establish water demand reduction standards for new development and redevelopment to reduce per capita and total water demand. | Consistent: See response to UCAP Goal 7. |

| Table 4: City of Upland Climate Action Plan Consistency | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Upland Goals | Compliance |
| GOAL 11: Require new development projects to adopt best management practices for water use efficiency and demonstrate specific water conservation measures. | Consistent: See response to UCAP Goal 7. |
| GOAL 12: Implement cost-effective water conservation programs, such as the existing rebates and grants for water efficiency and conservation, and enforce the Upland Municipal Code water conservation standards, to improve water-use efficiency, reduce water demand, and preserve the City's supplies. | N/A: This is not a project-specific policy and is therefore not applicable. Project will comply with CalGreen and Title 24 energy standards and will use energy efficiently. |
| GOAL 13: Encourage new and existing public and private development to incorporate California-friendly and drought tolerant vegetation into landscape plans to reduce water demand. | N/A: This is not a project-specific policy and is therefore not applicable. Project will comply with Chapter 17.12 Landscaping of the City of Upland Municipal Code. |
| GOAL 14: As appropriate, require all businesses and industries to use recycled water for irrigation. | N/A: This is not a project-specific policy and is therefore not applicable. |
| GOAL 15: Review new development projects to determine which are appropriate for recycled water piping systems ("purple pipe") and require these projects to incorporate dual potable and recycled water facilities into their design. | N/A: This is not a project-specific policy and is therefore not applicable. The Project would comply with current City of Upland Municipal Code design requirements and policies for recycled water piping systems. |
| GOAL 16: Encourage new industrial/commercial and residential developers to construct recycled water backbone facilities for their development. Additionally, continue to work with the IEUA to provide facilities for recycled water distribution. | N/A: See response to UCAP Goal 15. |
| GOAL 17: Encourage the use of recycled materials in new construction. | N/A: See response to UCAP Goal 12. |
| Source: City of Upland, <i>Climate Action Plan</i> , 2014. | |

The Open Space and Conservation Element of the City's General Plan also includes GHG related policies. The majority of these policies are municipal measures, such as requiring a Citywide GHG assessment, climate change assessment and monitoring, reduced emissions for City operations, preference for reduced-emissions equipment, City employee transportation systems management and trip reduction, adopting green buildings standards, and LEED standards for public buildings. Policies relevant to development projects include Policy OSC-5.2 (GHG reduction in new development) and Policy OSC-5.5 (requiring emissions reductions for development projects that exceed SCAQMD thresholds), Policy OSC-5.2 promotes water conservation and recycling, promoting energy efficient building design, and improving the jobs/housing ratio. The Project proposes warehouses that would implement water conservation and energy efficiency measures pursuant to the latest building codes and City requirements. Regarding Policy OSC-5.5, the project would not exceed SCAQMD thresholds and would not be required to further reduce emissions. Also, per Policy OSC-5.8 and the latest building codes, the Project would be required to include electric vehicle infrastructure and charging stations.

SCAG RTP/SCS Consistency

On April 7, 2016, the Southern California Association of Governments (SCAG) Regional Council adopted the *2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy* (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 proposed Project would inhibit the post-2020 GHG reduction goals promulgated by the state. The proposed Project's consistency with the RTP/SCS goals is analyzed in detail in [Table 5: Regional Transportation Plan/Sustainable Communities Strategy Consistency](#).

| Table 5: Regional Transportation Plan/Sustainable Communities Strategy Consistency | | | |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------------------------|
| SCAG Goals | | Compliance | |
| GOAL 1: | Align the plan investments and policies with improving regional economic development and competitiveness. | N/A: | This is not a project-specific policy and is therefore not applicable. |
| GOAL 2: | Maximize mobility and accessibility for all people and goods in the region. | N/A: | This is not a transportation improvement project and is therefore not applicable. |
| GOAL 3: | Ensure travel safety and reliability for all people and goods in the region. | N/A: | This is not a transportation improvement project and is therefore not applicable. |
| GOAL 4: | Preserve and ensure a sustainable regional transportation system. | N/A: | This is not a transportation improvement project and is therefore not applicable. |
| GOAL 5: | Maximize the productivity of our transportation system. | N/A: | This is not a transportation improvement project and is therefore not applicable. |
| GOAL 6: | Protect the environment and health of our residents by improving air quality and | N/A: | This is not a project-specific policy. However, the Project is required to comply with the provisions |

| Table 5: Regional Transportation Plan/Sustainable Communities Strategy Consistency | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SCAG Goals | Compliance |
| encouraging active transportation (e.g., bicycling and walking). | of the California Building Energy Efficiency Standards and the Green Building Standards Code (CALGreen) and is located in an infill area near existing development and transit. |
| GOAL 7: Actively encourage and create incentives for energy efficiency, where possible. | N/A: This is not a project-specific policy and is therefore not applicable. |
| GOAL 8: Encourage land use and growth patterns that facilitate transit as well as non-motorized transportation. | Consistent: See response to RTP/SCS Goal 6. |
| GOAL 9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies. | N/A: This is not a transportation improvement project and is therefore not applicable. |
| Source: Southern California Association of Governments, <i>Regional Transportation Plan/Sustainable Communities Strategy</i> , 2016. | |

The UCAP determined that implementation of GHG policies as well as 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 [Table 6](#), the proposed Project would be consistent with the stated goals of the RTP/SCS and the CARB Scoping Plan. 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 (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted the *Climate Change Scoping Plan* (CCSP) in 2008, which outlines actions recommended to obtain that goal. The CCSP 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. As shown in [Table 6: Project Consistency with Applicable CARB Scoping Plan Measures](#), the proposed Project is consistent with most of the strategies, while others are not applicable to the proposed Project.

The 2017 CCSP Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the CCSP 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 such, impacts related to consistency with the Scoping Plan would be less than significant.

Table 6: Project Consistency with Applicable CARB Scoping Plan Measures

| Scoping Plan Sector | Scoping Plan Measure | Implementing Regulations | Project Consistency |
|---------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Transportation | California Cap-and-Trade Program Linked to Western Climate Initiative | Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800) | Consistent. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial 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 Vehicle Greenhouse Gas Standards | Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles | Consistent. This measure applies to all new vehicles starting with model year 2012. The proposed Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with construction and operation of the proposed Project would be required to comply with the Pavley emissions standards. |
| | | 2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards | Consistent. The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with the site would comply with LEV III standards. |
| | Low Carbon Fuel Standard | 2009 readopted in 2015. Regulations to Achieve Greenhouse Gas Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480 | Consistent. This measure applies to transportation fuels utilized by vehicles in California. The proposed Project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the proposed Project would utilize low carbon transportation fuels as required under this measure. |
| | Regional Transportation-Related Greenhouse Gas Targets. | SB 375. Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28 | Consistent. The proposed Project would provide development in the region that is consistent with the growth projections in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). |
| | Goods Movement | Goods Movement Action Plan January 2007 | Not applicable. The proposed Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation. |
| | Medium/Heavy-Duty Vehicle | 2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer Greenhouse Gas Regulation | Consistent. This measure applies to medium and heavy-duty vehicles that operate in the state. The proposed Project would not conflict with implementation of this measure. Medium and heavy-duty vehicles associated with construction and operation of the proposed Project would be required to comply with the requirements of this regulation. |

