

Appendix F:
Greenhouse Gas Emissions Assessment

Greenhouse Gas Emissions Assessment
Alliance California Gateway South Building 8 Project
City of San Bernardino, California

Prepared by:



Kimley-Horn and Associates, Inc.
1100 W. Town and Country Road, Suite 700
Orange, California 92868
Contact: Mr. Ryan Chiene
714.705.1343

November 2021

TABLE OF CONTENTS

1	INTRODUCTION	
1.1	Project Location.....	1
1.2	Project Description.....	1
2	ENVIRONMENTAL SETTING	
2.1	Greenhouse Gases and Climate Change	6
3	REGULATORY SETTING	
3.1	Federal.....	8
3.2	State of California.....	9
3.3	Regional.....	16
3.4	Local.....	17
4	SIGNIFICANCE CRITERIA AND METHODOLOGY	
4.1	CEQA Thresholds and Significant Criteria.....	19
4.2	Methodology	20
5	POTENTIAL IMPACTS AND MITIGATION	
5.1	Greenhouse Gas Emissions	21
5.2	Greenhouse Gas Reduction Plan Compliance	23
5.3	Cumulative Setting, Impacts, and Mitigation Measures	29
6	REFERENCES	
	References.....	31

TABLES

Table 1: Description of Greenhouse Gases	7
Table 2: Construction-Related Greenhouse Gas Emissions	21
Table 3: Project Greenhouse Gas Emissions	22
Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency	24
Table 5: Project Consistency with Applicable CARB Scoping Plan Measures	26

EXHIBITS

Exhibit 1	Regional Location	3
Exhibit 2	Local Vicinity.....	4
Exhibit 3	Site Plan.....	5

APPENDIX

Appendix A: Greenhouse Gas Emissions Data

LIST OF ABBREVIATED TERMS

AB	Assembly Bill
CARB	California Air Resource Board
CCR	California Code of Regulations
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CALGreen Code	California Green Building Standards Code
CPUC	California Public Utilities Commission
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CFC	Chlorofluorocarbon
CPP	Clean Power Plan
cy	Cubic yard
EPA	Environmental Protection Agency
FAAA	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	Metric tons of carbon dioxide equivalent
NHTSA	National Highway Traffic Safety Administration
NF ₃	Nitrogen trifluoride
N ₂ O	Nitrous oxide
PFC	Perfluorocarbon
RSPA	Renaissance Specific Plan Area
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SBGP	City of San Bernardino General Plan
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 Alliance California Gateway South Building 8 Project (“Project” or “proposed Project”). The purpose of this GHG emissions Assessment is to evaluate the potential construction and operational emissions associated with the Project and determine the level of impact the Project would have on the environment.

1.1 Project Location

The proposed Project is located at the northwest corner of E. Norman Road and Lena Road in the City of San Bernardino (City). The proposed site consists of 29 parcels (APN 0280-151-27 and -28; 0280-161-03, -05 through -18, and -30; 0280-17-01 through -11) on 15.25 acres. Currently, the eastern-half of the site are predominantly vacant and undeveloped with sparse vegetation and the western-half of the site contains single-family residential structures, an automobile body-shop and sales company, and vacant lands. The Project site is relatively flat and has elevations ranging from approximately 1,024 to 1,029 feet above mean sea level (amsl). The site’s topography slightly slopes down to the west and southwest.

The Project site is bounded by industrial warehouse developments to the north and south, single-family residences and storage areas for trucks and shipping containers to the east, and single-family residence and a vacant lot to the west. In addition, the proposed Project is located approximately one mile southwest of the San Bernardino International Airport (SBIA) and is within the Airport Influence Area (AIA).

Local access to the Project site is provided via Lena Road and E. Norman Road. The nearest major freeways to the site include Interstate 215 (I-215), located approximately 1.1 miles west and Interstate 10 (I-10), located approximately 1.2 miles to the south of the site.; refer to [Exhibit 1: Regional Location](#) and [Exhibit 2: Local Vicinity](#).

1.2 Project Description

The Project proposes the development of an approximately 304,588-square-foot speculative industrial warehouse building that includes 16,000 square-feet of office space (with 10,000 square feet on the ground floor and 6,000 square feet on the mezzanine-level) and approximately 288,588 square feet of warehouse area on approximately 12.01 acres of the total 15.25 acres. The Project includes two (2) 40-foot-wide ingress and egress driveways from S. Lena Road and S. Foisy Street, along the northern part of the site and one (1) 30-foot-wide driveway from E. Norman Road. In addition, the rest of the site, which sits northeast of the proposed building would be developed into a 3.24-acre detention basin. The required parking, per the City’s Development Code (DC) is 244 spaces. The Project provides a total of 246 parking spaces that includes 47 trailer stalls, 39 dock door parking spaces, and 160 standard auto parking spaces. Refer to [Exhibit 3: Site Plan](#) for further Project details.

The Project would increase onsite impermeable areas as a result of the construction of a 304,588-SF warehouse building and parking areas. However, the Project would also create a new 3.24-acre detention basin on the northeast of the site.

General Plan Land Use and Zoning Designations

As designated by the City's Development Code, the Project site has a General Plan land use designation of Industrial (I) and a Zoning designation of Industrial Light (IL). As such, the Project is anticipated to be consistent with the existing land use and zoning.

Site Access

The Project would include two (2) 40-foot driveways, each along S. Lena Road and S. Foisy Street one (1) 30-foot-wide driveway from E. Norman Road, which would provide local access to the Project site. Truck, passenger, and emergency vehicle access would be provided via the two (2) 40-foot access driveways along S. Lena Road and S. Foisy Street. Passenger vehicle access would also be provided via the 30-foot-wide driveway along E. Norman Road.

Walls and Fences

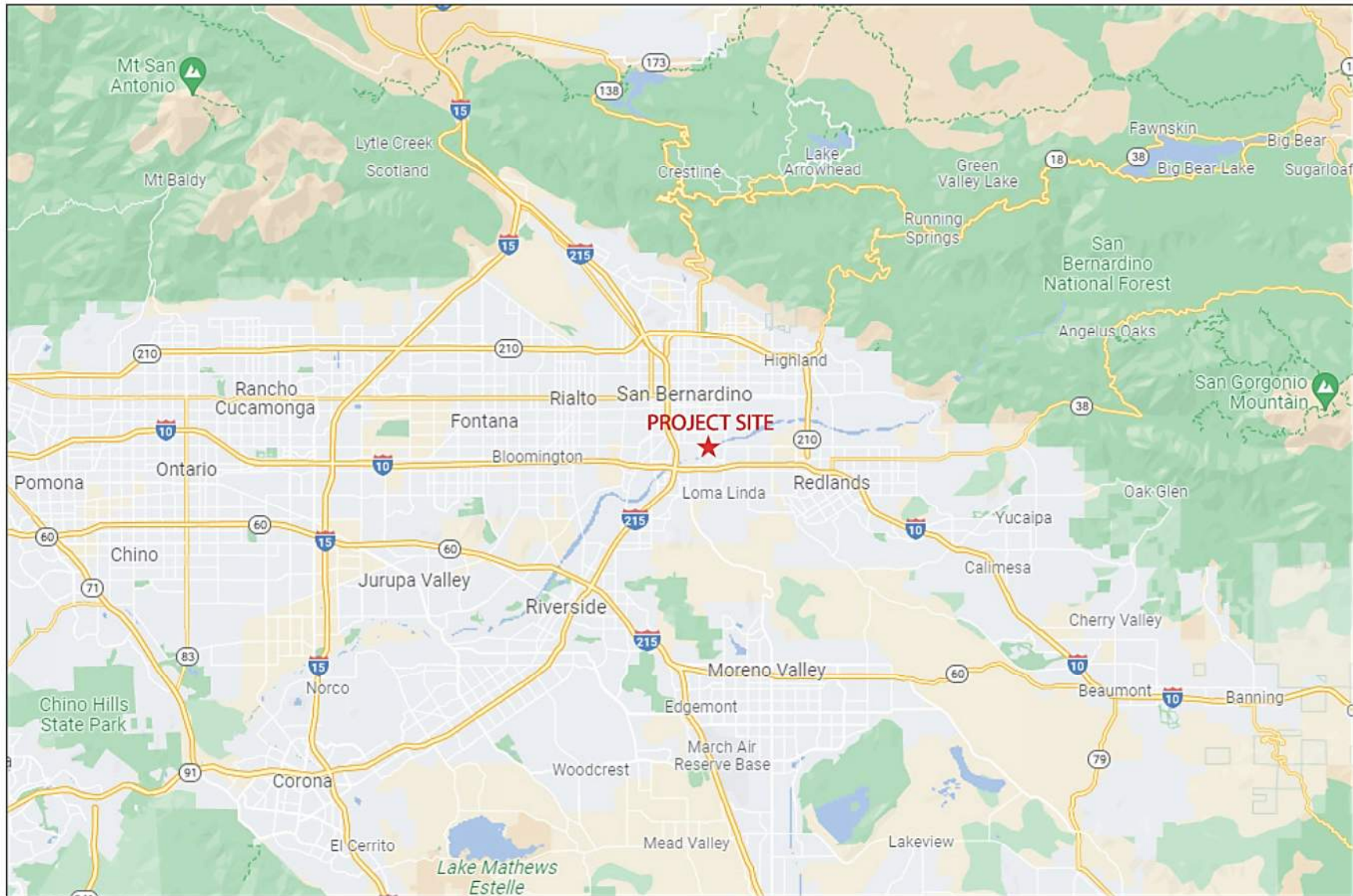
The Project proposes to incorporate two (2) 8-foot high wrought-iron entry gates, located in the northern portion of the site. One gate would be located at the northwestern entrance and another at the northeaster entrance of the property. Each entry gate would have a Knox-pad lock and 14-foot-high screen walls on each side of the gate.

