5.8 Greenhouse Gas Emissions

5.8.1 INTRODUCTION

This section of the Draft EIR evaluates greenhouse gas (GHG) emissions associated with the proposed Project and its contribution to global climate change. Specifically, this section evaluates the extent to which GHG emissions from the Project contribute to elevated levels of GHGs in the Earth's atmosphere and consequently contribute to climate change. This section also addresses the Project's consistency with applicable plans, policies, and public agency regulations adopted for the purpose of reducing the emissions of GHGs. The analysis within this section is based on the following City documents and technical reports:

- *City of Perris General Plan 2030*, Adopted 26 April 2005
- *City of Perris General Plan 2030 Environmental Impact Report*, Certified 26 April 2005
- Perris Municipal Code
- *Harvest Landing Specific Plan Greenhouse Gas Analysis*, prepared by Urban Crossroads, April 2025, included as EIR Appendix M

5.8.2 REGULATORY SETTING

5.8.2.1 Federal Regulations

Energy Independence and Security Act, Corporate Average Fuel Efficiency Standards

On December 19, 2007, the Energy Independence and Security Act of 2007 was signed into law, requiring an increased Corporate Average Fuel Economy (CAFE) standard of 35 miles per gallon (mpg) for the combined fleet of cars and light trucks by the 2020 model year.

In addition to setting increased CAFE standards for motor vehicles, the Energy Independence and Security Act includes the following additional provisions:

- Renewable Fuel Standard (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

Additional provisions of the Act address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.

5.8.2.2 State Regulations

California Assembly Bill 1493– Pavley

In 2002, the California Legislature adopted Assembly Bill (AB) 1493 requiring the adoption of regulations to reduce GHG emissions in the transportation sector. In September 2004, pursuant to AB 1493, the California Air Resources Board (CARB) approved regulations to reduce GHG emissions from new motor vehicles beginning with the 2009 model year (Pavley Regulations). In September 2009, CARB adopted amendments to the Pavley Regulations to reduce GHG emissions from 2009 to 2016. CARB, the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Transportation's National Highway Traffic and Safety Administration have coordinated efforts to develop fuel economy and GHG standards

for model 2017-2025 vehicles. The GHG standards are incorporated into the "Low Emission Vehicle" Regulations.

California Executive Order S-3-05 – Statewide Emission Reduction Targets

Executive Order S-3-05 was signed by Governor Arnold Schwarzenegger in June 2005. Executive Order S-3-05 establishes statewide emission reduction targets through the year 2050:

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

California Assembly Bill 32, Global Warming Solutions Act of 2006 (Chapter 488, Statutes of 2006)

In 2006, the California Legislature passed the California Global Warming Solutions Act of 2006 (AB 32), which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated at least every five years. Since 2008, there have been two updates to the Scoping Plan. Each of the Scoping Plans have included a suite of policies to help the State achieve its GHG targets, in large part leveraging existing programs whose primary goal is to reduce harmful air pollution. The 2017 Scoping Plan identifies how the State can reach the 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, and substantially advance toward the 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

The AB 32 Scoping Plan also anticipates that local government actions will result in reduced GHG emissions because local governments have the primary authority to plan, zone, approve, and permit development to accommodate population growth and the changing needs of their jurisdictions. The Scoping Plan also relies on the requirements of Senate Bill 375 (discussed below) to align local land use and transportation planning for achieving GHG reductions.

The Scoping Plan must be updated every five years to evaluate AB 32 policies and ensure that California is on track to achieve the GHG reduction goals. On December 15, 2022, CARB adopted the 2022 Scoping Plan. The 2022 Scoping Plan builds on the previous Scoping Plans as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world.

Senate Bill 375 (Chapter 728, Statutes of 2008)

In August 2008, the California Legislature passed, and on September 30, 2008, Governor Schwarzenegger signed, Senate Bill (SB) 375, which addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. Regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, as determined by CARB, are required to consider the emission reductions associated with vehicle emission standards (see SB 1493), the composition of fuels (see Executive Order S-1-07), and other CARB-approved measures to reduce GHG emissions. Regional metropolitan planning organizations will be responsible for preparing a Sustainable Communities Strategy within their Regional Transportation Plan. The goal of the Sustainable Communities Strategy is to establish a

development plan for the region, which, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If a Sustainable Communities Strategy is unable to achieve the GHG reduction target, a metropolitan planning organization must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies. SB 375 provides incentives for streamlining CEQA requirements by substantially reducing the requirements for "transit priority projects," as specified in SB 375, and eliminating the analysis of the impacts of certain residential projects on global warming and the growth-inducing impacts of those projects when the projects are consistent with the Sustainable Communities Strategy or Alternative Planning Strategy. On September 23, 2010, CARB adopted the SB 375 targets for the regional metropolitan planning organizations.

Executive Order B-30-15 – 2030 Statewide Emission Reduction Target

Executive Order B-30-15 was signed by Governor Jerry Brown on April 29, 2015, establishing an interim statewide GHG reduction target of 40 percent below 1990 levels by 2030, which is necessary to guide regulatory policy and investments in California in the midterm, and put California on the most cost-effective path for long-term emission reductions. Under this Executive Order, all State agencies with jurisdiction over sources of GHG emissions are required to continue to develop and implement emissions reduction programs to reach the State's 2050 target and attain a level of emissions necessary to avoid dangerous climate change. According to the Governor's Office, this Executive Order is in line with the scientifically established levels needed in the United States to limit global warming below 2°C - the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels.

Senate Bill 32 (Chapter 249, Statutes of 2016)

Senate Bill 32 was signed on September 8, 2016 by Governor Jerry Brown. SB 32 requires the State to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80 percent below 1990 levels by 2050. A related bill that was also approved in 2016, AB 197 (Chapter 250, Statutes of 2016) creates a legislative committee to oversee regulators to ensure that ARB is not only responsive to the Governor, but also the Legislature.

AB 398 – Extension of Cap and Trade Program to 2030 (Chapter 617, Statutes of 2017)

AB 398 was signed by Governor Brown on July 25, 2017 and became effective immediately as urgency legislation. AB 398, among other things, extending the cap and trade program through 2030.

Senate Bill 97 (Chapter 185, Statutes of 2007)

SB 97 (Health and Safety Code Section 21083.5) was adopted in 2007 and required the Office of Planning and Research to prepare amendments to the CEQA Guidelines for the mitigation of GHG impacts. The amendments became effective on March 18, 2010. The CEQA Guidelines Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. A new section, CEQA Guidelines Section 15064.4, was added to assist agencies in determining the significance of GHG emissions. The new CEQA Guidelines Section gives discretion to the lead agency whether to: (1) use a model of methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. CEQA does not provide guidance to determine whether the project's estimated GHG emissions are significant or cumulatively considerable.

Also amended were CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. However, GHG mitigation measures are referenced in general terms, and no specific measures are identified. Additionally, the revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze GHG emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable, however it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 permits programmatic GHG analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to Section 15183.5(b).

California Air Resources Board Scoping Plan

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan builds on the previous 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the State to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with CEQA Guidelines Section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation; the regulations that effect this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. As stated in the Plan's executive summary:

> *"The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place for a decade and a half. That means rapidly moving to zero-emission transportation; electrifying the cars, buses, trains, and trucks that now constitute California's single largest source of planet-warming pollution."*
>
> *"[A]pproval of this plan catalyzes a number of efforts, including the development of new regulations as well as amendments to strengthen regulations and programs already in place, not just at CARB but across state agencies."*

Under the 2022 Scoping Plan, the 2045 carbon neutrality goal is to be implemented by the following objectives:

- Reimagine roadway projects that increase vehicle miles traveled (VMT) in a way that meets community needs and reduces the need to drive.
- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.

- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.
- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.
- Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.
- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.
- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (regional transportation plan/sustainable communities strategy and regional housing needs assessment) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The California Energy Code is updated on a regular basis to allow consideration and possible incorporation of new energy efficient technologies and methods.

The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, and strengthens ventilation standards, among other requirements. The California Energy Commission anticipates that the 2022 Energy Code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons.

California Code of Regulations, Title 24, Part 11: The California Green Building Standards (CALGreen) Code is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

The 2022 California Energy Code and the CALGreen Code mandatory measures for nonresidential uses that reduce GHG emissions and are applicable to the proposed Project include, but are not limited to, the following:

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).

- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.5.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty electric vehicle supply equipment for warehouses, grocery stores, and retail stores.
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
    - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
    - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor- mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
    - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
    - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
- Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance, whichever is more stringent (5.304.1).
- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 square feet or for excess consumption where any tenant within a new building or within an addition that is projected to consume more than 1,000 gallons per day (5.303.1.1 and 5.303.1.2).
- Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 square feet. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit (5.304.3).

The 2022 CALGreen Building Standards Code has been adopted in Perris Municipal Code Section 16.08.050.

5.8.2.3 Local and Regional Regulations

City of Perris General Plan 2030

The City of Perris General Plan Healthy Community Element contains the following policies related to GHG emissions that are applicable to the Project:

Policy HC 6.3 Promote measures that will be effective in reducing emissions during construction activities:

- Perris will ensure that construction activities follow existing South Coast Air Quality Management District (AQMD) rules and regulations.
- All construction equipment for public and private projects will also comply with California Air Resources Board's vehicle standards. For projects that may exceed daily construction emissions established by the South Coast AQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the South Coast AQMD.
- Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded.

