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Chapter 3
Environmental Analysis

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Introduction

The following sections describe the Phase II project area setting, impacts associated with the proposed Phase II project components, and APMs and mitigation measures that will be implemented as part of the project to reduce significant impacts to less-than-significant levels for the following issue areas:

3.1   Aesthetics/Visual Resources

3.2   Air Quality

3.3   Biological Resources

3.4   Cultural Resources (includes Archaeological, Historical, and Paleontological Resources)

3.5   Energy and Mineral Resources

3.6   Geology and Soils

3.7   Hydrology and Water Quality

3.8   Land Use, Planning, and Agricultural Resources

3.9   Noise

3.10   Public Health and Safety and Hazards and Hazardous Materials

3.11   Public Services, Utilities, and Recreation

3.12   Transportation and Circulation

3.13   Population and Housing

Organization of the Environmental Analysis

Each resource section in Chapter 3 contains the following main headings and information.

■   **Environmental Setting.** The environmental setting for the resource is discussed; this information is used to define baseline environmental

conditions (i.e., conditions present before the proposed project is implemented). Changes that would result from the proposed Phase II project are compared to the baseline conditions to assess and measure the degree and severity of change.

■ **Regulatory Setting.** Existing laws and regulations that pertain to the proposed project are identified, including regulations, ordinances, and permit conditions required by the applicable federal, state, or local agency with jurisdiction. Solano County is currently in the process of preparing their General Plan Update. The General Plan Update has not been finalized, however, several "Background Reports" are available on the Solano County website (EDAW 2006). These background reports were reviewed to determine if there was any new information relevant to the Phase II project.

■ **Impact Analysis.** The methods used to assess potential impacts are presented, the criteria used to determine the significance of impacts are identified, each impact evaluated in this PEA and its associated level of significance (see *Terms Used in This PEA* below) are described, and applicable APMs are identified to reduce significant impacts to a less-than-significant level. In addition, mitigation measures adopted by the CPUC for the Kirby Hills I Facility are identified to reduce impacts to a less-than-significant level.

Terms Used in This PEA

This PEA uses the following terms to describe the environmental effects of the proposed Phase II project.

■ **No Impact.** A "no impact" determination is warranted if, based on the current environmental setting and the proposed project description, the hypothetical impact would not result from the proposed project.

■ **Less-Than-Significant Impact.** A "less-than-significant impact" determination is warranted if the impact resulting from the project would not reach the threshold of significance and would therefore cause no substantial change in the environment. No mitigation is required for less-than-significant impacts.

■ **Significant Impact.** A "significant impact" determination is warranted if the project would result in—or has the potential to result in—a substantial adverse change in physical environmental conditions, as measured using the specified significance criteria. Mitigation measures are identified to reduce these effects on the environment.

■ **Mitigation.** The State CEQA Guidelines (*14 CCR 15370*) define mitigation as:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action;

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;

(c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment;

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and

(e) Compensating for the impact by replacing or providing substitute resources or environments.