

**GHG IMPACT ANALYSIS**  
**TTM NO. 38339**  
**KIRBY STREET PROJECT**  
**SAN JACINTO, CALIFORNIA**

Prepared by:



Sara Friedman Gerrick  
Senior Engineer  
Giroux & Associates

Prepared for:

Tom Dodson & Associates  
Attn: Kaitlyn Dodson  
PO Box 2307  
San Bernardino, CA 92406-2307

Date:

November 29, 2022

Project No.: P22-049 GHG

## BACKGROUND

The project proposes the subdivision of an 18.5-acre property to enable the development of 76 single-family residences within the City of San Jacinto. GHG emissions associated with project construction and operation are presented in this report.

## GHG EMISSIONS THRESHOLDS

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO<sub>2</sub> equivalent/year CO<sub>2</sub>e. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT CO<sub>2</sub>e for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

## PROJECT GHG EMISSIONS GENERATION

### Construction Activity GHG Emissions

The project is assumed to require less than one year for construction. During project construction, the CalEEMod2022 computer model predicts that the construction activities will generate the annual CO<sub>2</sub>e emissions identified below.

#### Construction Emissions (Metric Tons CO<sub>2</sub>e)

|                  | CO <sub>2</sub> e |
|------------------|-------------------|
| Year 2023        | 340               |
| <b>Amortized</b> | <b>11.3</b>       |

CalEEMod Output provided in appendix

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less-than-significant.

### Project Operational GHG Emissions

The input assumptions for operational GHG emissions calculations and the GHG conversion from consumption to annual regional CO<sub>2</sub>e emissions are summarized in the CalEEMod2022 output files found in the appendix of this report.

The total operational and annualized construction emissions for the proposed project are identified as follows:

| <b>Operational Emissions</b> |              |
|------------------------------|--------------|
| <b>Consumption Source</b>    |              |
| Area Sources                 | 19.5         |
| Energy Utilization           | 257.0        |
| Mobile Source                | 12.2         |
| Waste                        | 6.7          |
| Water                        | 0.1          |
| Refrigeration                | 0.3          |
| Vegetation                   | 8.5          |
| Construction                 | 11.3         |
| <b>Total</b>                 | <b>315.6</b> |
| Guideline Threshold          | 3,000        |
| Exceeds Threshold?           | No           |

Total project GHG emissions would be substantially below the proposed significance threshold of 3,000 MT suggested by the SCAQMD. Hence, the project would not result in generation of a significant level of greenhouse gases.

## **CONSISTENCY WITH GHG PLANS, PROGRAMS AND POLICIES**

### **Western Riverside Council of Governments (WRCOG) Subregional Climate Action Plan**

The City of San Jacinto is participating the Western Riverside Council of Governments (WRCOG) Subregional Climate Action Plan. The WRCOG Subregional CAP establishes a community-wide emissions reduction target of 15% below 2010, following guidance from CARB and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined this approach to be consistent with the state-wide AB 32 goal of reducing emissions to 1990 levels.

The project's total operational and amortized construction emissions are 315.6 MT CO<sub>2</sub>e per year and do not exceed the SCAQMD draft threshold. The proposed project would also be anticipated to be consistent with the WRCOG Subregional CAP with the following project design features, which include standard rules and requirements and recognized building design elements which will help reduce GHG emissions.

#### Operational Design Features:

- No wood burning fireplaces will be installed in any residential dwelling.
- The future residences would be outfitted with low flow toilets and energy efficient appliances. Solar would be installed concurrent with development of each residence as required by the California Energy Code.

- The project will include a landscaping consistent with the requirements of the City's Development Code Chapter 17.325, Water Efficient Landscape and Irrigation. Additionally, the proposed subdivision would comply with the City's Landscape Design Guidelines.
- The project will comply with the mandatory requirements of California Building Standards Code Title 24 Part 6 (Energy Code) and Title 24 Part 11 (CAL Green).
- The project will comply with the mandatory requirements of City of San Jacinto/CalRecycle's residential recycling program.
- The homeowner's association will encourage residents and landscape maintenance crews to use electric landscaping equipment, such as lawn mowers and leaf blowers. Therefore, the project will not conflict with an applicable plan, policy, or regulation for the purpose of reducing the emissions of greenhouse gases and the impact is considered less than significant.

### **SB 32/2017 Scoping Plan Consistency**

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The Table below summarizes the project's consistency with the 2017 Scoping Plan. As summarized, the project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories.

