Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project (including planning, acquisition, development, and operation) be considered when evaluating the project's impact on the environment. Section 15126 also sets forth general content requirements for environmental impact reports (EIRs). This section identifies (1) significant irreversible environmental changes that would result from implementing the proposed project; (2) growth-inducing impacts of the proposed project; and (3) potential energy impacts of the proposed project.

9.1 SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT

Section 15126.2(c) of the CEQA Guidelines requires that an environmental impact report (EIR) describe any significant irreversible environmental changes that would be caused by the proposed project should it be implemented.

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The following are the significant irreversible changes that would be caused by the proposed project, should it be implemented:

- Construction activities associated with the proposed project would entail the commitment of nonrenewable and/or slowly renewable energy resources; human resources; and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, water, and fossil fuels. Operational activities would also require the use of natural gas and electricity, petroleum-based fuels, fossil fuels, and water. The commitment of resources required for the construction and operation of the project would limit the availability of such resources for future generations or for other uses during the life of the project.
- An increased commitment of social services and public maintenance services (e.g., police, fire, sewer, and water services) would also be required. The energy and social service commitments would be long-term obligations in view of the low likelihood of returning the land to its existing condition once it has been developed.

- Employment growth related to project implementation would increase vehicle trips over the long term. Emissions associated with such vehicle trips, particularly diesel truck trips, would continue to contribute to the South Coast Air Basin's nonattainment designations for ozone, particulate matter (PM₁₀ and PM₂₅), and lead (Los Angeles County only) under the California and National Ambient Air Quality Standards (AAQS), and nonattainment for nitrogen dioxide (NO₂) under the California AAQS.
- Future development in accordance with the proposed project is a long-term and likely irreversible commitment of vacant parcels of land and redevelopment of existing developed land (i.e., Riverside Cement Plant facility) in the City of Jurupa Valley.

Given the low likelihood that the land would revert to lower intensity uses or to its current form, the proposed project would generally commit future generations to these environmental changes. However, the Specific Plan area is already developed; therefore, the use of existing infrastructure is possible with some upgrades, improvements, and connections, and environmental impacts can be minimized. The commitment of resources to the proposed project is not unusual or inconsistent with projects of this type and scope. However, once these commitments are made, it is improbable that the Specific Plan area would revert back to its current condition. Thus, the proposed project would result in significant irreversible changes to the environment.

9.2 GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities which could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?
- Would this project result in the need to expand one or more public services to maintain desired levels of service?
- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this EIR.

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Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

Buildout of the Specific would not involve construction or extension of major infrastructure. Project construction would involve installation of utility connections to existing infrastructure facilities next to the site.

Construction/Extension of Major Infrastructure Facilities

The project site is already improved with infrastructure facilities associated with the former Riverside Cement Plant facility, including internal roadways, dry utilities (e.g., natural gas, electric, telephone, and cable), and water and wastewater connections. Therefore, development of the proposed project would not remove obstacles to growth through the construction or extension of major infrastructure facilities. Most improvements related to the project would consist of adding connections within the site to connect to existing infrastructure facilities adjacent to the project site.

Changes in Existing Regulations

The Jurupa Valley General Plan Land Use Element currently designates the entire project site as Business Park-Specific Plan Overlay, and the Jurupa Valley Zoning Ordinance zones the site as Manufacturing-Heavy and Manufacturing-Service Commercial. Approval of the project would not remove any existing regulatory obstacle to growth, but would redefine the nature of future growth in the area. The Agua Mansa Commerce Park Specific Plan would require a general plan amendment and zone change to allow the proposed industrial, business park, and open space uses, including warehousing and distribution uses.

