

7.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

According to the *California Environmental Quality Act (CEQA) Guidelines* Section 15126.2(c), “[u]ses 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.”¹ Primary impacts and, particularly, secondary impacts generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with a proposed project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Primary impacts will result from the consumption of non-renewable resources during construction and operation of the proposed project. Non-renewable resources such as sand, gravel, steel, and renewable resources such as lumber will be consumed during project construction. Energy, fossil fuels, oils, and natural gas will be irreversibly committed during construction. These same resources are used for vehicles and heating/cooling equipment during operations. The continued use of these resources associated with project operations represents a long-term obligation. The energy consumed in developing and maintaining the site for urban use may be considered a permanent investment.

Construction of the project would consume limited amounts of certain types of lumber; other raw materials in steel, metals such as copper and lead; aggregate materials used in concrete and asphalt such as sand and stone, water; petrochemical construction materials such as plastic, petroleum-based construction materials, and other similar slowly renewable or nonrenewable resources. Additionally, fossil fuels for construction vehicles and equipment would be consumed. In terms of project operations, the following slowly renewable and nonrenewable resources would be required: natural gas and electricity, petroleum-based fuels, fossil fuels, and water. The consumption of such resources would represent a long-term commitment of those resources.

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. However, continued use of such resources is consistent with anticipated growth in the City of Solvang.

¹ California Public Resources Code, Title 14, Division 6, Chapter 3, *California Environmental Quality Act Guidelines*, Section 15126(c).

7.2 Significant Irreversible Environmental Changes

The project's contribution to state, national, and global greenhouse gas (GHG) emission inventories and the resultant effect on global climate change is evaluated on a cumulative basis. Secondary impacts result from fuel consumption in the form of air pollution which degrades both air quality in general and contributes to the formation of greenhouse gases, which cumulatively affect global warming. Construction activities would contribute to GHG emissions. While the project would generate GHG emissions, its contribution was found not to be cumulatively considerable.