Table 6: Project Consistency with Applicable CARB Scoping Plan Measures

| Scoping Plan Sector | Scoping Plan Measure | Implementing Regulations | Project Consistency |
|--------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | High Speed Rail | Funded under SB 862 | Not applicable. This is a statewide measure that cannot be implemented by a project applicant or Lead Agency. |
| Electricity and Natural Gas | Energy Efficiency | Title 20 Appliance Efficiency Regulation | Consistent. The proposed Project would not conflict with implementation of this measure. The proposed Project would comply with the latest energy efficiency standards. |
| | | Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Building | |
| | | Title 24 Part 11 California Green Building Code Standards | |
| | Renewable Portfolio Standard/Renewable Electricity Standard. | 2010 Regulation to Implement the Renewable Electricity Standard (33% 2020) | Consistent. The Project would obtain electricity from the electric utility, Southern California Edison (SCE). SCE obtained 28 percent of its power supply from renewable sources in 2016. Therefore, the utility would provide power when needed on site that is composed of a greater percentage of renewable sources. |
| | Million Solar Roofs Program | SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030) | |
| | Million Solar Roofs Program | Tax Incentive Program | Consistent. This measure is to increase solar 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 California Green Building Code Standards | Consistent. The proposed Project would comply with the California Green Building Standards Code, which requires a 20 percent reduction in indoor water use. The proposed Project would also comply with the City's Water-Efficient Landscaping Regulations (Chapter 17.12 of the Upland Municipal Code). |
| | | SBX 7-7—The Water Conservation Act of 2009 | |
| | | Model Water Efficient Landscape Ordinance | |
| Green Buildings | Green Building Strategy | Title 24 Part 11 California Green Building Code Standards | Consistent. The State is to increase the use of green building practices. The proposed Project would implement required green building strategies through existing regulation that requires the proposed Project to comply with various CalGreen requirements. The proposed Project includes sustainability design features that support the Green Building Strategy. |
| Industry | Industrial Emissions | 2010 CARB Mandatory Reporting Regulation | Not applicable. The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 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 ₂ e. Therefore, this regulation would not apply. |
| Recycling and Waste Management | Recycling and Waste | Title 24 Part 11 California Green Building Code Standards | Consistent. The proposed Project would not conflict with implementation of these measures. The proposed Project is required to achieve the recycling mandates |

Table 6: Project Consistency with Applicable CARB Scoping Plan Measures

| Scoping Plan Sector | Scoping Plan Measure | Implementing Regulations | Project Consistency |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | AB 341 Statewide 75 Percent Diversion Goal | via compliance with the CALGreen code. The City has consistently achieved its state recycling mandates. |
| Forests | Sustainable Forests | Cap and Trade Offset Projects | Not applicable. The proposed Project site is in an area designated for urban uses. No forested lands exist on-site. |
| High Global Warming Potential | High Global Warming Potential Gases | CARB Refrigerant Management Program CCR 95380 | Not applicable. The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage system. The proposed Project would not conflict with the refrigerant management regulations adopted by CARB. |
| Agriculture | Agriculture | Cap and Trade Offset Projects for Livestock and Rice Cultivation | Not applicable. The proposed Project site is designated for urban development. No grazing, feedlot, or other agricultural activities that generate manure occur currently exist on-site or are proposed to be implemented by the proposed Project. |
| Source: California Air Resources Board, <i>California's 2017 Climate Change Scoping Plan</i> , November 2017 and CARB, <i>Climate Change Scoping Plan</i> , December 2008. | | | |

The Project is estimated to emit approximately 6,121 MTCO₂e per year (5,222 MTCO₂e per year net emissions) directly from on-site activities and indirectly from off-site motor vehicles, see [Table 3](#). The GHG emissions caused by long-term operation of the proposed 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 proposed Project would comply with all applicable measures are enacted that state lawmakers decide would lead to an 80 percent reduction below 1990 levels by 2050.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

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 toxic air contaminants, 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 much longer atmospheric lifetimes of one year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts and Mitigation Measures

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 proposed 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 4](#), [Table 5](#), and [Table 6](#), the proposed Project would not conflict with the UCAP or the RTP/SCS. As a result, the Project would not conflict with any GHG reduction plans including 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

1. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, 2017.
2. City of Upland, *Climate Action Plan*, 2014.
3. Herdman Architecture and Design, *Site Plan*, 2019.
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. San Bernardino County, *Regional Greenhouse Gas Reduction Plan*, 2010.
8. State of California, *Code of Regulations Section 15065.5a*, 2018.
9. Southern California Association of Governments, *Regional Transportation Plan/Sustainable Communities Strategy*, 2016.
10. South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, 2009.
11. Translutions, Inc., *Foothill Boulevard Warehouse Traffic Impact Analysis*, October 2019.
12. U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016*, 2018.
13. U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources*, 2010.
14. U.S. EPA, *Overview of Greenhouse Gases*, 2018.

Appendix A

Greenhouse Gas Emissions Data

Bridge Point Upland - San Bernardino-South Coast County, Annual

Bridge Point Upland
San Bernardino-South Coast County, Annual

1.0 Project Characteristics**1.1 Land Usage**

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------------|--------|----------|-------------|--------------------|------------|
| Unrefrigerated Warehouse-No Rail | 266.82 | 1000sqft | 6.13 | 266,825.00 | 0 |
| Parking Lot | 861.05 | 1000sqft | 19.77 | 1,306,800.00 | 0 |
| Regional Shopping Center | 10.00 | 1000sqft | 0.23 | 10,000.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 32 |
| Climate Zone | 10 | | | Operational Year | 2021 |
| Utility Company | Southern California Edison | | | | |
| CO2 Intensity (lb/MW hr) | 702.44 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 266.8 kSF buildings, 6.53 acres (284 KSF) landscaping, 1,306,800 KSF parking

Construction Phase - anticipated construction schedule

Off-road Equipment - anticipated construction equipment

Off-road Equipment - anticipated construction equipment

Off-road Equipment -

Off-road Equipment - anticipated construction equipment

Off-road Equipment - anticipated construction equipment

Off-road Equipment -

Trips and VMT - Export site is less 1 mile from project site

Demolition -

Grading - Anticipated export

Architectural Coating - low VOC paint mitigation

Vehicle Trips - trip rates from Translutions trip generation report using High Cube Warehouse

Construction Off-road Equipment Mitigation - mitigation per Rule 403

Area Mitigation -

Water Mitigation -

Waste Mitigation -

Operational Off-Road Equipment - anticipated operational equipment

Fleet Mix - Fleet mix from Translutions Traffic Study

| Table Name | Column Name | Default Value | New Value |
|------------------------|---------------------------------|---------------|-----------|
| tblConstDustMitigation | CleanPavedRoadPercentReduction | 0 | 6 |
| tblConstDustMitigation | WaterUnpavedRoadMoistureContent | 0 | 12 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 30.00 | 0.00 |
| tblConstructionPhase | NumDays | 20.00 | 2.00 |
| tblConstructionPhase | NumDays | 45.00 | 35.00 |
| tblConstructionPhase | NumDays | 440.00 | 105.00 |
| tblConstructionPhase | NumDays | 35.00 | 66.00 |
| tblConstructionPhase | NumDays | 35.00 | 10.00 |
| tblConstructionPhase | PhaseEndDate | 3/13/2020 | 1/31/2020 |
| tblConstructionPhase | PhaseEndDate | 4/10/2020 | 2/4/2020 |
| tblConstructionPhase | PhaseEndDate | 6/12/2020 | 3/24/2020 |
| tblConstructionPhase | PhaseEndDate | 2/18/2022 | 8/18/2020 |
| tblConstructionPhase | PhaseEndDate | 5/27/2022 | 8/31/2020 |
| tblConstructionPhase | PhaseEndDate | 4/8/2022 | 9/1/2020 |
| tblConstructionPhase | PhaseStartDate | 3/14/2020 | 2/1/2020 |