City of Perris Climate Action Plan

The City of Perris Climate Action Plan (CAP) was adopted by the City Council (Resolution Number 4966) on February 23, 2016. The Perris CAP was developed to address global climate change through the reduction of harmful GHG emissions at the community level, and as part of California's mandated statewide GHG emissions reduction goals under AB 32. Perris's CAP, including the GHG inventories and forecasts contained within, is based on the Western Riverside Council of Governments (WRCOG) Subregional CAP. The Perris CAP utilized WRCOG's analysis of existing GHG reduction programs and policies that have already been implemented in the subregion and applicable best practices from other regions to assist in meeting the 2020 subregional reduction target. The CAP reduction measures chosen for the City's CAP were based on their GHG reduction potential, cost-benefit characteristics, funding availability, and feasibility of implementation in the City of Perris. The CAP used an inventory base year of 2010 and included emissions from the following sectors: residential energy, commercial/industrial energy, transportation, waste, and wastewater. The CAP's 2020 reduction target is 15% below 2010 levels, and the 2035 reduction target is 47.5% below 2010 levels. The City of Perris is expected to meet these reduction targets through implementation of statewide and local measures. Beyond 2020, Executive Order S-03-05 calls for a reduction of GHG emissions to a level 80% below 1990 levels by 2050.

City of Perris Good Neighbor Guidelines

The City of Perris Good Neighbor Guidelines for Siting New and/or Modified Industrial Facilities were adopted in September 2022. The purpose of the Good Neighbor Guidelines is to protect residential areas in the City while allowing for the planned development of new or modified industrial facilities. The Guidelines apply to all new warehouse, logistics, and distribution facilities with applications submitted after September 2022. The Good Neighbor Guidelines contain the following policies related to greenhouse gas emissions that are applicable to future industrial developments within Phase 2 of the Specific Plan:

Policy 1.1 Any industrial project over 400,000 square feet in size or requiring the preparation of an Environmental Impact Report (EIR) shall be designed to meet the requirements of LEED Silver Certification whether or not certification is pursued. Documentation shall be provided to the City demonstrating compliance.

Policy 1.19 Signs and drive aisle pavement markings shall clearly identify the onsite circulation pattern to minimize unnecessary on-site vehicular travel.

Policy 2.1 Minimize the air quality impacts of trucks on sensitive receptors by:

a) Restricting diesel engine and construction equipment idling to 5 minutes or less (SCAQMD Rule 2485). A driver of a vehicle shall turn off the engine upon stopping at a destination.
b) Designing facilities with adequate on-site queuing for trucks and away from sensitive receptors and preventing queuing of trucks on surrounding public streets.
c) Providing ingress and egress for trucks away from sensitive receptors.
d) For buildings with 50 or more dock high doors, a site plan is required identifying a planned location for future electric truck charging stations and installation of raceway for conduit to that location. A ratio of one charging station shall be required for every 50 dock high doors.
e) On-site equipment, such as forklifts, shall be electric with the necessary electrical charging stations provided or be powered by alternative technology.
f) Passenger vehicles parking should be separated from enclosed truck parking/truck court, and have separate primary access.
g) At least 10% of all passenger vehicle parking spaces shall be electric vehicle (EV) ready. At least 5% of all passenger vehicle parking spaces shall be equipped with working Level 2 Quick charge EV charging stations installed and operational, prior to issuance of a certificate of occupancy. Signage shall be installed indicating EV charging stations and that spaces are reserved for clean air/EV vehicles.
h) Encouraging replacement of diesel fleets with new model vehicles.
i) Preventing the queuing of trucks on streets or elsewhere outside the warehouse facility or near sensitive receptor.
j) Promoting the installation of on-site electric hook-ups to eliminate idling of main and auxiliary engines during loading and unloading of cargo and when trucks are not in use – especially where transport refrigeration units (TRUs) are proposed to be used.

Policy 2.6 On site motorized operational equipment shall be ZE (Zero Emissions).

Policy 2.7 Buildings over 400,000 square feet shall install solar panels so 100% of the power is supplied to the office area of the facility, unless it is restricted due to the March Air Force Base Accident Potential Zone.

Policy 2.8 Truck operators with TRUs shall be required to utilize electric plug-in units when at loading docks.

Policy 2.9 Pursuant to CARB's Truck and Bus Regulation, facility operators shall maintain records of their facility owned and operated fleet equipment and ensure that all diesel fueled Medium-Heavy Duty Trucks (MHDT) and Heavy-Heavy Duty (HHD) trucks with a gross vehicle weight rating greater than 19,500 pounds use year CARB compliant 2010 or newer engines. Records should be made available to the City of Perris.

Policy 2.10 Facility operators shall coordinate with CARB and SCAQMD to obtain the latest information about regional air quality concentrations, health risks, and trucking regulations.

Policy 2.11 Equipment operator of a TRU (Transportation Refrigeration Unit) shall not cause a TRU to operate while stationary unless the vehicle is lawfully parked and not within 500 feet of a school, unless the operator is actively engaged in the process of loading or unloading cargo or is waiting in a queue to load or unload for a period not to exceed 2 hours.

Policy 2.12 Require low energy use features, low water use features, all-electric vehicles (EV) parking spaces and charging facility, carpool/vanpool parking spaces, and short- and long-term bicycle parking facilities (Title 24 of the California Code of Regulations – CALGreen).

Policy 2.13 Post signs requiring to turn off truck engines when not in use.

Policy 5.1 Provide adequate notification to all owners of real property on the latest records of the County Assessor within 500 feet of the real property. or at least 25 property owners, whichever is greater, for all required public notices pertaining to a warehouse project's entitlement.

Policy 5.2 Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

Policy 5.4 Facility operators for sites that exceed 250 employees shall establish a rideshare program, in accordance with SAQMD Rule 2202, with the intent of discouraging single-occupancy vehicle trips and promote alternate modes of transportation, such as carpooling and transit where feasible.

Policy 5.8 Provide facility owners/management with information from CARB and SCAQMD and encourage the utilization of resources provided by those agencies.

Goal 6 Implement Construction Practice Requirements in Accordance with State Requirements to Limit Emissions and Noise Impacts from Building Demolition, Renovation, and New Construction

Policy 6.1 In addition to regular construction inspections conducted by City Departments, the applicant shall provide monthly reports to the City demonstrating compliance with all the construction related policies.

Policy 6.2 All diesel fueled off-road construction equipment greater than 50 horsepower shall be equipped with CARB Tier 4 Compliant engines. If Tier 4 equipment is not available within 50 miles of the project site, Tier 3 or cleaner off road construction equipment may be utilized.

Policy 6.7 Construction equipment maintenance records and data sheets, as well as any other records necessary to verify compliance with CARB standards shall be kept on site and furnished to the City of Perris upon request.

Policy 6.11 Use of the most readily available technology (CARB Tier 3, Tier 4 Interim, and Tier 4 Compliant equipment).

Policy 6.12 Designate an area of the construction site where electric-powered construction vehicles and equipment can charge if the utility provider can feasibly provide temporary power for this purpose.

Goal 7 Ensure Compliance with the California Environmental Quality Act (CEQA) and State Environmental Agencies

Policy 7.1 In compliance with CEQA, conduct SCAQMD California Emissions Estimator Model (CalEEMod) and Emission Factors (EMFAC) computer models to identify the significance of air quality impacts on sensitive receptors.

Policy 7.2 Require an air quality analysis to ensure air quality protection, in accordance with the Air Quality Management District (AQMD) guidelines, for both project specific and cumulative impact analysis.

Policy 7.5 Require Transportation Demand Management Measures for industrial uses with over 100 employees to reduce work related vehicle trips.

Policy 7.6 Require signage about CARB regulations.

Policy 7.7 All building roofs shall be solar-ready.

5.8.3 ENVIRONMENTAL SETTING

Gases that trap heat in the atmosphere are called GHGs. The major concern with GHGs is that increases in their concentrations are contributing to global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potential, and carbon dioxide is the most common reference gas for climate change, GHG emissions are often quantified and reported as carbon dioxide equivalents (CO_2e). For example, sulfur hexafluoride is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. Sulfur hexafluoride, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG, with 22,800 times the global warming potential as carbon dioxide. Therefore, an emission of one metric ton (MT) of sulfur hexafluoride could be reported as an emission of 22,800 MT of CO_2e. Large emission sources are reported in million metric tons (MMT) of CO_2e. The principal GHGs are described below, along with their global warming potential.

Carbon dioxide: Carbon dioxide is an odorless, colorless, natural GHG. Carbon dioxide's global warming potential is 1. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (manmade) sources are from burning coal, oil, natural gas, and wood.

Methane: Methane is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years, and its global warming potential is 28. Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.

Nitrous oxide: Nitrous oxide (laughing gas) is a colorless GHG that has a lifetime of 121 years, and its global warming potential is 265. Sources include microbial processes in soil and water, fuel combustion, and industrial processes.

Sulfur hexafluoride: Sulfur hexafluoride is an inorganic, odorless, colorless, and nontoxic, nonflammable gas that has a lifetime of 3,200 years and a high global warming potential of 23,500. 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.

Perfluorocarbons: Perfluorocarbons 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. Their global warming potential ranges from 7,000 to 11,000. Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.

Hydrofluorocarbons: Hydrofluorocarbons are a group of GHGs containing carbon, chlorine, and at least one hydrogen atom. Their global warming potential ranges from 100 to 12,000. Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.

Some of the potential effects in California of global warming may include loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years. Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects:

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

There are also many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

GHGs are produced by both direct and indirect emissions sources. Direct emissions include consumption of natural gas, heating and cooling of buildings, landscaping activities and other equipment used directly by land uses. Indirect emissions include the consumption of fossil fuels for vehicle trips, electricity generation, water usage, and solid waste disposal.

