PHILLIPS 66 RODEO RENEWED PROJECT

(County File# CDLP20-02040)

CONTRA COSTA COUNTY DEPARTMENT OF CONSERVATION AND DEVELOPMENT

PRESENTED BY:
GARY KUPP, SENIOR PLANNER



PROJECT SITE LOCATIONS

- Contra Costa County (Rodeo Refinery)
- San Luis Obispo County (Santa Maria Refinery)
- **☐** Pipelines Sites (by County):
 - = Kern
 - = Kings
 - = Fresno
 - = Merced
 - = Alameda
 - = Stanislaus
 - = San Joaquin
 - = Santa Barbara



RODEO REFINERY SITE

1380 SAN PABLO AVENUE RODEO, CA 94572



CARBON PLANT SITE

2101 FRANKLIN CANYON ROAD RODEO, CA 94572





SANTA MARIA REFINERY SITE

2555 WILLOW ROAD
ARROYO GRANDE, CA 93420

RODEO REFINERY BYRON PATTERSON PACIFIC PANOCHE (OOS) OCEAN COALINGA TAR CANYON LINE 400 (DISMANTLED) LEGEND SHANDON JUNCTION TERMINAL MIDDLEWATER REFINERY CUESTA **ELK HILLS** PUMP BOOSTER SANTA MARIA STATION SISQUOC ORCUTT

PIPELINE SITES

4 PIPELINES IN THE
CENTRAL VALLEY
RUNNING BETWEEN THE
RODEO AND SANTA
MARIA REFINERIES

PROJECT MILESTONES

- Application: Filed on 8/13/2020
- CEQA Notice of Preparation: Issued 12/21/2020
- <u>Draft EIR</u>: 60-Day Circulation 10/18/2021 12/17/2021
- <u>Final EIR</u>: March 2022 Responses to Comments on Draft EIR
- County Planning Commission Hearing: 3/30/2022



PROJECT PURPOSE

Phillips 66 intends to modify and repurpose the facility for the processing of renewable feedstocks into renewable fuels, including renewable diesel.

RENEWABLE FEEDSTOCKS

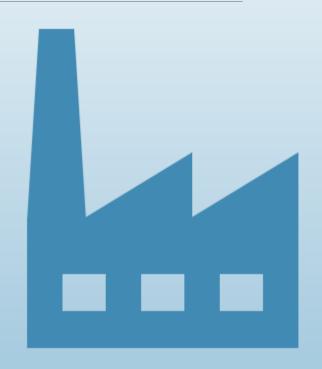
The anticipated renewable feedstocks processed at the facility would include, but not be limited to, the following:

- Used Cooking Oil,
- Grease
- Tallow (animal fat),
- Inedible Corn Oil,
- Canola Oil,
- Soybean Oil,
- Other Vegetable-Based Oils.

REFINERY MODIFICATIONS

Under the project, components to be permanently shut down and demolished include:

- Santa Maria Refinery
- Rodeo Carbon Plant
- Pipeline Sites



Marine Terminal (MTC) U110 Hydrogen Plan Renewable Feed Rail Off-Loading Rack Feed Pre-treatment Unit Existing Equipment

REFINERY MODIFICATIONS CONT.

(NEW EQUIPMENT)

- Pre-Treatment Unit (PTU): The new PTU would be constructed on the site of three existing storage tanks. New equipment would be added to decontaminate and condition the renewable feedstocks prior to processing.
- <u>Sulfur Treatment Unit (STU)</u>: The new STU would include a thermal oxidizer, waste heat boiler, caustic scrubber tower, and fresh and spent caustic tanks to control ammonia and hydrogen sulfide off-gases.



REFINERY MODIFICATIONS CONT.

(MODIFIED EXISTING UNITS)

- •<u>U240 Hydrocracker</u>: Replace two existing reactor vessels; replace and modify existing heat exchangers; add new process surge vessel, storage tanks, and feed filters.
- •<u>U246 Hydrocracker</u>: Replace and modify existing heat exchangers; add new exchangers and new storage tanks, process pump, and feed filters.
- •<u>U110 Hydrogen Plant</u>: Install new piping, fuel gas cooler, and control valve station to process renewable fuel gas at to produce renewable hydrogen.
- Rail Butane Loading Rack: Convert the existing butane rail loading stations to receive renewable feedstock by rail.

PROJECT BASELINE

Section 15125 of the California Environmental Quality Act requires that an Environmental Impact Report must include a description of the physical environmental conditions in the vicinity of the project to provide an accurate baseline setting.

