

# Red Hill Fuel Spill

## ISSUE SUMMARY:

In late November 2021, a petroleum release from the Red Hill Bulk Fuel Storage Facility (RHBFSF) on Oahu contaminated the Red Hill drinking water well. Thousands of families living on Joint Base Pearl Harbor-Hickam (JBPHH) and the Army's Aliamanu Military Reservation and Red Hill Housing, reported petroleum odors coming from residential tap water supplied by the U.S. Navy water system. Residents reported health symptoms arising from the contaminated drinking water.

As a result, the Hawai'i Department of Health (DOH) issued an emergency order requiring the Navy to defuel and permanently shut down the RHBFSF. In June 2023, the EPA finalized an Administrative Consent Order (2023 ACO) with the Navy and Defense Logistics Agency (DLA) to oversee the defueling and closure of the RHBFSF and upgrades and monitoring of the Navy drinking water system at Joint Base Pearl Harbor-Hickam. The order included a novel provision for the formation of a Community Representation Initiative (CRI) to enhance community partnership and engagement in the decision-making process. By April 2024, the Navy effectively defueled almost all (over 99.9%) of the 104 million gallons of fuel from RHBFSF.

The EPA and DOH also have a prior Administrative Order on Consent issued in 2015 (2015 AOC) to oversee tank infrastructure improvements and site assessment and remediation stemming from a 2014 petroleum release at the facility. The EPA and DOH have transitioned to overseeing this work pursuant to the EPA's 2023 ACO and DOH's emergency order but have yet to close out the 2015 AOC.

## JBPHH DRINKING WATER BACKGROUND AND HEALTH IMPACTS:

- At the time of the 2021 release, approximately 93,000 U.S. Navy water system users were impacted by the contaminated drinking water, many of whom relocated to temporary housing during the drinking water crisis.
- The Hawai'i Department of Health lifted drinking water advisories between March and October 2022 after concluding drinking water was below all applicable health-based drinking water standards, however, reports of symptoms persist.
- Drinking water testing in 2023 revealed increased levels of Total Petroleum Hydrocarbons (TPH) in the drinking water, which resulted in heightened concerns from the community and regulators. Joint analysis by the Navy, EPA, and DOH determined that the TPH levels were likely the result of a testing artifact, however the EPA is still testing that hypothesis with additional testing through the Extended Drinking Water Monitoring (EDWM) program.
- Starting in 2024 as part of EDWM, the EPA began conducting split sampling of 5% of all drinking water samples to provide additional oversight of the Navy's water quality testing.
- From 2022-2024, the EPA has conducted inspections and testing of the drinking water system and investigations into residential complaints, including self-reported health symptoms and visible sheens.

## DEFUEL, CLOSURE, AND REMEDIATION

- EPA conducted an interim defueling completion inspection in March 2024 to document the near completion of defueling and identify any potential remaining fuel in the facility. The Navy estimates about 28,000 gallons of sludge and 4,000 gallons of inaccessible fuel remain in the facility which will not be removed until the piping is deconstructed. The EPA will conduct a Final Defueling Completion Inspection when the remaining fuel is removed.
- "Phase I" closure of the tanks, as defined in the 2023 ACO, is expected to last through 2027. While the tanks will be decommissioned at that time, the long-term use of the tanks, if any, has yet to be determined.
- "Phase II" closure includes site assessment, site investigation, and remediation is expected to last beyond 2030.

## 2022 AFFF SPILL AND PFAS

- In November 2022, an estimated 1,300 gallons of Aqueous Film Forming Foam (AFFF) concentrate was unintentionally released from the Red Hill facility. The AFFF, which contained Per- and Polyfluoroalkyl Substances (PFAS) made its way out of the facility but was contained before entering any drinking water source.
- Prior to the incident, there was minimal PFAS data however community interest in PFAS has greatly heightened since the release.
- The Navy has agreed to conduct regular PFAS monitoring of source water and groundwater around Red Hill.

As part of the CERCLA Federal Facilities Agreement for Pearl Harbor, the Navy is responsible for PFAS site assessment, investigation, and remediation across Pearl Harbor, including Red Hill.

- Despite the successful completion of defueling, Red Hill continues to be in the news due to concerns over legacy

## PUBLIC INTEREST

groundwater contamination, drinking water quality, and speculation over the long-term fate of the Red Hill facility.

- The military's 65-year lease on Oahu and the Big Island is set to expire in 2029 and the environmental impact from the military is anticipated to be one of the key issues in those negotiations.
- As part of EPA's 2023 Consent Order, the Navy was required to establish a Community Representative Initiative (CRI) consisting of 10 elected members of the public to interface with the Navy on defueling, closure, and drinking water under the purview of EPA's enforcement action.
- Local advocate groups such as the O'ahu Water Protectors and Sierra Club are heavily represented in EPA's Community Representation Initiative. The CRI has provided these advocates with a platform to provide feedback to the Navy and regulators. EPA continues to attend monthly CRI meetings which are televised on public broadcast.
- The Honolulu Board of Water Supply (BWS), the primary water purveyor in Honolulu, has emerged as a political leader providing comments to both the public, Navy, and regulators over concerns ranging from groundwater quality to the Navy's drinking water system and testing regimen.

## UPCOMING MILESTONES:

- Tensions between the EPA-created CRI and Navy have not resulted in meaningful engagement or improved community relations; the EPA and the Navy are negotiating revisions to the 2023 ACO surrounding public involvement with the goal of reforming the CRI group and adding additional engagement requirements for the Navy.
- The Navy is implementing an Extended Drinking Water Monitoring (EDWM) Plan which will go through April 2025. The EDWM Plan is an extension and refinement to an earlier two-year Long-Term Monitoring Plan which provided for sampling and analysis of drinking water samples (source, distribution, household taps) throughout the JBPHH drinking water system.
- The Navy is systematically closing the 20 tanks by removing accumulated sludge, cleaning and testing the tank walls, and disposing of over 10 miles of associated piping at the facility. Closure of the tanks is expected to last through 2027.
- The EPA will oversee the environmental cleanup of petroleum releases at Red Hill under the 2023 ACO. Starting in early 2025, the EPA will oversee the site assessment to identify the presence of all historic releases from the underground storage tank system, which is estimated to be completed in 2026. Following the identification of releases, the EPA will require a site investigation to define the nature and extent of all releases, which is estimated to be completed in 2029. The final phase of the environmental work will include evaluating and implementing remediation, which is estimated to begin in 2030. This work mirrors the Hawai'i Department of Health's underground storage tank rules.
- Under the CERCLA Federal Facilities Agreement for the Pearl Harbor Superfund site, the EPA will provide oversight of the investigation and cleanup of PFAS releases at Red Hill. A Remedial Investigation will begin in 2025.

#### KEY EXTERNAL STAKEHOLDERS:

☒ Congress      ☐ Industry      ☒ States      ☐ Tribes      ☒ Media      ☒ Other Federal Agency  
☒ NGO      ☒ Local Governments      ☒ Other: Native Hawaiians.

#### MOVING FORWARD:

- The EPA is committed to working with the Navy and DOH to identify any remaining contamination in the drinking water at JBPHH and communicate any associated risks to the public.
- The EPA continues to work closely with the Navy to oversee the complete closure of the Red Hill tanks and clean-up of the aquifer underneath Oahu.

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