

RED HILL BULK FUEL STORAGE FACILITY Tank Upgrade Alternative and Release Detection Decision Document

What is the Tank Upgrade Alternative Report?

The U.S. Navy and Defense Logistics Agency (DLA) submitted the **Tank Upgrade Alternative** (**TUA**) and **Release Detection Decision Document** to the U.S. Environmental Protection Agency (EPA) and Hawaii State Department of Health (DOH) Sept. 9, 2019. The document is the Navy's proposed plan to continue improving and modernizing the Red Hill Bulk Fuel Storage Facility as part of its ongoing commitment to protect the environment, protect the water and protect our nation.

What does the plan propose?

The proposed plan uses extensive layers of protection to prevent, detect and lessen the risk of a release that could potentially harm the water source.

The current agreement between the EPA, DOH and Navy/DLA includes upgrading the tanks by 2037. Additionally, two major highlights are **Navy commitments** to:

- Pursue technologies that will provide secondary containment, or remove fuel from the Red Hill Facility in 2045; and
- Determine the feasibility for potential construction of a water treatment plant or equivalent engineering controls no later than 2022 in the improbable event that all control measures fail to effectively prevent, detect or lessen the release of fuel from the Red Hill Facility.

The proposed plan fulfills the requirements of the 2015 Administrative Order on Consent (AOC) between the Navy/DLA and EPA/DOH to minimize the risk of future fuel releases and to ensure the Red Hill Facility continues to operate in an environmentally protective manner.

What improvements have been made or are planned at Red Hill?

The AOC process already has led to many significant improvements to the Red Hill Facility and its operational procedures since 2015. Here are some of the ongoing and proposed improvements:

- Increase the frequency of tank tightness testing from annual to semi-annual
- Increase the number of monitoring wells from eight to 15; eight more are planned by 2021
- Develop a new groundwater model
- Implement a supplementary approach to release detection via groundwater sampling and soil vapor monitoring
- Evaluate water levels in monitoring wells to further help understand groundwater flows
- Improve fuel inventory monitoring and trend analysis using automated fuel handling equipment
- Continual improvement of the tank clean, inspect and repair program
- Improve evaluation of the tank steel liner using non-destructive methods
- Adopt higher standards for tank inspection, repair and maintenance procedures
- Complete U.S. Indo-Pacific Command fuel-study



RED HILL BULK FUEL STORAGE FACILITY TUA DD Fact Sheet

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- Install permanent release detection equipment
- Conduct a pilot study to evaluate continuous (vice monthly) soil vapor monitoring
- Reduce the max fuel level in the tanks to below the upper dome
- Modify automated tank gauging equipment to increase accuracy of the system
- Decommission smaller nozzles that cannot be inspected and repaired by personnel
- Conduct a pilot study to fully coat the interior of a tank

All of these efforts will further strengthen the Red Hill Facility's extensive layers of protection. This comprehensive approach to upgrade the tanks and improve operations includes implementing the current Best Available Practicable Technology (BAPT) which focuses on technology enhancements and procedural improvements.

What's Next?

- Since signing the AOC in 2015, the Department of Defense (DOD) has spent \$162 million to maintain and improve the facility. DOD anticipates spending an additional quarter billion dollars on future and ongoing improvements.
- Due to improvements in technology and continuous modernization, the facility functions better than it did at its inception.
- All Red Hill Facility tanks that store fuel now undergo semi-annual tank tightness testing. This is twice the frequency required by the current Hawaii State standard, which requires annual tank tightness testing. Since 2008 when tank tightness testing began, every tank tested has successfully passed, demonstrating they are not leaking.

The Red Hill Facility:

- The tanks are not leaking and the water remains safe to drink.
- The Navy is keeping the drinking water and the environment safe.
- The Navy is investing in the modernization and ongoing improvement of Red Hill.
- Red Hill is secure and there are multiple layers of protection in place to prevent potential future fuel releases.
- Red Hill is critical infrastructure vital to national security, safety and defense.
- Red Hill is an important safety net for Hawaii.

The Navy is committed to achieving secondary containment by 2045 or will remove the fuel from Red Hill.

For more information, visit our website at: <u>www.cnic.navy.mil/redhill</u> State of Hawaii Department of Health Red Hill web page: <u>https://health.hawaii.gov/shwb/ust-red-hill-project-main/</u>

Environmental Protection Agency website: https://www.epa.gov/red-hill