Parking

A total of 244 parking spaces would be required for the Project (1 space per 1,250 SF). The Project proposes to provide a total of 246 parking spaces that include 160 standard parking stalls (9 feet by 19 feet), 39 dock door parking stalls, and 47 trailer parking stalls (10 feet by 55 feet). Trailer stalls would be dispersed throughout the northern portion of the Project site. The proposed 160 standard parking stalls would be provided along the northwest and northeast portions of the site and along the western property line.

Hours of Operation

Tenant(s) of the facility have not been identified, so the precise nature of the facility operations cannot be determined at this time. Any future occupant would be required to adhere to the requirements of the pertinent City regulations. The hours of operation are assumed to be up to 7 days a week, 24 hours per day.

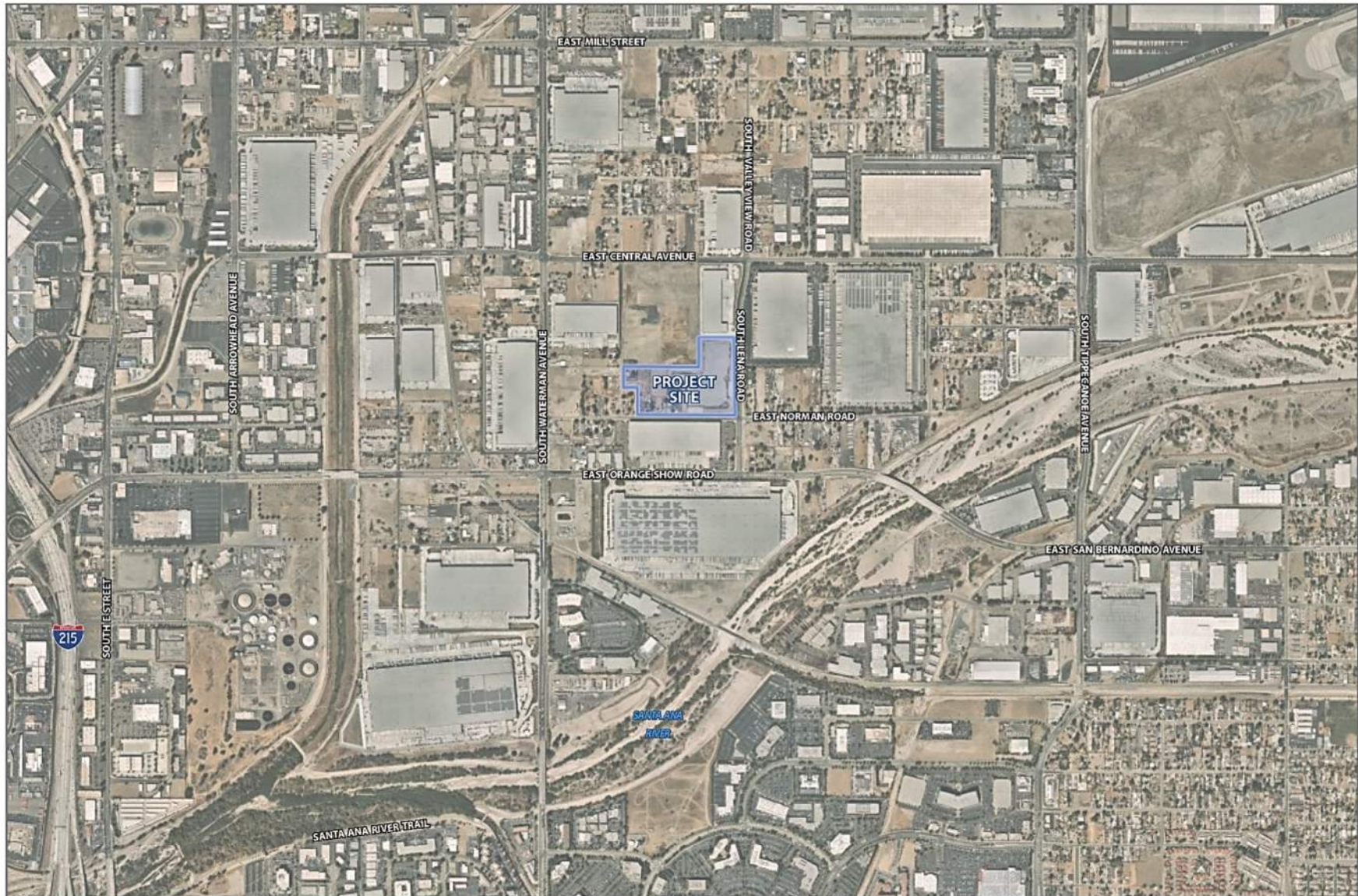


SOURCE: Google Map, 2021



EXHIBIT 1: REGIONAL LOCATION

ALLIANCE CALIFORNIA GATEWAY SOUTH BUILDING 8 PROJECT



SOURCE: Nearthmap, 2021

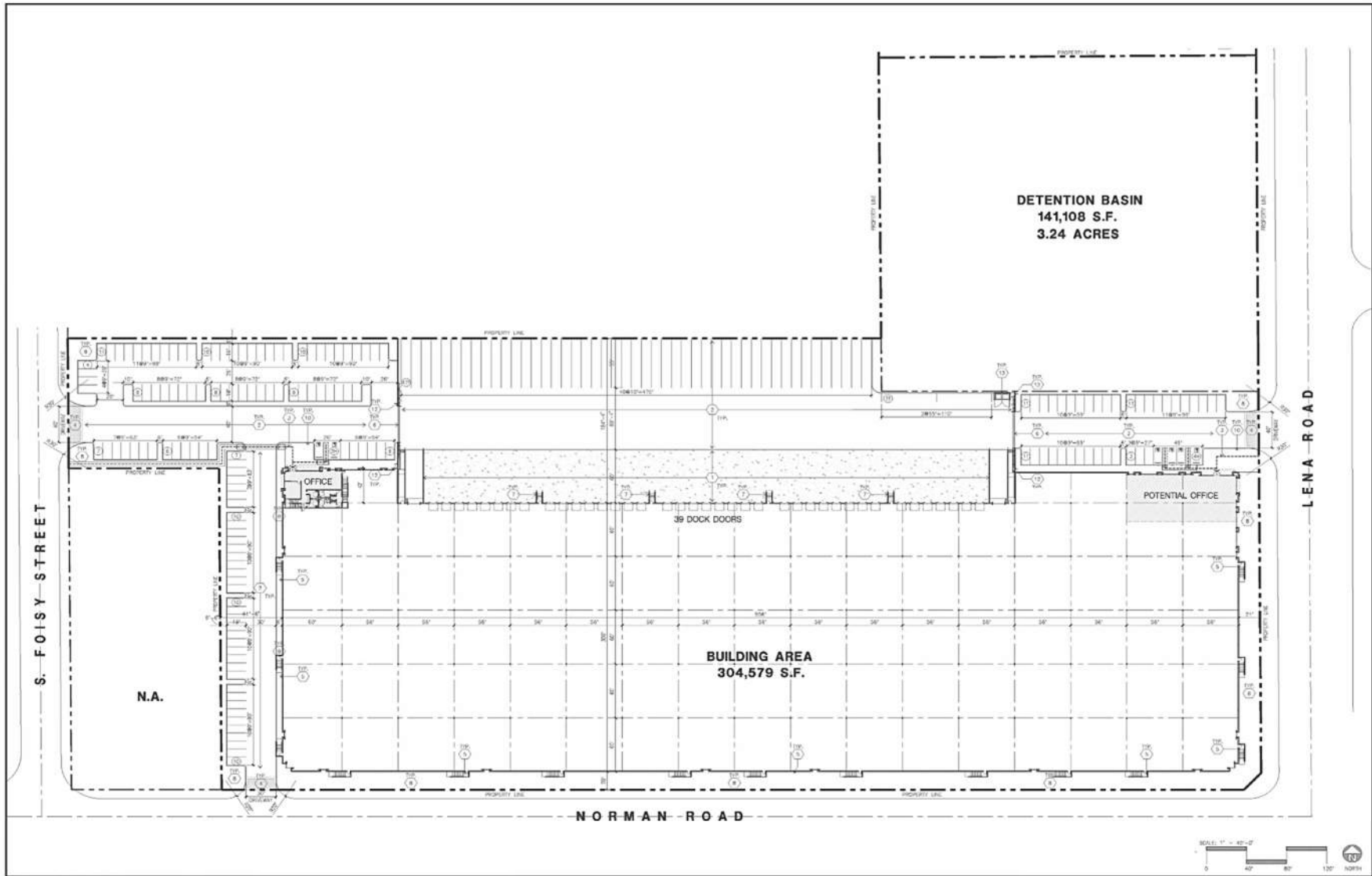


Not to Scale

EXHIBIT 2: LOCAL VICINITY

ALLIANCE CALIFORNIA GATEWAY SOUTH BUILDING 8 PROJECT

November 2021



SOURCE: HPA Architecture, 2021

EXHIBIT 3: SITE PLAN
ALLIANCE CALIFORNIA GATEWAY SOUTH BUILDING 8 PROJECT

November 2021

2 ENVIRONMENTAL SETTING

2.1 Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (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.

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.

In 2018, the President and the U.S. EPA stated their intent to halt various federal regulatory activities to reduce GHG emission, including the phase two program. California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives. On September 27, 2019, the U.S. EPA and the NHTSA published the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program.” (84 Fed. Reg. 51,310 (Sept. 27, 2019.)) The Part One Rule revokes California’s authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the U.S. EPA and NHTSA finalized rulemaking for SAFE Part Two sets CO₂ emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021-2026. The U.S. EPA is currently reconsidering the SAFE rule.

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.

California Air Resource Board 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).
- 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

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.

(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.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California's transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California's freight transport system is essential to supporting the State's economic development in coming decades while reducing pollution.
- CARB's Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years. The mobile Source Strategy includes increasing zero emission vehicle (ZEV) buses and trucks.

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

⁴ California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed October 29, 2021.

level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

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

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

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.

AB 398 (Market-Based Compliance Mechanisms)

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

SB 150 (Regional Transportation Plans)

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

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

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

Executive Orders Related to GHG Emissions

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

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

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

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

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission,

CARB, the University of California, and other agencies to develop and propose protocols for measuring the “life-cycle carbon intensity” of transportation fuels. CARB adopted the LCFS on April 23, 2009.

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

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

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

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of 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.

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

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 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, 2020 (2019 CALGreen). The 2019 CALGreen standards will continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

