

## BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843



February 25, 2014

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Linda Rosen, M.D  
Interim Director  
State of Hawaii  
Department of Health  
1250 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Dr. Rosen:

Subject: Red Hill Bulk Fuel Storage Facility

The Board of Water Supply (BWS) has serious concerns about the numerous past fuel releases from the Red Hill Bulk Fuel Storage Facility (RHSF) and its impact on an irreplaceable groundwater aquifer that we all depend on for our potable water supply.

According to several reports, past fuel releases have contaminated the fractured basalt, basal groundwater, and soil beneath the RHSF with petroleum hydrocarbons. A small release of several thousand gallons could produce a groundwater plume that impacts the Navy's Red Hill Shaft water supply. The reports also warn of the mounting age of the Facility increasing the chance that both the metal tank liners and the concrete foundation walls may fail together, making future releases more of a concern. These findings signify a potential but serious situation that warrants more work, study and considerations of remediating the existing groundwater contamination beneath the RHSF to mitigate impacts to the Navy's Red Hill Shaft, neighboring drinking water wells and the aquifer itself.

The Moanalua aquifer that supplies the Navy's Red Hill Shaft also supplies our Moanalua Wells station to the south. The BWS Halawa Shaft pumping station is located in the adjacent Waimalu aquifer less than a mile to the northwest of RHSF. Heads (also called water levels) in the Moanalua aquifer are higher than the Waimalu aquifer and could drive contaminants toward the Halawa Shaft. These stations provide drinking water in quantities that cannot be made up by other BWS pumping stations for any extended period without over-pumping and affecting the water quality of those stations.

In the event our Halawa Shaft and Moanalua Well stations are affected by the contamination under RHSF, costly treatment will be required that can be avoided today by remediating the petroleum contamination already there and installing additional

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groundwater monitoring wells to track any contamination that migrates from the site towards other wells in the area. Bioventing is currently being used to remediate contaminant concentrations in the underlying soils and groundwater as a result of leaks from a former Hickam Petroleum, Oils, and Lubricants (POL) pipeline system located along Kamehameha Highway in Mililani. The RHSF situation is serious and calls for corrective action in the interest of protecting our environment. Mitigating or correcting or addressing the situation now is prevention worth more and will cost significantly less than the cure of treating and removing contamination after it occurs.

The importance of the RHSF to the Navy equals the importance of the groundwater aquifer to the people of Oahu. Loss of this aquifer has grave consequences for everyone living here. Let's work together to preserve our most precious resource – the groundwater aquifer. Please keep us continually informed of the situation, the occurrence of any future releases from the RHSF, monitoring, and remediation work that you are considering and implementing, and all of your efforts from now and into the future. We also respectfully request copies of all past Navy groundwater studies, monitoring reports, water quality test results, and contingency and emergency plans, in addition to copies of all future studies and reports the Navy undertakes concerning the RHSF. This information will assist us in developing our own monitoring and emergency response planning to ensure our drinking water sources are protected.

We share the Navy's and Department of Health's dedication to environmental stewardship and preserving our natural resources now and into the future. Let's work together to insure that future.

Thank you for your kind attention to our concerns. If you have any questions, please feel free to call me at 748-5061.

Very truly yours,



ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer