

The Phillips 66

(formerly known as the ConocoPhillips Refinery, and the Unocal Refinery) Rodeo Refinery processes approximately 75,000 barrels (1 barrel = 42 gallons) of crude and approximately 38,000 barrels of partially refined oil from Santa Maria Refinery per day into transportation fuels. The principal fuels produced are gasoline, diesel and jet fuels. The refinery also produces propane, butane and elemental sulfur for commercial use. In addition, the facility produces petroleum coke.

As of early 2024, the refinery no longer processes crude oil and has transitioned to processing renewable feedstocks, such as oils, into renewable diesel fuels.

Hazardous Substances Stored or Produced Onsite and their Immediate Health Effects

- Flammables In Contra Costa County, flammables are methane, propane and butane. These gases are invisible and have a very slight, sweet, oil-like odor. Mildly irritates nose, throat and lungs.
- Hydrogen Sulfide Hydrogen sulfide is a colorless, corrosive, and highly toxic gas with an offensive rotten egg odor. It is also highly flammable and a respiratory inhibitor. Hydrogen sulfide's odor is readily detectable at low concentrations; however, high concentrations may deaden a person's sense of smell such that an odor would not be perceived. Irritates nose, throat and lungs, and may cause headaches, dizziness, difficulty in breathing, or nausea.
- Aqueous Ammonia A clear, colorless liquid with a pungent suffocating odor, which is noticeable at low concentrations. May cause headache, nausea, or coughing. May cause convulsions, breathing difficulty, and nausea.

3-year Accident History (Last Updated October 2022)

There have been no qualifying incidents to report in the last three years.

Safety Features and Recent Improvements (Updated May 2024):

Phillips 66 reported improvement projects designed to reduce the potential for accidents and injuries, including: installing systems to monitor ammonia content, adding independent high-level alarms for storage tanks, upgrading pump seals, replacing a transformer for better corrosion protection, and improving shutdown systems. Additionally, safety procedures for various units have been updated.

The Rodeo Renewed project will shift production to renewable diesel, eliminating crude feedstocks and switching to sources like used cooking oil and animal fats. The project also includes integrating solar energy capabilities.



Summary of the Most Recent Audit (October 2022):

Phillips 66 has developed policies and procedures as required by the California Accidental Release Prevention (CalARP) Program and the County's Industrial Safety Ordinance. During the most recent audit in the fall of 2022, most programs were found to be in compliance. However, some areas were identified as needing improvement. Compliance audits need to be completed every three years and documented in a detailed written report. The contractor safety program should be expanded to include smaller contracting companies and the frequency of assessments should be increased. A Process Safety Culture Assessment needs to be completed to meet CalARP Program 4 requirements as soon as possible. The documentation of job descriptions affected by organizational changes should be improved. Additionally, the evaluation and documentation of inherently safer systems associated with process hazard analysis recommendations should be enhanced.

For more information:

Copies of the latest audit findings, Risk Management Plan, and Safety Plan may be found in the following locations:

CCHHMP Hazardous Materials Office 4585 Pacheco Blvd., Suite 100, Martinez, CA 94553

Crockett Public Library 991 Loring Avenue, Crockett, CA 94525

RodeoPublic Library 220 Pacific Avenue, Rodeo, CA 94572