The current and proposed land use designations and zoning for the project site have varying allowable densities and permitted uses, but growth would be allowed under both the current and proposed land use designations and zoning. Therefore, the proposed project would not change existing regulations pertaining to land development and would not remove obstacles to growth.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

As described in Chapter 5.13, *Public Services*, public service agencies were consulted during preparation of this DEIR, including the Riverside County Fire Department and Riverside County Sheriff's Department. None of the service providers indicated that buildout of the Specific Plan would necessitate the immediate expansion of their services and facilities in order to maintain adequate and desired levels of service. Because no housing is proposed as part of the Specific Plan, no new residents would be added to the project area as a result of project buildout. Therefore, there would be no direct impacts to school and library services in the area. Overall, no future expansion of public services would be required to maintain existing levels of service.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

Implementation of the Specific Plan would create varying levels of temporary construction employment opportunities as the project area builds out. This would be an indirect economic effect of this project that would not significantly affect the environment. Implementation of the proposed Specific Plan would generate short-term design, engineering, and construction jobs during project construction. Construction-related jobs would not result in a significant population increase because they would likely be filled by workers in the region. Construction would occur intermittently over the four project phases. Construction would not result in a significant increase in population because the construction phases would be temporary and buildings would be developed as the market demands.

The proposed Specific Plan would result in the creation of up to 988 new long-term jobs (see Section 5.12, *Population and Housing*). As the number of employees in the Specific Plan area grows, these employees would seek shopping, entertainment, auto maintenance, and other economic opportunities in the surrounding area. This could encourage the creation of new businesses and/or the expansion of existing businesses to address these needs. Actual growth would depend on future market demand, site constraints, and property owners' willingness to take advantage of new development regulations. However, new neighborhood-serving commercial uses developed to serve the shopping needs of future employees would likely generate additional employment opportunities. Therefore, implementation of the Specific Plan would have both direct and indirect economic effects that could significantly affect the environment. The impacts from neighborhood commercial uses would be analyzed and any appropriate mitigation imposed on a project-by-project basis.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

The Agua Mansa Commerce Park Specific Plan would require the approval of discretionary actions; however, the project would not set a precedent for future projects with similar characteristics. The project would require the following approvals and adoptions from the Jurupa Valley City Council.

General Plan Amendments

- 1. Change the land use designation from "Business Park" with Specific Plan Overlay (BP-SPO) to the following land use designations:
 - Heavy Industrial (HI) with Specific Plan Overlay to be applied within the Industrial Park District of Agua Mansa Commerce Park Specific Plan.
 - Light Industrial (LI) with Specific Plan Overlay to be applied within the Business Park with Retail Overlay of Agua Mansa Commerce Park Specific Plan.
 - Open Space Recreation (OS-R) with Specific Plan Overlay to be applied within the Open Space District of the Agua Mansa Commerce Park Specific Plan.
- 2. Create a "Rubidoux Warehouse and Distribution Center Overlay" in the General Plan.

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- 3. Establish "Rubidoux Warehouse and Distribution Center Overlay" on the Industrial Park District of the Agua Mansa Commerce Park Specific Plan.
- Change of Zone: Rezone from Manufacturing-Heavy and Manufacturing-Service Commercial to Specific Plan.
- Specific Plan: Adopt the Agua Mansa Commerce Park Specific Plan, which supersedes the existing Agua Mansa Specific Plan No. 210 on the project site.
- **Site Development Permit:** Establish the speculative buildings for the future uses.

Development Agreement

The approval of these actions changes the existing restrictions on growth set by the Jurupa Valley General Plan and Zoning Code. The proposed project would not change the existing protocol for project approval and would not set a precedent that would make it more likely for other projects to gain approval of similar applications.

Moreover, no changes to any of the City's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, fire codes) are proposed or required to implement the proposed project. Therefore, the proposed project would not involve a precedent-setting action that would encourage and/or facilitate other activities that could significantly affect the environment.

9.3 ENERGY IMPACTS OF THE PROPOSED PROJECT

Section 21100(b)(3) of the California Environmental Quality Act (CEQA) requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing any inefficient, wasteful, and unnecessary consumption of energy. Appendix G of the CEQA Guidelines poses the following questions:

- Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

9.3.1 Regulatory Background

9.3.1.1 FEDERAL

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) provided the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also improved the energy performance of the federal government. The Act increased the Corporate Average Fuel Economy Standards, the Renewable Fuel Standard, appliance energy efficiency standards, and building energy efficiency standards

and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (USEPA 2019).

9.3.1.2 STATE

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078 and was amended in 2006, 2011 and 2018. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. The California Public Utilities Commission is required to provide quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the State. Based on the 3rd quarter 2016 report, the three largest retail energy utilities provided an average of 27.6 percent of its supplies from renewable energy sources. Since 2003, 15,565 megawatts (MW) of renewable energy projects have started operations (CPUC 2016). SB 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. Senate Bill 100 (de Leon) passed in 2018 puts California on the path to 100 percent fossil-fuel free electricity by the year 2045 (CEC 2017a).

