

Kern Oil & Refining Inc. (Kern Energy) Update on Environmental Compliance

August 2024

\$EPA

Background

Kern Oil & Refining Inc. (Kern Energy) is located at 7724 East Panama Lane, Bakersfield, CA 93307. Kern Energy is a refinery that produces gasoline and diesel fuels. The facility has been in operation since 1934 and was originally known as El Tejon Oil and Refining Company. Kern Energy primarily receives raw material via pipeline but can also receive it by truck and has the capability to process 25,000 barrels of crude per day. In addition to processing crude oil, Kern Energy refines vegetable oil and tallow into biodiesel.

Is the facility subject to environmental requirements?

Kern Energy is subject to federal, state, and local requirements related to air emissions, water quality, and hazardous materials and waste.

Who is involved in this matter?

Multiple environmental agencies at the federal, state, and local level are responsible for regulating Kern Energy and have been engaged in inspection and enforcement activities, including:

- San Joaquin Valley Air Pollution Control District (San Joaquin Valley APCD)
- Kern County Certified Unified Program Agency (CUPA)
- California Air Resources Board (CARB)
- State Water Resources Control Board (SWRCB)
- Central Valley Regional Water Quality Control Board (RWQCB)
- California Department of Toxic Substances Control (DTSC)
- California Environmental Protection Agency (CalEPA)
- United States Environmental Protection Agency (US EPA)

San Joaquin Valley APCD Actions

The San Joaquin Valley APCD is a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective, and entrepreneurial air quality management strategies, which include the adoption and enforcement of rules intended to control sources of air pollution. In addition to public complaint investigations and joint inspections with other agencies, District enforcement staff perform field inspections at Kern Energy to ensure the facility's strict adherence to applicable District Rules, as well as state and federal regulations, which include District Rules 2520, 4311, 4455, 4460, 4623, and 4702, and 40 CFR Part 60 requirements.

The District takes enforcement action whenever violations are found. Following an enforcement action, the District works with the facility to expedite their return to compliance, which is often accomplished on the same day the violation was discovered.

From January 2021 through July 2023, District staff conducted over fifty inspections and other field operations at Kern Energy, including a joint inspection of the facility with USEPA in April 2023.

Additionally, Kern Energy is located in the Assembly Bill 617 (AB 617) community of Arvin/Lamont. AB 617 requires the California Air Resources Board (CARB) to select communities who are being disproportionately impacted by pollution and to work with air districts to develop and implement additional emissions reporting, monitoring, emissions reduction programs, and measures in an effort to reduce localized air pollution exposure in these communities, and in 2021, Arvin/Lamont was selected for investment of additional resources under AB 617. After extensive coordination with community members over the following months, the District's Governing Board unanimously voted to adopt the Arvin/Lamont AB 617 Community Emissions Reduction Program (CERP), which includes strategies for reducing air pollution impacts from sources of pollution that are of particular concern to community members. A detailed summary of enforcement activities for all of the Arvin/Lamont community, including those for Kern Energy, from October 2018 to September 2021, can be found in the CERP, Appendix E, which can be accessed on the District's website through the following link:

https://community.valleyair.org/media/bufpshwq/appendix -e_enforcement-plan.pdf

Ongoing enforcement updates are provided to the community in Appendix B of the Annual Report on the community specific webpage. Links to the webpage and reports are both available in English and Spanish are found here:

http://community.valleyair.org/selectedcommunities/arvin-lamont/reports-and-document-archive/ The San Joaquin Valley APCD's compliance activities at Kern Energy dating back to 2018 are summarized below:

- In 2023: 23 inspections, 16 enforcement actions taken, and 8 complaints investigated.
 - Failure to perform annual visual seal gap inspection of a tank, monitor and record stack concentrations, calibrate Flare Continuous Emissions Monitoring System (CEMS), failure to comply with emission limits, maintain infrastructure, prevent leaks, ensure functional vapor recovery systems, repair a liquid leak, operate the flare with pilot flame present at all times, remain below maximum start-up and shutdown time, and ensure lines in Reformer are close ended.
- In 2022: 27 inspections, 16 enforcement actions taken, and 2 complaints investigated.
 - Failure to submit an Emission Control Plan for Rule 4320, failure to comply with emission limits, prevent leaks, ensure all lines are close-ended and drain pit is equipped with solid covers, maintain infrastructure, ensure a functional vapor recovery system, and equip tank with a PV vent.
- In 2021: 19 inspections, 17 enforcement actions taken, and 3 complaints investigated.
 - Complaints: Flares and odors were reported. No odors were identified during investigation.
 - NOVs: Issued for failure to comply with emission standards, comply with permit requirements, control vapors, submit unplanned flaring events, ensure a functional vapor recovery system, test engine after restart, prevent leaks, and conduct a source test.
- In 2020: 16 inspections, 21 enforcement actions taken, and 8 complaints investigated.
 - Complaints: Fires, strong odors, black smoke, and flares were reported. Fires were referred to OSHA, and NOVs were issued for VOC leaks and a breakdown. No violations were identified when flares were reported.
 - NOVs: Issued for failure to conduct source tests, prevent excess emissions, prevent, and repair leaks, comply with permit requirements, submit deviations, control vapors, and ensure a functional vapor recovery system.

- In 2019: 8 inspections, 16 enforcement actions taken, and no complaints were received.
 - NOVs: Issued for failure to monitor emissions, comply with permit requirements, prevent, and repair leaks, comply with emission limits, failure to provide records, and equip exhaust controls.
- In 2018: 9 inspections, 8 enforcement actions taken, and 2 complaints investigated.
 - Complaints: Excess sulfur emissions due to upset in sulfur recovery unit. NOV issued.
 - NOVs: Issued for failure to obtain permits, monitor emissions, prevent leaks, and comply with emission limits.

Kern County CUPA Actions

The Kern County Environmental Health Services Department operates as the Certified Unified Program Agency (CUPA) for Kern County. The CUPA ensures compliance with requirements related to hazardous materials, hazardous waste, and storage tanks.

- Kern County CUPA conducted an inspection of Kern Energy on February 15, 2023. The inspection involved: Hazardous Materials Business Plan (HMBP), Aboveground Petroleum Storage Act (APSA), Resource Conservation and Recovery Act (RCRA): Hazardous Waste Excluded or Exempted Material Recycler, and the California Accidental Release Prevention (CalARP) refinery program.
 - No violations were identified at the time of the inspection.
 - Kern County CUPA conducted an inspection of Kern Energy on February 21, 2024. The inspection involved the HMBP, APSA, RCRA: Hazardous Waste, Excluded or Exempted Material Recycler, and the CalARP refinery program.
 - 2 Class II Violations to the HMBP program were identified due to an incomplete hazardous material inventory plan and site map not meeting minimum requirements. Corrective Actions for the HMBP violations were completed for the Inventory on April 15, 2024, and for the site map on March 11, 2024.
 - 2 Class II Violations to the APSA program were identified due to failure to amend the SPCC plan and failure to provide and maintain secondary containment. The facility ordered secondary containment pallets and was awaiting their delivery

(May-June) to update the SPCC plan. They have since acquired secondary containments for qualifying materials and amended their SPCC plan with updated containments and quantities and have resolved the violation.

- No violations of the RCRA: Hazardous
 Waste, Excluded or Exempted Material
 Recycler program were identified at the
 time of the inspection.
- 1 Class II Violation to the CalARP program was identified due to emergency operations procedures do not meet the minimum requirements for Program 4. The facility is currently working through the revisions of their SOP's and expect this to be completed December 31, 2024.

CARB Actions

CARB is responsible for protecting the public from the harmful effects of air pollution and developing and enforcing programs and actions to fight climate change. CARB enforcement programs protect public health by ensuring statewide regulatory requirements are met and local community concerns are addressed. CARB programs target oil and gas sources through enforcement of fuel standard and methane leak regulations. CARB has no recent compliance history for Kern Oil and Refining.

State and Regional Water Board Actions

Kern Energy (Kern) is subject to Cleanup and Abatement Order 95-052 (Order) requirements. The order was issued in 1995 after inspections identified spill and leaks of petroleum products from aboveground tanks, pumps, valves, and piping in the tank farms.

- The Site is currently under active remediation by soil vapor extraction and regular bailing of groundwater monitoring wells to remove free product where it is present. Site groundwater and soil vapor are on a semi-annual monitoring and reporting schedule.
- In January 2022, Regional Water Board staff conducted a detailed review of the case history and issued a Case Status Review dated January 14, 2022, which identified several failures to comply with the requirements and due dates of the Order. Since the case status review was issued, Kern submitted a Comprehensive Assessment Workplan on July 12, 2022 (Workplan), designed to bring Kern into compliance with the Order and close data gaps to develop a comprehensive remedial approach. The

Workplan was approved by a Water Board staff letter dated December 5, 2022. Kern Energy began implementing the Workplan during the first quarter of 2023 and the final work plan implementation report was submitted on September 26, 2023. Kern Energy indicated in the report they are preparing a corrective action plan based on the results of the comprehensive site assessment. Water Board staff are currently reviewing the workplan implementation report and recent groundwater and soil vapor extraction monitoring reports and preparing a formal response.

 Kern Energy is conducting a parallel site investigation for Per- and Polyfluoroalkyl Substances (PFAS). Kern Energy completed a site assessment in 2022 and 2023 and submitted a June 22, 2023, report which identified evidence of past releases of aqueous film forming foam (AFFF) which contains PFAS and is used for fire suppression and indicated the presence of PFAS in several areas of site in soil, stormwater, and groundwater. A workplan for additional site assessment was submitted on March 22, 2024.

DTSC Actions

The California Department of Toxic Substances Control (DTSC) regulates the generation, handling, transportation, storage, treatment, and disposal of hazardous wastes. The petroleum refining industry is one of the largest generators of hazardous waste in California. These wastes are shipped under hazardous waste manifest to offsite treatment, storage, or disposal facilities. Many different types of hazardous wastes are generated by petroleum refineries, including inorganic solid wastes, spent catalysts, aqueous waste with organics, and aqueous waste with metals.

- DTSC conducted an inspection of Kern Energy in March of 2021. Three violations were observed during inspection and a Summary of Violations was issued. The violations are as follows:
 - Kern Energy failed to properly label one container of universal waste-lamps.
 - Kern Energy failed to properly label one container of universal waste- electronic devices.
 - Kern Energy failed to indicate the particular hazardous property on three containers storing hazardous wastes.
- The facility submitted a letter in response to the Summary of Violations on April 26th, 2021, and included photographic evidence that the violations had been corrected.

CalEPA Actions

CalEPA is the parent agency to six boards, departments, and offices charged with protecting public health and the environment, including DTSC, CARB, and the Water Boards. CalEPA has not exercised independent enforcement authority over activities at Kern Energy but helps to ensure enforcement and compliance activities are consistent, effective, and coordinated.

US EPA Actions

USEPA Region 9 (Pacific Southwest Region) provides regulatory oversight over states, tribes, and territories. USEPA works with state and local agencies to ensure private and public facilities maintain compliance under environmental statutes, including the Clean Air Act (CAA). USEPA has conducted inspections of Kern Energy under the CAA and entered a settlement with the refinery as described below.

- USEPA conducted an inspection of Kern Energy in April 2023 under the CAA. The inspection report was finalized July 13, 2023, and EPA identified the following concerns:
 - EPA observed that elevated background around the Transmix Unit, which was caused by maintenance operations, provoked concerns about excess emissions.
 - EPA observed that many of the rail car hose connections were leaking in the same or similar areas.
- On March 19, 2020, the U.S. Magistrate Judge • signed and entered an EPA/DOJ/SJVAPCD joint settlement with the company to resolve alleged violations at the petroleum refinery. The company paid a \$500,000 penalty to address failures to comply with flare emissions monitoring and leak inspection reporting under the Clean Air Act (CAA) and toxic chemical release reporting under the **Emergency Planning and Community Right-to-Know** Act. Additionally, the company spent \$200,000 on supplemental environmental projects that included an infrared camera used to detect vapor leaks and emergency responder equipment for the Kern **County Fire and Public Health Services** Departments.
- USEPA conducted an inspection of Kern Oil Refinery on April 17, 2014, under the CAA.

USEPA maintains the Enforcement and Compliance History Online (ECHO) database that focuses on compliance- and enforcement-related information for EPA-regulated facilities. ECHO includes permit data, inspection/compliance evaluation dates and findings, violations of environmental regulations, enforcement actions, and penalties assessed for federally regulated sources of pollution, including Kern Energy. The ECHO page for Kern Energy can be accessed through the following link:

https://echo.epa.gov/detailed-facilityreport?fid=110000481611&ej_type=sup&ej_compare=US

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