Chapter 6
Comparison of Alternatives

Chapter Summary

This chapter describes the project alternatives as compared to the Proposed Project under the California Environmental Quality Act (CEQA) and identifies the environmentally superior alternatives.

Key Points of Chapter 6:

As discussed in Chapter 3 (Environmental Analysis) and summarized in this chapter, the Proposed Project would have significant and unavoidable air quality impacts. The Proposed Project would meet the project's primary purpose to ensure that the Phillips 66 marine oil terminal (MOT) at Berths 148-151 complies with Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) to protect public health, safety, and the environment and to ensure continued viability of MOT operations within the Port.

The No Project Alternative (Alternative 1) would have no significant unavoidable impacts because no construction or operations would occur at the Berths 148-151 site. Accordingly, the No Project Alternative (Alternative 1) would be the environmentally superior alternative. However, the No Project Alternative (Alternative 1) would not meet a number of Project objectives. CEQA requires that if the environmentally superior alternative is the No Project Alternative, the environmental impact report (EIR) shall also identify an environmentally superior alternative among the other alternatives.

The Reduced Project Alternative (Alternative 2) would have significant and unavoidable air quality impacts. It would have lower construction impacts than the Proposed Project, but because the throughput would be the same as that of the Proposed Project, the operational impacts would be significant and unavoidable. The Reduced Project Alternative (Alternative 2) would meet the Project objectives.

Because the severity of significant and unavoidable impacts related to the Reduced Project Alternative (Alternative 2) would be less than impacts related to the other alternatives, it is the environmentally superior alternative after the No Project Alternative (Alternative 1).

One alternative considered was to construct a new MOTEMS-compliant facility at another location in the Port of Los Angeles. That alternative was rejected as infeasible because it would require constructing infrastructure that already exists at the Project site, thereby increasing construction impacts compared to the Proposed Projects. Furthermore, none of the other impacts of the Proposed Project would be reduced except, possibly, health impacts associated with exposure to air toxics and soil contaminants, and some could be increased, such as air quality, biological, and greenhouse gas (GHG) impacts.

6.1 Introduction

As described in more detail in Section 1.6.7, CEQA requires that an EIR present a reasonable range of feasible alternatives to the Proposed Project (CEQA Guidelines Section 15126.6). As outlined in Section 2.7, two alternatives were considered for evaluation during the preparation of this Draft EIR. This chapter presents a comparison of those alternatives. The comparison identifies the resource areas in Chapter 3 of this Draft EIR that indicate that either a potentially significant impact could occur unless mitigation is incorporated, or that significant and unavoidable impacts would occur with implementation of an alternative.

As the alternatives to the Proposed Project are intended to avoid or substantially lessen one or more of the significant adverse effects of the Proposed Project, this chapter focuses on the comparative merits of each alternative with respect to the environmental resource areas projected to be significantly impacted by the Proposed Project (prior to any mitigation).

Alternatives in this Draft EIR have been analyzed (see Chapter 3) at a level that provides sufficient information about the environmental effects of each alternative for comparative purposes and to allow for informed decision-making. Other alternatives were considered (see Section 2.7.2), but because they were rejected from further consideration they are not included in this comparison of alternatives.

6.2 Project Alternatives

The Project objectives (Section 2.3) formed the basis for developing potential alternatives. Those objectives would help the Proposed Project meet the project's basic purpose to ensure that the Phillips 66 MOT Berths 150-151 comply with MOTEMS to protect public health, safety, and the environment and to ensure continued viability of MOT operations at the Phillips 66 MOT at Berths 148-151. The objectives are to:

- Construct a new MOTEMS-compliant berthing and loading/unloading facility at Berths 150-151 capable of handling larger vessels;
- Provide for operation of Berths 148-149 for non-MOT uses after the MOTEMS-compliant facility at Berths 150-151 is operational;
- Optimize the use of existing land at the terminal and associated waterways in a manner that is consistent with the Los Angeles Harbor Department (LAHD)'s public trust obligations by optimizing the use of Berths 148-149 and use of the new MOTEMS-compliant facility at Berths 150-151 through a new, long-term entitlement;
- Maintain the ability to use the full terminal capacity to ensure continued reliability and availability of fuel supplies to help meet Southern California's energy needs given evolving market conditions and business cycle variability; and
- Support the objective of the Port Master Plan to "promote the orderly long-term development and growth of the Port by establishing functional areas for Port facilities and operations," and "allow the Port to adapt to changing technology, cargo trends, regulations, and competition from other U.S. and foreign seaports," (POLA 2018).

The alternatives to the Proposed Project (Section 2.7.1; Table 6-1) are:

- Alternative 1 – No Project Alternative
- Alternative 2 – Reduced Project Alternative.