State Alternative Fuels Plan

Assembly Bill 1007 requires the California Energy Commission (CEC) to prepare a plan to increase the use of alternative fuels in California. The State Alternative Fuels Plan was prepared by the CEC with the California Air Resources Board (CARB) and in consultation with other federal, state, and local agencies to reduce petroleum consumption, increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen), reduce greenhouse gas (GHG) emissions, and increase in-state production of biofuels. The State Alternative Fuels Plan recommends a strategy that combines private capital investment, financial incentives, and advanced technology that will increase the use of alternative fuels, result in significant improvements in the energy efficiency of vehicles, and reduce trips and vehicle miles traveled through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implements this plan (CEC 2007).

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (California Code of Regulations [CCR] Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances that are sold or offered for sale in California (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings). These standards are updated regularly to allow consideration of new energy efficiency technologies and methods (CEC 2017b).

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Title 24, Part 6, Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (24 CCR Part 6). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards, which were adopted on May 9, 2018, go into effect starting January 1, 2020.

The 2016 Standards improve upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings (CBSC 2015). Under the 2016 Standards, residential and nonresidential buildings are generally 28 and 5 percent more energy efficient than the 2013 Standards, respectively (CEC 2015a). Although the 2016 standards do not achieve zero net energy, they get very close to the state's goal and take important steps toward changing residential building practices in California.

The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards, and single-family homes will be 7 percent more energy efficient (CEC 2018b).

Title 24, Part 11, Green Building Standards

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. It includes mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were last updated in 2016. The 2016 Standards became effective on January 1, 2017. On October 3, 2018, the CEC adopted the voluntary standards of the 2019 CALGreen, which become effective January 1, 2020.

Overall, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impacts during and after construction. CALGreen contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2019).

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal*, above). In January 2012, CARB approved the Pavley Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions (CARB 2017).

9.3.1.3 LOCAL

City of Jurupa Valley General Plan Policies

As part of the City of Jurupa Valley's General Plan, the Conservation and Open Space Element includes the following goals:

- COS 5 **Renewable Energy Resources.** Increasing use of sustainable energy sources such as solar and wind energy and reducing reliance on nonsustainable energy sources to the extent possible with available technology and resources. This goal includes thirteen policies that relate to best available practices, energy-efficiency, and wind energy, solar energy, and biomass conservation.
- Non-Renewable Resources. Reducing consumption of non-renewable energy sources where possible and ensuring efficient use, development, and conservation of sustainable, non-polluting energy sources. This goal includes six policies that relate to the efficient use of non-renewable resources, fuel efficient vehicles, and the advancement of renewable energy sources.

The General Plan's Housing Element includes Goal HE 5, which aims to reduce residential energy and water use. The goal includes the following three policies:

- HE 5.1 **New Construction.** Encourage the development of dwellings with energy-efficient designs, utilizing passive and active solar features and energy-saving features that exceed minimum requirements in state law.
- HE 5.2 **Sustainable Design.** Residential developments should promote sustainability in their design, placement, and use.
- HE 5.3 **Site and Neighborhood Design.** Residential site, subdivision, and neighborhood designs should consider sustainability

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Furthermore, the General Plan's Air Quality Element includes Goal AQ 5, which aims to promote energy efficiency and conservation. The goal includes the following two policies:

- AQ 5.1 **Reduce Solid Waste.** Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- AQ 5.2 **Energy Conservation.** Encourage advanced energy conservation techniques and the incorporation of energy efficient design elements for private and public developments, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling, and offer incentives, as appropriate.

The General Plan also includes the following policies:

- AQ 7.6 **City Transportation Fleet.** Manage the City's transportation fleet to achieve energy savings.
- CSSF 2.3 **Facility Design.** Work with service agencies to ensure that new public facilities are well designed, energy efficient and compatible with adjacent land uses.
- HE 1.8 **Innovative Housing.** Encourage innovative housing, site plan design, and construction techniques to promote new affordable housing, improve energy efficiency, and reduce housing costs.
- LUE 11.6 **Energy Efficiency.** Require development projects to use energy efficient design features in their site planning, building design and orientation, and landscape design that meet or exceed state energy standards.

