

4.0 Environmental Analysis

Introduction to Environmental Analysis

Chapter 4 examines the potential environmental impacts of the Proposed Project. This chapter includes analyses of these environmental issue areas:

- 4.1 Air Quality
- 4.2 Public Safety and Hazardous Materials
- 4.3 Noise and Vibration
- 4.4 Public Services
- 4.5 Land Use and Policy Consistency Analysis
- 4.6 Transportation and Circulation
- 4.7 Water Resources
- 4.8 Other Issue Areas

Each environmental issue area analyzed in this document provides background information and describes the environmental setting (baseline conditions) to help the reader understand the underlying conditions against which an impact would be evaluated. In addition, each section describes how an impact on those underlying conditions is determined “significant” or “less than significant.” Finally, the individual sections recommend mitigation measures to reduce significant impacts. Throughout Section 4, both significant impacts and corresponding mitigation measures are identified with a bold letter-number designation (e.g., impact **AQ.1** and mitigation measure **AQ-1**).

Effects Not Found to be Significant

Based on an initial review and analysis, the Proposed Project would likely have a less than significant impact, or no impact, on these environmental issue areas:

- Aesthetics. No changes would be made to the Santa Maria Refinery that would change its appearance from public areas or would introduce additional use, glare, or night lighting or impact geological features of the area. Additionally, the Santa Margarita Pump Station sound wall proposed in mitigation measure N-1.1 would not have a significant visual impact on surrounding properties and, therefore, would not require additional analysis or mitigation. Therefore, impacts would be less than significant.

- Agricultural Resources. The Proposed Project would not convert existing agricultural land to other uses, or impair agricultural use of nearby lands, or conflict with existing zoning. Impacts would, therefore, be considered less than significant.
- Cultural Resources. The Proposed Project would not disturb pre-historic, historic, or paleontological resources because no excavation or grading would be expected. Impacts would, therefore, be considered less than significant.
- Geology and Soils. The Proposed Project would not involve soil movement or grading, and, therefore, would not result in exposure to or production of unstable earth conditions, result in soil erosion, topographic changes, loss of topsoil, or unstable soil conditions. The Project would also not change rates of soil absorption, or the amount or direction of surface runoff or change the drainage patterns. The Santa Maria Refinery is not located in a flood hazard zone, according to County maps, and is not located in a California Department of Mines & Geology Earthquake Fault Zone. Impacts to geology and soils would, therefore, be less than significant.
- Population and Housing. The Proposed Project would not introduce any additional employees or substantial construction to the area and would, therefore, not induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure), would not displace existing housing or people, requiring construction of replacement housing elsewhere, or create the need for substantial new housing in the area. Impacts would, therefore, be considered less than significant.
- Recreation. The Proposed Project would not increase the demand for parks or trails or affect the access to recreational areas. Therefore, impacts would be considered less than significant.
- Biological Resources. The Proposed Project would not increase impacts to biological resources compared to the current operations at the Santa Maria Facility. Therefore, impacts of the Proposed Project would be less than significant.

Assessment Methodology

The analysis of each issue area begins with an examination of the existing physical setting (baseline conditions as determined pursuant to Section 15125(a) of the California Environmental Quality Act [CEQA] Guidelines) that may be affected by the Proposed Project. The effects of the Proposed Project are defined as changes to the environmental setting attributable to project components or operation.

Significance Criteria

Significance criteria are identified for each environmental issue area. The significance criteria serve as benchmarks for determining if a component action will result in a significant adverse environmental impact when evaluated against the baseline. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means “a substantial, or potentially

substantial, adverse change in any of the physical conditions within the area affected by the project.”

Impact Analysis

Impacts are classified as:

- **Class I** (significant adverse impact that remains significant after mitigation);
- **Class II** (significant adverse impact that can be eliminated or reduced below an issue’s significance criteria);
- **Class III** (adverse impact that does not meet or exceed an issue’s significance criteria); or
- **Class IV** (beneficial impact).

A determination will be made, based on the analysis of any impact within each affected environmental issue area and compliance with any recommended mitigation measure(s), of the level of impact remaining in comparison to the pertinent significance criteria. If the impact remains significant, at or above the significance criteria, it is deemed to be Class I. If a “significant adverse impact” is reduced, based on compliance with mitigation, to a level less than the pertinent significance criteria, it is determined to no longer have a significant effect on the environment, i.e., to be “less than significant” (Class II). If an action creates an adverse impact beyond the baseline condition, but such impact does not meet or exceed the pertinent significance criteria, it is determined to be adverse, but less than significant (Class III). An action that provides an improvement to an environmental issue area in comparison to the baseline information is recognized as a beneficial impact (Class IV).

Formulation of Mitigation Measures and Mitigation Monitoring Program

When significant impacts are identified, feasible mitigation measures are formulated to eliminate or reduce the intensity of the impacts and focus on the protection of sensitive resources. The effectiveness of a mitigation measure is subsequently determined by evaluating the impact remaining after its application. Those impacts meeting or exceeding the impact significance criteria after mitigation are considered residual impacts that remain significant (Class I). Implementation of more than one mitigation measure may be needed to reduce an impact below a level of significance. The mitigation measures recommended in this document are identified in the impact sections and presented in a Mitigation Monitoring Program, provided in Section 8.0.

If any measures are incorporated as part of an applicant’s project design, they are not considered mitigation measures under CEQA. If they eliminate or reduce a potentially significant impact to a level below the significance criteria, they eliminate the potential for that significant impact since the “measure” is a component of the action.

Impacts of Alternatives

Section 5.0, Alternatives, identifies alternatives to the Proposed Project. Each issue area in Chapter 4 presents the impact analysis for each alternative scenario. The Executive Summary outlines the collective impacts of each alternative in comparison with the impacts of the Proposed Project.

Cumulative Projects Impact Analysis

Each issue area in Chapter 4 presents the cumulative impact scenario, which identifies the potential impacts of the Project that might not be significant when considered alone, but that might contribute to a significant impact in conjunction with the other projects. The list and description of cumulative projects is included in Section 3.0, Cumulative Projects.