Existing Specific Plan Area Conditions

The Project site includes two vacant single-family residences, remnants of two previously demolished residences, vacant land that has been disturbed from previous agricultural uses, and developed roadways, as shown in Figure 3-3, *Aerial View*. The Specific Plan Overlay Area is currently developed with Val Verde Elementary School. Greenhouse gas emissions are currently generated from operation of the existing school, related vehicle trips, and by occasional disking and weed control activities onsite.

The Project site is located within the City of Perris. The primary GHG emissions within the City of Perris are from on-road transportation, building energy, waste, and construction.

5.8.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines indicates that a Project could have a significant effect if it were to:

GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

CEQA Guidelines Section 15064.4 provides discretion to the lead agency whether to: (1) use a model of methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. In addition, CEQA does not provide guidance to determine whether the project's estimated GHG emissions are significant, but recommends that lead agencies consider several factors that may be used in the determination of significance of project related GHG emissions, including:

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines Section 15130(f) describes that the effects of GHG emissions are by their very nature cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis. Additionally, CEQA Guidelines Section 15064(h)3 states that a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides requirements to avoid or lesson the cumulative problem.

The South Coast Air Quality Management District (AQMD) is the agency responsible for air quality planning and regulation in the South Coast Air Basin, in which the City of Perris is located. The South Coast AQMD addresses the impacts to climate change of projects subject to South Coast AQMD permits as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The South Coast AQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

The South Coast AQMD has been evaluating GHG significance thresholds since April 2008. On December 5, 2008, the South Coast AQMD Governing Board adopted an Interim CEQA Greenhouse Gas Significance Threshold of 10,000 $MTCO_2e$ per year for stationary source/industrial projects for which the South Coast AQMD is the lead agency. The South Coast AQMD has continued to consider the adoption of significance thresholds for projects where the South Coast AQMD is not the lead agency. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a locally adopted greenhouse gas reduction plan. If a project is consistent with a qualifying locally adopted greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.

- Tier 3 consists of screening thresholds, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
    - Industrial land uses: 10,000 $MTCO_2e$ per year
    - Option 1: Based on non-industrial land use type:
        - Residential: 3,500 $MTCO_2e$ per year
        - Commercial: 1,400 $MTCO_2e$ per year
        - Mixed use: 3,000 $MTCO_2e$ per year
    - Option 2: All non-industrial land use types: 3,000 $MTCO_2e$ per year
- Tier 4 has the following options:
    - Option 1: Percent emission reduction target; this percentage is currently undefined.
    - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
    - Option 3, 2020 Target: For service populations, including residents and employees, 4.8 $MTCO_2e$ per service population per year for projects and 6.6 $MTCO_2e$ per service population per year for plans.
    - Option 3, 2035 Target: 3.0 $MTCO_2e$ per service population per year for projects and 4.1 $MTCO_2e$ per service population per year for plans.

The South Coast AQMD's draft thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 ppm, thus stabilizing global climate.

The thresholds identified above have not been adopted by the South Coast AQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain. If CARB adopts statewide significance thresholds, South Coast AQMD staff plan to report back to the South Coast AQMD Governing Board regarding any recommended changes or additions to the South Coast AQMD's interim threshold. The only update to the South Coast AQMD's GHG thresholds since 2010 is that the 10,000 $MTCO_2e$ per year threshold for industrial projects is now included in the South Coast AQMD's March 2023 South Coast AQMD Air Quality Significance Thresholds document that is published for use by local agencies.

In the absence of other thresholds of significance promulgated by the South Coast AQMD, the City of Perris has been using the South Coast AQMD's 10,000 $MTCO_2e$ per year threshold of significance for industrial warehousing projects and the draft thresholds for non-industrial projects the purpose of evaluating the GHG impacts associated with proposed general development projects. Other lead agencies through the Basin have also been using these adopted and draft thresholds. The City's evaluation of impacts under the 10,000 $MTCO_2e$ per year threshold of significance is also considered to be conservative since it is being applied to all of the GHG emissions generated by the project (i.e., area sources, energy sources, vehicular sources, solid waste sources, and water sources) whereas the South Coast AQMD's 10,000 $MTCO_2e$ per year threshold of significance applies only to the new stationary sources generated at industrial facilities.

Because the proposed Project includes both industrial and non-industrial (commercial) uses, it is considered to be a mixed-use project this analysis utilizes the 3,000 $MTCO_2e$ per year threshold of significance. The City's use of the 3,000 $MTCO_2e$ per year threshold of significance for the Project is also considered to be appropriate because the existing Harvest Landing Specific Plan designations for the Project site consist of mixed-uses that do not include industrial uses. Thus, for purposes of analysis in this analysis, if Project-related

GHG emissions do not exceed the 3,000 $MTCO_2e$ per year threshold of significance, then Project-related GHG emissions would clearly have a less-than-significant impact pursuant to Threshold GHG-1. On the other hand, if Project-related GHG emissions exceed 3,000 $MTCO_2e$ per year, the Project would be considered a substantial source of GHG emissions.

5.8.5 METHODOLOGY

The California Emissions Estimator Model (CalEEMod) v2022.1 has been used to determine construction and operational GHG emissions for each phase and buildout of the proposed Project, based on the maximum development assumptions outlined in Section 3.0*, Project Description*. The purpose of this model is to calculate construction-source and operational-source GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from measures incorporated into the Project to reduce or minimize GHG emissions. For construction phase Project emissions, GHGs are quantified and, per South Coast AQMD methodology, the total GHG emissions for construction activities are divided by 30 years, and then added to the annual operational phase of GHG emissions.

Mobile-source emissions were modeled based on the increase in daily vehicle trips that would result from the proposed Project. Trip generation rates from the traffic impact analysis prepared for the proposed Project (see Appendix R of this EIR) were modeled to predict long-term operational emissions. The proposed Project analysis includes two scenarios (A and B) that have been evaluated to determine the potential maximum reasonable level of impacts that could occur based on different potential truck trip lengths. Scenario A is based on trip length recommendations from South Coast AQMD's WAIRE Program and Scenario B is based on trip lengths from Streetlight™ data collected for the Project vicinity. This difference in trip lengths would only affect the mobile source emissions, and therefore, is only provided for the mobile source emissions listed below. Additionally, Phase 2 includes a 10.66-acre Overlay area. For purposes of a thorough and conservative analysis, Phase 2 is analyzed in a With Overlay Scenario and in a Without Overlay Scenario, as it is unknown at this time whether the Overlay area would be built out.

CEQA requires the lead agency to consider the extent to which the Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Therefore, this section addresses whether the Project complies with various programs and measures designed to reduce GHG emissions. There is no statewide program or regional program or plan that has been adopted with which all new development must comply; thus, this analysis has identified the most relevant to the City of Perris and the proposed Project.

5.8.6 ENVIRONMENTAL IMPACTS

As detailed in Section 3.0, *Project Description*, the proposed Project includes a Specific Plan Amendment to modify the existing land uses and development of the Project site pursuant to the proposed new land uses over two phases that are summarized below.

Phase 1 Development

Within Phase 1, the Project would construct and operate a 139.89-acre business park with seven buildings including a parcel hub, high cube warehouses, and light industrial buildings that would total 1,727,579 square feet; construct and operate a 22.16-acre shopping center with buildings totaling 250,457 square feet; and construct and operate a 167,060 square foot big box store on a 24.33-acre site with a 12-pump gas station and two fast-food restaurant parcels for two restaurants that would each be approximately 5,500 square feet.

In addition, during construction of Phase 1 the Project would implement street improvements on Indian Avenue, Orange Avenue, Frontage Road, Perris Boulevard, Barrett Avenue, Harvest Landing Way, and Private Drive A; install drainage infrastructure improvements in Perris Boulevard, Barrett Avenue, Orange Avenue, Indian Avenue, and Private Drive A; implement sewer line improvements in Perris Boulevard; implement water lines improvements in Barrett Avenue, Orange Avenue, Frontage Road, Walmart Supercenter Drive; and install a new water well for landscaping irrigation in the proposed drainage basin. Construction and operation of the Phase 1 development is analyzed at a project-specific level within this section.

Phase 2 Buildout

The proposed amended Specific Plan buildout of the Phase 2 development area without inclusion of the overlay area would allow up to 3,659,693 square feet of warehouse, light industrial, and/or manufacturing uses under the Multiple Business Use designation, at a maximum floor area ratio of 0.75. Development of the 10.66-acre overlay area would include approximately 348,262 square feet of warehouse, light industrial, and/or manufacturing uses under the Multiple Business Use designation. Total development within the Phase 2 area, including the overlay area, would include up to 4,007,955 square feet of building area.[1] The analysis within this section assumes that construction would begin in 2026 and be completed by 2030, thereby overlapping with operation of Phase 1 developments. Construction and operation of the Phase 2 buildout is analyzed at a programmatic level within this section.

IMPACT GHG-1: THE PROJECT WOULD GENERATE GREENHOUSE GAS EMISSIONS, EITHER DIRECTLY OR INDIRECTLY, THAT MAY HAVE A SIGNIFICANT IMPACT ON THE ENVIRONMENT.

Specific Plan Buildout

Significant and Unavoidable Impact. Implementation of the proposed Project would generate GHG emissions from construction activities, operational transportation, energy, waste disposal, and area sources (such as onsite equipment). For construction emissions, the South Coast AQMD recommends amortizing emissions over 30 years by calculating the total GHG emissions for the construction activities, dividing it by a 30-year project life, then adding that number to the annual operational phase GHG emissions, which is done within this analysis. Table 5.8-1 provides the estimated construction emissions from Project buildout. These construction emissions include emissions from buildout of the Phase 2 Overlay area.