9.3.2 Short-Term Construction Impacts

Construction of the proposed project would require the use of construction equipment for grading, hauling, and building activities. Electricity use during construction would vary during different phases of construction—the majority of construction equipment during demolition and grading would be gas or diesel powered, and the later construction phases would require electricity-powered equipment, such as for interior construction and architectural coatings. Construction also includes the vehicles of construction workers traveling to and from the project site and haul trucks for the export of materials from site clearing and demolition and the export and import of soil for grading. The project site is already served by onsite electrical infrastructure by Southern California Edison (SCE) and natural gas infrastructure by Southern California Gas Company (SCGC). As discussed in Chapter 5.17, *Utilities and Service Systems*, when current usage ceases upon demolition of the Riverside Cement Plant facility buildings and structures, adequate infrastructure capacity is available to accommodate the electricity and natural gas demand for construction activities and would not require additional or expanded infrastructure.

The construction contractors are also anticipated to minimize idling of construction equipment during construction and reduce construction and demolition waste by recycling. These required practices would limit wasteful and unnecessary electrical energy consumption. Furthermore, there are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient

than at comparable construction sites in other parts of the state. Therefore, the proposed short-term construction activities would not result in inefficient, wasteful, or unnecessary fuel consumption.

9.3.3 Transportation Impacts

9.3.3.1 SHORT-TERM CONSTRUCTION IMPACTS

Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would be temporary and would fluctuate according to the phase of construction. Construction trips would not result in unnecessary use of energy since the project site is centrally located and is served by numerous regional freeway systems that provides the most direct and shortest routes from various areas of the region.

Impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure. Overall, it is expected that construction fuel associated with land use developments accommodated under the proposed project would not be any more inefficient, wasteful, or unnecessary than similar development projects. Therefore, impacts would be less than significant with respect to transportation energy.

9.3.3.2 LONG-TERM OPERATIONAL IMPACTS

The proposed project would consume transportation energy during operations from the use of motor vehicles. Estimates of transportation energy use are based on the overall vehicle miles traveled (VMT) and related transportation energy use. Given that the existing Riverside Cement Plant facility is closed and not operational, the existing annual VMT is zero. Similarly, under existing conditions, the transportation energy demand is estimated to be zero gallons per year for gasoline and diesel fuel.

Project-related VMT would come from employee and visitor vehicle trips, delivery and supply trucks, and trips by maintenance and repair crews. Alternative 1 would increase VMT by 50,906,982 annually. Alternative 2 would increase VMT by 55,304,860 annually (see Appendix N, *Transportation Energy Use Calculations*). Table 9-1, *Project Operation-Related Vehicle Fuel/Energy Usage*, shows the proposed project's annual use of energy based on VMT. As shown in this table, Alternative 1 would consume 4,737,105 gallons of fuel per year (gasoline, diesel, and compressed natural gas) and 57,858 kilowatt-hours (kWh) of electricity per year. Alternative 2 would consume 4,652,883 gallons per year and 83,132 kWh per year.

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Table 9-1 Project Operation-Related Vehicle Fuel/Energy Usage

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	Gas		Diesel		CNG		Energy ¹	
Alternative	VMT	Gallons	VMT	Gallons	VMT	Gallons	VMT	kWh
Alternative 1	18,990,217	880,812	31,690,671	3,833,094	52,944	23,199	173,150	57,858
Alternative 2	25,819,273	1,703,379	29,187,258	3,557,796	49,543	21,708	248,787	83,123

Source: CalEEMod 2016.3.2; EMFAC2017.

Notes CNG: compressed natural gas; VMT: vehicle miles traveled; kWh: kilowatt-hour

Although the project would increase annual fuel consumption associated with more trips, average corporate fuel economy would increase as a result of state and federal laws, including the Pavley Advanced Clean Cars program, and vehicle turnover, which improve the overall fuel economy of California's vehicle fleets. In addition, in compliance with CALGreen, the proposed project would include bicycle racks and storage for employee use.