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

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

3.3 Regional

South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. 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. 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.

The Working Group has proposed a tiered approach to evaluating GHG emissions for development projects where SCAQMD is not the lead agency, wherein projects are evaluated sequentially through a series of "tiers" to determine whether the project is likely to result in a potentially significant impact due to GHG emissions. With the tiered approach, a project is compared against 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. The SCAQMD has adopted a threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year for industrial projects and a 3,000 MTCO₂e threshold was proposed for non-industrial projects but has not been adopted. During Working Group Meeting #7 it was explained that this threshold was derived using a 90 percent capture rate of a large sampling of industrial facilities. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.). SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact. 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, a project would be excluded if it was below an efficiency-based threshold of 4.8 MTCO₂e per service population per year. It is noted that efficiency metrics do not correlate well with the magnitude of an industrial project. An industrial source's emissions normally correlate with other factors such as fuel usage and performance standards such as emissions per resident or employee do not apply to most industrial sources. 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.

Tier 3 Screening Thresholds

When the tiered approach is applied to a proposed project, and the project is found not to comply with Tier 1 or Tier 2, the project's emissions are compared against a screening threshold, as described above,

for Tier 3. The screening threshold formally adopted by SCAQMD is an “interim” screening threshold for stationary source industrial projects where the SCAQMD is the lead agency under CEQA. The threshold was termed “interim” because, at the time, SCAQMD anticipated that CARB would be adopting a statewide significance threshold that would inform and provide guidance to SCAQMD in its adoption of a final threshold. However, no statewide threshold was ever adopted, and the interim threshold remains in effect.

For projects for which SCAQMD is not a lead agency, no screening thresholds have been formally adopted. However, the SCAQMD Working Group has recommended a threshold of 10,000 MTCO₂e/year for industrial projects and 3,000 MTCO₂e/year for residential and commercial projects. SCAQMD determined that these thresholds would “capture” 90 percent of greenhouse gas emissions from these sectors, “capture” meaning that 90 percent of total emissions from all new projects would be subject to some type of CEQA analysis (i.e., found potentially significant).⁵

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

3.4 Local

City of San Bernardino General Plan

The City of San Bernardino General Plan (SBGP) represents the community’s view of its future and can be thought of as the blueprint for the City’s growth and development. The SBGP has goals and policies to reduce GHG emissions through environmental management and transportation planning. Since there are limited Project-relevant policies specific to GHG emissions, related policies are mentioned in this section. SBGP policies that directly address reducing and avoiding natural resources and air quality impacts, and GHG emissions reduction include the following:

⁵ SCAQMD, “Staff Report: Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans,” December 5, 2008, Attachment E: “Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold,” October 2008, p. 3-2.

Safety Element

Goal 10.1: Protect the environment, public health, safety, and welfare from hazardous wastes.

Policy 10.1.2: Ensure the protection of surface and groundwater quality, land resources, air quality, and environmentally sensitive areas through safe transportation of waste through the City and comprehensive planning of hazardous materials, wastes, and sites.

Natural Resources and Conservation Element

The Natural Resources and Conservation Element is intended to maintain, improve, or preserve the quality and supply of the City's natural resources. The following topics are addressed in this element: Biological Resources, Natural Features, Mineral Resources, and Air Quality.

Goal 12.5: Promote air quality that is compatible with the health, wellbeing, and enjoyment of life.