[1] The Phase 2 buildout square footage of 4,007,955 square feet was based on the gross acreage of parcels within the Phase 2 area prior to roadway dedications. After roadway dedications, the maximum allowable development within Phase 2 would actually be 4,001,748 square feet. However, for purposes of providing a conservative analysis, a buildout of 4,007,955 square feet was assumed.

Table 5.8-1: Project Construction Greenhouse Emissions

Phase	Year	Emissions (MT/yr.)				
		CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Off-Site	2026	106.16	0.00	0.00	0.01	106.62
Phase 1 (2025 OY)	2025	217.19	0.01	0.01	0.06	219.98
	2026	6,978.71	0.20	0.44	4.46	7,118.97
Phase 2 (2030 OY)	2026	25.59	0.00	0.00	0.01	26.20
	2027	1,562.72	0.05	0.10	0.66	1,593.82
	2028	2,898.90	0.09	0.22	1.24	2,967.92
	2029	3,622.59	0.08	0.24	2.75	3,698.66
	2030	4,618.47	0.09	0.25	3.77	4,698.74
Total Construction Emissions		**20,030.34**	**0.52**	**1.26**	**12.97**	**20,430.91**
Amortized Construction Emissions		**667.68**	**0.02**	**0.04**	**0.43**	**681.03**

Source: EIR Appendix M

Long-term operations of uses proposed by the Project would generate GHG emissions from the following primary sources:

- **Area Source Emissions.** Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping.
- **Energy Source Emissions.** GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits carbon dioxide and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions.
- **Mobile Source Emissions.** The Project related GHG emissions are derived primarily from vehicle trips generated by the Project, including employee trips to and from the site and truck trips associated with the proposed uses. Trip characteristics from the Traffic Impact Analysis (EIR Appendix R) were utilized to quantify the GHGs from operation of the Project. The analysis of mobile emissions includes two scenarios (A and B) based on different potential truck trip lengths to identify each potential impact. Scenario A is based on trip length recommendations from the South Coast AQMD's WAIRE Program of 15.3 miles for 2-axle, 14.2 miles for 3-axle trucks and 40 miles for 4+-axle trucks. Scenario B is based on trip lengths from Streetlight™ data collected for the Project vicinity that is 31 miles for 2-axle and 3-axle trucks and 71 miles for 4+-axle trucks.
- **Onsite Cargo Handling Equipment Emissions.** It is common for industrial warehouse buildings to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. Mitigation Measure AQ-10 requires that on-site motorized operational equipment for use in industrial and warehousing facilities be zero emissions.
- **Stationary Source Emissions.** It is anticipated that the proposed buildings would utilize diesel fire pumps and emergency generators. This analysis assumes that for operation of Phase 1 of the Project, seven diesel-fueled fire pumps would operate at 300 horsepower for 50 hours during the year and five emergency generators would operate at 300 horsepower for 50 hours during the year. For operation of Phase 2 of the Project 16 diesel-fueled fire pumps would operate at 300 horsepower for 50 hours during the year and 16 emergency generators would operate at 300 horsepower for 50 hours during

the year. Without implementation of the Overlay in Phase 2, the Project would operate 15 diesel-fueled fire pumps for 50 hours during the year and 15 emergency generators for 50 hours during the year.

- **Water Supply, Treatment, and Distribution.** Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required depends on the volume of water as well as the sources of the water. For purposes of analysis, water usage is based on the estimated water demand.
- **Solid Waste.** The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material.
- **Refrigerants.** Air conditioning and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the EPA (EIR Appendix B). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a global warming potential of 150 or greater as of January 1, 2022. As such, it was conservatively assumed that refrigeration systems installed at the cold storage portion of the Project would utilize refrigerants with a global warming potential of 150.

Scenario A With Overlay. The annual GHG emissions associated from the proposed Project in Scenario A with the Overlay are summarized in Table 5.8-2. As shown, construction and operation of Phase 1 would generate a net total of approximately 39,767.50 $MTCO_2e$ per year, Phase 2 would generate a total of approximately 46,632.48 $MTCO_2e$ per year, and Specific Plan Buildout would generate 82,869.42 $MTCO_2e$ per year, which would exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore, construction and operation of the proposed Project in Scenario A with the Overlay would generate significant GHG emissions that would have a potentially significant effect on the environment.

Scenario A Without Overlay. The annual GHG emissions associated from the proposed Project in Scenario A without the Overlay are summarized in Table 5.8-3. As shown, construction and operation of Phase 1 would generate a net total of approximately 39,767.50 $MTCO_2e$ per year, Phase 2 would generate a total of approximately 42,662.95 $MTCO_2e$ per year, and Specific Plan Buildout would generate 78,867.88 $MTCO_2e$ per year, which would exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore, construction and operation of the proposed Project without the Overlay would also generate significant GHG emissions that would have a potentially significant effect on the environment.

Scenario B With Overlay. The annual GHG emissions associated from the proposed Project in Scenario B with the Overlay are summarized in Table 5.8-4. As shown, construction and operation of Phase 1 would generate a net total of approximately 45,462.85 $MTCO_2e$ per year, Phase 2 would generate a total of approximately 67,842.17 $MTCO_2e$ per year, and Specific Plan Buildout would generate 109,258.10 $MTCO_2e$ per year, which would exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore, construction and operation of the proposed Project with the Overlay would generate significant GHG emissions that would have a potentially significant effect on the environment.

Scenario B Without Overlay. The annual GHG emissions associated from the proposed Project in Scenario B without the Overlay are summarized in Table 5.8-5. As shown, construction and operation of Phase 1 would generate a net total of approximately 45,462.85 $MTCO_2e$ per year, Phase 2 would generate a total of approximately 61,991.43 $MTCO_2e$ per year, and Specific Plan Buildout would generate 103,407.36 $MTCO_2e$ per year, which would exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore,

construction and operation of the proposed Project without the Overlay would also generate significant GHG emissions that would have a potentially significant effect on the environment.

Table 5.8-2: Unmitigated Project Generated Greenhouse Gas Emissions - Scenario A - With Overlay

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Phase 1 (2026)					
Annual construction-related emissions amortized over 30 years	243.40	0.01	0.01	0.15	248.19
Mobile Source	32,009.86	1.57	2.31	47.71	32,784.17
Area Source	43.93	0.00	0.00	0.00	44.09
Energy Source	3,839.67	0.36	0.04	0.00	3,860.45
Water Usage	645.99	14.72	0.35	0.00	1,119.46
Waste	314.72	31.45	0.00	0.00	1,101.08
Refrigerants	0.00	0.00	0.00	257.04	257.04
Stationary Source	68.54	0.00	0.00	0.00	68.77
On Site Equipment	0.00	0.00	0.00	0.00	284.25
Total CO_2e (All Sources)	**39,767.50**				
Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	424.28	0.01	0.03	0.28	432.84
Mobile Source	32,072.13	0.76	3.87	31.38	33,277.24
Area Source	81.28	0.00	0.00	0.00	81.58
Energy Source	8,269.94	1.05	0.13	0.00	8,333.90
Water Usage	1,064.55	30.25	0.73	0.00	2,037.76
Waste	443.45	44.32	0.00	0.00	1,551.48
Refrigerants	0.00	0.00	0.00	62.04	62.04
Stationary Source	182.78	0.01	0.00	0.00	183.39
On Site Equipment	0.00	0.00	0.00	0.00	663.25
Total CO_2e (All Sources)	**46,632.48**				
Phase 1 + Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	667.68	0.02	0.04	0.43	681.03
Mobile Source	61,549.09	2.09	5.95	61.53	63,435.55
Area Source	125.22	0.01	0.00	0.00	125.67
Energy Source	11,290.60	1.41	0.17	0.00	11,375.34
Water Usage	1,586.46	44.96	1.08	0.00	3,033.14
Waste	758.16	75.78	0.00	0.00	2,652.56
Refrigerants	0.00	0.00	0.00	319.08	319.08
Stationary Source	251.33	0.01	0.00	0.00	252.17
On Site Equipment	0.00	0.00	0.00	0.00	994.88
Total CO_2e (All Sources)	**82,869.42**				

Source: EIR Appendix M

Table 5.8-3: Project Generated Greenhouse Gas Emissions - Scenario A - Without Overlay

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Phase 1 (2026)					
Annual construction-related emissions amortized over 30 years	243.40	0.01	0.01	0.15	248.19
Mobile Source	32,009.86	1.57	2.31	47.71	32,784.17
Area Source	43.93	0.00	0.00	0.00	44.09
Energy Source	3,839.67	0.36	0.04	0.00	3,860.45
Water Usage	645.99	14.72	0.35	0.00	1,119.46
Waste	314.72	31.45	0.00	0.00	1,101.08
Refrigerants	0.00	0.00	0.00	257.04	257.04
Stationary Source	68.54	0.00	0.00	0.00	68.77
On Site Equipment	0.00	0.00	0.00	0.00	284.25
Total CO_2e (All Sources)	**39,767.50**				
Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	424.28	0.01	0.03	0.28	432.84
Mobile Source	29,280.92	0.69	3.54	28.66	30,381.00
Area Source	74.22	0.00	0.00	0.00	74.49
Energy Source	7,551.34	0.96	0.12	0.00	7,609.75
Water Usage	974.09	27.62	0.66	0.00	1,862.75
Waste	404.92	40.47	0.00	0.00	1,416.66
Refrigerants	0.00	0.00	0.00	56.65	56.65
Stationary Source	171.36	0.01	0.00	0.00	171.93
On Site Equipment	0.00	0.00	0.00	0.00	615.88
Total CO_2e (All Sources)	**42,621.95**				
Phase 1 + Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	667.68	0.02	0.04	0.43	681.03
Mobile Source	58,757.88	2.02	5.61	58.81	60,539.31
Area Source	118.16	0.00	0.00	0.00	118.58
Energy Source	10,572.00	1.32	0.16	0.00	10,651.19
Water Usage	1,496.00	42.34	1.02	0.00	2,858.13
Waste	719.63	71.92	0.00	0.00	2,517.75
Refrigerants	0.00	0.00	0.00	313.69	313.69
Stationary Source	239.90	0.01	0.00	0.00	240.70
On Site Equipment	0.00	0.00	0.00	0.00	947.50
Total CO_2e (All Sources)	**78,867.88**				

Source: EIR Appendix M

Table 5.8-4: Project Generated Greenhouse Gas Emissions - Scenario B - With Overlay

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Phase 1 (2026)					
Annual construction-related emissions amortized over 30 years	243.40	0.01	0.01	0.15	248.19
Mobile Source	37,455.74	1.64	3.11	54.78	38,479.52
Area Source	43.93	0.00	0.00	0.00	44.09
Energy Source	3,839.67	0.36	0.04	0.00	3,860.45
Water Usage	645.99	14.72	0.35	0.00	1,119.46
Waste	314.72	31.45	0.00	0.00	1,101.08
Refrigerants	0.00	0.00	0.00	257.04	257.04
Stationary Source	68.54	0.00	0.00	0.00	68.77
On Site Equipment	0.00	0.00	0.00	0.00	284.25
Total CO_2e (All Sources)	**45,462.85**				
Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	52,365.97	1.04	6.89	51.57	54,495.93
Mobile Source	81.28	0.00	0.00	0.00	81.58
Area Source	8,269.94	1.05	0.13	0.00	8,333.90
Energy Source	1,064.55	30.25	0.73	0.00	2,037.76
Water Usage	443.45	44.32	0.00	0.00	1,551.48
Waste	0.00	0.00	0.00	62.04	62.04
Refrigerants	182.78	0.01	0.00	0.00	183.39
Stationary Source	0.00	0.00	0.00	0.00	663.25
On Site Equipment	52,365.97	1.04	6.89	51.57	54,495.93
Total CO_2e (All Sources)	**67,842.17**				
Phase 1 + Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	667.68	0.02	0.04	0.43	681.03
Mobile Source	86,787.66	2.43	9.70	86.65	89,824.23
Area Source	125.22	0.01	0.00	0.00	125.67
Energy Source	11,290.60	1.41	0.17	0.00	11,375.34
Water Usage	1,586.46	44.96	1.08	0.00	3,033.14
Waste	758.16	75.78	0.00	0.00	2,652.56
Refrigerants	0.00	0.00	0.00	319.08	319.08
Stationary Source	251.33	0.01	0.00	0.00	252.17
On Site Equipment	0.00	0.00	0.00	0.00	994.88
Total CO_2e (All Sources)	**109,258.10**				

Source: EIR Appendix M

Table 5.8-5: Project Generated Greenhouse Gas Emissions Scenario B Without Overlay

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Phase 1 (2026)					
Annual construction-related emissions amortized over 30 years	243.40	0.01	0.01	0.15	248.19
Mobile Source	37,455.74	1.64	3.11	54.78	38,479.52
Area Source	43.93	0.00	0.00	0.00	44.09
Energy Source	3,839.67	0.36	0.04	0.00	3,860.45
Water Usage	645.99	14.72	0.35	0.00	1,119.46
Waste	314.72	31.45	0.00	0.00	1,101.08
Refrigerants	0.00	0.00	0.00	257.04	257.04
Stationary Source	68.54	0.00	0.00	0.00	68.77
On Site Equipment	0.00	0.00	0.00	0.00	284.25
Total CO_2e (All Sources)	**45,462.85**				
Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	424.28	0.01	0.03	0.28	432.84
Mobile Source	47,806.19	0.95	6.29	47.09	49,750.48
Area Source	74.22	0.00	0.00	0.00	74.49
Energy Source	7,551.34	0.96	0.12	0.00	7,609.75
Water Usage	974.09	27.62	0.66	0.00	1,862.75
Waste	404.92	40.47	0.00	0.00	1,416.66
Refrigerants	0.00	0.00	0.00	56.65	56.65
Stationary Source	171.36	0.01	0.00	0.00	171.93
On Site Equipment	0.00	0.00	0.00	0.00	615.88
Total CO_2e (All Sources)	**61,991.43**				
Phase 1 + Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	667.68	0.02	0.04	0.43	681.03
Mobile Source	82,227.88	2.34	9.09	82.17	85,078.79
Area Source	118.16	0.00	0.00	0.00	118.58
Energy Source	10,572.00	1.32	0.16	0.00	10,651.19
Water Usage	1,496.00	42.34	1.02	0.00	2,858.13
Waste	719.63	71.92	0.00	0.00	2,517.75
Refrigerants	0.00	0.00	0.00	313.69	313.69
Stationary Source	239.90	0.01	0.00	0.00	240.70
On Site Equipment	0.00	0.00	0.00	0.00	947.50
Total CO_2e (All Sources)	**103,407.36**				

Source: EIR Appendix M

Mitigated GHG Emissions

As detailed above, the proposed Project would exceed the significance threshold of 3,000 $MTCO_2e$ per year in each of the scenarios. Therefore, Mitigation Measures AQ-1 through AQ-19 and Mitigation Measures GHG-1 through GHG-5 have been included to reduce GHG emissions from both construction and operation activities to the maximum extent feasible.

Scenario A With Overlay. The estimated Project-related GHG emissions with implementation of these mitigation measures are summarized in Table 5.8-6 for Scenario A with Overlay As shown, construction and operation of Phase 1 would generate a net total of approximately 38,167.70 $MTCO_2e$ per year, Phase 2 would generate a total of approximately 44,392.99 $MTCO_2e$ per year, and Specific Plan Buildout would generate 79,114.37 $MTCO_2e$ per year, which would exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore, despite implementation of Mitigation Measures AQ-1 through AQ-19 and Mitigation Measures GHG-1 through GHG-5, construction and operation of the proposed Project in Scenario A with the Overlay would remain significant and unavoidable.

Scenario A Without Overlay. The estimated Project-related GHG emissions with implementation of these mitigation measures are summarized in Table 5.8-7 for Scenario A without Overlay As shown, construction and operation of Phase 1 would generate a net total of approximately 38,167.70 $MTCO_2e$ per year, Phase 2 would generate a total of approximately 40,574.60 $MTCO_2e$ per year, and Specific Plan Buildout would generate 75,295.97 $MTCO_2e$ per year, which would exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore, despite implementation of Mitigation Measures AQ-1 through AQ-19 and Mitigation Measures GHG-1 through GHG-5, construction and operation of the proposed Project in Scenario A with the Overlay would remain significant and unavoidable.

Scenario B With Overlay. The estimated Project-related GHG emissions with implementation of mitigation measures are summarized in Table 5.8-8 for Scenario B with Overlay As shown, construction and operation of Phase 1 would generate a net total of approximately 43,863.05 $MTCO_2e$ per year, Phase 2 would generate a total of approximately 65,611.68 $MTCO_2e$ per year, and Specific Plan Buildout would generate 105,503.05 $MTCO_2e$ per year, which would exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore, despite implementation of Mitigation Measures AQ-1 through AQ-19 and Mitigation Measures GHG-1 through GHG-5, construction and operation of the proposed Project in Scenario A with the Overlay would remain significant and unavoidable.

Scenario B Without Overlay. The estimated Project-related GHG emissions with implementation of mitigation measures are summarized in Tables 5.8-6 for Scenario A with Overlay. As shown, construction and operation of Phase 1 would generate a net total of approximately 43,863.05 $MTCO_2e$ per year, Phase 2 would generate a total of approximately 59,944.09 $MTCO_2e$ per year, and Specific Plan Buildout would generate 99,835.45 $MTCO_2e$ per year, which would exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore, despite implementation of Mitigation Measures AQ-1 through AQ-19 and Mitigation Measures GHG-1 through GHG-5, construction and operation of the proposed Project in Scenario A with the Overlay would remain significant and unavoidable.

Table 5.8-6: Project Generated Greenhouse Gas Emissions - Scenario A - With Overlay - With Mitigation

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Phase 1 (2026)					
Annual construction-related emissions amortized over 30 years	243.40	0.01	0.01	0.15	248.19
Mobile Source	32,009.86	1.57	2.31	47.71	32,784.17
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	3,479.15	0.33	0.04	0.00	3,497.83
Water Usage	470.21	10.68	0.26	0.00	813.71
Waste	142.34	14.23	0.00	0.00	497.99
Refrigerants	0.00	0.00	0.00	257.04	257.04
Stationary Source	68.54	0.00	0.00	0.00	68.77
Total CO_2e (All Sources)	**38,167.70**				
Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	424.28	0.01	0.03	0.28	432.84
Mobile Source	32,072.13	0.76	3.87	31.38	33,277.24
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	8,274.89	1.05	0.13	0.00	8,338.89
Water Usage	772.98	21.91	0.53	0.00	1,477.99
Waste	177.38	17.73	0.00	0.00	620.59
Refrigerants	0.00	0.00	0.00	62.04	62.04
Stationary Source	182.78	0.01	0.00	0.00	183.39
Total CO_2e (All Sources)	**44,392.99**				
Phase 1 + Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	667.68	0.02	0.04	0.43	681.03
Mobile Source	61,549.09	2.09	5.95	61.53	63,435.55
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	11,023.97	1.38	0.16	0.00	11,106.66
Water Usage	1,152.79	32.59	0.78	0.00	2,201.30
Waste	319.72	31.95	0.00	0.00	1,118.58
Refrigerants	0.00	0.00	0.00	319.08	319.08
Stationary Source	251.33	0.01	0.00	0.00	252.17
Total CO_2e (All Sources)	**79,114.37**				

