RED HILL STATUS UPDATE – [DATE] 2017

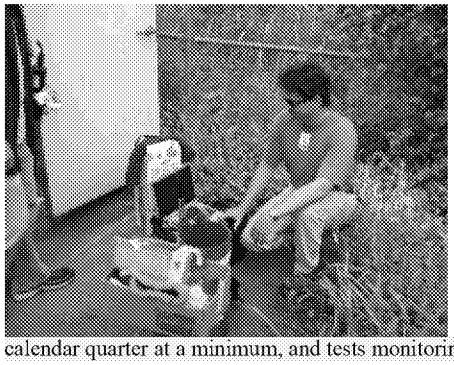
LATEST FINDINGS, ACCOMPLISHMENTS AND ACTIVITIES:

- **Recent testing indicates tanks are not leaking**
- **Navy and DLA improve inspection and repair procedures**
- **Detailed tank upgrade study in progress**
- **Drinking water meets federal and state standards**
- **Environmental monitoring increased around tanks**

ABOUT 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. Originally built in the 1940s, the unique facility includes 20 large underground fuel storage tanks with a facility-wide capacity of approximately 250 million gallons of fuel. A fuel release of up to 27,000 gallons from Tank 5 in January 2014 led to a comprehensive plan to minimize the threat of future leaks and protect groundwater resources around the facility. This and other periodic updates are intended to keep the public informed on major progress being made to protect public health and the environment at the Red Hill facility

Groundwater Investigation



Drinking water meets federal and state standards
All drinking water supplies in the vicinity of Red Hill continue to meet all federal drinking water standards, known as Maximum Contaminant Levels. Depending on the 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. The most recent drinking water testing for contaminants indicates that the public drinking water supply is safe.

The Navy continues to collect groundwater samples from their entire well network for testing each calendar quarter at a minimum, and tests monitoring wells known to have contamination monthly. Monitoring well #2, which is located adjacent to the fuel release from Tank #5 in January 2014, continues to show the highest levels of residual contamination. Cumulative data from all of the Navy owned monitoring wells are available at [HYPERLINK "http://health.hawaii.gov/shwb/ust-red-hill-project-main/"].

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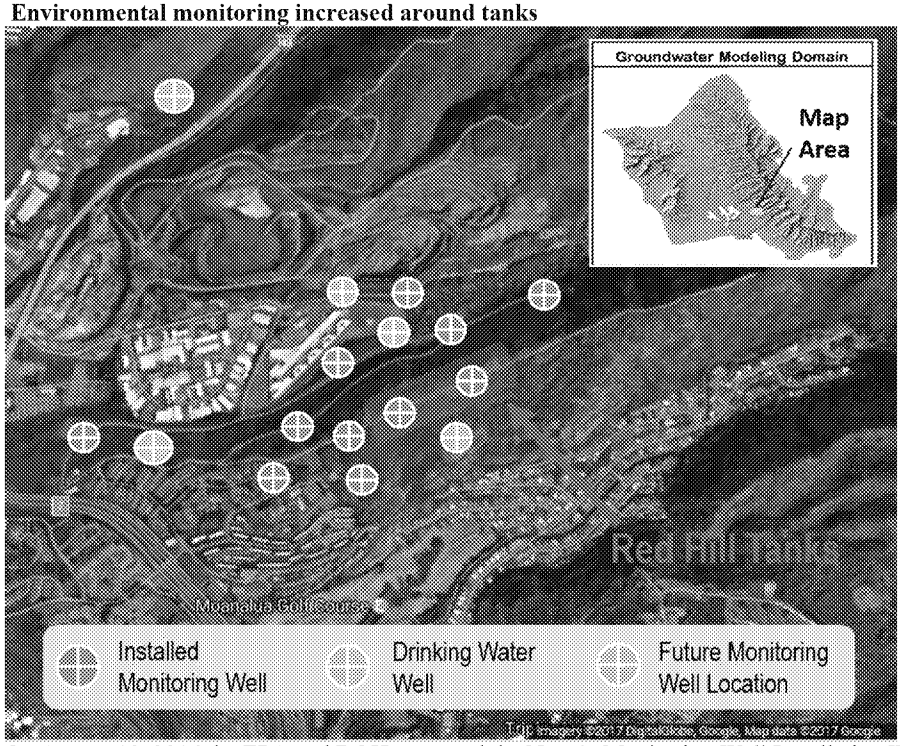
Environmental monitoring increased around tanks



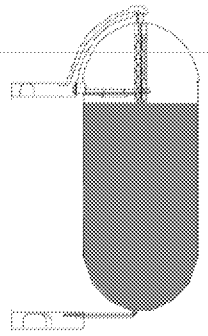
On August 10, 2016 the EPA and DOH approved the Navy's Monitoring Well Installation Work Plan, and the Navy began drilling operations to install the new wells in late August 2016. The Monitoring Well Installation Work Plan and the Regulatory Agencies' approval letter can be found at [HYPERLINK "https://www.epa.gov/red-hill/groundwater-monitoring"]. A new monitoring well located southeast of the spill location will be installed in March 2017. Access agreements for another monitoring well north west of the spill location are in process. The AOC parties continue to be committed to expanding the network of groundwater monitoring to ensure the protection of drinking water through accurate characterization of the underlying geology.