Policy 12.5.1: Reduce the emission of pollutants including carbon monoxide, oxides of nitrogen, photochemical smog, and sulfate in accordance with SCAQMD standards.

Goal 12.5.2: Prohibit the development of land uses (e.g., heavy manufacturing) that will contribute significantly to air quality degradation, unless sufficient mitigation measures are undertaken according SCAQMD standards.

Policy 12.5.3: Require dust abatement measures during grading and construction operations.

Policy 12.5.4: Evaluate the air emissions of industrial land uses to ensure that they will not impact adjacent uses.

Goal 12.7: Participate in regional initiatives and programs to improve the SCAB's air quality.

Policy 12.7.1: Cooperate with the SCAQMD and incorporate pertinent local implementation provisions of the AQMP.

Policy 12.7.2: Work with the SCAQMD to establish controls and monitor uses in the City that could add to the SCAB's degradation (e.g., auto repair, manufacturers).

Policy 12.7.3: Coordinate with SCAQMD to ensure that all elements of air quality plans regarding reduction of air pollutants emissions are being enforced.

Policy 12.7.4: Work with the other cities in the SCAB to implement regional mechanisms to reduce air emissions and improve air quality.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 CEQA Thresholds and Significance Criteria

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

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

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 emissions.⁶

South Coast Air Quality Management Thresholds

The City of San Bernardino has not adopted project-specific significance thresholds, and instead relies on SCAQMD's recommended Tier 3 screening thresholds to determine the significance of a project's GHG emissions. On December 5, 2008, the SCAQMD Governing Board adopted a 10,000 MTCO₂e industrial threshold for projects where the SCAQMD is lead agency. During the GHG CEQA Significance Threshold Working Group Meeting #15, the SCAQMD noted that it was considering extending the industrial GHG significance threshold for use by all lead agencies. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.). Additionally, the SCAQMD GHG Significance Threshold Stakeholder Working Group has specified that a warehouse is considered to be an industrial project.⁷ Furthermore, the Working Group indicated that the 10,000 MTCO₂e per year threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.). 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. The SCAQMD has not announced when staff is expecting to present a finalized version of its GHG thresholds to the governing board.

As the Project involves the construction of 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. This threshold is selected because the proposed Project is analogous to an industrial use much more closely than any other land use such as commercial or residential in terms of its expected operating characteristics. Typical industrial zoned areas include storage facilities, warehouses, plants, and

⁶ 14 California Code of Regulations, Section 15064.4a

⁷ South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #8*, 2009.

airports, while commercial land uses are generally designated as businesses that have some kind of interaction with the public and typically include offices, retail stores, hotels, or restaurants. The 10,000 MTCO₂eq per year threshold is used in addition to the qualitative thresholds of significance set forth below from Section VII of Appendix G to the CEQA Guidelines.

4.2 Methodology

Global climate change is, by definition, a cumulative impact of GHG emissions. Therefore, there is no project-level analysis. The baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities which almost doubled between 1970 and 2010 from approximately 27 gigatonnes (Gt) of CO₂/year to nearly 49 GtCO₂/year.⁸ As such, the geographic extent of climate change and GHG emissions cumulative impact discussion is worldwide.

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2020.4.0 (CalEEMod). Details of the modeling assumptions and emission factors are provided in [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 operational-related GHG emissions would be generated by vehicular traffic, off-road equipment, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. The increase of traffic over existing conditions as a result of the Project was obtained from the Project's *Traffic Impact Analysis* prepared by Translutions, Inc. (September 2021) (Traffic Impact Analysis). The modeled operational fleet mix was incorporated in CalEEMod consistent with the Traffic Impact Analysis. Project trip generation from the Traffic Impact Analysis is based on the Institute of Transportation Engineers (ITE) High-Cube Transload and Short-Term Storage Warehouse land use (ITE code 154) and High-Cube Cold Storage Warehouse land use (ITE code 157). Additionally, truck mix percentages are based on the SCAQMD Truck Trip Generation Study applied to ITE truck percentages. Other operational emissions from area, energy, and stationary sources were quantified in CalEEMod based on land use activity data.

⁸ Intergovernmental Panel on Climate Change, *Climate Change 2014 Mitigation of Climate Change Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2014.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 Greenhouse Gas Emissions

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

Construction Emissions

The Project would result in direct emissions of CO₂, N₂O, and CH₄ from construction equipment and the transport of materials and construction workers to and from the Project site. The GHG emissions only occur during temporary construction activities and would be cease once construction is complete. The total GHG emissions generated during all phases of construction were combined and are shown in [Table 2: Construction-Related Greenhouse Gas Emissions](#).

Category	MTCO ₂ e
2022 Construction Emissions	571
30-Year Amortized Construction	19

Source: CalEEMod version 2020.4.0. Refer to [Appendix A](#) for model outputs.

As shown, the Project would result in the generation of approximately 571 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 emissions⁹. The amortized Project construction emissions would be 19 MTCO₂e per year. Once construction is complete, the generation of these GHG emissions would cease.

Operational Emissions

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

Total GHG emissions associated with the Project are summarized in [Table 3: Project Greenhouse Gas Emissions](#). [Table 3](#) shows that the Project would generate approximately 3,129 MTCO₂e annually from both construction and operations of the Project.

⁹ 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).

Table 3: Project Greenhouse Gas Emissions	
Emissions Source	MTCO₂e per Year
Amortized Construction Emissions	19
Area	0.02
Energy	186
Mobile	2,382
Off-Road Equipment	138
Waste	144
Water and Wastewater	260
Total GHG Emissions	3,129
SCAQMD Threshold	10,000
Exceeds Threshold?	No
Source: CalEEMod version 2020.4.0. Refer to Appendix A for model outputs.	

Modeled emissions are broken down into the general categories of area sources, energy consumption, mobile sources, off-road equipment, solid waste, and water demand. Emissions from these categories are discussed below.

- **Construction.** As noted above, construction would result in direct GHG emissions. Construction GHG emissions are summed and amortized over the lifetime of the Project (assumed to be 30 years), then added to the operational emissions. The amortized emissions would be 19 MTCO₂e per year.
- **Area Sources.** Area source emissions occur from hearths, architectural coatings, landscaping equipment, and consumer products. The Project involves warehouse uses and would not include hearths. Landscaping and consumer products would be limited. Additionally, the primary emissions from architectural coatings are volatile organic compounds, which are relatively insignificant as direct GHG emissions. As shown in [Table 3](#), area source emissions would result in 0.02 MTCO₂e/yr.
- **Energy Consumption.** Energy consumption consists of emissions from project consumption of electricity and natural gas. The Project would result in 186 MTCO₂e/yr from energy consumption; refer to [Table 3](#).
- **Mobile Sources.** Mobiles source emissions were calculated with CalEEMod based on the trip generation from the Project's Traffic Impact Analysis. Mobile source emissions would be 2,382MTCO₂e/yr.
- **Off-Road Equipment.** Operational off-road emissions would be generated by off-road equipment used during operational activities. For this Project it was assumed that warehouse would employ six forklifts for loading and unloading goods.
- **Solid Waste.** Solid waste releases GHG emissions in the form of methane when these materials decompose. The Project would result in 144 MTCO₂e/yr from solid waste during operations.

- Water and Wastewater. As shown in Table 3, energy from water and wastewater would result in 260 MTCO₂e/yr from the electricity consumption associated with water conveyance and treatment.

Approximately 76 percent of the emissions are from mobile sources. The remaining 24 percent of GHG emissions would be from amortized construction emissions, area emissions, off-road equipment, waste, and water and wastewater.

As shown in Table 3, total emissions would be approximately 3,129 MTCO₂e annually from both construction and operations. Therefore, the Project would not exceed the 10,000 MTCO₂e per year threshold and impacts would be less than significant.

5.2 Greenhouse Gas Reduction Plan Compliance

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

Regional Transportation Plan/Sustainable Communities Strategy Consistency

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

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

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

Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency	
SCAG Goals	Compliance
GOAL 1: Encourage regional economic prosperity and global competitiveness.	N/A: This is not a project-specific policy and is therefore not applicable. However, the Project is located in an industrial area in proximity to existing developments. The development of the site would contribute to regional economic prosperity.
GOAL 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	Consistent: This is not a project-specific policy. However, the Project would not exceed any air quality thresholds. Class I bicycle facilities are planned at the Santa Ana River Trail located approximately 0.2-mile east of the Project site. Class II bicycle facilities are planned along Tippecanoe Avenue, Mill Street, and Orange Show Road, located approximately 0.7-, 0.6-, and 0.1-mile east, north, and south of the Project site, respectively. Additionally, the Project is located near Omnitrans Route 305 along Waterman Avenue, which has a stop at Waterman Avenue and Orange Show Road to the south of the Project.
GOAL 3: Enhance the preservation, security, and resilience of the regional transportation system.	N/A: This is not a transportation improvement project and is therefore not applicable.
GOAL 4: Increase person and goods movement and travel choices within the transportation system.	N/A: This is not a transportation improvement project and is therefore not applicable. However, the Project includes a warehouse use that would support goods movement.
GOAL 5: Reduce greenhouse gas emissions and improve air quality.	N/A: The Project is located within an industrial area in proximity to existing truck routes and freeways. The project is surrounded by existing industrial development and considered an infill site. The California Air Pollution Control Officers Association, <i>Quantifying Greenhouse Gas Mitigation Measures</i> (August 2010) identifies that infill developments, such as the proposed Project reduce vehicle miles traveled which reduces fuel consumption. Infill projects such as the proposed Project would have an improved location efficiency, which would reduce GHG and air quality emissions.
GOAL 6: Support healthy and equitable communities.	Consistent: The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development are encouraged through the development of alternative transportation methods, green design techniques for buildings, and other energy-reducing techniques. This development project is required to comply with the provisions of the California Building Energy Efficiency Standards and the Green Building Standards Code (CALGreen). As discussed in the Air Quality Assessment and the Health Risk Assessment, the Project would not exceed thresholds or result in health impacts. The Project is located on a site that is currently zoned Industrial and would not conflict

Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency	
SCAG Goals	Compliance
	with the surrounding community’s ability to access healthy food or parks.
GOAL 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	N/A: This is not a project-specific policy and is therefore not applicable.
GOAL 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Consistent: The Project involves a warehouse development and the site is bounded by East Norman Road to the south and Lena Road/S. Valley View Avenue to the east and would not disrupt land use patterns that facilitate transit and motorized/non-motorized transportation. The Project is located in a developed area in proximity to existing truck routes and freeways. As noted above, the Project is surrounded by existing industrial development and considered an infill site. The California Air Pollution Control Officers Association, <i>Quantifying Greenhouse Gas Mitigation Measures</i> (August 2010) identifies that infill developments, such as the proposed Project reduce vehicle miles traveled which reduces fuel consumption. Infill projects such as the proposed Project would have an improved location efficiency, which would result in more efficient travel.
GOAL 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	N/A: The Project involves development of a warehouse and does not include housing.
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats.	This the Project is not located on agricultural or habitat lands.
Source: Southern California Association of Governments, <i>Regional Transportation Plan/Sustainable Communities Strategy</i> , 2020.	

Compliance with applicable State standards (e.g., continuation of the Cap-and-Trade regulation; CARB’s Mobile Source Strategy, Sustainable Freight Action Plan, and Advanced Clean Truck Regulation; Executive Order N-79-20; SB 100/renewable electricity portfolio improvements that require 60 percent renewable electricity by 2030 and 100 percent renewable by 2045, etc.) 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 4](#), the proposed Project would be consistent with the stated goals of the RTP/SCS. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG’s ability to achieve the region’s post-2020 mobile source GHG reduction targets.

California Air Resource Board Scoping Plan Consistency

The California State Legislature adopted Assembly Bill (AB) 32 in 2006. AB 32 focuses on reducing GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, CARB adopted the *Climate Change Scoping Plan* (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan provides a range of GHG reduction actions that include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives,

voluntary actions, market-based mechanisms such as the cap-and-trade program, and an AB 32 implementation fee to fund the program. As shown in [Table 5: Project Consistency with Applicable CARB Scoping Plan Measures](#), the Project is consistent with most of the strategies, while others are not applicable to the Project.

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 GHG 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 GHG 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 Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles sold after the effective dates of the standards would 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 GHG Emission Reductions Sub-article 7. Low Carbon Fuel Standard CCR 95480	Consistent. This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. Motor vehicles associated with construction and operation of the Project would utilize low carbon transportation fuels as required under this measure.
	Regional Transportation-Related GHG Targets.	SB 375. Cal. Public Resources Code §§ 21155, 21155.1, 21155.2, 21159.28	Consistent. The Project would provide development in the region that is consistent with the growth projections in the RTP/SCS.
	Goods Movement	Goods Movement Action Plan January 2007	Not applicable. The 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	Consistent. This measure applies to medium and heavy-duty vehicles that operate in the state. The Project would not conflict with implementation of this measure. Medium and heavy-duty vehicles associated with construction and operation of the Project would be

Table 5: Project Consistency with Applicable CARB Scoping Plan Measures			
Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
		the Tractor-Trailer GHG Regulation	required to comply with the requirements of this regulation.
	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 Project would not conflict with implementation of this measure. The 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 36 percent of its power supply from renewable sources in 2019. 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 Project would comply with the CalGreen standards, which requires a 20 percent reduction in indoor water use. The Project would also comply with the County’s Water-Efficient Landscaping Regulations (§ 63.2201: Adoption of Model Water Efficient Landscape Ordinance of the San Bernardino County 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 Project would implement required green building strategies through existing regulation that requires the Project to comply with various CalGreen requirements. The 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	Title 24 Part 11 California Green	Consistent. The Project would not conflict with implementation of these measures. The Project is

Table 5: Project Consistency with Applicable CARB Scoping Plan Measures			
Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Recycling and Waste Management		Building Code Standards	required to achieve the recycling mandates via compliance with the CALGreen code. The City has consistently achieved its state recycling mandates.
		AB 341 Statewide 75 Percent Diversion Goal	
Forests	Sustainable Forests	Cap and Trade Offset Projects	Not applicable. The Project is in an area designated for industrial 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 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 Project site is designated for industrial development. No grazing, feedlot, or other agricultural activities that generate manure occur currently exist on-site or are proposed to be implemented by the 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 2017 Scoping Plan Update identifies additional GHG reduction measures necessary to achieve the 2030 target. These measures build upon those identified in the first update to the Scoping Plan in 2013. Although a number of these measures are currently established as policies and measures, some measures have not yet been formally proposed or adopted. It is expected that these actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. As such, impacts related to consistency with the Scoping Plan would be less than significant.

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

The majority of the GHG reductions from the Scoping Plan would result from continuation of the Cap-and-Trade regulation. Assembly Bill 398 (2017) extends the state's Cap-and-Trade program through 2030 and the Scoping Plan provide a comprehensive plan for the state to achieve its GHG targets through a variety of regulations enacted at the state level. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply 60 percent renewable electricity by 2030 and 100 percent renewable by 2045), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the Mobile Source Strategy and Sustainable Freight Action Plan.

Several of the State's plans and policies would contribute to a reduction in mobile source emissions from the Project. These include the CARB's Advanced Clean Truck Regulation, Executive Order N-79-20, CARB's Mobile Source Strategy, CARB's Sustainable Freight Action Plan, and CARB's Emissions Reduction Plan for Ports and Goods Movement. CARB's Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck

Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.

Executive Order N-79-20 establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035 and all medium and heavy-duty vehicles will be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment “requiring increasing volumes” of new ZEVs “towards the target of 100 percent.”