Source: EIR Appendix M

Table 5.8-7: Project Generated Greenhouse Gas Emissions - Scenario A - Without Overlay - With Mitigation

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Phase 1 (2026)					
Annual construction-related emissions amortized over 30 years	243.40	0.01	0.01	0.15	248.19
Mobile Source	32,009.86	1.57	2.31	47.71	32,784.17
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	3,479.15	0.33	0.04	0.00	3,497.83
Water Usage	470.21	10.68	0.26	0.00	813.71
Waste	142.34	14.23	0.00	0.00	497.99
Refrigerants	0.00	0.00	0.00	257.04	257.04
Stationary Source	68.54	0.00	0.00	0.00	68.77
Total CO_2e (All Sources)	**38,167.70**				
Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	424.28	0.01	0.03	0.28	432.84
Mobile Source	29,280.92	0.69	3.54	28.66	30,381.00
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	7,555.86	0.96	0.12	0.00	7,614.30
Water Usage	707.45	20.01	0.48	0.00	1,351.21
Waste	161.97	16.19	0.00	0.00	566.67
Refrigerants	0.00	0.00	0.00	56.65	56.65
Stationary Source	171.36	0.01	0.00	0.00	171.93
Total CO_2e (All Sources)	**40,574.60**				
Phase 1 + Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	667.68	0.02	0.04	0.43	681.03
Mobile Source	58,757.88	2.02	5.61	58.81	60,539.31
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	10,304.95	1.28	0.15	0.00	10,382.07
Water Usage	1,087.26	30.68	0.74	0.00	2,074.52
Waste	304.30	30.41	0.00	0.00	1,064.65
Refrigerants	0.00	0.00	0.00	313.69	313.69
Stationary Source	239.90	0.01	0.00	0.00	240.70
Total CO_2e (All Sources)	**75,295.97**				

Source: EIR Appendix M

Table 5.8-8: Project Generated Greenhouse Gas Emissions - Scenario B - With Overlay - With Mitigation

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Phase 1 (2026)					
Annual construction-related emissions amortized over 30 years	243.40	0.01	0.01	0.15	248.19
Mobile Source	37,455.74	1.64	3.11	54.78	38,479.52
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	3,479.15	0.33	0.04	0.00	3,497.83
Water Usage	470.21	10.68	0.26	0.00	813.71
Waste	142.34	14.23	0.00	0.00	497.99
Refrigerants	0.00	0.00	0.00	257.04	257.04
Stationary Source	68.54	0.00	0.00	0.00	68.77
Total CO_2e (All Sources)	**43,863.05**				
Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	424.28	0.01	0.03	0.28	432.84
Mobile Source	52,365.97	1.04	6.89	51.57	54,495.93
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	8,274.89	1.05	0.13	0.00	8,338.89
Water Usage	772.98	21.91	0.53	0.00	1,477.99
Waste	177.38	17.73	0.00	0.00	620.59
Refrigerants	0.00	0.00	0.00	62.04	62.04
Stationary Source	182.78	0.01	0.00	0.00	183.39
Total CO_2e (All Sources)	**65,611.68**				
Phase 1 + Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	667.68	0.02	0.04	0.43	681.03
Mobile Source	86,787.66	2.43	9.70	86.65	89,824.23
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	11,023.97	1.38	0.16	0.00	11,106.66
Water Usage	1,152.79	32.59	0.78	0.00	2,201.30
Waste	319.72	31.95	0.00	0.00	1,118.58
Refrigerants	0.00	0.00	0.00	319.08	319.08
Stationary Source	251.33	0.01	0.00	0.00	252.17
Total CO_2e (All Sources)	**105,503.05**				

Source: EIR Appendix M

Table 5.8-9: Project Generated Greenhouse Gas Emissions - Scenario B - Without Overlay - With Mitigation

Emission Source	Emissions (MT/yr)				
	CO_2	CH_4	N_2O	Refrigerants	Total CO_2e
Phase 1 (2026)					
Annual construction-related emissions amortized over 30 years	243.40	0.01	0.01	0.15	248.19
Mobile Source	37,455.74	1.64	3.11	54.78	38,479.52
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	3,479.15	0.33	0.04	0.00	3,497.83
Water Usage	470.21	10.68	0.26	0.00	813.71
Waste	142.34	14.23	0.00	0.00	497.99
Refrigerants	0.00	0.00	0.00	257.04	257.04
Stationary Source	68.54	0.00	0.00	0.00	68.77
Total CO_2e (All Sources)	**43,863.05**				
Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	424.28	0.01	0.03	0.28	432.84
Mobile Source	47,806.19	0.95	6.29	47.09	49,750.48
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	7,555.86	0.96	0.12	0.00	7,614.30
Water Usage	707.45	20.01	0.48	0.00	1,351.21
Waste	161.97	16.19	0.00	0.00	566.67
Refrigerants	0.00	0.00	0.00	56.65	56.65
Stationary Source	171.36	0.01	0.00	0.00	171.93
Total CO_2e (All Sources)	**59,944.09**				
Phase 1 + Phase 2 (2030)					
Annual construction-related emissions amortized over 30 years	667.68	0.02	0.04	0.43	681.03
Mobile Source	82,227.88	2.34	9.09	82.17	85,078.79
Area Source	0.00	0.00	0.00	0.00	0.00
Energy Source	10,304.95	1.28	0.15	0.00	10,382.07
Water Usage	1,087.26	30.68	0.74	0.00	2,074.52
Waste	304.30	30.41	0.00	0.00	1,064.65
Refrigerants	0.00	0.00	0.00	313.69	313.69
Stationary Source	239.90	0.01	0.00	0.00	240.70
Total CO_2e (All Sources)	**99,835.45**				

Source: EIR Appendix M

As detailed above, the proposed Project would exceed the significance threshold of 3,000 $MTCO_2e$ per year in each of the scenarios after implementation of Mitigation Measures AQ-1 through AQ-19 and Mitigation Measures GHG-1 through GHG-5. The majority of the GHG emissions (80% for Scenario A and 85% for Scenario B) are associated with mobile sources. Emissions of motor vehicles are controlled by State and Federal standards, and the City and Project Applicant has no control over these emissions. Thus, impacts related to GHG emissions would be significant and unavoidable.

IMPACT GHG-2: THE PROJECT WOULD CONFLICT WITH AN APPLICABLE PLAN, POLICY OR REGULATION ADOPTED FOR THE PURPOSE OF REDUCING THE EMISSIONS OF GREENHOUSE GASES.

Specific Plan Buildout

Significant and Unavoidable Impact.

City of Perris CAP

As described previously, the City of Perris CAP was designed to reinforce the City's commitment to reducing GHG emissions and demonstrate compliance with the State's GHG emissions reduction standards. The measures identified in the CAP represent the City's actions to achieve the GHG reduction targets of AB 32 for target year 2020. Local measures incorporated in the CAP include:

- Energy measure that directs the City to create an energy action plan to reduce energy consumption citywide;
- Land use and transportation measures that encourage alternative modes of transportation (walking, biking, and transit), reduce motor vehicle use by allowing a reduction in parking supply, voluntary transportation demand management to reduce vehicle miles traveled, and land use strategies that improve jobs-housing balance (increased density and mixed-use); and
- Solid waste measures that reduce landfilled solid waste in the City.

The Project is subject to California Building Code requirements. New buildings must meet the applicable building code requirements and standards in place at the time building permit documentation submittals are made. The CALGreen Code is updated on a regular basis, with the most recently approved 2022 CALGreen standards having taken effect on January 1, 2023. As construction of the Project is anticipated to be started in 2025, it is presumed that the Project would be required to comply with the Title 24 standards in place at that time. The Project would include sidewalks, bike racks, pedestrian walkways, and TDM measures, in compliance with Mitigation Measure AQ-11, to encourage the use of alternative modes of transportation (walking and biking). Furthermore, the Project would be designed to achieve LEED Silver certification, as included in Mitigation Measure GHG-4. Therefore, the Project would be consistent with the policies and goals of the Perris CAP and would not conflict with the CAP.

AB 32 & SB 32

The Project would include contemporary, energy-efficient/energy-conserving design features and operational procedures. The proposed Project would interfere with the State's implementation of Executive Order B-30-15 and SB 32's target of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030; Executive Order S-3-05's target of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050; or AB 1279's target of achieving carbon neutrality by 2045 because it does interfere with implementation of the GHG reduction measures listed in CARB's 2022 Scoping Plan and results in a substantial increase in GHG emissions that exceed thresholds. CARB's Updated Scoping Plan reflects the 2045 target of carbon neutrality as codified by AB 1279.

The development resulting from the Project would include sustainable design features related to reduction of GHG emissions and would be consistent with the following existing regulatory requirements.

- Pavley emissions standard and Low Carbon Fuel Standard: Pavley emissions standards (AB 1493) apply to all new passenger vehicles starting with model year 2009, and the Low Carbon Fuel Standard became effective in 2010 and regulates the transportation fuel used. The second phase of implementation of the Pavley regulations per AB 1493 is referred to as the Advanced Clean Car program, which combines

the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The Project would be consistent with these requirements as they apply to all new passenger vehicles and vehicle fuel purchased in California.