| | | | |
|--------------------------------|----------------------------|-------------|--------------|
| tblConstructionPhase | PhaseStartDate | 4/11/2020 | 2/5/2020 |
| tblConstructionPhase | PhaseStartDate | 6/13/2020 | 3/25/2020 |
| tblConstructionPhase | PhaseStartDate | 4/9/2022 | 6/1/2020 |
| tblConstructionPhase | PhaseStartDate | 2/19/2022 | 8/19/2020 |
| tblFleetMix | HHD | 0.06 | 0.02 |
| tblFleetMix | LDA | 0.55 | 0.23 |
| tblFleetMix | LDT1 | 0.04 | 0.04 |
| tblFleetMix | LDT2 | 0.18 | 0.18 |
| tblFleetMix | LHD1 | 0.02 | 0.38 |
| tblFleetMix | LHD2 | 5.2670e-003 | 5.4600e-003 |
| tblFleetMix | MCY | 6.0000e-003 | 6.1170e-003 |
| tblFleetMix | MDV | 0.12 | 0.12 |
| tblFleetMix | MH | 1.0100e-003 | 0.00 |
| tblFleetMix | MHD | 0.02 | 0.02 |
| tblFleetMix | OBUS | 1.3480e-003 | 0.00 |
| tblFleetMix | SBUS | 8.1200e-004 | 0.00 |
| tblFleetMix | UBUS | 1.6070e-003 | 0.00 |
| tblGrading | AcresOfGrading | 175.00 | 225.00 |
| tblGrading | MaterialExported | 0.00 | 431.00 |
| tblLandUse | LandUseSquareFeet | 266,820.00 | 266,825.00 |
| tblLandUse | LandUseSquareFeet | 861,050.00 | 1,306,800.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 4.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 2.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 4.00 |
| tblOperationalOffRoadEquipment | OperFuelType | Diesel | CNG |
| tblOperationalOffRoadEquipment | OperOffRoadEquipmentNumber | 0.00 | 12.00 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 10.00 |
| tblTripsAndVMT | WorkerTripNumber | 33.00 | 20.00 |
| tblVehicleTrips | ST_TR | 49.97 | 7.75 |

| | | | |
|-----------------|-------|-------|------|
| tblVehicleTrips | ST_TR | 1.68 | 7.94 |
| tblVehicleTrips | SU_TR | 25.24 | 7.75 |
| tblVehicleTrips | SU_TR | 1.68 | 7.94 |
| tblVehicleTrips | WD_TR | 42.70 | 7.75 |
| tblVehicleTrips | WD_TR | 1.68 | 7.94 |

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2020 | 1.9969 | 4.3322 | 3.9115 | 0.0115 | 0.7643 | 0.1432 | 0.9075 | 0.2212 | 0.1338 | 0.3550 | 0.0000 | 1,042.5587 | 1,042.5587 | 0.1250 | 0.0000 | 1,045.6847 |
| Maximum | 1.9969 | 4.3322 | 3.9115 | 0.0115 | 0.7643 | 0.1432 | 0.9075 | 0.2212 | 0.1338 | 0.3550 | 0.0000 | 1,042.5587 | 1,042.5587 | 0.1250 | 0.0000 | 1,045.6847 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2020 | 1.9969 | 4.3322 | 3.9115 | 0.0115 | 0.5990 | 0.1432 | 0.7422 | 0.1686 | 0.1338 | 0.3023 | 0.0000 | 1,042.5583 | 1,042.5583 | 0.1250 | 0.0000 | 1,045.6843 |
| Maximum | 1.9969 | 4.3322 | 3.9115 | 0.0115 | 0.5990 | 0.1432 | 0.7422 | 0.1686 | 0.1338 | 0.3023 | 0.0000 | 1,042.5583 | 1,042.5583 | 0.1250 | 0.0000 | 1,045.6843 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 21.63 | 0.00 | 18.21 | 23.81 | 0.00 | 14.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|----------------------------------------------|--------------------------------------------|
| 1 | 2-1-2020 | 4-30-2020 | 2.4222 | 2.4222 |
| 2 | 5-1-2020 | 7-31-2020 | 2.8999 | 2.8999 |
| 3 | 8-1-2020 | 9-30-2020 | 1.0076 | 1.0076 |
| | | Highest | 2.8999 | 2.8999 |

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-------------|-------------|---------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|------------|------------|-------------|-------------|------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 1.2326 | 1.3000e-004 | 0.0146 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0282 | 0.0282 | 7.0000e-005 | 0.0000 | 0.0301 |
| Energy | 3.0400e-003 | 0.0276 | 0.0232 | 1.7000e-004 | | 2.1000e-003 | 2.1000e-003 | | 2.1000e-003 | 2.1000e-003 | 0.0000 | 416.7005 | 416.7005 | 0.0165 | 3.8500e-003 | 418.2625 |
| Mobile | 1.2115 | 11.9882 | 13.8800 | 0.0512 | 3.6365 | 0.0758 | 3.7123 | 0.9938 | 0.0719 | 1.0657 | 0.0000 | 4,712.1687 | 4,712.1687 | 0.1651 | 0.0000 | 4,716.2960 |
| Offroad | 0.2018 | 1.8394 | 1.8218 | 2.3800e-003 | | 0.1306 | 0.1306 | | 0.1201 | 0.1201 | 0.0000 | 209.4944 | 209.4944 | 0.0678 | 0.0000 | 211.1883 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 53.0436 | 0.0000 | 53.0436 | 3.1348 | 0.0000 | 131.4132 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 19.8102 | 260.6681 | 280.4783 | 2.0455 | 0.0503 | 346.5954 |
| Total | 2.6490 | 13.8554 | 15.7396 | 0.0538 | 3.6365 | 0.2085 | 3.8450 | 0.9938 | 0.1942 | 1.1880 | 72.8538 | 5,599.0599 | 5,671.9137 | 5.4297 | 0.0541 | 5,823.7855 |

Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-------------|-------------|---------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|------------|------------|-------------|-------------|------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 1.2326 | 1.3000e-004 | 0.0146 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0282 | 0.0282 | 7.0000e-005 | 0.0000 | 0.0301 |
| Energy | 3.0400e-003 | 0.0276 | 0.0232 | 1.7000e-004 | | 2.1000e-003 | 2.1000e-003 | | 2.1000e-003 | 2.1000e-003 | 0.0000 | 416.7005 | 416.7005 | 0.0165 | 3.8500e-003 | 418.2625 |
| Mobile | 1.2115 | 11.9882 | 13.8800 | 0.0512 | 3.6365 | 0.0758 | 3.7123 | 0.9938 | 0.0719 | 1.0657 | 0.0000 | 4,712.1687 | 4,712.1687 | 0.1651 | 0.0000 | 4,716.2960 |
| Offroad | 0.2018 | 1.8394 | 1.8218 | 2.3800e-003 | | 0.1306 | 0.1306 | | 0.1201 | 0.1201 | 0.0000 | 209.4944 | 209.4944 | 0.0678 | 0.0000 | 211.1883 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 26.5218 | 0.0000 | 26.5218 | 1.5674 | 0.0000 | 65.7066 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 15.8482 | 208.7579 | 224.6060 | 1.6364 | 0.0402 | 277.5005 |
| Total | 2.6490 | 13.8554 | 15.7396 | 0.0538 | 3.6365 | 0.2085 | 3.8450 | 0.9938 | 0.1942 | 1.1880 | 42.3700 | 5,547.1497 | 5,589.5197 | 3.4532 | 0.0441 | 5,688.9840 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|-------|-------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 41.84 | 0.93 | 1.45 | 36.40 | 18.57 | 2.31 |