Facility Infrastructure

Facility meets or exceeds petroleum industry standards

From May 9 to May 11, 2016 EPA and DOH officials evaluated the Red Hill Bulk Fuel Storage Facility and its operating records with a contracted team of industry experts. The evaluating team consisted of EPA and DOH programmatic staff and inspection personnel along with five industry experts specializing in bulk petroleum storage systems. The team concluded that the facility's operations and maintenance meet or exceed practices encountered in private industry. A detailed report based on the evaluation is being developed by EPA's contractors and should be available in the second quarter of 2017. EPA contractors are also recommending a site specific inspection routine for the facility based on its unique characteristics and EPA's newly revised underground storage tank regulations.

Testing indicates tanks are not leaking
From December 2016 to February 2017 Navy performed annual tank tightness tests on all of the large tanks currently in use. All tanks passed and were reported as being tight to the Regulatory Agencies. The Regulatory Agencies will review the complete reports which will be forthcoming.



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Navy and DLA improve inspection and repair procedures
Since the 2014 tank 5 release caused by faulty repairs, the Navy has implemented a number of improvements to its tank inspection, repair and maintenance procedures. After the *Tank Inspection Repair and Maintenance Procedures Report* was submitted on October 11, 2016, the AOC Parties began meeting to discuss plans for implementing additional improved tank inspection, repair and maintenance procedures and propose a schedule for tank repair at the Facility. These meetings concluded on February 21, 2017. The Report, available on EPA's describes the facility's construction, historical maintenance operations, the January 2014 release from tank 5, lessons learned from that release, the tank inspection and repair schedule, and other facility information.

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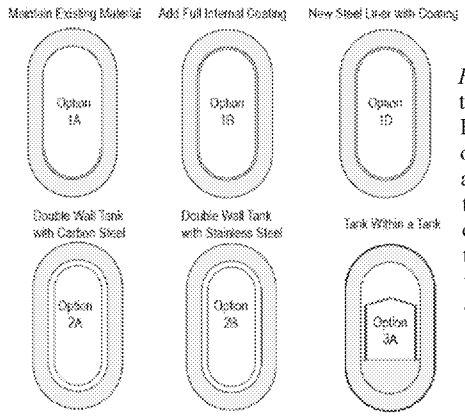
Detailed tank upgrade study in progress
On December 8, 2016 EPA and DOH approved the *Tank Upgrade Alternatives Scope of Work* submitted by Navy and DLA on September 8, 2016. The Regulatory Agency approval requires Navy and DLA to provide EPA and DOH with two interim progress updates on the study of tank upgrade technologies and to develop a decision process for selecting the best available practicable technology



As detailed in our previous Red Hill Status Update from March 2016, the *Tank Upgrade Alternatives Report* will cover a broad list of upgrade technologies that were surveyed for the tanks at Red Hill and also perform an in-depth study of the six options chosen for detailed analysis. The six alternatives to be studied include: modifications to the current tank configuration, the current configuration plus coatings, complete replacement of the existing steel plates, construction of a double - walled tank without an accessible outer wall using either carbon steel or stainless steel, and construction of a new tank inside the existing tank.

The *Scope of Work*, available on EPA's Red Hill website, summarizes the information that will be collected and examined to determine which tank upgrade alternatives will be scrutinized to determine the initial upgrade technologies for the tanks at Red Hill. An analysis of this information and key findings will be contained in the *Tank Upgrade Alternatives Report* due to be submitted in approximately January 2018.

Additional Work at Red Hill

Public meeting on Red Hill work held in Honolulu on October 6, 2016

On October 6, 2016, EPA, DOH, Navy and DLA hosted a public meeting at Moanalua Middle School to allow the public to learn of progress on the work being performed under the Administrative Order on Consent (AOC) and to ask questions. Roughly 100 members of the public attended the three-hour long meeting, including some locally elected representatives and government officials. Several local news media outlets covered the meeting. The Red Hill AOC Statement of Work commits the AOC Parties to host public meetings at least annually.

EPA and DOH approve two Navy and DLA reports
Navy and DLA submitted a *Corrosion and Metal Fatigue Practices Report* and a *Current Fuel Release Monitoring Systems Report*. Both reports have been approved by the Regulatory Agencies and scoping discussions are underway to investigate additional potential improvements for the fuel monitoring systems and to assess corrosion inside the large underground tanks. The reports were required by the Red Hill AOC, and they establish a baseline assessment for the existing systems, procedures and corrosion control practices at the facility.

Next Steps

Important work planned for the next 90 days
In April the *Tank Inspection, Repair and Maintenance Procedures Decision Document* and a scope of work for the risk and vulnerability assessment are due to the Regulatory Agencies for review and approval. In May a scope of work for an analysis of tank liner scanning techniques is due to the Regulatory Agencies for review and approval. Ongoing scoping discussions regarding new release detection systems are scheduled to be completed over the next 90 days.

For Further Information

www.epa.gov/red-hill

www.health.hawaii.gov/shwb/ust-red-hill-project-main/

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