- Medium/Heavy-Duty Vehicle Regulations: Medium/heavy-duty vehicle regulations are implemented by the State to reduce emissions from trucks. Since the proposed Project has a large truck component, these regulations would aid in reducing GHG emissions from the Project. The Project is consistent with this measure and its implementation as medium and heavy-duty vehicles associated with construction and operation of the Project would be required to comply with the requirements of this regulation.
- Tractor-Trailer Greenhouse Gas Regulation: Tractor-trailers subject to this State regulation are primarily 53-foot or longer box-type trailers, are required to be either use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The Project is consistent with this regulation, as it applies to specific trucks that are used throughout the State.
- Energy Efficiency – Title 24, Part 6: The proposed Project subject to the Title 24, Part 6 building energy efficiency requirements that offer builders better windows, insulation, lighting, ventilation systems, and other features as listed in Section 5.8.2, *Regulatory Setting* that reduce energy consumption. Compliance with the Title 24, Part 6 standards would be verified by the City during building permitting process.
- Renewable Portfolio Standard. As a customer of Southern California Edison, the future tenants of the Project would purchase from an increasing supply of renewable energy sources and more efficient baseload generations, reduce GHG emissions, and be consistent with this requirement.
- Million Solar Roofs Program: The Project is consistent with this scoping plan measure as the Project would provide solar-ready roofs.
- Water Efficiency and Waste Diversion: Development and operation of the Project would be implemented in consistency with water conservation requirements (as included in Title 24) and solid waste recycling and landfill diversion requirements of the State (as required by Mitigation Measure GHG-1).

Further, the Project is consistent with AB 32 and SB 32 through implementation of measures that address GHG emissions related to building energy, solid waste management, wastewater, and water conveyance. However, the GHG emissions generated by vehicular and truck trips generated by the Project cannot be reduced by the City or Project Applicant and would result in a substantial exceedance of thresholds. Therefore, a conflict with AB 32 and SB 32 would occur.

CARB Scoping Plan

As detailed in Section 5.8.2, *Regulatory Setting*, the CARB Scoping Plan recommends actions for achieving carbon neutrality through reduced GHG emissions levels. New development pursuant to the proposed Project would include energy-efficient/energy-conserving design features. However, the Project would interfere with the State's implementation of AB 1279's target of 85 percent below 1990 levels and carbon neutrality by 2045 because it is not consistent with the VMT reductions listed in CARB's most recent Scoping Plan (2022) and would result in a substantial exceedance of GHG thresholds. As demonstrated in Table 5.8-10, the Project is consistent with the remaining Scoping Plan Actions.

Table 5.8-10: Project Consistency with the CARB 2022 Scoping Plan Actions

Action	Consistency
GHG Emissions Reductions Relative to the SB 32 Target	
40 percent below 1990 levels by 2030.	**Not Consistent.** Development pursuant to the proposed Project would comply with the Title 24, Part 6, building energy requirements along with other local and State initiatives that aim to achieve the 40 percent below 1990 levels by 2030 goal. This would be ensured through the City's existing development permitting process. Further, Mitigation Measures AQ-1 through AQ-19 and Mitigation Measures GHG-1 though GHG-5 would require emissions reduction measures, which would lower GHG emissions buildout of the proposed Project. However, as detailed previously, implementation of the Project would result in GHG emissions that would far exceed South Coast AQMD thresholds and would result in a significant and unavoidable impact.
Smart Growth/Vehicle Miles Traveled VMT	
VMT per capita reduced 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045.	**Not Consistent.** As discussed in Section 5.16, *Transportation*, with implementation of the design features and mitigation measures, buildout of the Specific Plan would still result in a VMT/SP that is 1.18 percent above the threshold in Baseline (2024) conditions and 5.33 percent above the threshold during General Plan buildout (2045) conditions. Therefore, despite implementation of mitigation measures, impacts related to VMT from the commercial component of Phase 1 and buildout of the Specific Plan would be significant and unavoidable.
Light-Duty Vehicle (LDV) Zero-Emission Vehicles (ZEVs)	
100 percent of LDV sales are ZEV by 2035.	**Consistent.** Development Projects would be designed and constructed in accordance with the Title 24 Part 6 and Part 11 requirements, which includes ZEV designated parking spaces and charging stations.
Truck ZEVs	
100 percent of medium-duty (MDV)/HDC sales are ZEV by 2040 (AB 74 University of California Institute of Transportation Studies [ITS] report).	**Consistent.** The new development pursuant to the proposed Project would be designed and constructed in accordance with the most updated Title 24 regulations and would implement Mitigation Measure AQ-13, which requires prewiring for truck ZEV charging stations and/or providing electrical plug-ins at applicable locations.
Aviation	
20 percent of aviation fuel demand is met by electricity (batteries) or hydrogen (fuel cells) in 2045. Sustainable aviation fuel meets most or the rest of the aviation fuel demand that has not already transitioned to hydrogen or batteries.	**Not Applicable.** Development and operation of the proposed Project would not utilize aviation fuel.
Ocean-going Vessels (OGV)	
2020 OGV At-Berth regulation fully implemented, with most OGVs utilizing shore power by 2027. 25 percent of OGVs utilize hydrogen fuel cell electric technology by 2045.	**Not Applicable.** Development and operation of the proposed Project would not utilize any OGVs.

Action	Consistency
Port Operations	
100 percent of cargo handling equipment is zero-emission by 2037. 100 percent of drayage trucks are zero emission by 2035.	**Not Applicable.** Development and operation of the proposed Project would not impact any operations at any ports.
Freight and Passenger Rail	
100 percent of passenger and other locomotive sales are ZEV by 2030. 100 percent of line haul locomotive sales are ZEV by 2035. Line haul and passenger rail rely primarily on hydrogen fuel cell technology, and others primarily utilize electricity.	**Not Applicable.** Development and operation of the proposed Project would not involve any rail operations.
Oil and Gas Extraction	
Reduce oil and gas extraction operations in line with petroleum demand by 2045.	**Not Applicable.** The proposed Project would not involve any oil or gas extraction.
Petroleum Refining	
CCS on majority of operations by 2030, beginning in 2028. Production reduced in line with petroleum demand.	**Not Applicable.** The proposed Project would not involve any petroleum refining.
Electricity Generation	
Sector GHG target of 38 million metric tons of carbon dioxide equivalent ($MTCO_2e$) in 2030 and 30 $MTCO_2e$ in 2035. Retail sales load coverage of 20 gigawatts (GW) of offshore wind by 2045. Meet increased demand for electrification without new fossil gas-fired resources.	**Consistent.** The proposed Project would comply with the Title 24, Part 6 building requirements, including related to renewable energy generation requirements as well as improved insulation reducing energy consumption.
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	**Consistent.** The proposed Project would comply with the Title 24, Part 6 building energy requirements.
Existing Residential Buildings	
80 percent of appliance sales are electric by 2030 and 100 percent of appliance sales are electric by 2035. Appliances are replaced at end of life such that by 2030 there are 3 million all-electric and electric-ready homes—and by 2035, 7 million homes—as well as contributing to 6 million heat pumps installed statewide by 2030.	**Consistent.** The proposed Project does not involve the operation of any existing residential buildings. However, appliances within Project buildings would comply with the Title 24, Part 6 building energy requirements.
Existing Commercial Buildings	
80 percent of appliance sales are electric by 2030, and 100 percent of appliance sales are electric by 2045. Appliances are replaced at end of life, contributing to 6 million heat pumps installed statewide by 2030.	**Consistent.** The proposed Project does not involve the continued operations of existing commercial buildings. However, appliances within Project buildings would comply with the Title 24, Part 6 building energy requirements.
Energy Demand	
7.5 percent of energy demand electrified directly and/or indirectly by 2030; 75 percent by 2045.	**Consistent.** The proposed Project would comply with the Title 24, Part 6 building energy requirements, including renewable energy generation requirements, as well as improved insulation reducing energy consumption.

Action	Consistency
Construction Equipment	
25 percent of energy demand electrified by 2030 and 75 percent electrified by 2045.	**Consistent.** Through City permitting, the proposed Project would be required to use construction equipment that is registered by CARB and meet CARB's standards. CARB sets its standards to be in line with the goal of reducing energy demand by 25 percent in 2030 and 75 percent in 2045.
Energy Generation	
Electrify 0 percent of boilers by 2030 and 100 percent of boilers by 2045. Hydrogen for 25 percent of process heat by 2035 and 100 percent by 2045. Electrify 100 percent of other energy demand by 2045.	**Consistent.** The proposed Project would comply with the Title 24, Part 6 building energy requirements, including installing electrical wiring for all built in appliances, electric outlets for landscape equipment, solar panels, and provision of electric charging stations.
Stone, Clay, Glass, and Cement	
CCS on 40 percent of operations by 2035 and on all facilities by 2045. Process emissions reduced through alternative materials and CCS.	**Not Applicable**. Uses proposed do not involve manufacturing or storage of stone, clay, glass, or cement.
Other Industrial Manufacturing	
0 percent energy demand electrified by 2030 and 50 percent by 2045.	**Not Applicable**. The proposed Project would comply with the Title 24, Part 6, including increases in renewable energy generation requirements as well as improved insulation reducing energy consumption.
Combined Heat and Power	
Facilities retire by 2040.	**Not Applicable.** The proposed Project does not involve any existing combined heat and power facilities.
25 percent energy demand electrified by 2030 and 75 percent by 2045.	**Not Applicable.** The proposed Project does not involve generation of energy; but Project buildings would comply with the Title 24 renewable energy generation requirements.
Low Carbon Fuels for Transportation	
Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen.	**Not Applicable.** The proposed Project does not involve any production of biofuels.
Low Carbon Fuels for Buildings and Industry	
In 2030s, biomethane135 blended in pipeline Renewable hydrogen blended in fossil gas pipeline at 7 percent energy (~20 percent by volume), ramping up between 2030 and 2040. In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters	**Not Applicable.** The proposed Project does not involve any production of fuels for buildings and industry.
Non-combustion Methane Emissions	
Increase landfill and dairy digester methane capture. Some alternative manure management deployed for smaller dairies. Moderate adoption of enteric strategies by 2030. Divert 75 percent of organic waste from landfills by 2025. Oil and gas fugitive methane emissions reduced 50 percent by 2030 and further reductions as infrastructure components retire in line with reduced fossil gas demand.	**Not Applicable.** The proposed Project does not involve any landfill and/or dairy uses.