- Generally, the project baseline should describe physical environmental conditions as they exist at the time the Notice of Preparation is published; ALTHOUGH,
- Where existing conditions change or fluctuate over time, and as necessary to provide the most accurate picture of the project's impacts, CEQA also allows the existing baseline conditions for a project to be defined by referencing historic conditions that are supported with substantial evidence.

BASELINE: REFINERY OPERATIONS

In light of the 2020 COVID-19 pandemic and its effects on the economy of the San Francisco Bay Area and the northern California region, 2019 was selected for the project baseline for refinery process operations.

Table 3-5.	Historical Throughput for Rodeo Refinery Facilities (Refinery and Carbon Plant
	Combined)

Туре	Units	2016	2017	2018	2019	2020
Feedstocks	MBPD	117	124	125	120	104
Products	MBPD	118	126	127	121	105

Note: MBPD = thousand barrels per day

BASELINE: MARINE VESSEL ACTIVITY

- A 3-year average baseline period was used for marine vessel activity (2017 through 2019)
- **2019** had unusually high vessel traffic, which if used, would overstate baseline conditions.

Annual Vessel Traffic at Rodeo Refinery Marine Terminal							
Vessel	2016	2017	2018	2019	2020	3-year	3-year
Class						Average	Average
						(2017-	(2018-
						2019)	2020)
Barges	83	63	73	135	86	90	98
Tankers	81	82	76	84	63	81	74
Total Visits	164	145	149	219	149	170	172

RENEWABLE PRODUCTION LEVELS

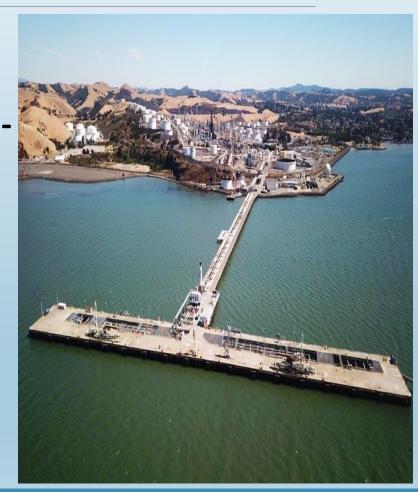
- Up to 80,000 barrels/day (bpd) of renewable feedstocks would be received at the Rodeo refinery and would be processed in the proposed Pre-Treatment Unit.
- Once operational, the Rodeo refinery would supply up to 107,000 bpd of fuel, both renewable fuels (67,000 bpd) and petroleum-based transportation 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.
- The Rodeo Refinery could receive, blend, and ship up to 40,000 bpd of gasoline and gasoline blendstocks under the project.

MARINE TERMINAL

- The project also proposes a temporary increase in deliveries of crude oil and gas oil feedstocks by tanker vessel during the transitional period prior to project startup.
- The increase would not increase the amount of crude and gas oil that can currently be processed at the Rodeo refinery.

Table 3-4. Marine Terminal Traffic and Crude/Gas Oil Deliveries during Transitional Phase

Activity	Baseline	Transitional Phase
Crude and Gas Oil Received through Marine Terminal (1,000 barrels/day 12-month average)	35	85
Pipeline Crude Received (1,000 barrels/day 12-month average)	70	0
Tanker Vessels (calls/year)	80	96
Barges (calls/year)	90	92



All-SOURCE REDUCTIONS FOR CRITERIA POLLUTANTS (PERCENT)

Course	Emissions (tons/year)						
Source	VOC	NO _x	PM ₁₀ ^a	PM _{2.5}	SO ₂	СО	
Rodeo Facility Project Emissions							
Ocean-going Vessels and Harbor Craft	16	266	7	7	11	87	
Trucks	0.03	2.38	2.1	0.37	0.02	0.19	
Rail	0.18	4.79	0.11	0.1	0.08	1.38	
Facility Stationary Sources	111	210	71	69	295	51	
Total Operational	127	483	81	76	307	140	
Air Liquide H ₂ Plant	1	22	5	5	0	1	
Total Operational with Air Liquide	129	505	85	81	307	141	
Percent Reductions	0%	-33%	-19%	-17%	-79%	-7%	

All-SOURCE REDUCTIONS FOR GREENHOUSE GASSES (PERCENT)

