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SIGNIFICANT IRREVERSIBLE IMPACTS

9.1 Introduction

Pursuant to Section 15126.2(c) of the 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 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.*

9.2 Analysis of Irreversible Changes

Land use changes that would result in changes and/or intensification of activities with the potential for impacting the physical environment, as well as construction and operations of the proposed appealable/fill projects have the greatest potential to result in irreversible changes. The potential for the proposed appealable/fill projects to result in irreversible changes would be subject to detailed evaluation in second-tier environmental documents prepared when proposed appealable/fill projects are initiated and carried forward for environmental review.

At a programmatic level, the three fill projects (China Shipping Fill, Yang Ming Terminal Redevelopment, and Berth 300 Development) and associated land use changes represent the greatest potential for irreversible changes because they would fill areas of the Port that currently are open water, thereby representing irreversible loss of open water habitat. While the loss of habitat can be mitigated through creation or restoration of aquatic habitat at another location, in accordance with the 2008 Compensatory Mitigation Rule (*The Compensatory Mitigation for Losses of Aquatic Resources Final Rule*, adopted April 2008, USACE and USEPA, Federal Register 73(70):19594-19705) or other compensatory mitigation mechanisms, the habitat of the landfill location would be changed irreversibly.

The PMPU area contains cultural resources, although irreversible changes to these resources are not expected because mitigation measures would be implemented (e.g., site assessments and construction monitoring) as applicable, for the proposed appealable/fill projects and land use changes under the proposed Program.

The proposed appealable/fill projects and land use changes under the proposed Program would develop the PMPU area for increased Port-related activities. Resources that are committed irreversibly and irretrievably are those that would be used by a proposed appealable/fill project on a long-term or permanent basis. For example, construction and operation of the proposed appealable/fill projects likely would require the use of nonrenewable resources including fossil fuels (e.g., oil, gasoline, and diesel fuel for construction equipment) and nonrenewable construction materials. Additionally, construction materials for buildings and structures could consist of lumber, steel, aggregate sand and gravel materials for cement, and other natural resources.

Operation of facilities associated with the proposed appealable/fill projects and land use changes also would result in an irreversible commitment of nonrenewable energy resources, including fossil fuels and natural gas. These energy resources would be irretrievable and irreversible. However, use of these types of resources is common for construction activities on similar scale projects throughout southern California, and the proposed appealable/fill projects likely would not require any resources that would substantially deplete existing supplies. Thus, the proposed Program would indirectly result in irreversible changes due to the use of energy resources and fossil fuels during construction and operations of the proposed appealable/fill projects and land use changes. However, the use of energy and fossil fuels would not be uncommon in comparison to other types of institutional or commercial uses, and would, therefore, not result in significant irreversible impacts on the environment.

Additionally, as described in Section 3.13, Utilities, the Port's Construction and Maintenance Division recycles and reuses demolition debris to the extent possible.

Construction and operation of the proposed appealable/fill projects and land use changes are not expected to result in irreversible changes to aesthetics/visual resources, air quality, geology, groundwater and soils, land use, noise, socioeconomics, public services, recreation, transportation, or utilities.

The minimal irreversible changes associated with the proposed Program would be justified by the projected economic growth in trade and import/export of goods, as well as the increased efficiency in cargo handling at the Port.