Action	Consistency
High GWP Potential Emissions	
Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions.	**Consistent.** The new development pursuant to the proposed Project would comply with the Title 24, Part 6, building energy requirements, including use of low GWP refrigerants, which would be verified through the City's existing development permitting process.

City of Perris General Plan

As detailed in Table 5.8-11, the Project would not conflict with the relevant General Plan policies related to GHG emissions.

Table 5.8-11: Project Consistency with the City General Plan Policies Related to GHGs

General Plan Policy	Consistency
Policy HC 6.3 Promote measures that will be effective in reducing emissions during construction activities. • Perris will ensure that construction activities follow existing South Coast AQMD rules and regulations. • All construction equipment for public and private projects will also comply with California Air Resources Board's vehicle standards. For projects that may exceed daily construction emissions established by the South Coast AQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the South Coast AQMD. • Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded.	**Consistent.** The proposed Project would follow all applicable South Coast AQMD policies for construction and would implement best management practices during construction of the Project.

Overall, the proposed Project would result in a conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs due to the volume of GHG emissions that would be generated by the proposed Project.

Nevertheless, the Project would be implemented in compliance with State energy standards provided in Title 24, in addition to provision of sustainable design features, and the mitigation measures listed herein. In addition, the Project would be consistent with the relevant Perris General Plan goal and policies and the City of Perris CAP.

However, the Project would interfere with the State's implementation of Executive Order B-30-15 and SB 32's target of reducing statewide GHG emissions to 40 percent below 1990 levels by 2030; Executive Order S-3-05's target of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050; and AB 1279's goal of statewide carbon neutrality by 2045 because it would not be consistent with the CARB 2022 Scoping Plan, which is intended to achieve the reduction targets required by the State. Overall, the volume of GHG emissions generated by the Project after implementation of mitigation measures would be considerably above the South Coast AQMD threshold of significance, and therefore, the Project would

result in a significant and unavoidable impact related to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

5.8.7 CUMULATIVE IMPACTS

GHG emissions impacts are assessed in a cumulative context since no single project can cause a discernible change to climate. Climate change impacts are the result of incremental contributions from natural processes, and past and present human-related activities. Therefore, the area in which a proposed project in combination with other past, present, or future projects, could contribute to a significant cumulative climate change impact would not be defined by a geographical boundary such as a project site or combination of sites, city or air basin. GHG emissions have high atmospheric lifetimes and can travel across the globe over a period of 50 to 100 years or more. Even though the emissions of GHGs cannot be defined by a geographic boundary and are effectively part of the global issue of climate change, CEQA places a boundary for the analysis of impacts at the state's borders. Thus, the geographic area for analysis of cumulative GHG emissions impacts is the State of California.

Executive Order S-3-05, Executive Order B-30-15, AB 32, and SB 32 recognizes that California is the source of substantial amounts of GHG emissions and recognizes the significance of the cumulative impact of GHG emissions from sources throughout the state and sets performance standards for reduction of GHGs.

The analysis of GHG emission impacts under CEQA contained in this Draft EIR effectively constitutes an analysis of the Project's contribution to the cumulative impact of GHG emissions. As described previously, the City's evaluation of impacts using the South Coast AQMD's 3,000 $MTCO_2e$/year threshold of significance is conservative since it is being applied to all of the GHG emissions generated by the Project. As detailed in Tables 5.8-6 through 5.8-9, the estimated GHG emissions from development and operation of the Project would exceed the South Coast AQMD's threshold after implementation of mitigation measures. As detailed previously, the majority (80-85%) of the GHG emissions generated by the Project are associated mobile sources that are controlled by State and Federal standards, and the City and Project Applicant has no control over these emissions. Therefore, Project emissions would exceed thresholds after implementation of regulations and mitigation, and the contribution of the Project to significant cumulative GHG impacts would be cumulatively considerable, and cumulative impacts would be significant.

5.8.8 EXISTING REGULATIONS

As discussed above, the Project would be required to comply with the following existing regulations and plans, programs, or policies which would help to reduce the potential impacts of the Project.

State

- Clean Car Standards – Pavley Assembly Bill 1493
- California Executive Order S-3-05
- Assembly Bill 32 (Global Warming Solutions Act of 2006)
- Senate Bill 375
- California Executive Order B-30-15
- Senate Bill 32
- California Green Building Standards Code (Code of Regulations, Title 24 Part 6)
- Assembly Bill 1279

Local

City of Perris General Plan Healthy Community Element

- Policy HC 6.3: reducing emissions from construction activities

City of Perris Climate Action Plan

5.8.9 PROJECT DESIGN FEATURES

None.

5.8.10 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Impact GHG-1 and GHG-2 would be potentially significant.

5.8.11 MITIGATION MEASURES

Mitigation Measures AQ-1 through AQ-19, as included in Section 5.3, *Air Quality*.

Mitigation Measure GHG-1: The Project plans and specifications shall require that, prior to receipt of occupancy permits, separate recycling bins shall be provided within each commercial/industrial building and large external recycling collection bins shall be provided at central locations in the commercial and industrial land uses for collection truck pickup. In addition, the Project shall provide a commercial recycling/composting program that provides a minimum 50 percent diversion of waste for the commercial land uses. In addition, the Project shall provide an industrial recycling program that provides a minimum 60 percent diversion of waste for the industrial land uses.

Mitigation Measure GHG-2: The Project landscape plans and specifications shall require that drought tolerant low-water landscaping and trees be installed throughout the Project site and use recycled (purple pipe) irrigation water with drip irrigation and weather based smart irrigation controllers.

Mitigation Measure GHG-3: The Project plans and specifications shall require that the Project shall implement a Water Conservation Strategy and demonstrate a minimum 20 percent reduction in indoor and outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Prior to the issuance of building permits for the Project, the Project applicant shall provide building plans that could include the following water conservation measures:

- Install low-water use appliances and fixtures
- Restrict the use of water for cleaning outdoor surfaces and prohibit systems that apply water to non-vegetated surfaces
- Implement water-sensitive urban design practices in new construction
- Install rainwater collection systems

Mitigation Measure GHG-4: The Project plans and specifications shall require that all development within the MBU areas shall achieve certification of compliance or demonstrate equivalency with LEED Silver building standards. Prior to the issuance of building permits, the Project Applicant or successor in interest shall provide documentation to the City of Perris demonstrating that each development is designed to achieve energy efficient buildings equivalent to LEED Silver building standards with the following design criteria options:

- Five percent of all parking spaces shall have Level 2 or Level 3 charging capacity.
- Ten percent of all parking spaces shall have EV-ready conduit.
- Building envelops insulation of conditioned space within all commercial and industrial buildings shall be R15 or greater for walls and R30 or greater for attics/roofs.
- Windows of commercial and industrial buildings shall have an insulation factor of 0.28 or less U-factor and 0.22 or less SHGC.
- All roofing material for commercial buildings shall be CRRC Rated 0.15 aged solar reflectance or greater and 0.75 thermal emittance.
- All heating/cooling ducting within the commercial and industrial buildings shall be insulated with R6 or greater insulation.
- All heating and cooling equipment shall be ERR 14/78 percent AFUE, or 7.7 HSPF levels of efficiency or greater.
- All water heaters in the commercial and industrial buildings shall be high efficiency electric water heaters with a minimum 0 .72 Energy Factor or greater.
- Lighting within the commercial and industrial buildings shall be high efficiency LED lighting with a minimum of 40 lumens/watt for 15 watt or less fixtures, 50 lumens/watt for 15–40-watt fixtures, and 60 lumens/watt for fixtures greater than 40 watts.
- All appliances within the commercial and industrial land uses shall be energy star rated appliances.
- All water fixtures shall be water efficient (toilets/urinals [1.5 GPM or less], showerheads [2.0 GPM or less], and faucets [1.28 GMM or less]).

Mitigation Measure GHG-5: The Project Applicant/Developer shall install all necessary infrastructure (i.e., wiring, reinforced roofs) to allow solar photovoltaic systems on the project site to be installed in the future, with a specified electrical generation capacity in order to meet California Green Building Code Standards. The entire roof of the office section of each industrial building shall be designed to support solar installations; and, once the building tenant has been identified, solar panels shall be installed in order to generate enough energy to meet 100% of the building office's energy needs.

5.8.12 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Upon implementation of existing regulatory requirements and the mitigation measures listed above, impacts related to GHG emissions would remain above the 3,000 $MTCO_2e$ per year threshold of significance, and impacts associated with GHG emissions for both Impact GHG-1 and GHG-2 would be significant and unavoidable.

5.8.13 REFERENCES

City of Perris. (July 2005a). *General Plan 2030*. Retrieved September 12, 2023, from https://www.cityofperris.org/departments/development-services/general-plan

City of Perris. (July 2005b). *General Plan 2030 Environmental Impact Report*. Retrieved September 12, 2023, from https://www.cityofperris.org/home/showpublisheddocument/451/637203139698630000

Urban Crossroads. (April 2025). *Harvest Landing Greenhouse Gas Analysis*. **(EIR Appendix M)**

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