

5750 N4 June 2, 2020

## CERTIFIED NO: 7019 2970 0001 7433 3547

Mr. Steven Linder U.S. Environmental Protection Agency Region IX 75 Hawthorne Street San Francisco, CA 94105

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

Dear Mr. Linder and Ms. Kwan:

SUBJECT: ADMINISTRATIVE ORDER ON CONSENT STATEMENT OF WORK SECTION 5.3.3, CORROSION AND METAL FATIGUE PRACTICES, DESTRUCTIVE TESTING RESULTS REPORT, RED HILL BULK FUEL STORAGE FACILITY, JOINT BASE PEARL HARBOR-HICKAM, OAHU, HAWAII

The Navy/DLA acknowledges receipt of your letter dated March 16, 2020, disapproving the Destructive Testing Results Report (DTRR) provided by Commander, Navy Region Hawaii dated July 7, 2019. We understand the disapproval is based on a different interpretation of findings and non-concurrence with our conclusion that non-destructive examination (NDE) was validated. Your letter states the Regulatory Agencies do not require further destructive testing of Tank 14 samples. The Tank 14 data provided in the DTRR was determined to be adequate to enable conclusions to be made. However, more work should be performed to address differences in interpretation.

Based on your letter dated March 16, 2020 and a May 5th telephone conference between the Navy and the Regulatory Agencies, the Navy/DLA understands that a difference in interpretation exists between parties. The Navy/DLA also understands that the Regulatory Agencies will administratively approve the testing and the data provided within the DTRR. This approval concludes work under Section 5.3.2 of the Red Hill Administrative Order on Consent (AOC) Scope of Work (SOW).

The Navy/DLA affirms the conclusions stated in the DTRR that NDE practices at Red Hill are sound. The Navy/DLA has a robust and effective tank integrity management program at Red Hill that is continually undergoing appropriate process improvement. The Navy supports the Regulatory Agencies' opinion that additional information to substantiate DTRR conclusions is warranted and discussions between parties on statements contained in the March 16, 2020 letter should commence as set forth in AOC SOW 5.4.

Of note, the Navy/DLA has implemented new Tank Inspection, Repair, and Maintenance (TIRM) procedures as stated in the Red Hill Facility TIRM Procedure Decision Document, dated April 24, 2017. These procedures, such as phased-array ultrasonic testing and deployment of third-party

independent inspectors to assess construction Quality Control during the repair phase, were thoroughly covered in the TIRM Procedure Decision Document.

The TIRM Procedure Decision Document states on Page IV: "The AOC SOW is an iterative process, which means that as work progresses, the findings from one section may affect the recommendations of another section." The conclusions and results reached from the AOC SOW Section 3 Tank Upgrade Alternative Report, and the AOC SOW Section 5.3.2 DTRR provide a basis for the identification of relevant updates to ongoing regulator approved TIRM procedures. As these documents are discussed with the Regulatory Agencies, the scope of NDE processes necessary to update TIRM procedures can be further defined and mutually agreed upon by the parties involved.

In December 2017, NAVFAC EXWC was designated as a Department of Defense Science and Technology, and Reinvention Laboratory (STRL). In this role, EXWC has already engaged academia, vendors, and industry to discover and potentially develop new and innovative technologies that can be employed at the Red Hill bulk fuel storage facility. Specific to the Red Hill TIRM process, one event which has already taken place was an industry outreach symposium at Pearl Harbor. The goal of this event was to obtain input from industry and academic Subject Matter Experts on technologies that may be available or could be further developed for Red Hill use. The University of Hawaii (UH) was a participant in this event and the Navy is currently partnering with the UH Engineering Department and The Applied Research Lab (ARL) to leverage the "best and brightest minds" in the State to assist with engineering, science and technology endeavors. For example, two initiatives currently being pursued by UH include ultrasonic, infrared, and electromagnetic tank inspections, and permanent-magnet, wall-crawling mobile robots for remote inspection of back-side corrosion.

These initiatives and numerous proposed updates to TIRM procedures are in addition to the improvements and enhancements already approved by the Regulatory Agencies under the AOC. Furthermore, additional initiatives will be introduced prior to the Red Hill AOC SOW Section 5.4 scoping meeting. Presenting applicable TIRM updates should help expedite the scoping process and facilitate a smooth transition from approval of the DTRR, to scope development of further improvements to the tank inspection and repair process.

We look forward to meaningful and productive collaboration with the EPA and the Hawaii DOH on further refining the TIRM process. If you have any questions or require more information please contact Mr. Donald Panthen at (808) 473-4148 or myself directly. Thank you again and I look forward to advancing this important AOC work in the very near future.

Sincerely.

M. R. DELAO Captain, CEC, U.S. Navy Regional Engineer By direction of the Commander

Copy to: Commanding Officer, NAVFAC and Expeditionary Warfare Center