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 | 2/1/2020 | 1/31/2020 | 5 | 0 | |
| 2 | Site Preparation | Site Preparation | 2/1/2020 | 2/4/2020 | 5 | 2 | |
| 3 | Grading | Grading | 2/5/2020 | 3/24/2020 | 5 | 35 | |
| 4 | Building Construction | Building Construction | 3/25/2020 | 8/18/2020 | 5 | 105 | |
| 5 | Paving | Paving | 8/19/2020 | 9/1/2020 | 5 | 10 | |
| 6 | Architectural Coating | Architectural Coating | 6/1/2020 | 8/31/2020 | 5 | 66 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 225

Acres of Paving: 19.77

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 415,238; Non-Residential Outdoor: 138,413; Striped Parking Area:

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 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 | 4 | 8.00 | 158 | 0.38 |
| Grading | Graders | 2 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 4 | 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 |
| Architectural Coating | Air Compressors | 2 | 6.00 | 78 | 0.48 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

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 | 6 | 15.00 | 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 | 13 | 20.00 | 0.00 | 54.00 | 14.70 | 6.90 | 10.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 664.00 | 260.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 2 | 133.00 | 0.00 | 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 |

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

| | | | | | | | | | | | | | | | | |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0181 | 0.0000 | 0.0181 | 9.9300e-003 | 0.0000 | 9.9300e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.0800e-003 | 0.0424 | 0.0215 | 4.0000e-005 | | 2.2000e-003 | 2.2000e-003 | | 2.0200e-003 | 2.0200e-003 | 0.0000 | 3.3431 | 3.3431 | 1.0800e-003 | 0.0000 | 3.3701 |
| Total | 4.0800e-003 | 0.0424 | 0.0215 | 4.0000e-005 | 0.0181 | 2.2000e-003 | 0.0203 | 9.9300e-003 | 2.0200e-003 | 0.0120 | 0.0000 | 3.3431 | 3.3431 | 1.0800e-003 | 0.0000 | 3.3701 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.0000e-005 | 7.0000e-005 | 7.0000e-004 | 0.0000 | 2.0000e-004 | 0.0000 | 2.0000e-004 | 5.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.1692 | 0.1692 | 1.0000e-005 | 0.0000 | 0.1693 |
| Total | 9.0000e-005 | 7.0000e-005 | 7.0000e-004 | 0.0000 | 2.0000e-004 | 0.0000 | 2.0000e-004 | 5.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.1692 | 0.1692 | 1.0000e-005 | 0.0000 | 0.1693 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|-------------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 7.7200e-003 | 0.0000 | 7.7200e-003 | 4.2500e-003 | 0.0000 | 4.2500e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.0800e-003 | 0.0424 | 0.0215 | 4.0000e-005 | | 2.2000e-003 | 2.2000e-003 | | 2.0200e-003 | 2.0200e-003 | 0.0000 | 3.3431 | 3.3431 | 1.0800e-003 | 0.0000 | 3.3701 |
| Total | 4.0800e-003 | 0.0424 | 0.0215 | 4.0000e-005 | 7.7200e-003 | 2.2000e-003 | 9.9200e-003 | 4.2500e-003 | 2.0200e-003 | 6.2700e-003 | 0.0000 | 3.3431 | 3.3431 | 1.0800e-003 | 0.0000 | 3.3701 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-------------|-------------|-------------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.0000e-005 | 7.0000e-005 | 7.0000e-004 | 0.0000 | 1.9000e-004 | 0.0000 | 1.9000e-004 | 5.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.1692 | 0.1692 | 1.0000e-005 | 0.0000 | 0.1693 |
| Total | 9.0000e-005 | 7.0000e-005 | 7.0000e-004 | 0.0000 | 1.9000e-004 | 0.0000 | 1.9000e-004 | 5.0000e-005 | 0.0000 | 5.0000e-005 | 0.0000 | 0.1692 | 0.1692 | 1.0000e-005 | 0.0000 | 0.1693 |

3.4 Grading - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.2247 | 0.0000 | 0.2247 | 0.0708 | 0.0000 | 0.0708 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1295 | 1.4849 | 0.9665 | 1.9100e-003 | | 0.0617 | 0.0617 | | 0.0568 | 0.0568 | 0.0000 | 168.0105 | 168.0105 | 0.0543 | 0.0000 | 169.3690 |
| Total | 0.1295 | 1.4849 | 0.9665 | 1.9100e-003 | 0.2247 | 0.0617 | 0.2864 | 0.0708 | 0.0568 | 0.1276 | 0.0000 | 168.0105 | 168.0105 | 0.0543 | 0.0000 | 169.3690 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.2000e-004 | 4.9000e-003 | 7.0000e-004 | 1.0000e-005 | 2.3000e-004 | 1.0000e-005 | 2.4000e-004 | 6.0000e-005 | 1.0000e-005 | 7.0000e-005 | 0.0000 | 1.2031 | 1.2031 | 9.0000e-005 | 0.0000 | 1.2054 |
| 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 | 1.7300e-003 | 1.3600e-003 | 0.0136 | 4.0000e-005 | 3.8400e-003 | 3.0000e-005 | 3.8600e-003 | 1.0200e-003 | 2.0000e-005 | 1.0400e-003 | 0.0000 | 3.2894 | 3.2894 | 1.0000e-004 | 0.0000 | 3.2918 |
| Total | 1.8500e-003 | 6.2600e-003 | 0.0143 | 5.0000e-005 | 4.0700e-003 | 4.0000e-005 | 4.1000e-003 | 1.0800e-003 | 3.0000e-005 | 1.1100e-003 | 0.0000 | 4.4925 | 4.4925 | 1.9000e-004 | 0.0000 | 4.4973 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------|-----|----|-----|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0961 | 0.0000 | 0.0961 | 0.0303 | 0.0000 | 0.0303 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | | | | | | | | | | | | |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Off-Road | 0.1295 | 1.4849 | 0.9665 | 1.9100e-003 | | 0.0617 | 0.0617 | | 0.0568 | 0.0568 | 0.0000 | 168.0103 | 168.0103 | 0.0543 | 0.0000 | 169.3688 |
| Total | 0.1295 | 1.4849 | 0.9665 | 1.9100e-003 | 0.0961 | 0.0617 | 0.1578 | 0.0303 | 0.0568 | 0.0871 | 0.0000 | 168.0103 | 168.0103 | 0.0543 | 0.0000 | 169.3688 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.2000e-004 | 4.9000e-003 | 7.0000e-004 | 1.0000e-005 | 2.2000e-004 | 1.0000e-005 | 2.3000e-004 | 6.0000e-005 | 1.0000e-005 | 7.0000e-005 | 0.0000 | 1.2031 | 1.2031 | 9.0000e-005 | 0.0000 | 1.2054 |
| 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 | 1.7300e-003 | 1.3600e-003 | 0.0136 | 4.0000e-005 | 3.6400e-003 | 3.0000e-005 | 3.6600e-003 | 9.7000e-004 | 2.0000e-005 | 9.9000e-004 | 0.0000 | 3.2894 | 3.2894 | 1.0000e-004 | 0.0000 | 3.2918 |
| Total | 1.8500e-003 | 6.2600e-003 | 0.0143 | 5.0000e-005 | 3.8600e-003 | 4.0000e-005 | 3.8900e-003 | 1.0300e-003 | 3.0000e-005 | 1.0600e-003 | 0.0000 | 4.4925 | 4.4925 | 1.9000e-004 | 0.0000 | 4.4973 |

