Former Naval Petroleum Reserve No. 1; Draft Remedy Selection and Statement of Basis; AOCs 030-001, -003, 038-003, 044-001, -002, 053, 072, 073-001, -002, and Interim Measures/Removal Action Work Plans; AOCs 115-001, 119-005, -018, and 125-016 – U.S. Department of Energy

The Department of Toxic Substances Control (DTSC) invites public comments on Corrective Measures for the former Naval Petroleum Reserve No. 1 (NPR-1) Closure Project (Site). The Draft Remedy Selection and Statement of Basis; AOCs 030-001, -003, 038-003, 044-001, -002, 053, 072, 073-001, -002, and Interim Measures/Removal Action Work Plans; AOCs 115-001, and 119-005, -018, and 125-016 (Draft RSSBs and IM/RAWs) are available for review. These and related documents can be found online or at the repositories listed on the next page.

DTSC will accept comments from February 16 to March 17, 2021. A Public Meeting will be held on Zoom on February 23, 2021 to answer questions about the Site and AOCs and receive public comments. Please find the meeting details below.

Site Location: NPR-1 is part of the Elk Hills Oil Field. It is about 74 square miles of land in Kern County, California. The Site includes Areas of Concern (AOCs) — 030-001, -003, 038-003, 044-001, -002, 053, 072, 073-001, -002, 115-001, 119-005, -018, and 125-016 — on NPR-1 (see map on page 2 for AOC locations). AOCs are contaminated areas that require action to be taken to protect human health.

The AOCs are in different areas of NPR-1. They vary in size, ranging from roughly 0.18 acres to 19.48 acres. The AOCs are in an active oil field that is closed to the public.

What is Being Proposed?
The proposed Draft RSSBs and IM/RAWs have previous sample results, describe each AOC, and propose cleanup options. These actions are needed for DTSC to approve the closure of the AOCs and for a “No Further Action” designation for each of them.

The U.S. Department of Energy (DOE) proposes removing about 219,028 cubic yards (cy) (roughly 12,168 truckloads; 18 cy in each truck) of contaminated soil from AOCs 030-001, -003, 038-003, 044-001, -002, 053, 072, 073-001, -002, 115-001, 119-005, -018, and 125-016.

PUBLIC MEETING:

Where: Via Zoom – https://zoom.us/join
Meeting ID: 868 1389 1249
By Phone: (669) 900-6833
Date: February 23, 2021
Time: 6:30 pm to 8:30 pm

Please register if joining by Zoom. Spanish interpretation will be provided. Please contact Jessica Swan if you need any accommodation to attend.

jessica.swan@dtsc.ca.gov or (818) 717-6568

Ryan Mitchum
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30-day Public Comment Period from February 16, 2021 through March 17, 2021

DTSC encourages you to review and comment on the Draft RSSBs and IM/RAWs for AOCs 030-001, -003, 038-003, 044-001, -002, 053, 072, 073-001, -002, 115-001, 119-005, -018, and 125-016. The documents are available for review online or at the repositories. DTSC will make a final decision after all public comments are reviewed.

Please submit your comments postmarked or emailed by March 17, 2021, to:

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Clovis, CA 93611-0522
Email: Ryan.Mitchum@dtsc.ca.gov
Where to Find the Documents: The Draft RSSBs and IM/RAWs and related documents about the former NPR-1 Closure Project are available for review at the following Repositories:

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

**DTSC Clovis Regional Office**
1515 Tollhouse Road
Clovis, CA 93611-0522
(559) 297-3978 (Call for appointment)

Documents Available Online at the DTSC EnviroStor database (click “Community Involvement” tab):

Location map of AOCs 030-001, -003, 038-003, 044-001, -002, 053, 072, 073-001, -002, 115-001, 119-005 and -018, and 125-016

Site History and Background: NPR-1 was created by an Executive Order in 1912 to preserve potential oil resources for national defense purposes. Public Law 104-106 passed in February 1996 required DOE to sell the United States’ lands and hydrocarbon interests in NPR-1. DOE sold these interests to Occidental Petroleum Corporation (Occidental) on October 1, 1997. In 2014, Occidental transferred the property to California Resources Corporation. DOE and DTSC entered an Agreement for Site Assessment in 1998. In 2008, DOE signed a Corrective Action Consent Agreement. DOE agreed to clean up 131 AOCs, including the ones in this update.
**Previous Site Investigations:** Consultants for DOE assessed these AOCs to find out if chemicals were released due to past U.S. Government operations. Results showed some chemicals onsite at levels that could be harmful to human health. These are known as contaminants of concern (COCs). The COCs found onsite were arsenic, lead, hexavalent chromium (Cr+6), polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs) in soil, and VOCs in soil gas.