Source	Emissions (metric tons/yr)					
Source	CO ₂	CH₄	N ₂ O	CO ₂ e		
Rodeo Renewed Project Emissions						
Ocean Going Vessels and Harbor Craft	26,195	0.28	1.53	26,657		
Rail	8,119	0.64	0.2	8,195		
Trucks	2,720	0	0.43	2,847		
Facility Stationary Sources	1,069,772	84.51	10.79	1,075,100		
Electricity	1,180	0.41	0.09	2,889		
Total Operational	1,109,661	85.84	13.04	1,115,689		
Air Liquide H ₂ Plant	1,031,689			1,031,689		
Total Operational with Air Liquide	2,141,350	85.84	13.04	2,147,378		
Percent Reductions	-8.7%	-23.4%	-18.5%	-8.7%		

APPEALS

The Planning Commission's March 30 decision to approve the project received 3 appeals:

- Natural Resources Defense Council, et. al. 4/7/2022
- Mr. Charles Davidson 4/11/2022
- Crockett Community Foundation 4/11/2022

NATURAL RESOURECES DEFENSE COUNCIL, et. al.

Joint Appeal Filed On April 7, 2022, Asian Pacific Environmental Network, Biofuel Watch, Center for Biological Diversity, Communities for a Better Environment, Richmond City Councilmembers Claudia Jimenez, Eduardo Martinez and Gayle McLaughlin, Friends of the Earth, Interfaith Climate Action Network of Contra Costa County, Natural Resources Defense Council, Rodeo Citizens Association, San Francisco Baykeeper, The Climate Center, Sunflower Alliance, and 350 Contra Costa County

MAJOR APPEAL POINTS

The Appeal presents the following general issues:

Adequacy of FEIR to Address Impacts and Respond to Comments;

Concern with Unit 250 in the Project Analysis;

Adequacy of Response to Public Comments;

Findings Concerning Choice of Alternatives and Throughput Volumes;

Introduction of "New" Information;

Accuracy of the Statement of Overriding Considerations; and

Provisions Regarding Site Cleanup.

Adequacy of FEIR to Address Impacts and Respond to Comments

The following issues are addressed within the first appeal point:

- (a) Project description
- (b) Baseline
- (c) Operational upsets
- (d) Food system oil consumption
- (e) Odor mitigation plan
- (f) Cumulative impacts
- (g) California climate pathways
- (h) Transportation risk impacts

Mr. Charles Davidson

The Appeal presents three general issues:

Hydrogen Use Climate Pathways and the LCFS Soybean as "default principal feedstock"

Crockett Community Foundation

Appellants contend that "Terms of proposed Community Benefits Agreement were not sufficiently defined."

CONCLUSION

The proposed Phillips 66 Rodeo Renewed Project, as conditioned would provide the following benefits:

- Consistent with the General Plan and the Heavy Industrial Zoning.
- Reductions in Greenhouse Gas Emissions.
- Reductions in Criteria Pollutant Emissions.
- Demolition of the Carbon Plant and the Santa Maria Refinery.
- Retains Current Employment Levels.
- Reductions in Energy and Natural Gas Usage.

CONCLUSION CONT.

STAFF RECOMMENDATIONS

- 1. OPEN the public hearing on an appeal of a Planning Commission decision to approve a land use permit for the Phillips 66 Rodeo Renewed Project at 1380 San Pablo Avenue in Rodeo and other project locations. (County File# CDLP20-02040), RECEIVE testimony, and CLOSE the public hearing.
- 2. CERTIFY that the Environmental Impact Report (EIR) for the Phillips 66 Rodeo Renewed Project (State Clearinghouse #20200120330) was completed in compliance with the California Environmental Quality Act (CEQA), was reviewed and considered by the County Planning Commission before project approval, and reflects the County's independent judgment and analysis.
- 3. CERTIFY the EIR prepared for the project.
- 4. ADOPT the CEQA findings for the project.
- 5. ADOPT the Mitigation Monitoring and Reporting Program for the project.
- 6. ADOPT the statement of overriding considerations for the project.
- 7. DIRECT the Department of Conservation and Development to file a CEQA Notice of Determination with the County Clerk.
- 8. SPECIFY that the Department of Conservation and Development, located at 30 Muir Road, Martinez, CA, is the custodian of the documents and other material which constitute the record of proceedings upon which the decision of the Board of Supervisors is based.
- 9. DENY the appeal of Natural Resources Defense Council, et.al.; Charles Davidson; and the Crockett Community Foundation.
- 10. APPROVE the Phillips 66 Rodeo Renewed Project.
- 11. APPROVE the findings in support of project.
- 12 APPROVE the conditions of approval for the project.
- 13. APPROVE the attached Community Benefits Agreement.