CARB’s Mobile Source Strategy includes increasing ZEV buses and trucks and their Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project site and may include existing trucks or new trucks that are part of the statewide goods movement sector. CARB’s Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. While these measures are not directly applicable to the Project, any commercial activity associated with goods movement would be required to comply with these measures as adopted. As such, the Project would not interfere with their implementation.

The Project would not obstruct or interfere with efforts to increase ZEVs or state efforts to improve system efficiency. The Project would also benefit from implementation of the State programs for ZEVs and goods movement efficiencies that reduce future GHG emissions from trucks.

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

Mitigation Measures: No Mitigation Measures 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 TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result

in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As shown in [Table 4](#) and [Table 5](#), the Project would not conflict with the RTP/SCS or the CARB Scoping Plan. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

Mitigation Measures: No Mitigation Measures is required.

Level of Significance: Less than significant impact.

6 REFERENCES

1. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, 2008.
2. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, 2017.
3. City of San Bernardino, *General Plan*, 2005.
4. HPA Architecture, *Site Plan*, 2021.
5. Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*, 2007.
6. 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.
7. National Research Council, *Advancing the Science of Climate Change*, 2010.
8. Southern California Association of Governments, *2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy*, 2020.
9. South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, 2009.
10. Translutions, Inc., *Gateway South & Warehouse – Trip Impact Analysis*, September 29, 2021.
11. U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016*, 2018.
12. U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources*, 2010.
13. U.S. EPA, *Overview of Greenhouse Gases*, 2018.

Appendix A

Greenhouse Gas Emissions Data

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

**Alliance GWSB8 Warehouse
San Bernardino-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	16.00	1000sqft	0.37	16,000.00	0
Unrefrigerated Warehouse-No Rail	288.59	1000sqft	9.43	288,588.00	0
Parking Lot	246.00	Space	2.21	98,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - land uses
- Construction Phase - Anticipated construction schedule
- Trips and VMT -
- Demolition -
- Grading -
- Vehicle Trips - per traffic study
- Vehicle Emission Factors - EMFAC 2021
- Vehicle Emission Factors - EMFAC 2021
- Vehicle Emission Factors - EMFAC 2021

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Area Coating -

Energy Use -

Construction Off-road Equipment Mitigation - SCAQMD Rule compliance

Water Mitigation -

Waste Mitigation - per AB 939

Operational Off-Road Equipment - Forklift for operational

Fleet Mix - fleet mix

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	67.00
tblConstructionPhase	NumDays	300.00	125.00
tblConstructionPhase	NumDays	30.00	60.00
tblConstructionPhase	NumDays	20.00	7.00
tblConstructionPhase	NumDays	10.00	7.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.62
tblFleetMix	LDA	0.54	0.55
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT1	0.06	0.07
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1960e-003	0.00
tblFleetMix	LHD2	7.1960e-003	0.17
tblFleetMix	MCY	0.03	0.03
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.14	0.16
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MH	5.0710e-003	0.00
tblFleetMix	MHD	0.01	0.00

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	OBUS	5.5900e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	SBUS	9.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblFleetMix	UBUS	2.5400e-004	0.00
tblGrading	AcresOfGrading	180.00	90.00
tblGrading	AcresOfGrading	10.50	15.00
tblGrading	MaterialImported	0.00	500.00
tblLandUse	LandUseSquareFeet	288,590.00	288,588.00
tblLandUse	LotAcreage	6.63	9.43

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	6.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	100.00
tblVehicleTrips	CW_TTP	33.00	100.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	77.00	100.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.21	23.19
tblVehicleTrips	ST_TR	1.74	0.34
tblVehicleTrips	SU_TR	0.70	23.19
tblVehicleTrips	SU_TR	1.74	0.34
tblVehicleTrips	WD_TR	9.74	23.19
tblVehicleTrips	WD_TR	1.74	0.34

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2022	3-31-2022	1.1285	1.1285
2	4-1-2022	6-30-2022	1.0174	1.0174
3	7-1-2022	9-30-2022	1.6416	1.6416
		Highest	1.6416	1.6416

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2502	6.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0146
Energy	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	184.8047	184.8047	0.0134	2.1700e-003	185.7846
Mobile	0.3370	3.3178	4.2794	0.0239	1.4639	0.0355	1.4994	0.3992	0.0338	0.4330	0.0000	2,301.4935	2,301.4935	0.0869	0.2613	2,381.5277
Offroad	0.0114	0.5533	7.2296	1.1900e-003		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003	0.0000	136.8263	136.8263	0.0443	0.0000	137.9326
Waste						0.0000	0.0000		0.0000	0.0000	58.0859	0.0000	58.0859	3.4328	0.0000	143.9053
Water						0.0000	0.0000		0.0000	0.0000	22.0746	164.1098	186.1844	2.2811	0.0552	259.6663
Total	1.6020	3.9022	11.5422	0.0253	1.4639	0.0468	1.5107	0.3992	0.0451	0.4443	80.1604	2,787.2479	2,867.4084	5.8585	0.3187	3,108.8310

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	1.2502	6.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0146
Energy	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	184.8047	184.8047	0.0134	2.1700e-003	185.7846
Mobile	0.3370	3.3178	4.2794	0.0239	1.4639	0.0355	1.4994	0.3992	0.0338	0.4330	0.0000	2,301.4935	2,301.4935	0.0869	0.2613	2,381.5277
Offroad	0.0114	0.5533	7.2296	1.1900e-003		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003	0.0000	136.8263	136.8263	0.0443	0.0000	137.9326
Waste						0.0000	0.0000		0.0000	0.0000	29.0429	0.0000	29.0429	1.7164	0.0000	71.9526
Water						0.0000	0.0000		0.0000	0.0000	17.6597	131.7652	149.4249	1.8249	0.0442	208.2128
Total	1.6020	3.9022	11.5422	0.0253	1.4639	0.0468	1.5107	0.3992	0.0451	0.4443	46.7026	2,754.9033	2,801.6059	3.6860	0.3076	2,985.4249

	ROG	NOx	CO	SO2	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	41.74	1.16	2.29	37.08	3.46	3.97

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	1/1/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/8/2022	5	7	
3	Paving	Paving	2/9/2022	2/17/2022	5	7	
4	Grading	Grading	2/18/2022	5/12/2022	5	60	
5	Building Construction	Building Construction	5/13/2022	11/3/2022	5	125	
6	Architectural Coating	Architectural Coating	8/3/2022	11/3/2022	5	67	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 2.21

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 456,882; Non-Residential Outdoor: 152,294; Striped Parking Area: 5,904 (Architectural

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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
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
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	236.00	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
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	63.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	168.00	66.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	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

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0255	0.0000	0.0255	3.8600e-003	0.0000	3.8600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e-004	0.0255	0.0124	0.0379	3.8600e-003	0.0116	0.0154	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	4.4000e-004	0.0170	4.2300e-003	7.0000e-005	2.0300e-003	1.7000e-004	2.2000e-003	5.6000e-004	1.6000e-004	7.2000e-004	0.0000	6.8582	6.8582	2.9000e-004	1.0900e-003	7.1894
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	4.4000e-004	5.3200e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.4000e-004	0.0000	1.3193	1.3193	4.0000e-005	4.0000e-005	1.3315
Total	1.0100e-003	0.0174	9.5500e-003	8.0000e-005	3.6700e-003	1.8000e-004	3.8500e-003	1.0000e-003	1.7000e-004	1.1600e-003	0.0000	8.1775	8.1775	3.3000e-004	1.1300e-003	8.5209