**Proposed Cleanup Action Options:** The following options were considered for these AOCs:

1. **No Action:** This option means no changes would be made at the Site and is used for comparing options.
2. **Institutional Controls:** For this option, soil impacted by COCs is left in place. Access to contaminated soil is limited and/or fencing is put around the AOC. The landowner and DTSC enter an agreement to manage use of the AOC.
3. **Clean Soil Cover:** For this option, clean soil is put over the AOC to provide a barrier and prevent access to the impacted soil. Contaminated soil may be removed as part of the process. The AOC requires long-term, regular maintenance and in some cases additional security (i.e., adding fencing). To protect the cover and prevent unauthorized use, land use controls are needed.
4. **Limited Excavation with Land Use Controls:** For this option, DOE would remove soil near the surface and replace it with clean soil. This creates a barrier and prevents access to impacted soil. Land use controls would be used to protect human health.
5. **Excavation and Off-site Disposal:** Under this option, excavators, dump trucks and other equipment is used to remove impacted soil. DOE then disposes of soil at an off-site licensed facility. Remaining soil and/or soil vapor is tested to ensure cleanup goals have been met. Clean soil is used for backfill. This is also known as Traditional Excavation.
6. **Large Diameter Auger (LDA) and Traditional Excavation with Off-site Disposal:** For this option, DOE uses LDA and traditional excavation to remove impacted soil. A LDA drill rig is used to create 6-ft and 3-ft borings to remove soil to target depths in areas where sloping is not possible.

**AOCs and Suggested Actions:**

DOE suggests Excavation and Off-site Disposal for the following AOCs:

- **AOC 030-001** was used as a sump to hold water from oil field operations. The sump is about 700 ft long, 200 ft wide, and 25 ft deep. The size of the subarea is about 3.14 acres. Arsenic is the COC. About 9,395 cy of impacted soil (522 truckloads) needs removal.

- **AOC 030-003** was used for disposal of well drilling waste material. It has a disposal and drainage area and is about 19.48 acres. Arsenic is the COC. About 50,350 cy of impacted soil (2,797 truckloads) needs to be removed.

- **AOC 038-003** is a lower catch basin which received drilling mud from former aboveground storage tanks (AST), located up-slope. The size of the AOC is about 2.06 acres. Arsenic is the COC. About 30,000 cy of impacted soil (1,667 truckloads) needs to be removed.

- **AOC 044-001** is the location of a former AST. It is about 1.49 acres. The tank and its piping were removed. Arsenic is the COC. About 12,500 cy of impacted soil (694 truckloads) needs removal.

- **AOC 053** has three connected former sumps and is no longer in use. It is about 2.49 acres. They functioned either as emergency overflow containment basin or as wastewater percolation sumps. The former sumps have been backfilled. Arsenic is the COC. About 55,698 cy of impacted soil (3,094 truckloads) needs to be removed.

- **AOC 073-001 and AOC 073-002** operated as two former truck washout sumps until 1989. They were designed to receive rinsate from the vacuum Truck Wash Rack. The combined size of the two subareas is about 0.77 acres. Arsenic is the COC. About 7,700 cy of impacted soil (428 truckloads) needs removal.
AOC 119-005 and AOC 119-018 are located on well pads. They are two of the 66 subareas within AOC 119. Both are Cr⁶ spill sites from drilling mud additives used during NPR-1 oil well operations. The combined size of the two subareas is about 1.13 acres. The COC is Cr+6. About 1,309 cy of impacted soil (329 cy from AOC 119-005 and 980 cy from AOC 119-018) (73 truckloads in total) needs removal.

AOC 125-016 is an active emergency overflow containment basin. It is located down gradient from the 10G Lease Automatic Custody Transfer facility and 10G waste-water storage tanks to contain stormwater runoff or fluids from a system upset. The basin is about 180 ft long by 110 ft wide and the subarea is about 0.45 acres. Arsenic, Cr+6, B(a)P, and dibenz(a,h)anthracene are the COCs. About 1,910 cy of impacted soil (106 truckloads) needs to be removed.