Table 6-1. Summary of Proposed Project and Alternatives at Full Operation

Annual Activity	Alternative		
	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced Project
Terminal Throughput (barrels)	23.7 million	0	23.7 million
Oceangoing Vessels	75	0	75
Barges	296	0	296
Truck trips (round trip)	371	0	371
Direct Jobs	8	0	8

6.2.1 Alternative 1 – No Project Alternative

The No Project Alternative (Alternative 1) required by CEQA represents what would reasonably be expected to occur in the foreseeable future if the Proposed Project were not approved. Under this alternative, the MOT at Berths 148-151 would not be brought into compliance with MOTEMS requirements as required by state regulations and therefore the MOT would be required to cease operations and termination clauses associated with existing entitlements would be carried out. Accordingly, activities under the No Project (Alternative 1) would be negligible in the foreseeable future as no future development has been proposed or approved.

The No Project Alternative (Alternative 1) would not meet a number of Project objectives, including optimizing the use of existing land and associated waterways in a manner that is consistent with LAHD's public trust obligations; maintaining the ability to use the full terminal capacity to ensure continued reliability and availability of fuel supplies to help meet Southern California's energy needs; and supporting the Port Master Plan objective to "promote the orderly long-term development and growth of the Port by establishing functional areas for Port facilities and operations," (POLA 2018).

6.2.2 Alternative 2 – Reduced Project Alternative

In the Reduced Project Alternative (Alternative 2), all of the elements of the Proposed Project described in Section 2.5 would be constructed except that the refurbishment of 11 idle storage tanks would not occur. As those tanks are not necessary to support the throughput volumes contemplated by the Proposed Project, the MOT's throughput, and therefore activity levels, would be the same as the Proposed Project's (Table 6-1). Accordingly, the Reduced Project Alternative (Alternative 2) would result in slightly reduced emissions from on-land construction activities but the same in-water construction work and the same operational impacts as the Proposed Project and thus no changes in significant Project impacts.

The Reduced Project Alternative (Alternative 2) would meet all of the Project objectives.

6.3 Alternatives Comparison

Table 6-2 presents the Proposed Project and the alternatives and identifies the resource areas where the Proposed Project or alternative(s) would result in a significant and unavoidable impact, as analyzed in Chapter 3 (Environmental Analysis); impacts are presented in more detail in Table ES-2 and the summary tables in each resource section in Chapter 3.

As shown in Table 6-2, the Proposed Project and Reduced Project Alternative (Alternative 2) would have significant unavoidable impacts on air quality. The Proposed Project and Reduced Project Alternative (Alternative 2) would have significant impacts that could be mitigated to less than significant in the area of biological resources via the application of Mitigation Measure (MM) BIO-1 (Protect Marine Mammals) and MM BIO-2 (Protect Eelgrass), as discussed in Section 3.2 (Biological Resources) and greenhouse gases via the application of MM GHG-1 (GHG Reduction Offsets) and MM GHG-2 (LED Lighting), as discussed in Section 3.4 (Greenhouse Gases). The No Project (Alternative 1) would have no impacts in any resource area.

Table 6-2. Summary of Impacts by Alternative

Environmental Resource Area	Proposed Project	Alternative 1 No Project	Alternative 2 Reduced Project
Air Quality	S (4)	N	S (4)
Biological Resources	M (2)	N	M (2)
Greenhouse Gases	M (1)	N	M (1)
Energy	L	N	L
Hazards	L	N	L

Notes:
The analysis includes only project-level impacts, not cumulatively considerable contributions to significant cumulative impacts.
Numbers in parentheses indicate the number of CEQA impacts that would occur in each resource area.
Alternatives eliminated from further consideration are not included.
S = Unavoidable significant impacts; M = Significant but mitigable impact; L = Less than significant impact (not significant); N = No impact

For air quality and meteorology, impacts were determined to be significant and unavoidable under the Proposed Project and Reduced Project Alternative (Alternative 2). The Proposed Project and Reduced Project Alternative (Alternative 2) would have significant and unavoidable impacts related to ambient PM_{10} concentration impacts from construction, NO_X emissions from Project operations, and ambient NO_2 and PM_{10} concentrations from Project operations during the period of overlapping construction activities (2027 – 2029). (As described in Section 2.5.1, the assumed dates are for analytical purposes only and mean that the analysis is conservative, as a later start date would result in cleaner construction and operational equipment being used.) However, impacts from the Reduced Project Alternative (Alternative 2) would be slightly lower than those of the Proposed Project because of the slightly lower construction emissions.

The implementation of the following LAHD mitigation and lease measures would reduce the impacts of operational and construction air emissions; the full text of the measures is provided in Section 3.1 (Air Quality and Meteorology).