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					9.4500e-003	0.0000	9.4500e-003	1.4300e-003	0.0000	1.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e-004	9.4500e-003	0.0124	0.0219	1.4300e-003	0.0116	0.0130	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	4.4000e-004	0.0170	4.2300e-003	7.0000e-005	1.9400e-003	1.7000e-004	2.1100e-003	5.4000e-004	1.6000e-004	7.0000e-004	0.0000	6.8582	6.8582	2.9000e-004	1.0900e-003	7.1894
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e-004	4.4000e-004	5.3200e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.2000e-004	0.0000	1.3193	1.3193	4.0000e-005	4.0000e-005	1.3315
Total	1.0100e-003	0.0174	9.5500e-003	8.0000e-005	3.5000e-003	1.8000e-004	3.6800e-003	9.6000e-004	1.7000e-004	1.1200e-003	0.0000	8.1775	8.1775	3.3000e-004	1.1300e-003	8.5209

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0712	0.0000	0.0712	0.0356	0.0000	0.0356	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1158	0.0689	1.3000e-004		5.6400e-003	5.6400e-003		5.1900e-003	5.1900e-003	0.0000	11.7038	11.7038	3.7900e-003	0.0000	11.7984
Total	0.0111	0.1158	0.0689	1.3000e-004	0.0712	5.6400e-003	0.0768	0.0356	5.1900e-003	0.0408	0.0000	11.7038	11.7038	3.7900e-003	0.0000	11.7984

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.9000e-004	2.2400e-003	1.0000e-005	6.9000e-004	0.0000	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5541	0.5541	2.0000e-005	2.0000e-005	0.5592
Total	2.4000e-004	1.9000e-004	2.2400e-003	1.0000e-005	6.9000e-004	0.0000	6.9000e-004	1.8000e-004	0.0000	1.9000e-004	0.0000	0.5541	0.5541	2.0000e-005	2.0000e-005	0.5592

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					0.0264	0.0000	0.0264	0.0132	0.0000	0.0132	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1158	0.0689	1.3000e-004		5.6400e-003	5.6400e-003		5.1900e-003	5.1900e-003	0.0000	11.7038	11.7038	3.7900e-003	0.0000	11.7984
Total	0.0111	0.1158	0.0689	1.3000e-004	0.0264	5.6400e-003	0.0320	0.0132	5.1900e-003	0.0184	0.0000	11.7038	11.7038	3.7900e-003	0.0000	11.7984

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.9000e-004	2.2400e-003	1.0000e-005	6.5000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5541	0.5541	2.0000e-005	2.0000e-005	0.5592
Total	2.4000e-004	1.9000e-004	2.2400e-003	1.0000e-005	6.5000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5541	0.5541	2.0000e-005	2.0000e-005	0.5592

3.4 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.8600e-003	0.0389	0.0510	8.0000e-005		1.9900e-003	1.9900e-003		1.8300e-003	1.8300e-003	0.0000	7.0097	7.0097	2.2700e-003	0.0000	7.0663
Paving	2.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7600e-003	0.0389	0.0510	8.0000e-005		1.9900e-003	1.9900e-003		1.8300e-003	1.8300e-003	0.0000	7.0097	7.0097	2.2700e-003	0.0000	7.0663

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.6000e-004	1.8600e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.4618	0.4618	1.0000e-005	1.0000e-005	0.4660
Total	2.0000e-004	1.6000e-004	1.8600e-003	1.0000e-005	5.8000e-004	0.0000	5.8000e-004	1.5000e-004	0.0000	1.6000e-004	0.0000	0.4618	0.4618	1.0000e-005	1.0000e-005	0.4660

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	3.8600e-003	0.0389	0.0510	8.0000e-005		1.9900e-003	1.9900e-003		1.8300e-003	1.8300e-003	0.0000	7.0096	7.0096	2.2700e-003	0.0000	7.0663
Paving	2.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7600e-003	0.0389	0.0510	8.0000e-005		1.9900e-003	1.9900e-003		1.8300e-003	1.8300e-003	0.0000	7.0096	7.0096	2.2700e-003	0.0000	7.0663

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.6000e-004	1.8600e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4618	0.4618	1.0000e-005	1.0000e-005	0.4660
Total	2.0000e-004	1.6000e-004	1.8600e-003	1.0000e-005	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4618	0.4618	1.0000e-005	1.0000e-005	0.4660

3.5 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2284	0.0000	0.2284	0.1045	0.0000	0.1045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1087	1.1653	0.8713	1.8600e-003		0.0491	0.0491		0.0451	0.0451	0.0000	163.6038	163.6038	0.0529	0.0000	164.9266
Total	0.1087	1.1653	0.8713	1.8600e-003	0.2284	0.0491	0.2775	0.1045	0.0451	0.1496	0.0000	163.6038	163.6038	0.0529	0.0000	164.9266

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	4.5400e-003	1.1300e-003	2.0000e-005	5.4000e-004	5.0000e-005	5.9000e-004	1.5000e-004	4.0000e-005	1.9000e-004	0.0000	1.8308	1.8308	8.0000e-005	2.9000e-004	1.9192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2600e-003	1.7800e-003	0.0213	6.0000e-005	6.5800e-003	4.0000e-005	6.6100e-003	1.7500e-003	3.0000e-005	1.7800e-003	0.0000	5.2772	5.2772	1.5000e-004	1.5000e-004	5.3261
Total	2.3800e-003	6.3200e-003	0.0224	8.0000e-005	7.1200e-003	9.0000e-005	7.2000e-003	1.9000e-003	7.0000e-005	1.9700e-003	0.0000	7.1080	7.1080	2.3000e-004	4.4000e-004	7.2453

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					0.0846	0.0000	0.0846	0.0387	0.0000	0.0387	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1087	1.1653	0.8712	1.8600e-003		0.0491	0.0491		0.0451	0.0451	0.0000	163.6036	163.6036	0.0529	0.0000	164.9264
Total	0.1087	1.1653	0.8712	1.8600e-003	0.0846	0.0491	0.1337	0.0387	0.0451	0.0838	0.0000	163.6036	163.6036	0.0529	0.0000	164.9264

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	4.5400e-003	1.1300e-003	2.0000e-005	5.2000e-004	5.0000e-005	5.6000e-004	1.4000e-004	4.0000e-005	1.9000e-004	0.0000	1.8308	1.8308	8.0000e-005	2.9000e-004	1.9192
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2600e-003	1.7800e-003	0.0213	6.0000e-005	6.2400e-003	4.0000e-005	6.2700e-003	1.6600e-003	3.0000e-005	1.7000e-003	0.0000	5.2772	5.2772	1.5000e-004	1.5000e-004	5.3261
Total	2.3800e-003	6.3200e-003	0.0224	8.0000e-005	6.7600e-003	9.0000e-005	6.8300e-003	1.8000e-003	7.0000e-005	1.8900e-003	0.0000	7.1080	7.1080	2.3000e-004	4.4000e-004	7.2453

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1066	0.9760	1.0227	1.6800e-003		0.0506	0.0506		0.0476	0.0476	0.0000	144.8283	144.8283	0.0347	0.0000	145.6957
Total	0.1066	0.9760	1.0227	1.6800e-003		0.0506	0.0506		0.0476	0.0476	0.0000	144.8283	144.8283	0.0347	0.0000	145.6957

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	7.0300e-003	0.1900	0.0674	7.7000e-004	0.0260	2.1500e-003	0.0282	7.5100e-003	2.0600e-003	9.5700e-003	0.0000	74.9033	74.9033	2.0200e-003	0.0111	78.2595
Worker	0.0396	0.0311	0.3726	1.0000e-003	0.1151	6.2000e-004	0.1158	0.0306	5.7000e-004	0.0311	0.0000	92.3506	92.3506	2.6300e-003	2.6500e-003	93.2072
Total	0.0466	0.2211	0.4400	1.7700e-003	0.1412	2.7700e-003	0.1439	0.0381	2.6300e-003	0.0407	0.0000	167.2539	167.2539	4.6500e-003	0.0137	171.4667

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	0.1066	0.9760	1.0227	1.6800e-003		0.0506	0.0506		0.0476	0.0476	0.0000	144.8281	144.8281	0.0347	0.0000	145.6955
Total	0.1066	0.9760	1.0227	1.6800e-003		0.0506	0.0506		0.0476	0.0476	0.0000	144.8281	144.8281	0.0347	0.0000	145.6955