DOE suggests Excavation and Off-site Disposal, with Institutional Controls, for the following AOCs:

AOC 044-002, currently in operation, has a tank setting and piping and is surrounded by a berm. DOE recommends Institutional Controls for a portion of the AOC that is still active and not accessible to removal equipment. The size of the subarea is about 3.03 acres. Arsenic is the COC at AOC 044-002. About 18,300 cy of impacted soil (1,017 truckloads) needs to be removed. Also, of impacted soil in the non-accessible area will be left in place with restrictions to land use the site.

DOE recommends Limited Excavation and Off-site Disposal with Clean Soil Cover and Institutional Controls for AOC 072. This 0.39-acre former oil recovery sump operated between 1979 and 1995. Arsenic, lead, and PAHs in soil and VOCs in soil and soil gas are the COCs. The upper 10-14 ft of impacted soil (25,700 cy or 1,428 truckloads) would be removed and disposed. Remaining impacted soil and soil gas below the excavation surface would be covered with clean soil and compacted to appropriate standards.

DOE recommends LDA and Traditional Excavation with Off-site Disposal for AOC 115-001. This AOC consists of a former underground storage tank setting. The size of the subarea is about 0.18 acres. The soil COCs include arsenic, lead, benzene, toluene, ethylbenzene, xylenes, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene.

The soil gas COCs are benzene, toluene, ethylbenzene, xylenes, 1,2,4-trimethylbenzene, 1,2-dichloroethane, 1,3,5-trimethylbenzene, and vinyl chloride. About 6,166 cy of impacted soil (343 truckloads) would be removed.

The following activities would be performed under the various Excavation and Off-site Disposal options:
- Remove impacted soil based on previous sampling results.
- Native American Monitors will be present at the AOCs to ensure cleanup activities are done based on DTSC-approved Cultural Resources Management Plan (CRMP) and the CRMP Addendum
- Sample soil and/or soil gas remaining onsite to confirm COCs are not at levels that pose a risk to human health
- Dispose of impacted soil at a permitted landfill
- Removed soil is replaced with clean soil
- Complete surface restoration in line with the California Endangered Species Act Incidental Take Permit (ITP) No. 2081-2013-029-04 and the 2017 ITP Amendment No. 1
**Protective Measures:** The following actions will be taken to protect the surrounding community:

- Removal actions will be planned and conducted to minimize dust from moving offsite.
- Dust control measures will be performed daily before work begins based on best practices. These may include wetting soil, reducing vehicle speed, cleaning vehicle tires, and covering truckloads.
- Dust monitoring and testing will be done based on National Ambient Air Quality Standards.
- Oilfield access is restricted. Visitors must sign in, receive a Safety and Health briefing, and wear appropriate Personal Protective Equipment.

**California Environmental Quality Act:** DTSC reviewed the proposed Draft RSSBs and IM/RAWs in accordance with CEQA. DTSC prepared a Programmatic CEQA Document and Mitigated Negative Declaration for the Site Closure Project. Both documents were approved on March 27, 2018. Addendum 1 and Addendum 2 to the Programmatic CEQA Document, which included additional AOC sites and showed that DOE’s cleanup of multiple sites at the same time would not have a negative effect on the environment. These were approved, respectively, on May 20, 2019, and February 12, 2021. DTSC reviewed these documents and determined the project will not have a significant effect on public health or the environment.

**Next Steps:** Before making a final decision on the proposed plans, DTSC will review and consider public comments received during the **30-day public comment period from February 16 to March 17, 2021.** DTSC will hold a **Public Meeting** via Zoom or by phone on **February 23, 2021 from 6:30 pm to 8:30 pm** to answer questions and receive public comment. After the close of the comment period, DTSC will prepare a Response to Comments document. This document lists the comments received and how they were considered prior to making a final decision. The Response to Comments document will be included in the Final RSSBs and IM/RAWs. This document will also be sent to anyone who includes their return address.

**Schedule for Proposed Removal Actions:** If the Draft RSSBs and IM/RAWs are approved, the cleanup actions will begin in 2021.

**DTSC Contacts:** If you have questions about this Community Update or the Draft RSSBs and IM/RAWs, please contact the following DTSC staff:

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In the space below (and on additional pages, if necessary), please provide your written comments. You can reach DTSC's Ryan Mitchum or Jessica Swan, respectively, at Ryan.Mitchum@dtsc.ca.gov or Jessica.Swan@dtsc.ca.gov:

En el espacio a continuación (y en páginas adicionales, si es necesario), por favor proporcione sus comentarios por escrito. Puede comunicarse con Ryan Mitchum o Jessica Swan del DTSC, respectivamente, en Ryan.Mitchum@dtsc.ca.gov o Jessica.Swan@dtsc.ca.gov: