Chapter 9
Significant Irreversible Changes

9.1 Introduction

Pursuant to Section 15126.2(c) of the State CEQA Guidelines, an EIR must consider any significant irreversible environmental changes that would be caused by the proposed Project should it be implemented. Section 15126.2(c) states:

> *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 a highway 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.*

Resources that are committed irreversibly and irretrievably are those that would be used by a project on a long-term or permanent basis.

9.2 Analysis of Irreversible Changes

The proposed Project would require the use of nonrenewable resources, principally fossil fuels and nonrenewable construction materials, to develop the site for Port-related activities. Fossil fuels and energy would be consumed during both the construction and the operational phases. Fossil fuels in the form of diesel oil, natural gas, and gasoline would be used for construction equipment and vehicles, and electrical energy from the grid would also be consumed. During operations, diesel oil, natural gas, and gasoline would be used by terminal equipment (e.g., yard tractors and mobile cranes), trains, and on-road vehicles. Electrical energy generated off-site would be consumed by the container cranes and normal terminal functions such as lighting and building power. These energy resources would for the most part be irretrievable, and would cause irreversible changes in supplies of fossil fuel available for other uses. However, it is important to note that some electricity provided by SCE and the LADWP is provided from renewable sources (CPUC, 2011). In 2010, SCE produced 19.4 percent of its electricity from renewable sources and LADWP produced 20 percent of its electricity from renewable sources (LADWP, 2011). Furthermore, recently adopted legislation raises California's renewable portfolio requirements for retail electricity sales to 33 percent by 2020 (See Senate Bill X1 2 [2011]).

Non-recoverable material resources committed to the proposed Project other than fossil fuels would include: capital, labor, and construction materials such as rock, steel,

concrete, and timber. Non-recoverable materials would be used during construction and operational activities, but the amounts needed would be accommodated by existing supplies. Although the increase in the amount of materials used would be limited, they would nevertheless be unavailable for other uses. The irreversible changes discussed above would be justified by the increased efficiency in cargo handling at the Port that the proposed Project would provide, as well as the environmental benefits in comparison to the No Project Alternative.