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	7.0300e-003	0.1900	0.0674	7.7000e-004	0.0249	2.1500e-003	0.0271	7.2400e-003	2.0600e-003	9.3000e-003	0.0000	74.9033	74.9033	2.0200e-003	0.0111	78.2595
Worker	0.0396	0.0311	0.3726	1.0000e-003	0.1091	6.2000e-004	0.1098	0.0291	5.7000e-004	0.0297	0.0000	92.3506	92.3506	2.6300e-003	2.6500e-003	93.2072
Total	0.0466	0.2211	0.4400	1.7700e-003	0.1341	2.7700e-003	0.1368	0.0364	2.6300e-003	0.0390	0.0000	167.2539	167.2539	4.6500e-003	0.0137	171.4667

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4255					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8500e-003	0.0472	0.0608	1.0000e-004		2.7400e-003	2.7400e-003		2.7400e-003	2.7400e-003	0.0000	8.5534	8.5534	5.6000e-004	0.0000	8.5673
Total	1.4323	0.0472	0.0608	1.0000e-004		2.7400e-003	2.7400e-003		2.7400e-003	2.7400e-003	0.0000	8.5534	8.5534	5.6000e-004	0.0000	8.5673

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2900e-003	3.3700e-003	0.0404	1.1000e-004	0.0125	7.0000e-005	0.0126	3.3200e-003	6.0000e-005	3.3800e-003	0.0000	10.0178	10.0178	2.9000e-004	2.9000e-004	10.1108
Total	4.2900e-003	3.3700e-003	0.0404	1.1000e-004	0.0125	7.0000e-005	0.0126	3.3200e-003	6.0000e-005	3.3800e-003	0.0000	10.0178	10.0178	2.9000e-004	2.9000e-004	10.1108

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	1.4255					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8500e-003	0.0472	0.0608	1.0000e-004		2.7400e-003	2.7400e-003		2.7400e-003	2.7400e-003	0.0000	8.5534	8.5534	5.6000e-004	0.0000	8.5673
Total	1.4323	0.0472	0.0608	1.0000e-004		2.7400e-003	2.7400e-003		2.7400e-003	2.7400e-003	0.0000	8.5534	8.5534	5.6000e-004	0.0000	8.5673

Mitigated Construction Off-Site

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2900e-003	3.3700e-003	0.0404	1.1000e-004	0.0118	7.0000e-005	0.0119	3.1600e-003	6.0000e-005	3.2200e-003	0.0000	10.0178	10.0178	2.9000e-004	2.9000e-004	10.1108
Total	4.2900e-003	3.3700e-003	0.0404	1.1000e-004	0.0118	7.0000e-005	0.0119	3.1600e-003	6.0000e-005	3.2200e-003	0.0000	10.0178	10.0178	2.9000e-004	2.9000e-004	10.1108

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	0.3370	3.3178	4.2794	0.0239	1.4639	0.0355	1.4994	0.3992	0.0338	0.4330	0.0000	2,301.4935	2,301.4935	0.0869	0.2613	2,381.5277
Unmitigated	0.3370	3.3178	4.2794	0.0239	1.4639	0.0355	1.4994	0.3992	0.0338	0.4330	0.0000	2,301.4935	2,301.4935	0.0869	0.2613	2,381.5277

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	371.04	371.04	371.04	2,241,972	2,241,972
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	98.12	98.12	98.12	1,428,636	1,428,636
Total	469.16	469.16	469.16	3,670,608	3,670,608

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
General Office Building	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	40.00	0.00	0.00	100.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.552018	0.073360	0.189757	0.159343	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.025522	0.000000	0.000000
Parking Lot	0.537785	0.055838	0.172353	0.139003	0.027005	0.007196	0.011392	0.017285	0.000559	0.000254	0.025303	0.000954	0.005071
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.173077	0.211538	0.615385	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	150.9218	150.9218	0.0127	1.5400e-003	151.7004
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	150.9218	150.9218	0.0127	1.5400e-003	151.7004
NaturalGas Mitigated	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.8829	33.8829	6.5000e-004	6.2000e-004	34.0843
NaturalGas Unmitigated	3.4200e-003	0.0311	0.0261	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	33.8829	33.8829	6.5000e-004	6.2000e-004	34.0843

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

5.2 Energy by Land Use - NaturalGas

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					
General Office Building	54880	3.0000e-004	2.6900e-003	2.2600e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9286	2.9286	6.0000e-005	5.0000e-005	2.9460
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
Unrefrigerated Warehouse-No Rail	580062	3.1300e-003	0.0284	0.0239	1.7000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	30.9543	30.9543	5.9000e-004	5.7000e-004	31.1383
Total		3.4300e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8829	33.8829	6.5000e-004	6.2000e-004	34.0843

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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					
General Office Building	54880	3.0000e-004	2.6900e-003	2.2600e-003	2.0000e-005		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	2.9286	2.9286	6.0000e-005	5.0000e-005	2.9460
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
Unrefrigerated Warehouse-No Rail	580062	3.1300e-003	0.0284	0.0239	1.7000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	30.9543	30.9543	5.9000e-004	5.7000e-004	31.1383
Total		3.4300e-003	0.0311	0.0261	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.8829	33.8829	6.5000e-004	6.2000e-004	34.0843

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	147040	26.0769	2.2000e-003	2.7000e-004	26.2114
Parking Lot	34440	6.1078	5.2000e-004	6.0000e-005	6.1393
Unrefrigerated Warehouse-No Rail	669524	118.7371	0.0100	1.2100e-003	119.3497
Total		150.9218	0.0127	1.5400e-003	151.7004

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	147040	26.0769	2.2000e-003	2.7000e-004	26.2114
Parking Lot	34440	6.1078	5.2000e-004	6.0000e-005	6.1393
Unrefrigerated Warehouse-No Rail	669524	118.7371	0.0100	1.2100e-003	119.3497
Total		150.9218	0.0127	1.5400e-003	151.7004

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	1.2502	6.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0146
Unmitigated	1.2502	6.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0146

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1425					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1070					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0146
Total	1.2502	6.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0146

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	0.1425					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1070					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.5000e-004	6.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0146
Total	1.2502	6.0000e-005	7.0300e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0137	0.0137	4.0000e-005	0.0000	0.0146

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

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	149.4249	1.8249	0.0442	208.2128
Unmitigated	186.1844	2.2811	0.0552	259.6663

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.84374 / 1.74294	10.9031	0.0935	2.2900e-003	13.9233
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	66.7364 / 0	175.2813	2.1876	0.0529	245.7430
Total		186.1844	2.2811	0.0552	259.6663

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	2.27499 / 1.63662	9.1998	0.0749	1.8400e-003	11.6185
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	53.3892 / 0	140.2250	1.7501	0.0423	196.5944
Total		149.4249	1.8249	0.0442	208.2128

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	29.0429	1.7164	0.0000	71.9526
Unmitigated	58.0859	3.4328	0.0000	143.9053

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	14.88	3.0205	0.1785	0.0000	7.4832
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	271.27	55.0654	3.2543	0.0000	136.4221
Total		58.0859	3.4328	0.0000	143.9053

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	7.44	1.5103	0.0893	0.0000	3.7416
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	135.635	27.5327	1.6271	0.0000	68.2111
Total		29.0429	1.7164	0.0000	71.9526

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	6	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	0.0114	0.5533	7.2296	1.1900e-003		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003	0.0000	136.8263	136.8263	0.0443	0.0000	137.9326
Total	0.0114	0.5533	7.2296	1.1900e-003		8.9200e-003	8.9200e-003		8.9200e-003	8.9200e-003	0.0000	136.8263	136.8263	0.0443	0.0000	137.9326

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

Alliance GWSB8 Warehouse - San Bernardino-South Coast County, Annual

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