3.5 Building Construction - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1113 | 1.0073 | 0.8846 | 1.4100e-003 | | 0.0587 | 0.0587 | | 0.0551 | 0.0551 | 0.0000 | 121.5952 | 121.5952 | 0.0297 | 0.0000 | 122.3369 |
| Total | 0.1113 | 1.0073 | 0.8846 | 1.4100e-003 | | 0.0587 | 0.0587 | | 0.0551 | 0.0551 | 0.0000 | 121.5952 | 121.5952 | 0.0297 | 0.0000 | 122.3369 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|----------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0424 | 1.4572 | 0.3047 | 3.6400e-003 | 0.0861 | 6.6600e-003 | 0.0927 | 0.0248 | 6.3700e-003 | 0.0312 | 0.0000 | 348.5078 | 348.5078 | 0.0241 | 0.0000 | 349.1107 |
| Worker | 0.1722 | 0.1353 | 1.3520 | 3.6300e-003 | 0.3822 | 2.5500e-003 | 0.3848 | 0.1015 | 2.3500e-003 | 0.1039 | 0.0000 | 327.6213 | 327.6213 | 9.8400e-003 | 0.0000 | 327.8673 |
| Total | 0.2146 | 1.5925 | 1.6568 | 7.2700e-003 | 0.4683 | 9.2100e-003 | 0.4775 | 0.1264 | 8.7200e-003 | 0.1351 | 0.0000 | 676.1291 | 676.1291 | 0.0340 | 0.0000 | 676.9779 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1113 | 1.0073 | 0.8846 | 1.4100e-003 | | 0.0586 | 0.0586 | | 0.0551 | 0.0551 | 0.0000 | 121.5951 | 121.5951 | 0.0297 | 0.0000 | 122.3367 |
| Total | 0.1113 | 1.0073 | 0.8846 | 1.4100e-003 | | 0.0586 | 0.0586 | | 0.0551 | 0.0551 | 0.0000 | 121.5951 | 121.5951 | 0.0297 | 0.0000 | 122.3367 |

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

| | | | | | | | | | | | | | | | | |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Worker | 3.7000e-004 | 2.9000e-004 | 2.9100e-003 | 1.0000e-005 | 8.2000e-004 | 1.0000e-005 | 8.3000e-004 | 2.2000e-004 | 1.0000e-005 | 2.2000e-004 | 0.0000 | 0.7049 | 0.7049 | 2.0000e-005 | 0.0000 | 0.7054 |
| Total | 3.7000e-004 | 2.9000e-004 | 2.9100e-003 | 1.0000e-005 | 8.2000e-004 | 1.0000e-005 | 8.3000e-004 | 2.2000e-004 | 1.0000e-005 | 2.2000e-004 | 0.0000 | 0.7049 | 0.7049 | 2.0000e-005 | 0.0000 | 0.7054 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 6.7800e-003 | 0.0703 | 0.0733 | 1.1000e-004 | | 3.7600e-003 | 3.7600e-003 | | 3.4600e-003 | 3.4600e-003 | 0.0000 | 10.0141 | 10.0141 | 3.2400e-003 | 0.0000 | 10.0951 |
| Paving | 0.0259 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0327 | 0.0703 | 0.0733 | 1.1000e-004 | | 3.7600e-003 | 3.7600e-003 | | 3.4600e-003 | 3.4600e-003 | 0.0000 | 10.0141 | 10.0141 | 3.2400e-003 | 0.0000 | 10.0951 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.7000e-004 | 2.9000e-004 | 2.9100e-003 | 1.0000e-005 | 7.8000e-004 | 1.0000e-005 | 7.9000e-004 | 2.1000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.7049 | 0.7049 | 2.0000e-005 | 0.0000 | 0.7054 |
| Total | 3.7000e-004 | 2.9000e-004 | 2.9100e-003 | 1.0000e-005 | 7.8000e-004 | 1.0000e-005 | 7.9000e-004 | 2.1000e-004 | 1.0000e-005 | 2.1000e-004 | 0.0000 | 0.7049 | 0.7049 | 2.0000e-005 | 0.0000 | 0.7054 |

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 1.4648 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0160 | 0.1111 | 0.1209 | 2.0000e-004 | | 7.3200e-003 | 7.3200e-003 | | 7.3200e-003 | 7.3200e-003 | 0.0000 | 16.8515 | 16.8515 | 1.3000e-003 | 0.0000 | 16.8841 |
| Total | 1.4808 | 0.1111 | 0.1209 | 2.0000e-004 | | 7.3200e-003 | 7.3200e-003 | | 7.3200e-003 | 7.3200e-003 | 0.0000 | 16.8515 | 16.8515 | 1.3000e-003 | 0.0000 | 16.8841 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0217 | 0.0170 | 0.1702 | 4.6000e-004 | 0.0481 | 3.2000e-004 | 0.0485 | 0.0128 | 3.0000e-004 | 0.0131 | 0.0000 | 41.2487 | 41.2487 | 1.2400e-003 | 0.0000 | 41.2797 |
| Total | 0.0217 | 0.0170 | 0.1702 | 4.6000e-004 | 0.0481 | 3.2000e-004 | 0.0485 | 0.0128 | 3.0000e-004 | 0.0131 | 0.0000 | 41.2487 | 41.2487 | 1.2400e-003 | 0.0000 | 41.2797 |

Mitigated Construction On-Site

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|-----------------|---------|--------|--------|-------------|--|-------------|-------------|--|-------------|-------------|--------|---------|---------|-------------|--------|---------|
| Archit. Coating | 1.4648 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0160 | 0.1111 | 0.1209 | 2.0000e-004 | | 7.3200e-003 | 7.3200e-003 | | 7.3200e-003 | 7.3200e-003 | 0.0000 | 16.8515 | 16.8515 | 1.3000e-003 | 0.0000 | 16.8841 |
| Total | 1.4808 | 0.1111 | 0.1209 | 2.0000e-004 | | 7.3200e-003 | 7.3200e-003 | | 7.3200e-003 | 7.3200e-003 | 0.0000 | 16.8515 | 16.8515 | 1.3000e-003 | 0.0000 | 16.8841 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|-------------|--------|---------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0217 | 0.0170 | 0.1702 | 4.6000e-004 | 0.0456 | 3.2000e-004 | 0.0459 | 0.0122 | 3.0000e-004 | 0.0125 | 0.0000 | 41.2487 | 41.2487 | 1.2400e-003 | 0.0000 | 41.2797 |
| Total | 0.0217 | 0.0170 | 0.1702 | 4.6000e-004 | 0.0456 | 3.2000e-004 | 0.0459 | 0.0122 | 3.0000e-004 | 0.0125 | 0.0000 | 41.2487 | 41.2487 | 1.2400e-003 | 0.0000 | 41.2797 |

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|-------------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|------------|------------|--------|--------|------------|
| Mitigated | 1.2115 | 11.9882 | 13.8800 | 0.0512 | 3.6365 | 0.0758 | 3.7123 | 0.9938 | 0.0719 | 1.0657 | 0.0000 | 4,712.1687 | 4,712.1687 | 0.1651 | 0.0000 | 4,716.2960 |
| Unmitigated | 1.2115 | 11.9882 | 13.8800 | 0.0512 | 3.6365 | 0.0758 | 3.7123 | 0.9938 | 0.0719 | 1.0657 | 0.0000 | 4,712.1687 | 4,712.1687 | 0.1651 | 0.0000 | 4,716.2960 |