The City of Jurupa Valley and its surrounding areas are generally urbanized with available gasoline fuel facilities and infrastructure. Consequently, the proposed project would not result in a substantial demand for energy that would require expanded supplies or the construction of other infrastructure or expansion of existing facilities. Additionally, fuel consumption associated with vehicle trips generated by the proposed project would not be considered inefficient, wasteful, or unnecessary. Therefore, impacts would be less than significant with respect to operation-related fuel usage.

9.3.4 Other Operational Energy Demand Impacts

As detailed in Chapter 5.17, *Utilities and Service Systems*, the project site is developed with the Riverside Cement Plant facility and is served by SCE for electricity services and SCGC for natural gas services.

Operation of the existing facility consumes electricity for various purposes, including, but not limited to heating, cooling, and ventilation of buildings, water heating, operation of electrical systems, security and control center functions, lighting, and use of onsite equipment and appliances. Based on the air quality modeling, Alternative 1 of the proposed project would have an average annual electricity demand of 24,609,120 kWh per year and an average natural gas demand of 32,192,320 thousand British thermal units (kBTU) per year. For Alternative 2, the average annual electricity demand is 12,599,810 kWh per year and the average natural gas demand is 11,189,740 kBTU per year.

Total mid-electricity² consumption in SCE's service area is forecast to increase by approximately 12,723 gigawatt-hours between 2015 and 2027 (CEC 2016). SCE forecasts that it will have sufficient electricity supplies

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¹ Electricity use from electric vehicles is based on the average electricity consumption available from the U.S. Department of Transportation (USDOT 2017).

It should be noted that the square footage used for Alternative 2 in the air quality model is slightly higher that the square footage stated in the Specific Plan. The air quality model is based on 170,000 square feet of light industrial use and 25,000 square feet of commercial retail.

² CEC forecasts include three scenarios: a high energy demand case, a low energy demand case, and a mid-energy demand case. The high energy demand case incorporates relatively high economic/demographic growth, relatively low electricity and natural gas rates,

to meet demands in its service area, and the electricity demand due to the project is within the forecast increase in SCE's electricity demands. Project development would not require SCE to obtain new or expanded electricity supplies, and impacts would be less than significant.

SCGC's residual supplies were forecast to remain constant at 3,775 million cubic feet per day (MMCF/day) from 2020 through 2035. Total natural gas consumption in SCGC's service area is forecast to decline slightly—from 2,591 MMCF/day in 2019 to 2,313 MMCF/day in 2035 (CGEU 2018). SCGC forecasts that it will have sufficient natural gas supplies to meet project gas demands, and project development would not require SCGC to obtain new or expanded gas supplies. Impacts would be less than significant.

Furthermore, the new structures would be designed in accordance with the 2016 Building and Energy Efficiency Standards (24 CCR Part 6) and the 2019 California Green Building Code (24 CCR Part 11) and would not result in inefficient, wasteful, or unnecessary electricity and natural gas consumption. Therefore, the proposed project would not result in a significant impact related to operational energy demand or result in inefficient, wasteful, or unnecessary fuel consumption.

9.3.5 Renewable Energy

The project site is in SCE's service area, which spans much of southern California from Orange and Riverside counties in the south to Santa Barbara County in the west to Mono County in the north (CEC 2015b). Sources of electricity sold by SCE in 2017, the latest year for which data are available, were:

- 32 percent renewable, consisting mostly of solar and wind
- 8 percent large hydroelectric
- 20 percent natural gas
- 6 percent nuclear
- 34 percent unspecified sources—that is, not traceable to specific sources (SCE 2018)³

The net increase in power demand associated with the proposed project is anticipated to be within the service capabilities of SCE and would not impede SCE's ability to implement California's renewable energy goals. Therefore, the proposed project would not obstruct a state or local plan for renewable energy.

9.3.6 References

California Air Resources Board. 2017, January 11 (reviewed). Clean Car Standards - Pavley, Assembly Bill 1493. https://ww3.arb.ca.gov/cc/ccms/ccms.htm.

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and relatively low efficiency program and self-generation impacts. The low energy demand case includes lower economic/demographic growth, higher assumed rates, and higher efficiency program and self-generation impacts. The mid case uses input assumptions at levels between the high and low cases.

The electricity sources listed above reflect changes after the 2013 closure of the San Onofre Nuclear Generating Station, which is owned by SCE.



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