

# COMMUNITY UPDATE

The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products.

## Former Naval Petroleum Reserve No. 1, Draft Removal Action Work Plan; AOC 046 - U.S. Department of Energy

**Para información en español por favor comuníquese con Elsa Lopez al número (818) 717 6571.**

The California Department of Toxic Substances Control (DTSC) invites public comment on the Draft Removal Action Work Plan (RAW); Area of Concern (AOC) 046, prepared as part of the former Naval Petroleum Reserve (NPR-1) Closure Project.

The former NPR-1 is located in the Elk Hills Oil Field and consists of approximately 74 square miles of land in Kern County, California. AOC 046 comprises two inactive sumps that were used to contain produced water during oil field activities.

This Fact Sheet contains information about site location, history, and background of the AOC, previous site investigations and actions, removal action objectives, proposed cleanup alternatives, recommended cleanup option, next steps, and contact information.

**California Environmental Quality Act (CEQA):** As required by California Law, DTSC has performed a review of the proposed Draft RAW in accordance with CEQA. Based on that review, DTSC has determined that the project will not have any significant effect on public health or the environment. DTSC proposes to issue a CEQA Mitigated Negative Declaration for this project.

### What is Being Proposed?

The Draft RAW proposes to remove approximately 2,300 cubic yards (cy) of soil for disposal at an appropriate California landfill. The Draft RAW provides a description of AOC 046 and the proposed cleanup activities. These corrective measures are necessary to obtain DTSC approval for closure of AOC 046 and a "No Further Action" (NFA) designation.

**Site Location:** The former NPR-1 is divided into a series of townships and ranges. AOC 046 is located in the western portion of the former NPR-1 in grid 24Z, Section 24/Township 30S/Range 22E. AOC 046 consists of a Main Sump and an Overflow Sump. The Main Sump is approximately 225 feet (ft) long, 75 ft wide, and 10 ft deep. The Overflow Sump is approximately 125 ft long, 75 ft wide, and 10-20 ft deep. An eight-inch pipe runs through a berm that separates the two sumps.

### Public Comment Period



**30-day public comment period from January 5 through February 6, 2017**

DTSC encourages you to review and comment on the Draft RAW for AOC 046. The Draft RAW, CEQA, and other project related documents are available for review at the locations listed on the last page of this document.

DTSC will make a final decision after all public comments have been reviewed. Please submit written comments postmarked or emailed by February 6, 2017, to:

**Thomas Berg**  
DTSC Project Manager  
1515 Tollhouse Road  
Clovis, California 93611-0522  
Phone: (559) 297-3978  
E-mail:  
[thomas.berg@dtsc.ca.gov](mailto:thomas.berg@dtsc.ca.gov)

A public meeting has not been scheduled for this project.



[www.calepa.ca.gov](http://www.calepa.ca.gov)

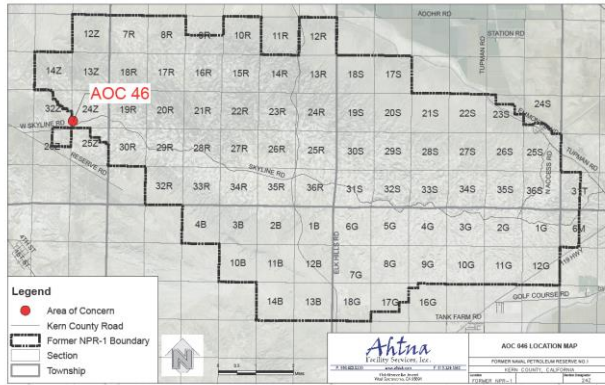


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Both the Main Sump and the Overflow Sump are within an active oil field, which is closed to the public.



**AOC 046 Location Map**

**Site History and Background:** NPR-1 was created by an Executive Order in 1912 to preserve potential petroleum resources for national defense purposes. Pursuant to Public Law 104-106, passed in February 1996, the U.S. Department of Energy (DOE) was required to sell the United States’ lands and hydrocarbon interests in NPR-1. DOE sold the Federal Government’s interests in NPR-1 to Occidental Petroleum Corporation (Occidental), effective October 1, 1997, which operated the Elk Hills Oil Field under the name Occidental of Elk Hills, Inc. (OEHI). In 2014, Occidental transferred the property to California Resources Corporation, who now operates the Elk Hills Oil Field under the name of California Resources Elk Hills, LLC.

DOE and DTSC entered into an Agreement for Site Assessment in 1998 that was subsequently amended and, in 2008, a Corrective Action Consent Agreement was signed in which DOE agreed to complete the corrective action process at 131 Solid Waste Management Units and/or AOCs, including AOC 046. DTSC will oversee a removal action planned for AOC 046.

AOC 046, also known as the 24Z Sumps (2 Water Flood), comprises a Main Sump and an Overflow Sump, with an eight-inch pipe that runs through the berm separating the two sumps. Both the sumps were historically used to contain produced water during oil field activities.

**Previous Site Investigations:** In 1958, the California Regional Water Quality Control Board issued Waste Discharge permit #58-491, which covered all sumps in the former NPR-1, including AOC 046.

In 1998, Houghton HydroGeo-Logic conducted soil sampling at AOC 046.