#### **2017 SCOPING PLAN CONSISTENCY SUMMARY**

| <b>Action</b>   | <b>Responsible Parties</b> | <b>Consistency</b>  |
|---|----------------------------|---|
| Implement SB 350 by 2030  |                            |   |
| Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.  | CPUC,<br>CEC,<br>CARB      | Consistent. This measure is not directly applicable to development projects, but the proposed project would use energy from Southern California Edison, which has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. Additionally, as the project structures are less than 4-stories, they would be required to install solar PV systems to increase renewable energy availability for the project. |
| Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030. |                            | Consistent. Although this measure is directed towards policymakers, the proposed project would be designed consistent with Title 24 2019, which increases in overall energy efficiency from Title 24 2016.  |

| Action  | Responsible Parties   | Consistency  |
|---|---|--|
| Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.                                 |   | Not applicable. This measure is not within the purview of this project.  |
| Implement Mobile Source Strategy (Cleaner Technology and Fuels)   |   |  |
| At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025.   | CARB,<br>California State Transportation Agency (CalSTA),<br>Strategic Growth Council (SGC),<br>California Department of Transportation (Caltrans),<br>CEC,<br>OPR,<br>Local Agencies | No conflict. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy. |
| At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.   |   | No conflict. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy. |
| Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.   |   | No conflict. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy. |
| Medium- and Heavy-Duty GHG Phase 2.   |   | No conflict. These are CARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy. |
| Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO <sub>x</sub> standard. |   | Not applicable. This measure is not within the purview of this project.  |
| Last Mile Delivery: New regulation that would result in the use of low NO <sub>x</sub> or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020,  |   | Not applicable. This project is not responsible for implementation of SB 375 and would therefore not conflict with this measure.                               |

| Action   | Responsible Parties   | Consistency   |
|--|---|---|
| increasing to 10% in 2025 and remaining flat through 2030.   |   |   |
| Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.” |   | No conflict. This project is not responsible for implementation of SB 375 and would therefore not conflict with this measure.   |
| Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).   | CARB  | Not applicable. The project is not within the purview of SB 375 and would therefore not conflict with this measure.   |
| By 2019, adjust performance measures used to select and design transportation facilities   |   |   |
| Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection, etc.).  | CalSTA,<br>SGC,<br>OPR,<br>CARB,<br>Governor’s Office of Business and Economic Development (GO Biz),<br>California Infrastructure and Economic Development Bank,<br>Department of Finance,<br>California Transportation Commission (CTC),<br>Caltrans | Not applicable. Although this is directed towards CARB and Caltrans, the proposed project would be designed to promote and support pedestrian activity on-site and in the project site area.  |
| By 2019, develop pricing policies to support low-GHG transportation (e.g., low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).  | CalSTA,<br>Caltrans,<br>CTC,<br>OPR,  | Not applicable. Although this measure is directed towards policymakers, the proposed project would comply with AB 939, which sets a statewide policy that not less than 65% of solid waste generated be source reduced, recycled, or composted. |

| Action  | Responsible Parties   | Consistency   |
|---|---|---|
|   | SGC,<br>CARB  | Additionally, the proposed project would be required to participate in the City of San Jacinto recycling program and recycling collection. During construction, the proposed project shall recycle and reuse construction and demolition waste per City of Whittier solid waste procedures. |
| Implement California Sustainable Freight Action Plan  |   |   |
| Improve freight system efficiency.  | CalSTA,<br>CalEPA,<br>CNRA,<br>CARB,<br>Caltrans,<br>CEC,<br>GO-Biz | Not applicable. This measure is not within the purview of this project.   |
| Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030. |   | Not applicable. This measure is not within the purview of this project.   |
| Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.  | CARB  | No conflict. This measure would apply to all fuel purchased and used by the project in the state.   |
| Implement the Short-Lived Climate Pollutant Strategy by 2030  |   |   |
| 40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.   | CARB,<br>CalRecycle,<br>CDFA,<br>SWRCB,<br>Local Air Districts      | Not applicable. This measure is not within the purview of this project.   |
| 50% reduction in black carbon emissions below 2013 levels.  |   | Not applicable. This measure is not within the purview of this project.   |
| By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.  | CARB,<br>CalRecycle,<br>CDFA<br>SWRCB,<br>Local Air Districts       | Not applicable. This measure is not within the purview of this project.   |
| Implement the post-2020 Cap-and-Trade Program with declining annual caps.   | CARB  | Not applicable. This measure is not within the purview of this project.   |
| By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink   |   |   |

| Action   | Responsible Parties  | Consistency   |
|--|--|---|
| Protect land from conversion through conservation easements and other incentives.                                    | CNRA,<br>Departments Within<br>CDFA,<br>CalEPA,<br>CARB  | Not applicable. This measure is not within the purview of this project. |
| Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity              |  | Not applicable. This measure is not within the purview of this project. |
| Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments |  | Not applicable. This measure is not within the purview of this project. |
| Establish scenario projections to serve as the foundation for the Implementation Plan                                |  | Not applicable. This measure is not within the purview of this project. |
| Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018                 | CARB   | Not applicable. This measure is not within the purview of this project. |
| Implement Forest Carbon Plan   | CNRA,<br><br>California<br>Department of<br>Forestry and Fire<br>Protection,<br><br>CalEPA and<br>Departments Within | Not applicable. This measure is not within the purview of this project. |
| Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.                   | State Agencies &<br>Local Agencies   | Not applicable. This measure is not within the purview of this project. |

As shown above, the project would not conflict with any of the 2017 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the project. Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030.