

CHAPTER 2.0 SUMMARY OF ENVIRONMENTAL EFFECTS

2.1 PROPOSED PROJECT

The Plains Exploration and Production Company (PXP) is proposing development of a water reclamation facility at their Arroyo Grande Oil Field to facilitate continued operations associated with their approved Phase IV Development Plan (Project). The primary purpose of the proposed project is to enhance the recovery of oil reserves via treatment and reuse of excess produced water. Inherent to this enhanced recovery is dewatering the oil-bearing formation by reducing return water flows from the existing oil-water separation process.

The proposed project involves construction of infrastructure for a 20,000 barrel per day water reclamation facility utilizing primarily reverse osmosis (RO) treatment technology, on an approximately 100-foot by 150-foot to 175-foot by 450-foot building pads. Two 210,000-gallon filtered water tanks, a 420,000-gallon Recovery Water Tank, and two 420,000-gallon day tanks would be designed to contain 12 hours of treated water. Additionally, three air stripping towers (air strippers), two heat exchangers and various other tanks and silos would be constructed on an 175-foot by 450-foot building pad. Pipelines, a tempering pond, and an outfall to Pismo Creek would also be constructed for disposal of the treated water. Please see Chapter 3.0 – Project Description for a detailed explanation of project components.

2.2 AREAS OF CONTROVERSY

Section 15132 of the CEQA Guidelines requires the summary section of an EIR to include "Areas of Controversy known to the Lead Agency." Areas of Controversy identified during preparation of the Draft EIR include:

- 1) Potential impacts on biological resources, particularly special-status species such as steelhead;
- 2) Construction will generate construction emissions that contribute to local air quality degradation;
- 3) Air strippers will require mitigation for release of Volatile Organic Compounds (VOCs) per San Luis Obispo Air Pollution Control District (APCD) regulations; and,
- 4) Water Quality in Pismo Creek may be adversely affected by the release of treated water into the hydrologic system. Treated water will be required to meet specific criteria and standards as discuss in Section 5.5 – Hydrology and Water Quality.

2.3 ISSUES TO BE RESOLVED

Section 15123 of the CEQA Guidelines requires the summary section of an EIR to identify any "issues to be resolved including the choice among alternatives and how to mitigate significant effects." Summary of the alternative evaluation is presented below.

2.4 SUMMARY OF ALTERNATIVES ANALYSIS

CEQA does not require that the alternatives analysis evaluate modification of internal components or phases of a proposal. However, the County formulated a number of alternatives that would meet objectives of the project, while minimizing impacts to area resources. Four alternatives are examined in this EIR:

- **Alternative 1:** No Project Alternative
- **Alternative 2:** Reduced Project Alternative
- **Alternative 3:** Fully Mitigated Alternative

These alternatives were formulated by Padre to provide a reasonable range of scenarios that could reduce the level of impact from that anticipated with implementation of the proposed project. Eight other alternatives were analyzed by Padre and Entrix, Inc. to determine the feasibility of each alternative in terms of environmental impacts and the ability to meet project objectives. Each of these proposed and dismissed alternatives are described in greater detail in Section 6.0 - Alternatives Analysis.

The No Project alternative would not involve any new construction, nor introduce any new significant environmental effects. It would allow the existing operations of the Phase IV project to continue as it is currently configured but would not allow any expansion of the Arroyo Grande Oil Field to include water treatment facilities. It would avoid all of the impacts of the proposed project; however, the No Project alternative would not achieve the project objectives.

Alternative 2 consists of a reduced project alternative by proposing construction of a 10,000 barrel per day (1.25 acre feet per day or 420,000 gallons per day) water reclamation facility rather than 20,000 barrel per day facility as in the proposed project. For the purposes of this section, Alternative 2 can also be defined as a “reduced project” in terms of total output of treated water into Pismo Creek and overall area of disturbance. More simply, it is the proposed project as intended for implementation, but reduced in overall size and scope with the intention of reducing project-related impacts. In a conceptual sense, this alternative would minimize the footprint of disturbance and the overall daily output of treated water to Pismo Creek by 50 percent (i.e., 0.65 cfs).

Alternative 3 is the applicant-proposed project, which would be implemented with mitigation measures discussed in Chapter 5.0 in its entirety. Elements of this alternative include construction of a 20,000 BPD water reclamation facility and air strippers, along with construction of other supporting infrastructure for water reclamation. See Chapter 3.0 – Project Description for a detailed listing and discussion of the proposed project elements.

2.5 MITIGATION MONITORING PLAN

Section 21081.6 of the Public Resources Code requires the adoption of a "reporting or monitoring plan" for the changes to the project, which the agency has adopted, or for the mitigation measures adopted as conditions of approval. The Mitigation Monitoring Plan will be prepared in conjunction with the Final EIR.

2.6 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 2-1 provides a summary of the level of significance for each impact discussed in this EIR. Project level impacts are categorized as Significant and Unavoidable (Class 1), Significant but Mitigable (Class 2), Less than Significant (Class 3), and Beneficial (Class 4). In addition, instances where project level impacts would contribute to a cumulative regional impact are identified as Significant Cumulative (SC).

Significant Unavoidable (Class 1) impacts are those impacts that would be significant at the project level. The project may propose mitigation, or recommended measures may be identified in the EIR, but despite the implementation of such measures, the impact is suggested to be significant and unavoidable. Mitigation has not been identified that could reduce these impacts to a less than significant level and still achieve the project objectives.

Significant but Mitigable (Class 2) impacts are those impacts that would be significant if allowed to occur as proposed. However, mitigation measures have been recommended that would reduce these impacts to less than significant if implemented. Recommended mitigation measures are not considered part of the project, and consequently the level of impact reflects the significance without implementation of the Recommended Measure(s).

Less than Significant (Class 3) impacts are those impacts that would be less than significant without mitigation or less than significant after the application of Proposed Mitigation. Proposed mitigation includes measures that have been incorporated into project design or that the applicant has agreed to implement as part of the project.

Beneficial Impacts (Class 4) would result in net positive affects to a given resource category.

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