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|----------------------------------|-------------------------|----------|----------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Regional Shopping Center | 77.50 | 77.50 | 77.50 | 167,620 | 167,620 |
| Unrefrigerated Warehouse-No Rail | 2,118.55 | 2,118.55 | 2118.55 | 9,079,509 | 9,079,509 |
| Total | 2,196.05 | 2,196.05 | 2,196.05 | 9,247,129 | 9,247,129 |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|----------------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Parking Lot | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |
| Unrefrigerated Warehouse-No Rail | 16.60 | 8.40 | 6.90 | 59.00 | 0.00 | 41.00 | 92 | 5 | 3 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|----------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Parking Lot | 0.549952 | 0.037123 | 0.179649 | 0.119457 | 0.017229 | 0.005267 | 0.017877 | 0.062669 | 0.001348 | 0.001607 | 0.006000 | 0.000812 | 0.001010 |
| Regional Shopping Center | 0.549952 | 0.037123 | 0.179649 | 0.119457 | 0.017229 | 0.005267 | 0.017877 | 0.062669 | 0.001348 | 0.001607 | 0.006000 | 0.000812 | 0.001010 |
| Unrefrigerated Warehouse-No Rail | 0.227299 | 0.037976 | 0.179086 | 0.122965 | 0.380000 | 0.005460 | 0.017497 | 0.023600 | 0.000000 | 0.000000 | 0.006117 | 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 | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 386.6111 | 386.6111 | 0.0160 | 3.3000e-003 | 387.9942 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 386.6111 | 386.6111 | 0.0160 | 3.3000e-003 | 387.9942 |
| NaturalGas Mitigated | 3.0400e-003 | 0.0276 | 0.0232 | 1.7000e-004 | | 2.1000e-003 | 2.1000e-003 | | 2.1000e-003 | 2.1000e-003 | 0.0000 | 30.0894 | 30.0894 | 5.8000e-004 | 5.5000e-004 | 30.2682 |
| NaturalGas Unmitigated | 3.0400e-003 | 0.0276 | 0.0232 | 1.7000e-004 | | 2.1000e-003 | 2.1000e-003 | | 2.1000e-003 | 2.1000e-003 | 0.0000 | 30.0894 | 30.0894 | 5.8000e-004 | 5.5000e-004 | 30.2682 |

5.2 Energy by Land Use - NaturalGas

Unmitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------------------------|----------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 22200 | 1.2000e-004 | 1.0900e-003 | 9.1000e-004 | 1.0000e-005 | | 8.0000e-005 | 8.0000e-005 | | 8.0000e-005 | 8.0000e-005 | 0.0000 | 1.1847 | 1.1847 | 2.0000e-005 | 2.0000e-005 | 1.1917 |
| Unrefrigerated Warehouse-No Fuel | 541655 | 2.9200e-003 | 0.0266 | 0.0223 | 1.6000e-004 | | 2.0200e-003 | 2.0200e-003 | | 2.0200e-003 | 2.0200e-003 | 0.0000 | 28.9048 | 28.9048 | 5.5000e-004 | 5.3000e-004 | 29.0765 |
| Total | | 3.0400e-003 | 0.0276 | 0.0232 | 1.7000e-004 | | 2.1000e-003 | 2.1000e-003 | | 2.1000e-003 | 2.1000e-003 | 0.0000 | 30.0894 | 30.0894 | 5.7000e-004 | 5.5000e-004 | 30.2683 |

Mitigated

| | Natural Gas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------------------------------|-----------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 22200 | 1.2000e-004 | 1.0900e-003 | 9.1000e-004 | 1.0000e-005 | | 8.0000e-005 | 8.0000e-005 | | 8.0000e-005 | 8.0000e-005 | 0.0000 | 1.1847 | 1.1847 | 2.0000e-005 | 2.0000e-005 | 1.1917 |
| Unrefrigerated Warehouse-No Fuel | 541655 | 2.9200e-003 | 0.0266 | 0.0223 | 1.6000e-004 | | 2.0200e-003 | 2.0200e-003 | | 2.0200e-003 | 2.0200e-003 | 0.0000 | 28.9048 | 28.9048 | 5.5000e-004 | 5.3000e-004 | 29.0765 |
| Total | | 3.0400e-003 | 0.0276 | 0.0232 | 1.7000e-004 | | 2.1000e-003 | 2.1000e-003 | | 2.1000e-003 | 2.1000e-003 | 0.0000 | 30.0894 | 30.0894 | 5.7000e-004 | 5.5000e-004 | 30.2683 |

5.3 Energy by Land Use - Electricity

Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|----------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use | kWh/yr | MT/yr | | | |
| Parking Lot | 457380 | 145.7311 | 6.0200e-003 | 1.2400e-003 | 146.2524 |
| Regional Shopping Center | 126300 | 40.2419 | 1.6600e-003 | 3.4000e-004 | 40.3859 |
| Unrefrigerated Warehouse-No Fuel | 629707 | 200.6381 | 8.2800e-003 | 1.7100e-003 | 201.3559 |
| Total | | 386.6111 | 0.0160 | 3.2900e-003 | 387.9942 |

Mitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|----------|-----------------|-----------|-----|-----|------|
| Land Use | kWh/yr | MT/yr | | | |
| | | | | | |

| | | | | | |
|----------------------------------|--------|-----------------|---------------|--------------------|-----------------|
| Parking Lot | 457380 | 145.7311 | 6.0200e-003 | 1.2400e-003 | 146.2524 |
| Regional Shopping Center | 126300 | 40.2419 | 1.6600e-003 | 3.4000e-004 | 40.3859 |
| Unrefrigerated Warehouse-No Rail | 629707 | 200.6381 | 8.2800e-003 | 1.7100e-003 | 201.3559 |
| Total | | 386.6111 | 0.0160 | 3.2900e-003 | 387.9942 |

6.0 Area Detail

6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------|---------|-------------|--------|--------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.2326 | 1.3000e-004 | 0.0146 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0282 | 0.0282 | 7.0000e-005 | 0.0000 | 0.0301 |
| Unmitigated | 1.2326 | 1.3000e-004 | 0.0146 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0282 | 0.0282 | 7.0000e-005 | 0.0000 | 0.0301 |

6.2 Area by SubCategory

Unmitigated

[illegible]

| | | | | | | | | | | | | | | | | |
|-------------------|-------------|-------------|--------|--------|--|-------------|-------------|--|-------------|-------------|--------|--------|--------|-------------|--------|--------|
| Consumer Products | 1.0848 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.3600e-003 | 1.3000e-004 | 0.0146 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0282 | 0.0282 | 7.0000e-005 | 0.0000 | 0.0301 |
| Total | 1.2326 | 1.3000e-004 | 0.0146 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0282 | 0.0282 | 7.0000e-005 | 0.0000 | 0.0301 |

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 | 0.1465 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1.0848 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 1.3600e-003 | 1.3000e-004 | 0.0146 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0282 | 0.0282 | 7.0000e-005 | 0.0000 | 0.0301 |
| Total | 1.2326 | 1.3000e-004 | 0.0146 | 0.0000 | | 5.0000e-005 | 5.0000e-005 | | 5.0000e-005 | 5.0000e-005 | 0.0000 | 0.0282 | 0.0282 | 7.0000e-005 | 0.0000 | 0.0301 |

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

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|----------|
| Category | MT/yr | | | |
| Mitigated | 224.6060 | 1.6364 | 0.0402 | 277.5005 |
| Unmitigated | 280.4783 | 2.0455 | 0.0503 | 346.5954 |

