Chapter 3
3. Environmental Analysis

Introduction

This section serves as an introduction to Chapter 3 and presents an overview of the approach and principles that guide the evaluation of potential environmental impacts in this Recirculated Draft EIS/EIR. The remaining sections of the chapter (Sections 3.1 through 3.14) present the affected environment and environmental consequences of the proposed Project and Project Alternatives for environmental issue, as described in Chapter 2 of this EIS/EIR. The affected environment and consequences are described in the context of the resource areas, which correspond to the issues required to be analyzed by the Amended Stipulated Judgment (ASJ) that are listed at the end of this section.

In addition, the impact discussions and determinations regarding Project construction under each resource area apply to Phase I, which was completed in 2004, as well as to Phases II and III, which have not been constructed.

To assist the reader in comparing information about the various environmental issues, Sections 3.1 through 3.14 each present the following information for its specific resource area:

+ Environmental Setting (the environmental setting or baseline for this Recirculated Draft EIS/EIR is the physical condition that existed prior to March 2001 as set forth in the ASJ).
+ Significance Criteria (i.e., the criteria against which the significance of impacts is judged)
+ Impact Assessment Methodology
+ Impacts of the proposed Project and alternatives, and Mitigation Measures to reduce or avoid significant impacts
+ Mitigation Monitoring
+ Residual Impacts

Significant cumulative impacts to which the proposed Project and alternatives would contribute in each environmental resource area are summarized in Chapter 4 of this Recirculated Draft EIS/EIR. A comparison of the results of impact analyses for the proposed Project and all alternatives is presented in Chapter 6. The Project alternatives are compared to the proposed Project, the CEQA baseline, and NEPA baseline, and ranked relative to each other based on anticipated impacts for each resource area to determine the environmentally preferred and environmentally superior alternative. The

CEQA and NEPA baselines and their application to analysis of potential impacts from the proposed Project and alternatives are explained in detail in Section 1.5.5 and Section 2.6 in this Recirculated Draft EIS/EIR.

In evaluating the potential impacts of the proposed Project and the Project alternatives, the level of significance is determined by applying the threshold of significance (significance criteria) presented for each resource evaluation area. The following terms are used in the impact analysis for each resource area.

+ No Impact: A designation of no impact is given when no adverse changes in the environment are expected.

+ Less Than Significant Impact: A less than significant impact would be identified when the proposed Project or alternatives would cause no substantial adverse change in the environment, i.e., the impact would not exceed the threshold of significance.

+ Significant Impact: A significant (but mitigable, or avoidable) impact would create a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the proposed Project or alternatives. Such an impact would exceed the applicable significance threshold established by NEPA and CEQA, but the impact would be reduced to a less than significant level by application of one or more feasible mitigation measure.

+ Significant Unavoidable Impact: As required by Section 15126.2(b) of the CEQA Guidelines, this terminology is used when a residual impact that would cause a substantial adverse effect on the environment – which may or may not be reduced somewhat by feasible mitigation measure(s) – but which could not be reduced to a less than significant level by feasible mitigation measure(s).

+ Beneficial Effect: The proposed Project or alternatives would create a positive change in any of the physical conditions in the affected resource area.

+ Mitigation: This term refers to measures that would be implemented to avoid or lessen potentially significant impacts. Mitigation includes:

  - Avoiding the impact altogether by not taking a certain action or parts of an action;
  - Minimizing the impact by limiting the degree or magnitude of the action and its implementation;
  - Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
  - Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
  - Compensating for the impact by replacing or providing substitute resources or environments.

  The mitigation measures would be proposed for implementation as conditions of Project approval and would be monitored to ensure compliance and implementation.

+ Residual Impact: This is the level of impact after the implementation of mitigation measures. In the case where a mitigation measure(s) would avoid or reduce a significant impact to a level that is less than significant, a determination would be made that the Residual Impact would be less than significant. In the case where a mitigation measure(s) would reduce a significant impact somewhat but would not reduce it to a level that is less than significant, then a determination would be made

that the Residual Impact would remain significant. A determination that the Residual Impact would remain significant is used to identify Significant Unavoidable Impacts, as required by Section 15126.2(b) of the CEQA Guidelines.

CEQA Baseline

Section 15125 of the CEQA Guidelines requires EIRs to include a description of the physical environmental conditions in the vicinity of a project that exist at the time of the NOP. These environmental conditions would normally constitute the baseline physical conditions by which the CEQA lead agency determines whether an impact is significant. For purposes of this Recirculated Draft EIS/EIR, the CEQA baseline for determining the significance of potential Project impacts is the environmental setting prior to March 2001, pursuant to the ASJ described in Chapter 1, Section 1.4.3, and in Chapter 2, Section 2.6. The CEQA baseline for this proposed Project includes 45,135 TEUs per year that occurred on the Project site in the year prior to March 2001.

The CEQA baseline represents the setting at a fixed point in time and differs from the No Project Alternative (discussed in Section 2.5) in that the No Project Alternative addresses what is likely to happen at the site over time, starting from the existing conditions. The No Project Alternative allows for growth at the Project site that could be expected to occur without additional approvals.

