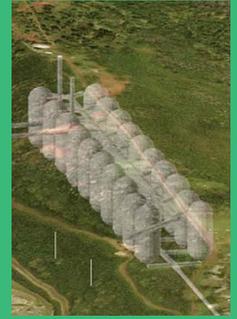


## Status Update:

# Red Hill Underground Fuel Storage Facility

Implementation of the Administrative Order on Consent Agreement (AOC) between the Navy and Defense Logistics Agency, the Hawaii Department of Health, and U.S. EPA for Environmental Investigation, Cleanup and Environmental Performance



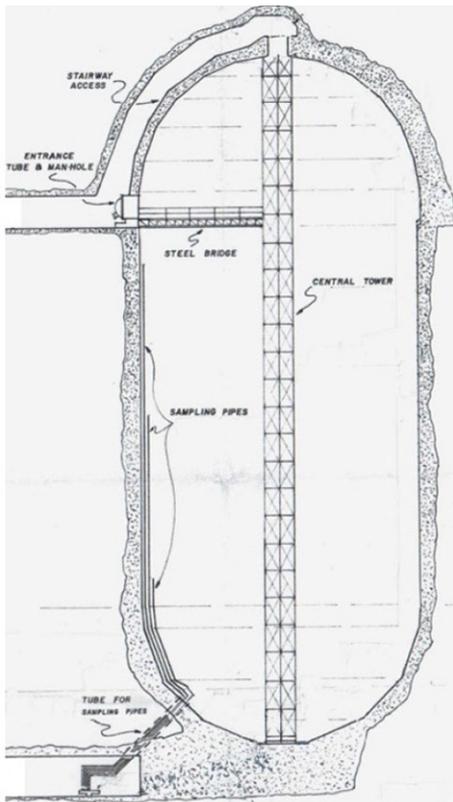
Issue #3 – December 2017

## HIGHLIGHTS

- Regulatory Agencies Approve Enhanced Tank Maintenance Procedures
- Navy Continues to Expand Groundwater Monitoring Network
- Drinking Water Sampling Continues to Meet Federal and State Standards
- Groundwater Experts Convene to Study Conditions Around Red Hill
- Navy to Submit Tank Studies in the Next Four Months
- Process for Selecting Tank Upgrades
- Public Information Workshop on Tank Upgrades in Early Spring 2018

## Regulatory Agencies Approve Enhanced Tank Maintenance Procedures

On September 5, 2017, the Hawaii Department of Health and U.S. EPA approved the Navy's updated Tank Inspection, Repair, and Maintenance ("TIRM") Procedures for the Red Hill tanks. These improvements in tank maintenance will help to reduce the risk of future releases of fuel from the tanks.



Typical tank construction.

Notable improvements to the procedures include:

- Qualification requirements for Navy and contractor personnel
- Improved inspection procedures
- Improved repair and repair verification procedures
- Increased oversight of Navy contractors
- Additional protective measures prior to recommissioning tanks
- Increased frequency of precision leak testing
- Expanded use of high performance interior coating to prevent leaks

Further information on these improvements can be found at the U.S. EPA's Red Hill website: <https://www.epa.gov/red-hill>

## The Red Hill Fuel Tanks

The Navy's Red Hill Bulk Fuel Storage Facility, located near Pearl Harbor, provides fuel for military operations in the Pacific. First constructed in the 1940s, the unique facility includes 20 large underground storage tanks with a facility-wide capacity of approximately 250 million gallons of fuel. A fuel release of roughly 27,000 gallons in January 2014 led to a comprehensive plan to minimize the threat of future leaks and protect groundwater resources around the facility.

## Navy Continues to Expand Groundwater Monitoring Network

On August 25, 2017, the Navy provided revised plans for expansion of the groundwater monitoring network around the Red Hill facility. In addition to the current monitoring well network, the Navy is prioritizing the installation of four additional wells before the end of December 2017 to improve understanding of groundwater flow conditions and water quality conditions. The map below displays the locations of groundwater monitoring wells below and around the facility.



## Drinking Water Sampling Continues to Meet Federal and State Standards

Drinking water samples continue to meet federal and state standards and indicate that the public drinking water supply is safe. Depending on your location, drinking water in the Red Hill region is either supplied by the Honolulu Board of Water Supply, or Joint Base Pearl Harbor-Hickam Water System. Full drinking water reports are available on your local water purveyor's website.

## Groundwater Experts Convene to Study Conditions Around Red Hill

Representatives from the U.S. Geological Survey, Hawaii Department of Land and Natural Resources, Honolulu Board of Water Supply, Hawaii Department of Health, U.S. EPA and the Navy have formed a working group to discuss groundwater conditions around the Red Hill facility. Comprised of engineers, expert scientists and hydrogeologists, the group reviews Navy work products and examines best practices to be employed as a regional groundwater model is being developed. The regional groundwater model is necessary to understand how water moves through the subsurface in the Red Hill area. An accurate model of groundwater flow will help understand how any contamination from the facility may act in the subsurface.

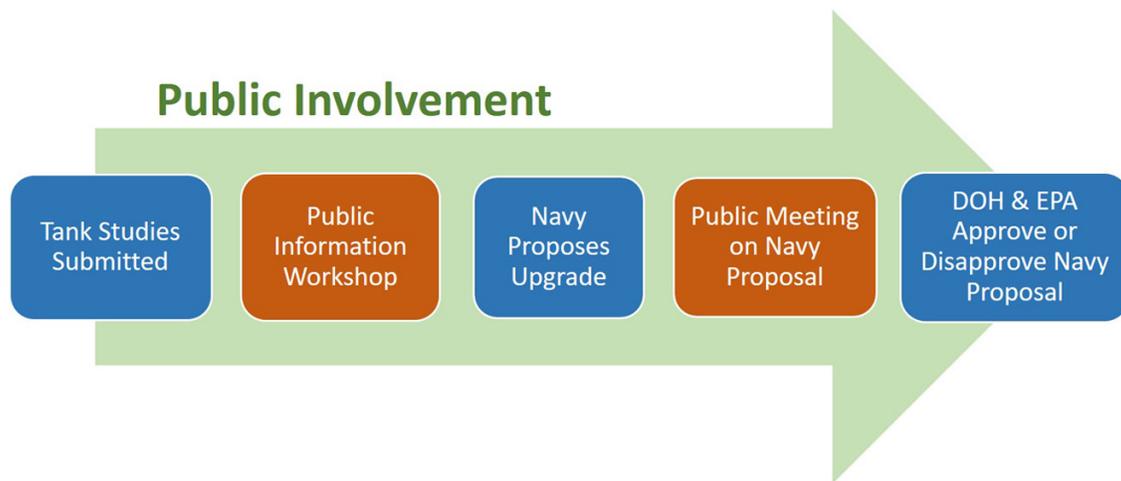
## Navy to Submit Tank Studies in the Next Four Months

The Navy's expert engineering consultants are studying both tank upgrade options and alternative fuel storage locations. The Navy will submit its tank upgrade study by the middle of December 2017 and its alternative locations study by March 2018. The Tank Upgrade Study will evaluate six tank upgrade options against approximately 18 factors ranging from construction challenges and cost to inspection and maintenance requirements. Three options utilize a single-walled tank system and three utilize double-walled systems. The Alternative Locations Study is limited to investigating locations that could provide fuel support to Joint Base Pearl Harbor Hickam. Both studies will be available on U.S. EPA's Red Hill website for public viewing and feedback.

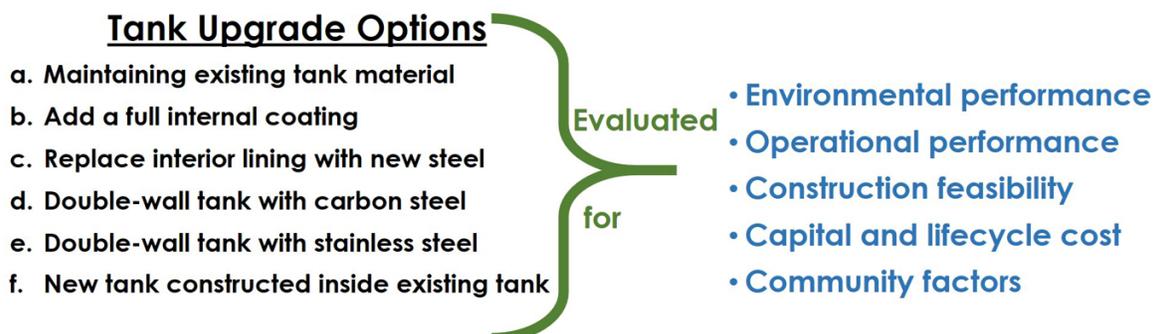
## Process for Selecting Tank Upgrades

The Navy's tank upgrade study will not recommend a specific upgrade option. Instead, it will provide conceptual design information regarding six tank upgrade alternatives. This information will be used in conjunction with work from other portions of the Red Hill Administrative Order on Consent and input from the community to ultimately inform the Navy and Hawaii Department of Health and U.S. EPA's determination of how to best upgrade the existing Red Hill tanks. Any proposed tank upgrades would proceed while the overall facility remains in operation.

The graphic below shows how public input will be sequenced and incorporated into a tank upgrade decision. Following submission of the tank studies, a public information workshop will be held to better explain the content of the studies and hear the community's concerns. Additional technical meetings to discuss the tank upgrade options will be held following the workshop. After that, the Navy will propose a tank upgrade decision. Hawaii Department of Health and U.S. EPA will then hold a public meeting to receive input from the community about the Navy's proposed upgrade decision before electing to approve or disapprove the Navy's proposal.



A decision on how to best upgrade the tanks at Red Hill will be revisited once every five years. For this first tank upgrade decision, six tank upgrade options are being closely evaluated.



More information on the tank upgrade decision process is available on the Tank Upgrade Alternatives page of EPA's Red Hill website.

## Public Information Workshop on Tank Upgrades in Early Spring 2018

The Navy and the Hawaii Department of Health and U.S. EPA will be hosting a public information workshop in early spring of 2018 in Honolulu, Hawaii to answer questions about the Tank Upgrade and Alternative Location studies. The workshop will be an open-house style format to allow community members an opportunity to have their individual questions answered one on one with representatives from each organization.

## Information Available on EPA's Website for Review and Comment

Navy reports and additional information developed because of the Red Hill AOC are available on U.S. EPA's and DOH's websites. Interested members of the public are encouraged to review these documents and provide any comments or feedback to the contacts listed below or via email to [redhill@epa.gov](mailto:redhill@epa.gov).

### For Further Information:

#### [EPA Red Hill Website](#)

#### [HDOH Red Hill Website](#)

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