The following year, Bechtel Petroleum Operations, Inc.(BPOI), which operated the former NPR-1 for DOE from 1985 to 1998, proposed a remediation plan for AOC 046 to excavate the impacted soil, backfill the AOC with clean soil, and grade it to match the surrounding topography. However, the BPOI remediation plan was never implemented.

In 2011, Langan Engineering & Environmental Services conducted soil sampling at AOC 046 on behalf of OEHI, as part of an ongoing assessment at the former NPR-1.

Based on the 1998 Houghton HydroGeo-Logic and 2011 Langan Engineering & Environmental Services sampling events, metals were identified as chemicals of potential concerns at AOC 046.

In 2014, Ahtna Facility Services, Inc., under contract with DOE, conducted pre-excavation soil sampling to plan the proposed removal action.

Based on the 2014 sampling event, arsenic and barium have been identified as the chemicals of concern (COCs).

**Removal Action Objectives:** The primary objective of the Draft RAW is to propose a preferred cleanup approach that prevents or reduces potential risks to human health.

The Draft RAW summarizes previous studies, presents four alternatives, and then recommends the most appropriate cleanup option for the site, including procedures for achieving proposed cleanup goals.

**Proposed Remediation Alternatives:** The Draft RAW evaluates a range of alternatives that could be used to mitigate potential health risks at AOC 046. These alternatives are evaluated, with respect to Federal and State criteria, for short and long-term effectiveness, feasibility,

and cost. The following alternatives were considered for remediation at AOC 046.

1. No Action. In accordance with regulatory guidance, the No Action alternative is analyzed as a baseline for comparison with other alternatives.
2. No Removal Action – with Land Use Controls. This alternative proposes to leave the impacted soil in place, but limit access and restrict future use of the property.
3. Excavation and Offsite Disposal. This alternative proposes to remove the impacted soil within AOC 046 and conduct post-excavation soil sampling to confirm that soil cleanup goals are met.
4. Land Use Controls and Capping. This alternative proposes to place a cap of clean soil to prevent migration of or exposure to COCs. In addition, the site would need long-term maintenance.

**Recommended Action:** Alternative 3 offers short-term and long-term effectiveness, is feasible, cost effective, and offers a high degree of protection for human health. Alternatives 1, 2, and 4 were determined to be either not protective or having a moderate degree of protection for human health.

Based on the evaluation of the remediation alternatives, DOE recommends Alternative 3: Remove the arsenic and barium impacted soil, followed by post-excavation sampling. Approximately 2,300 cy of impacted soil would be excavated from AOC 046 and hauled to a properly permitted California landfill.

Confirmation sampling will be conducted to verify that the remaining soil meets cleanup goals. The excavation would then be backfilled with clean soil.

The following activities would be performed under the proposed alternative:

- Excavate impacted soil, based on the results from previous sampling events.
- Collect post-excavation soil samples to confirm COCs are not present at levels that pose a risk to human health.
- Characterize and dispose of excavated soil at an approved landfill.

- Backfill excavated areas with clean soil and re-grade. In addition, the following controls designed to protect the surrounding community are proposed during cleanup activities:
- The removal action will be planned and conducted to minimize wind erosion and generation of airborne dust.
- Dust control measures will be implemented prior to the start of work and maintained each day by applying Best Management Practices, including: wetting the soil, reducing vehicle speed, and cleaning vehicle tires to minimize contamination leaving the site.
- Dust monitoring and testing will be conducted to confirm compliance with National Ambient Air Quality Standards for PM<sub>10</sub> (small dust particles in the air with the potential to cause health issues if exposed for long periods of time).
- Site workers will be required to sign in, receive a Safety and Health briefing, and wear the appropriate Personal Protective Equipment.

**Next Steps:** Before making a final decision to approve or reject the proposed plan, DTSC will review and consider the comments received during the 30-day public comment period. After the close of the public comment period and prior to making a final decision on the Draft RAW, DTSC will prepare a Response to Comments document that will list the comments received and how they were considered. The Response to Comments will be included in the final RAW, placed in the information repositories established for the site.

**Schedule for Proposed Removal Actions:** The removal action is scheduled for completion in spring/summer of 2017.

**Where to Find the Documents:** The Draft RAW and other related documents regarding the former NPR-1 Closure Project are available for review at the following repository:

Taft Library  
27 Emmons Park Drive  
Taft, California 93268  
(661) 763-3294

Documents Available Online at the DTSC EnviroStor database:



www.calepa.ca.gov



www.dtsc.ca.gov



www.ca.gov

[http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=80001254](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=80001254)

(Click the “Community Involvement” tab)

**Whom to Contact for More Information:** If you have any questions about this Fact Sheet or the Draft RAW, please contact the following DTSC staff:

Thomas Berg  
Project Manager  
DTSC, 1515 Tollhouse Road  
Clovis, California 93611-0522  
(559) 297-3978  
E-mail: [thomas.berg@dtsc.ca.gov](mailto:thomas.berg@dtsc.ca.gov)

Tim Chauvel  
Public Participation Specialist  
DTSC, 5796 Corporate Ave  
Cypress, California 90630  
(714) 484-5487  
E-mail: [tim.chauvel@dtsc.ca.gov](mailto:tim.chauvel@dtsc.ca.gov)

For Media Inquiries Only  
Mr. Sandy Nax  
DTSC Public Information Officer  
(916) 327-6114  
E-mail: [sandy.nax@dtsc.ca.gov](mailto:sandy.nax@dtsc.ca.gov)



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