- **MM AQ-1: On-Road Trucks During Construction**.
- **MM AQ-2: Off-Road Construction Equipment.**
- **MM AQ-3: Port of Los Angeles Sustainable Construction Guidelines.**
- **MM AQ-4: General Construction Mitigation Measure.**
- **MM AQ-5: Renewable Diesel Fuel for Construction Equipment and On-Road Trucks.**
- **MM AQ-6: Vessel Speed Reduction Program (VSRP).**
- **LM AQ-1: Periodic Review of New Technology.**

For biological resources, impacts on marine mammals and eelgrass from the Proposed Project and the Reduced Project Alternative (Alternative 2) were determined to be significant prior to mitigation; the impacts would at the same level of severity in both cases. The impacts would result from construction activities, specifically pile driving and dredging. In both scenarios, the impact would be reduced to less than significant by the application of mitigation measures MM BIO-1 (Protect Marine Mammals) and MM BIO-2 (Protect Eelgrass); the full text of the measures is provided in Section 3.2 (Biological Resources).

- **MM BIO-1: Protect Marine Mammals.**
- **MM BIO-2: Protect Eelgrass.**

The Proposed Project and Reduced Project Alternative (Alternative 2) were determined to result in emissions of greenhouse gases that would have significant impacts prior to mitigation. The Proposed Project would emit the highest amount of GHGs because of the slightly greater construction activity associated with refurbishment of 11 idle storage tanks as compared to the Reduced Project Alternative (Alternative 2). In both scenarios, the impact would be reduced to less than significant by the application of mitigation measures MM GHG-1 (GHG Reduction Offsets); application of MM GHG-2 (LED Lighting) would reduce emissions further, although by an unknown amount. The full text of the measures is provided in Section 3.4 (Greenhouse Gases)

- **MM GHG-1: GHG Reduction Offsets.**
- **MM GHG-2: LED Lighting.**

6.4 Environmentally Superior Alternative

Based on the above comparison, Alternative 1 (No Project Alternative) would have no impacts and is deemed to be the environmentally superior alternative. However, under CEQA Guidelines, the No Project Alternative (Alternative 1) cannot be the environmentally superior alternative as it does not satisfy any of the Project objectives listed in the Project Description (Section 2.3.2) including, but not limited to, the objective to maintain the ability to use the full terminal capacity to ensure continued reliability and availability of fuel supplies to help meet Southern California's energy needs given evolving market conditions and business cycle variability. The Reduced Project Alternative (Alternative 2) would have somewhat less severe impacts than the Proposed Project because of its lower on-land construction activity levels. Accordingly, the Reduced Project Alternative (Alternative 2) is deemed the environmentally superior alternative.

6.5 Alternatives Considered But Not Further Evaluated

CEQA requires an EIR to present a reasonable range of alternatives to the Proposed Project along with an evaluation of the comparative merits of the alternatives and a brief description of the rationale for selection and rejection of alternatives. The lead agencies may make an initial determination as to which alternatives are ostensibly feasible and therefore merit consideration, and which are infeasible. In addition, alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, need not be considered (CEQA Guidelines §15126 (f)(2)). Under CEQA, alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the Project objectives, are infeasible, or would not avoid or substantially reduce any significant environmental effects (CEQA Guidelines §15126.6(c)).

Based on comments received on the Notice of Preparation (NOP), an alternative considered was locating the upgraded, MOTEMS compliant MOT at another site within the Port where impacts of MOT operations would perhaps be less than those that would occur if the MOT were to operate at Berths 150-151 as planned under the Proposed Project. For example, some impacts associated with air pollutant emissions from the MOT on human health would be reduced if the alternative location were further removed from residences and other sensitive receptors such as day care centers, etc. as described in Section 3.1.2.2 (Environmental Setting: Criteria Pollutants and Air Monitoring). This would require that the alternative location provide the same or better level of access for transport of exported and imported products to and from the MOT to avoid any increased emissions from product transportation, for example from longer truck routes or increased truck trips due to limited pipeline capacity. The hazards associated with construction worker exposure to site contamination described in Section 3.5 (Hazards and Hazardous Materials) could be reduced or eliminated, but as those impacts were found to be less than significant for the Proposed Project, the difference would be insubstantial. Other impacts, including the biological impacts described in Section 3.2 (Biological Resources) and the Energy, Greenhouse Gas, and Hazards impacts described in Sections 3.3 (Energy), 3.4 (Greenhouse Gas Emissions), and 3.5 (Hazards and Hazardous Materials), respectively would not be reduced and could in fact increase. Furthermore, relocating the MOT would require new construction of backland facilities, including storage tanks and pipelines, that already exist at Berths 148-151 (this terminal has operated continuously as a MOT since the 1920s). Moving the MOT would increase construction and potentially operating costs and could make the project infeasible.

References

Port of Los Angeles (POLA) 2018. Port Master Plan, Port of Los Angeles. September. [Online]: https://kentico.portoflosangeles.org/getmedia/adf788d8-74e3-4fc3-b774-c6090264f8b9/port-master-plan-update-with-no-29_9-20-2018. Accessed January 12, 2022.