Red Hill Bulk Fuel Storage Facility

Oahu, Hawaii

Fact Sheet **March 4, 2015**

The Red Hill Bulk Fuel Storage Facility is a strategically important national defense asset, especially now that the United States is rebalancing its forces to Asia and the Pacific. The facility comprises 20 tanks, which each can hold 12.5 million gallons of fuel. Each tank was built in place, with quarter-inch steel plates backed by 2.5 to 4 feet of concrete, inside a hill of basalt rock.

Red Hill's physical security, capacity and gravity-fed distribution system provide a unique and economical capability to the U.S. Pacific Fleet and other military forces. The facility cannot be readily replaced.

Modernized Facility

- Automated valves, pumps and gauges
- 52 cameras to monitor automated equipment and ensure security and environmental safety
- State-of-the-art communication and inventory management systems

The Red Hill Bulk Fuel Storage Facility is a national strategic asset and continues to provide vital, secure fuel storage for ships and aircraft of U.S. Pacific Fleet and other military branches. This enables them to respond promptly to military and humanitarian missions throughout the Indo-Asia-Pacific region.

TANK 5 RELEASE

As part of a continuous effort to modernize and extend the service life of the tanks at Red Hill, individual tanks are routinely taken out of service for a "clean-inspect-repair" process. This can take 3 to 4 years, extending the life of that tank for 20 years. Tank 5 had successfully passed a tank tightness test (given to all operational tanks to show that they can safely hold fuel) before being handed over to a contractor for this service process. Upon completion of the service, the Navy began refilling the tank.

Navy fuel operators detected a fuel level discrepancy in Tank 5 on January 13, 2014. This tank held JP-8 aviation fuel, primarily consisting of kerosene. Manual measurements indicated a possible loss of fuel from the tank, and the Navy immediately transferred fuel to another tank at the facility in accordance with response procedures. The level discrepancy was confirmed as a release and a full inspection was conducted to determine the cause. The inspection found that poor workmanship and oversight resulted in a tank that could no longer hold fuel.

IS OUR DRINKING WATER SAFE?

Drinking water for both Joint Base Pearl Harbor-Hickam and nearby civilian communities continues to meet Federal and State drinking water quality standards.

Scheduled sampling of water

Drinking water is vitally important to us all, so the Navy is taking action to collect even more data. And we are continuing to conduct routine compliance sampling to better understand the potential for any impacts to this valuable resource.

The Navy is continuing to work with the State Department of Health, as it has for many years, as well as with other regulators and stakeholders in a collaborative way to protect our drinking water resources.

HOW DO YOU TEST WATER?

Groundwater and drinking water are not the same thing, but both are tested. Groundwater is not uniform in chemical makeup or purity. Oahu's drinking water is drawn from specific sources that are sampled regularly to ensure it is safe for consumption.

Groundwater wells are used to improve and validate the predictive movement of groundwater modeling; and from a long-term perspective, they can determine if trace amounts of petroleum constituents are moving in any general direction. All of these test results are submitted to regulatory agencies for review and evaluation.

WHAT ELSE IS BEING DONE?

The Navy and the Defense Logistics Agency will make all necessary upgrades to Red Hill through an Administrative Order on Consent (AOC) to be enforced by the Environmental Protection Agency and the State of Hawaii Department of Health. EPA and DOH agree with us that the AOC and associated Statement of Work (SOW) present the best solution. This AOC/SOW is a legal document and an enforceable plan to ensure Red Hill continues to operate safely. The final draft of this document is nearing completion.

We are also continuing to evaluate appropriate technologies to improve tank integrity and leak detection sensitivity.

Work already accomplished:

- Updated Ground Water Protection Plan, submitted to regulators for comment
- Awarded Leak Containment and Detection Study Update (feasibility)
- Installed two more monitoring wells
- Installed watertight hatch over Red Hill water well
- Conducted visual and non-destructive inspection of Tank 5. One method of inspection is vacuum box testing, which can reveal a path through the wall of the tank that may not be clearly visible.

Leak Detection Methods

- Daily inventory management
- Automated tank level gauging
- Soil vapor monitoring for hydrocarbons
- Scheduled oil/water interface testing
- Quarterly groundwater monitoring
- Scheduled tank tightness testing

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