Chapter 8
Significant Irreversible Changes

8.1 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 a 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 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.*

8.2 Analysis of Irreversible Changes

The proposed Project would implement improvements to comply with MOTEMS requirements and includes a new 30-year lease. Resources that are committed irreversibly and irretrievably are those that would be used by a project on a long-term or permanent basis.

Resources committed to the proposed Project during construction include the use of fossil fuels to run diesel oil and gasoline-powered construction equipment and vehicles, electrical energy and natural gas to power other construction equipment and vehicles, and nonrenewable construction materials such as iron, concrete and gravel.

Although the proposed Project would not increase the capacity of the terminal, it includes a new 30-year lease, which would allow for an increase in throughput over the new lease period (i.e., an increase relative to current throughput levels). Fossil fuels and energy would be consumed during operational activities. During operations, ocean-going vessel fuels, diesel and gasoline would be used for ships, tugboats, terminal operations, and on-road vehicles associated with employees. Electrical energy and natural gas would be consumed during construction and operation. For additional information on energy consumption and conservation related to the proposed Project, refer to Section 3.5, Energy Conservation.

Non-renewable materials (i.e., irreversible/irretrievable resources) such as iron, concrete and gravel would be used during construction activities, and energy would be used during construction and operation activities, but the amounts needed would be accommodated by existing supplies. Although the increase in amount of materials and energy used would be limited and considered minor relative to existing supplies and reserves, they would

nevertheless be unavailable for other uses. The minimal irreversible changes would be justified by the improvements to better protect public health, safety and the environment (e.g., from MOTEMS improvements), and would contribute over the 30-year lease to the reliability of the region's future energy handling capabilities. Therefore, the irretrievable commitments of resources associated with the proposed Project and alternatives are justified under CEQA.