Rodeo Renewed Project Description Summary

Phillips 66 proposes to modify the existing Rodeo Refinery into a repurposed facility that would process renewable feedstocks into renewable diesel fuel, renewable components for blending with other transportation fuels, and renewable fuel gas. As a result of proposed modifications, the Rodeo Refinery would no longer process crude oil for petroleum-based fuels and would assist California in meeting its stated goals of reducing GHG emissions and ultimately transitioning to carbon neutrality.[1] The Project would also provide a mechanism for complying with California's Low-Carbon Fuel Standard and Cap-and-Trade programs and the federal Renewable Fuels Standard, while continuing to meet regional market demand for transportation fuels.

Pre- and post-Project operational activities are shown in Table ES-1. Once the Project is operational, no crude oil would be processed at the Rodeo Refinery. As shown in Table 3-2, the Rodeo Refinery would no longer receive crude oil and gas oil at its Marine Terminal (35,000 barrels per day [bpd]) on a 12-month rolling average[2]) or from the pipelines connecting the Rodeo Refinery to the Santa Maria Site (70,000 bpd).The Rodeo Refinery would still receive gasoline and gasoline blendstocks (38,000 bpd, an increase overbaseline of 28,000 bpd.

Up to 80,000 bpd of renewable feedstocks would be received at the Rodeo Refinery and would be processed in the proposed Feed Pre-treatment Unit (PTU). The majority of the time, the feedstocks treated by the PTU would be processed onsite to produce renewable fuels. In situations where excess treated feedstock produced by the PTU is not processed onsite, this material could be exported from the Rodeo Refinery via the Marine Terminal. Project emissions associated with processing at the PTU would be correlated with how much material is being processed and handled, rather than the specific type of material.

As shown on Table ES-1, once operational the Rodeo Refinery would supply up to 107,000 bpd of renewable fuels (67,000 bpd) and petroleum-based transportation fuels or gasoline (40,000 bpd). Of the 67,000 bpd of renewable fuels that would be produced, 55,000 bpd would occur as a result of the Project. This amount would be in addition to the Rodeo Refinery's existing capability (as of 2021) of producing 12,000 bpd from pretreated feedstocks using Unit 250 (previously used to process petroleum-based feedstocks). However, renewable feedstocks and renewable fuels were not produced from Unit 250 during the CEQA baseline period in 2019 (refer to Chapter 3, Project Description, Section 3.13, CEQABaseline); therefore, Table ES-1 indicates "0" for "Renewable Fuels Shipped."

To maintain the current facility capability to supply regional market demand for transportation fuels, including renewable and conventional fuels, the Rodeo Refinery could receive, blend, and ship up to 40,000 bpd of gasoline and gasoline blendstocks.

Because the Project would discontinue processing crude oil at the Rodeo Refinery, other sites owned and operated by Phillips 66 located throughout the state would be affected. Therefore, the Project consists of activities at the following four sites:

- **Rodeo Site** is within the Rodeo Refinery where the proposed modifications would occur.
- **Carbon Plant** is within the Rodeo Refinery in nearby Franklin Canyon and would no longer be necessary. It would be demolished.
- **Santa Maria Refinery** is located in San Luis Obispo County and would no longer be necessary to provide semi-refined feedstock to the Rodeo Refinery. It would be demolished.
- **Pipeline Sites** collect crude oil for the Santa Maria Refinery and deliver semi-refined feedstock to the Rodeo Refinery and, therefore, would not be necessary. The pipelines would be cleaned and taken out of service, or sold.

Table ES-1. Rodeo Refinery Pre- and Post-Project Operational Activity

	Baseline	Post-Project
Product Received		
Marine Terminal Crude and Gas Oil Received (1,000 bpd 12-month average)	35	0
Pipeline Crude Received (1,000 bpd 12-month average)	70	0
Renewable Feedstocks Received (1,000 bpd 12-month average)[a]	0	80
Gasoline and Blendstocks Received (1,000 bpd 12-month average)	10	38
Product Shipped		
Petroleum Products Shipped (1,000 bpd 12-month average)	121	40
Renewable Fuels Shipped (1,000 bpd 12-month average)	0	67
Treated Renewable Feedstock Shipped (1,000 bpd 12-month average)	0	25
Mode of Transportation		
Tanker Vessels (calls/year)	80	201
Barges (calls/year)	90	161
Carbon Plant Site Rail (average railcars per week)	6.96	0
Refinery Railcar Loading/Unloading Rack (average railcars per day)	4.7	16
Santa Maria Site Rail (railcars per year)	409	0
Refinery and Carbon Plant Truck Trips (roundtrips per year)	40,213	16,026
Santa Maria Site Truck Trips (roundtrips per year)	13,008	0
Rodeo Refinery Approximate Number of Employees and Contractors	650	650

[a] The facility currently has the capacity to produce approximately 12,000 bpd of renewable fuels from pretreated feedstocks using Unit 250, which was previously used to process petroleum-based feedstocks. However, renewable feedstocks and renewable fuels were not produced from U250 during the baseline period in 2019 and are not included in this table.

[2] Governor Newsom's Executive Order N-79-20 states: "clean renewable fuels play a role as California transitions to a decarbonized transportation sector" and "to support the transition away from fossil fuels consistent with the goals established in this Order and California's goal to achieve carbon neutrality by no later than 2045, the California Environmental Protection Agency and the California Natural Resources Agency, in consultation with other State, local and federal agencies, shall expedite regulatory processes to repurpose and transition upstream and downstream oil production facilities..." The Governor's Order also directs CARB to "develop and propose strategies to continue the State's current efforts to reduce the carbon intensity of fuels beyond 2030 with consideration of the full life cycle of carbon. Additionally, the California Air Resources Board's November 19, 2020, "California's Greenhouse Gas Goals and Deep Decarbonization" presentation anticipates that biofuels will comprise 19 percent of the transportation "fuel" sector by 2045.