## **BOARD OF WATER SUPPLY**

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Mr. Omer Shalev EPA Red Hill Project Coordinator United States Environmental Protection Agency Region IX 75 Hawthorne Street San Francisco, California 94105

And

Ms. Roxanne Kwan State of Hawaii Department of Health Solid and Hazardous Waste Branch 2827 Waimano Home Road Pearl City, Hawaii 96782

Dear Mr. Shaley and Ms. Kwan:

Subject: Honolulu Board of Water Supply (BWS) Comments to IMR Test Labs
Destructive Analysis of 10 Steel Coupons Removed from Red Hill Fuel
Storage Tank #14, REPORT No. 201801967, Dated December 17, 2018

The BWS offers the following comments to the subject laboratory report performed in accordance with the Destructive Testing work conducted under the Red Hill Bulk Fuel Storage Facility (RHBFSF) Administrative Order on Consent (AOC) Statement of Work (SOW) Section 5.3 (Navy, 2019).

The BWS continues to have serious concerns that the Navy's current tank wall inspection techniques may not be sufficiently reliable to detect the potential for leaks and repair them before they occur (Lau, 2018). To date, the Navy has not demonstrated to our satisfaction that its nondestructive evaluation (NDE) process can accurately and reliably identify areas of thinned liner in the RHBFSF underground storage tanks (USTs). Backside corrosion represents a significant leak hazard for single-walled USTs. In USTs as large as those at the RHBFSF, tank wall inspection and repair methods must be extremely reliable. This reliability is necessary to ensure that all areas of the liner, which serves as the primary barrier to fuel release, that are so

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thin that they may corrode to the point of leaking prior to the next inspection are found and repaired (NAVFAC, 2018).

The subject laboratory testing data appears to support our concerns. For example, the laboratory data shows that the Navy's tank wall inspection methods both significantly overestimate (Coupon 6) and underestimate (Coupon 1) the remaining wall thickness of the Tank No. 14 steel liner (Navy, 2019). If anything, this laboratory testing only serves to substantiate the BWS' unease regarding the accuracy and reliability of the Navy's current NDE process.

The BWS reserves its right to further comment on this destructive testing laboratory report subject to reviewing the Navy's final Destructive Testing Results Report, which is currently due in July 2019 as part of the work required under the AOC.

If you have any questions, please feel free to call Erwin Kawata, Program Administrator of the Water Quality Division, at 808-748-5080.

Very truly yours,

ERNEST V.W. LAU, P.E.

Manager and Chief Engineer

CC: Mr. Steve Linder
United States Environmental Protection Agency
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75 Hawthorne Street
San Francisco, California 94105

Mr. Mark Manfredi Red Hill Regional Program Director/Project Coordinator NAVFAC Hawaii 850 Ticonderoga Street Suite 110 JBPHH Hawaii 96860

Enclosure: IMR Report No. 201801967 dated December 17, 2018

## References

Department of the Navy (Navy). 2019. Destructive Analysis of 10 Steel Coupons Removed from Red Hill Fuel Storage Tank No. 14, Pursuant to Section 5.3 of the Administrative Order on Consent (AOC) Statement of Work (SOW) Red Hill Bulk Mr. Shalev and Ms. Kwan March 5, 2019 Page 3

Fuel Storage Facility (RHBFSF) Joint Base Pearl Harbor-Hickam, Oahu, Hawaii. February 15.

- Lau, E. Y. W. (Lau), 2018. Honolulu Board of Water Supply (BWS) Comments on the Red Hill Bulk Fuel Storage Facility (RHBFSF), Scope of Work for Destructive Testing Supplement - Destructive Testing Plan, Supplement to Administrative Order on Consent (AOC) and Statement of Work (SOW) Section 5.3.2, dated June 1, 2018 and Our Inspection on June 25, 2018 of Coupons Removed from Tank 14. August 20.
- Naval Facilities Engineering Command (NAVFAC), 2018. Red Hill Bulk Fuel Storage Facility Scope of Work for Destructive Testing Supplement Destructive Testing Plan, Supplement to Administrative Order on Consent (AOC) and Statement of Work (SOW) Section 5.3.2, June 1.