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|----------------------------------|---------------------|-----------|--------|-------------|----------|
| Land Use | Mgal | MT/yr | | | |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 0.740725 / 0.453993 | 4.9152 | 0.0243 | 6.1000e-004 | 5.7052 |
| Unrefrigerated Warehouse-No Pool | 61.7021 / 0 | 275.5631 | 2.0211 | 0.0497 | 340.8902 |
| Total | | 280.4783 | 2.0455 | 0.0503 | 346.5954 |

Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|-------------|--------------------|-----------|--------|--------|--------|
| Land Use | Mgal | MT/yr | | | |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | |
|-------------------------------|--------------------|----------|--------|-------------|----------|
| Regional Shopping Center | 0.59258 / 0.426299 | 4.1555 | 0.0195 | 4.9000e-004 | 4.7883 |
| Unrefrigerated Warehouse-No 0 | 49.3617 / 0 | 220.4505 | 1.6169 | 0.0397 | 272.7122 |
| Total | | 224.6060 | 1.6364 | 0.0402 | 277.5005 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|----------|
| | MT/yr | | | |
| Mitigated | 26.5218 | 1.5674 | 0.0000 | 65.7066 |
| Unmitigated | 53.0436 | 3.1348 | 0.0000 | 131.4132 |

8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|-------------|----------------|-----------|--------|--------|--------|
| Land Use | tons | MT/yr | | | |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

| | | | | | |
|-----------------------------|--------|----------------|---------------|---------------|-----------------|
| Regional Shopping Center | 10.5 | 2.1314 | 0.1260 | 0.0000 | 5.2805 |
| Unrefrigerated Warehouse-No | 250.81 | 50.9122 | 3.0088 | 0.0000 | 126.1327 |
| Total | | 53.0436 | 3.1348 | 0.0000 | 131.4132 |

Mitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|-----------------------------|----------------|----------------|---------------|---------------|----------------|
| Land Use | tons | MT/yr | | | |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Regional Shopping Center | 5.25 | 1.0657 | 0.0630 | 0.0000 | 2.6402 |
| Unrefrigerated Warehouse-No | 125.405 | 25.4561 | 1.5044 | 0.0000 | 63.0664 |
| Total | | 26.5218 | 1.5674 | 0.0000 | 65.7066 |

9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|----------------|--------|-----------|-----------|-------------|-------------|-----------|
| Forklifts | 12 | 8.00 | 260 | 89 | 0.20 | CNG |

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 | tons/yr | | | | | | | | | | MT/yr | | | | | |

| | | | | | | | | | | | | | | | | |
|-----------|--------|--------|--------|-------------|--|--------|--------|--|--------|--------|--------|----------|----------|--------|--------|----------|
| Forklifts | 0.2018 | 1.8394 | 1.8218 | 2.3800e-003 | | 0.1306 | 0.1306 | | 0.1201 | 0.1201 | 0.0000 | 209.4944 | 209.4944 | 0.0678 | 0.0000 | 211.1883 |
| Total | 0.2018 | 1.8394 | 1.8218 | 2.3800e-003 | | 0.1306 | 0.1306 | | 0.1201 | 0.1201 | 0.0000 | 209.4944 | 209.4944 | 0.0678 | 0.0000 | 211.1883 |

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

| | | | | | |
|----------------|--------|----------------|-----------------|---------------|-----------|
| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| | |
|----------------|--------|
| Equipment Type | Number |
|----------------|--------|

11.0 Vegetation

Bridge Point Upland - Existing Rock Crushing - San Bernardino-South Coast County, Annual

Bridge Point Upland - Existing Rock Crushing

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|-------------------------|-------|-------------------|-------------|--------------------|------------|
| User Defined Industrial | 40.00 | User Defined Unit | 40.00 | 0.00 | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.2 | Precipitation Freq (Days) | 32 |
| Climate Zone | 10 | | | Operational Year | 2019 |
| Utility Company | Southern California Edison | | | | |
| CO2 Intensity (lb/MW hr) | 702.44 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Rock crushing on approx. 40 acre site

Construction Phase - current operation

Off-road Equipment - current-onsite equipment, cone, jaw, screen, loaders, stackers, water trucks

Grading - Approximately 78 trucks per day

Trips and VMT - approximately 78 trucks per day

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403

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

| | | | |
|------------------------|---------------------------------|-----------|-----------------------------------|
| tblConstDustMitigation | CleanPavedRoadPercentReduction | 0 | 6 |
| tblConstDustMitigation | WaterUnpavedRoadMoistureContent | 0 | 12 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 75.00 | 261.00 |
| tblConstructionPhase | PhaseEndDate | 5/24/2019 | 12/31/2019 |
| tblConstructionPhase | PhaseStartDate | 2/11/2019 | 1/1/2019 |
| tblGrading | MaterialExported | 0.00 | 624.00 |
| tblLandUse | LotAcreage | 0.00 | 40.00 |
| tblOffRoadEquipment | HorsePower | 168.00 | 350.00 |
| tblOffRoadEquipment | HorsePower | 168.00 | 300.00 |
| tblOffRoadEquipment | HorsePower | 168.00 | 100.00 |
| tblOffRoadEquipment | HorsePower | 203.00 | 375.00 |
| tblOffRoadEquipment | HorsePower | 203.00 | 300.00 |
| tblOffRoadEquipment | OffRoadEquipmentType | | Other Material Handling Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Other Material Handling Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Loaders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Crushing/Proc. Equipment |
| tblOffRoadEquipment | OffRoadEquipmentType | | Rubber Tired Loaders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Off-Highway Trucks |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00 |

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2019 | 0.6342 | 6.3446 | 4.1724 | 9.9700e-003 | 0.0365 | 0.2800 | 0.3165 | 9.6900e-003 | 0.2605 | 0.2702 | 0.0000 | 892.4149 | 892.4149 | 0.2541 | 0.0000 | 898.7674 |
| Maximum | 0.6342 | 6.3446 | 4.1724 | 9.9700e-003 | 0.0365 | 0.2800 | 0.3165 | 9.6900e-003 | 0.2605 | 0.2702 | 0.0000 | 892.4149 | 892.4149 | 0.2541 | 0.0000 | 898.7674 |

Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2019 | 0.6342 | 6.3446 | 4.1724 | 9.9700e-003 | 0.0346 | 0.2800 | 0.3146 | 9.2200e-003 | 0.2605 | 0.2698 | 0.0000 | 892.4139 | 892.4139 | 0.2541 | 0.0000 | 898.7664 |
| Maximum | 0.6342 | 6.3446 | 4.1724 | 9.9700e-003 | 0.0346 | 0.2800 | 0.3146 | 9.2200e-003 | 0.2605 | 0.2698 | 0.0000 | 892.4139 | 892.4139 | 0.2541 | 0.0000 | 898.7664 |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 5.24 | 0.00 | 0.61 | 4.85 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| Quarter | Start Date | End Date | Maximum Unmitigated ROG + NOX (tons/quarter) | Maximum Mitigated ROG + NOX (tons/quarter) |
|---------|------------|-----------|----------------------------------------------|--------------------------------------------|
| 1 | 2-11-2019 | 5-10-2019 | 1.6999 | 1.6999 |
| 2 | 5-11-2019 | 8-10-2019 | 1.7572 | 1.7572 |
| 3 | 8-11-2019 | 9-30-2019 | 0.9741 | 0.9741 |
| | | Highest | 1.7572 | 1.7572 |

2.2 Overall Operational

Unmitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-------------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |
| Energy | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Mobile | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |

Mitigated Operational

[illegible]

| | | | | | | | | | | | | | | | | |
|-------|-------------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|-------------|--------|--------|-------------|
| Total | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |
|-------|-------------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|-------------|-------------|--------|--------|-------------|

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

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|------------|------------|------------|------------|---------------|----------|-------------------|
| 1 | Grading | Grading | 1/1/2019 | 12/31/2019 | 5 | 261 | |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|------------|-----------------------------------|--------|-------------|-------------|-------------|
| Grading | Excavators | 0 | 8.00 | 158 | 0.38 |
| Grading | Graders | 0 | 8.00 | 187 | 0.41 |
| Grading | Other Material Handling Equipment | 1 | 8.00 | 350 | 0.40 |
| Grading | Rubber Tired Dozers | 0 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 0 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 0 | 8.00 | 97 | 0.37 |
| Grading | Other Material Handling Equipment | 1 | 8.00 | 300 | 0.40 |
| Grading | Other Material Handling Equipment | 3 | 8.00 | 100 | 0.40 |
| Grading | Rubber Tired Loaders | 1 | 8.00 | 375 | 0.36 |
| Grading | Crushing/Proc. Equipment | 1 | 8.00 | 85 | 0.78 |
| Grading | Rubber Tired Loaders | 1 | 8.00 | 300 | 0.36 |

| | | | | | |
|---------|--------------------|---|------|-----|------|
| Grading | Off-Highway Trucks | 2 | 4.00 | 402 | 0.38 |
|---------|--------------------|---|------|-----|------|

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 |
|------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Grading | 10 | 25.00 | 0.00 | 78.00 | 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

3.2 Grading - 2019

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|----------|-----------|--------|--------|----------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 4.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.6164 | 6.3197 | 4.0303 | 9.5900e-003 | | 0.2797 | 0.2797 | | 0.2603 | 0.2603 | 0.0000 | 857.8225 | 857.8225 | 0.2529 | 0.0000 | 864.1445 |
| Total | 0.6164 | 6.3197 | 4.0303 | 9.5900e-003 | 4.0000e-005 | 0.2797 | 0.2798 | 1.0000e-005 | 0.2603 | 0.2603 | 0.0000 | 857.8225 | 857.8225 | 0.2529 | 0.0000 | 864.1445 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-------------|--------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|---------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 2.7000e-004 | 0.0106 | 1.5900e-003 | 3.0000e-005 | 6.7000e-004 | 3.0000e-005 | 7.1000e-004 | 1.8000e-004 | 3.0000e-005 | 2.2000e-004 | 0.0000 | 2.9441 | 2.9441 | 1.7000e-004 | 0.0000 | 2.9484 |
| 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 | 0.0175 | 0.0143 | 0.1405 | 3.5000e-004 | 0.0358 | 2.5000e-004 | 0.0360 | 9.5000e-003 | 2.3000e-004 | 9.7300e-003 | 0.0000 | 31.6484 | 31.6484 | 1.0500e-003 | 0.0000 | 31.6745 |
| Total | 0.0178 | 0.0248 | 0.1421 | 3.8000e-004 | 0.0364 | 2.8000e-004 | 0.0367 | 9.6800e-003 | 2.6000e-004 | 9.9500e-003 | 0.0000 | 34.5925 | 34.5925 | 1.2200e-003 | 0.0000 | 34.6229 |

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|---------|--------|--------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|----------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.6164 | 6.3197 | 4.0303 | 9.5900e-003 | | 0.2797 | 0.2797 | | 0.2603 | 0.2603 | 0.0000 | 857.8214 | 857.8214 | 0.2529 | 0.0000 | 864.1435 |
| Total | 0.6164 | 6.3197 | 4.0303 | 9.5900e-003 | 2.0000e-005 | 0.2797 | 0.2797 | 0.0000 | 0.2603 | 0.2603 | 0.0000 | 857.8214 | 857.8214 | 0.2529 | 0.0000 | 864.1435 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|----------|-------------|--------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|--------|--------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 2.7000e-004 | 0.0106 | 1.5900e-003 | 3.0000e-005 | 6.4000e-004 | 3.0000e-005 | 6.8000e-004 | 1.8000e-004 | 3.0000e-005 | 2.1000e-004 | 0.0000 | 2.9441 | 2.9441 | 1.7000e-004 | 0.0000 | 2.9484 |

| | | | | | | | | | | | | | | | | |
|--------|--------|--------|--------|-------------|--------|-------------|--------|-------------|-------------|-------------|--------|---------|---------|-------------|--------|---------|
| 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 | 0.0175 | 0.0143 | 0.1405 | 3.5000e-004 | 0.0339 | 2.5000e-004 | 0.0342 | 9.0400e-003 | 2.3000e-004 | 9.2700e-003 | 0.0000 | 31.6484 | 31.6484 | 1.0500e-003 | 0.0000 | 31.6745 |
| Total | 0.0178 | 0.0248 | 0.1421 | 3.8000e-004 | 0.0346 | 2.8000e-004 | 0.0348 | 9.2200e-003 | 2.6000e-004 | 9.4800e-003 | 0.0000 | 34.5925 | 34.5925 | 1.2200e-003 | 0.0000 | 34.6229 |

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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 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 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|-------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| User Defined Industrial | 0.00 | 0.00 | 0.00 | | |
| Total | 0.00 | 0.00 | 0.00 | | |

4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|-------------------------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| User Defined Industrial | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| User Defined Industrial | 0.541740 | 0.038987 | 0.178620 | 0.126833 | 0.019742 | 0.005671 | 0.017070 | 0.060066 | 0.001326 | 0.001715 | 0.006244 | 0.000823 | 0.001163 |

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

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

Mitigated

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-------------------------|----------------|---------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

5.3 Energy by Land Use - Electricity

Unmitigated

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|-------------------------|-----------------|-----------|--------|--------|--------|
| Land Use | kWh/yr | MT/yr | | | |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Mitigated

| | | | | | |
|-------------------------|-----------------|-----------|--------|--------|--------|
| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
| Land Use | kWh/yr | MT/yr | | | |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

6.0 Area Detail

6.1 Mitigation Measures Area

| | | | | | | | | | | | | | | | | |
|-------------|-------------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| | ROG | NOx | CO | SO2 | Fugitive 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 | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |
| Unmitigated | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |

6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |
| Total | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |

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 | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |
| Total | 5.0000e-005 | 0.0000 | 5.2000e-004 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 9.9000e-004 | 9.9000e-004 | 0.0000 | 0.0000 | 1.0600e-003 |

7.0 Water Detail

7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|-------------|-----------|--------|--------|--------|
| Category | MT/yr | | | |
| Mitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

7.2 Water by Land Use

Unmitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|-----------|--------|--------|--------|
| Land Use | Mgal | MT/yr | | | |
| User Defined | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Industrial | | | | | |
| Total | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Mitigated

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|-----------|--------|--------|--------|
| Land Use | Mgal | MT/yr | | | |
| User Defined | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Industrial | | | | | |
| Total | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|-------------------------|----------------|-----------|--------|--------|--------|
| Land Use | tons | MT/yr | | | |
| User Defined Industrial | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Mitigated

| | | | | | |
|--------------|----------------|-----------|--------|--------|--------|
| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
| Land Use | tons | MT/yr | | | |
| User Defined | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Industrial | | | | | |
| Total | | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

| | | | | | |
|----------------|--------|----------------|-----------------|---------------|-----------|
| Equipment Type | Number | Heat Input/Day | Heat Input/Year | Boiler Rating | Fuel Type |
|----------------|--------|----------------|-----------------|---------------|-----------|

User Defined Equipment

| | |
|----------------|--------|
| Equipment Type | Number |
|----------------|--------|

11.0 Vegetation