NEPA Baseline

For purposes of this Recirculated Draft EIS/EIR, the evaluation of significance under NEPA is defined by comparing the proposed Project or other alternative to the NEPA baseline. The NEPA baseline condition for determining significance of impacts includes the full range of construction and operational activities the applicant could implement and is likely to implement absent permits from the USACE. The NEPA baseline begins in the year prior to 2001 but is not fixed in time. The EPA baseline includes construction and operation of backlands for supplemental container storage operations on up to 117 acres, but does not include wharves, dredging, bridges, or improvements that would require federal permits. The NEPA baseline assumes upland development of container backlands (117 acres), which is greater than the 2001 baseline conditions. In addition, the NEPA baseline assumes a highest reasonably foreseeable supplemental container storage capacity of 632,500 TEUs. No annual ships calls are included in the NEPA baseline.

Unlike the CEQA baseline, which is defined by conditions at a point in time, the NEPA baseline is not bound by statute to a flat or no-growth scenario. Therefore, the USACE could forecast increases in operations over the life of a project to properly describe the NEPA baseline condition. Normally, any ultimate permit decision would focus on direct impacts of the Project to the aquatic environment, as well as indirect and cumulative impacts in the uplands determined to be within the scope of federal control and responsibility. Significance of the proposed Project or alternative is defined by comparing the proposed Project or alternative to the NEPA baseline (i.e., the increment). In this environmental document, Alternative 1 is the No Project Alternative, under which there would be no additional Port or federal action. Alternative 2 is the No Federal Action Alternative, which would include the terminal uses that could occur absent a federal permit from the USACE. The impacts of the No Project Alternative are not required to be analyzed under NEPA. NEPA requires the analysis of a No Federal Action

Alternative. As a result, no NEPA impact determinations are made for Alternative 1 in any of the resource sections in this Chapter. The NEPA baseline conditions are described in Section 2.6.2.

The NEPA baseline also differs from the No Project Alternative, under which the Port would take no further action to construct and develop additional backlands (other than the 72 acres that are currently developed). Under the No Project Alternative, no construction would occur, other than the Phase I construction. However, the abandonment of the existing bridge and 1.3 acres of fill, as well as removal of the four A-frame cranes built as part of Phase 1, would occur. Forecasted increases in cargo throughput would still occur as greater operational efficiencies are realized.

Requirements to Evaluate Alternatives

NEPA (40 CFR 1502.14[a]) and CEQA Guidelines 15126.6 require that an EIS and an EIR describe a range of reasonable alternatives to the Project, or to the location of the Project, that could feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any significant environmental impacts. The EIR should compare merits of the alternatives and determine an environmentally superior alternative. Section 2.5 of this Recirculated Draft EIS/EIR sets forth potential alternatives to the Project and evaluates their suitability, as required by CEQA Guidelines (Section 15126.6). Section 1.5.7 and Sections 6.2 and 6.3 of this Recirculated Draft EIS/EIR describe the detailed requirements to evaluate alternatives.

The information presented in this Recirculated Draft EIS/EIR specific to impacts to the aquatic environment would be used by the USACE as part of any proposed permit action subject to jurisdiction of Section 404 of the CWA.

Amended Stipulated Judgment Requirements

The ASJ requires the following conditions.

+ The analysis in this Recirculated Draft EIS/EIR shall consider Project impacts against a baseline of either zero, or conditions prior to approval of the original China Shipping lease in March 2001.
+ The analysis shall evaluate all Project-specific and cumulative impacts from the China Shipping Project alone and not as part of any larger West Basin project or other project.
+ The analysis shall consider the following alternatives in the EIS/EIR:
  - Alternative Port-related uses other than a shipping terminal (nonshipping use)
  - Smaller terminals
+ The analysis shall consider all written and photographic evidence of impacts submitted by the PCAC, any of its subcommittees, or any other member of the public.
+ The analysis shall address the following mitigation measures:
  - Low profile cranes
  - All yard tractors must use alternative fuels; all toppicks and sidepicks shall use emulsified fuel and DOCs (unless infeasible)

- AMP: installing AMP facilities and retrofitting China ships, with 70 percent using AMP by July 1, 2005
- Low Sulfur Fuel: The Port shall evaluate the feasibility and emissions benefits of using available grades of marine fuel with 2,000 parts per million (ppm) or less sulfur content

The ASJ also requires that this Recirculated Draft EIS/EIR evaluate the environmental resource sections listed in Table 3-1. This table lists the corresponding EIS/EIR section that contains the applicable evaluations.

Table 3-1. Required Amended Stipulated Judgment Sections

Required Section	Corresponding EIS/EIR Section
Geology, Seismicity, and Topography	Section 3.5: Geology
Groundwater, Soils, and Sediments	Section 3.7: Groundwater and Soils; and Section 3.14: Water Quality, Sediments, and Oceanography
Meteorology and Air Quality	Section 3.2: Air Quality and Meteorology
Toxic Emissions and Risk	Section 3.2: Air Quality and Meteorology
Hydrology, Water Quality, and Oceanography	Section 3.14: Water Quality, Sediments, and Oceanography
Biota and Habitats	Section 3.3: Biological Resources
Ground Transportation and Circulation	Section 3.6: Ground Transportation and Circulation
Marine Vessel Transportation	Section 3.10: Marine Transportation
Noise	Section 3.11: Noise
Public Health and Safety	Section 3.8: Hazards and Hazardous Materials
Public Services	Section 3.13: Utilities and Public Services
Energy	Section 3.13: Utilities and Public Services
Utilities	Section 3.13: Utilities and Public Services
Land Uses	Section 3.9: Land Use
Aesthetics, Visual Impacts, and Light and Glare	Section 3.1: Aesthetics and Visual Resources
Recreation	Section 3.12: Recreation
Cultural Resources	Section 3.4: Cultural Resources
Environmental Justice	Chapter 5: Environmental Justice

Source: LAHD, 2004