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In reply, please refer to:

September 6, 2024

Rear Admiral Stephen Barnett
Navy Closure Task Force – Red Hill
850 Ticonderoga Street, Suite 110
Joint Base Pearl Harbor-Hickam, Hawaii 96860
[via email only: stephen.d.barnett.mil@us.navy.mil]

Dear Rear Admiral Barnett:

SUBJECT: Conditional Approval of NCTF-RH Revised Tank Cleaning Verification Plan

On January 18, 2024, the Hawaii Department of Health (DOH) conditionally approved the Navy Closure Task Force – Red Hill's (NCTF-RH's) December 15, 2023 tank cleaning submission for the Red Hill Bulk Fuel Storage Facility, one of the conditions being that the NCTF-RH must receive the DOH's approval for a plan to verify that the tanks, sumps, and other infrastructure remaining in the tanks are sufficiently cleaned. After the initial Tank Cleaning Verification Plan was submitted on January 12, 2024, the DOH provided comments on four iterations of this plan, including the enclosed comments.

The DOH received the NCTF-RH's latest July 26, 2024 tank cleaning verification submission, which included the following enclosures, hereinafter collectively referred to as the July 2024 Tank Cleaning Verification Plan:

- Enclosure 1: NCTF-RH Revised Tank Cleaning Verification Plan – July 26, 2024; and
- Enclosure 2: NCTF-RH Quality Validation Plan Addendum – July 26, 2024.

After review, the DOH conditionally approves the July 2024 Tank Cleaning Verification Plan for implementation, provided that:

1. The NCTF-RH provides the DOH up-to-date, detailed schedules of tank cleaning and verification activities as soon as possible, so our staff can plan to be present.
2. The DOH has access to observe cleaning and verification at all times. Continue to accommodate our staff.

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3. The DOH is allowed to visually inspect cloths from the "cloth rub test" at any time and place. For example, if the DOH cannot enter a tank for safety reasons, we may require a sample cloth be brought out of the tank into the tunnel for us to inspect during verification.
4. The NCTF-RH does not dispose of any cloths until the DOH approves or conditionally approves the final quality validation (QV) report for the associated tank.
5. The QV reports include shell roll out diagrams showing the date each plate was washed, rinsed, and inspected, and the locations of cloth rub tests and corresponding photos.
6. The DOH may require improvements to the verification process, based on lessons learned from previous tanks.
7. The NCTF-RH submits for the DOH's review and approval before execution, a tank cleaning verification plan for the 6 tanks (Tanks 1, 13, 14, 17, 18, and 19) that were previously cleaned.
8. Before pressure washing begins, the NCTF-RH responds to our enclosed comments, updates and corrects the Tank Cleaning Verification Plan as described in our comments, and makes the updated Plan publicly available.

If you have any questions regarding this letter or its enclosure, please contact Kelly Ann Lee, DOH Red Hill Project Coordinator, at KellyAnn.Lee@doh.hawaii.gov or (808) 586-4226.

Sincerely,

Kathleen Ho

KATHLEEN S. HO
Deputy Director for Environmental Health

Enclosure

c (w/encl.) [via email only]:

Ash Nieman, EPA
Jamie Marincola, EPA
RDML Marc Williams, NCTF-RH
CAPT Steven Stasick, NCTF-RH
Joshua Stout, NCTF-RH
Noor James, NCTF-RH

Enclosure
DOH Comments on NCTF-RH Revised Tank Cleaning Verification Plan, July 26, 2024
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General Comments

1. Verify that all dates in this document are correct. Some errors noted on the first page of Enclosure 1 are:
 - a. Paragraph 1: The previous version of the Tank Cleaning Verification Plan was submitted on June 20, 2024, not June 13, 2024.
 - b. Paragraph 2: The initial Tank Cleaning Verification Plan was submitted on January 12, 2024, not January 10, 2024.
 - c. Paragraph 2: The Tank Closure Plan, Supplement 2 was submitted on May 31, 2023, not February 28, 2024. Based on the time difference, was this intended to refer to a different document?
 - d. Paragraph 2: The first revised Tank Cleaning Verification Plan was submitted on April 15, 2024, not April 12, 2024.
2. We understand a separate plan will be submitted to address cleaning verification for Tanks 1, 13, 14, 17, and 18. The DOH's preference is to apply the same method to all tanks, where feasible. If not feasible, modifications to the established method can be requested for the DOH's consideration and approval.

Specific Comments

3. **Section 1. Introduction, Enclosure 1, Page 1:** Again, the DOH's May 9, 2024 letter did not "propos[e] to adopt the definition of 'clean' from the Society for Protective Coatings (SSPC) Surface Preparation Standard No. 1 – Solvent Cleaning (SP-1)." This was Comment 2 of our previous comment letter, dated June 6, 2024. The NCTF-RH "acknowledged" the comment in its June 20, 2024 response but did not correct the plan. Correct the plan accordingly.
4. **Tier 3: Quality Validation (QV) by Third-Party Certified Inspector, Enclosure 1, Page 4:** States "NCTF-RH will provide documentation demonstrating the qualifications of the [Certified Coatings Inspector Certification] CIP Level 2 and CIP Level 3 inspectors once these individuals have been identified." This should be updated, as the inspectors and their credentials are provided in the addendum that came with this plan (Enclosure 2).
5. **Section 3.1. Primary Methods, Enclosure 1, Page 5:** States "The AMPP [Association for Materials Protection and Performance] inspector will rely primarily on in-tank lighting to inspect the tank surface. The inspector will maintain a separate light source for up-close inspection as well as for areas where in-tank lighting is not sufficient. For compatible products, a blacklight (365 nanometer intensity of 4,000 microwatts per square centimeter at 15 inches) may augment inspection to facilitate screening." Page 3 of this plan summarizes why the NCTF-RH ruled out ultra-violet (UV) light as an effective verification method. Explain the following in the revised Plan:

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- a. What “compatible products” refers to. Page 3 states UV was determined ineffective for viewing JP-5.
 - b. How this “blacklight” is different (in wavelength, etc.) than the “UV-bandpass camera” mentioned on page 3 that was used to determine UV was ineffective.
6. **Step 4 – Quality Validation, Enclosure 1, Page 10:** Which item or items listed in the QV report will include a shell roll out diagram? The May 13, 2024 version of the Tank Cleaning Verification Plan listed “Shell Roll Out Diagrams showing dates each plate has been washed, rinsed and inspected” and “Shell Roll Out Diagrams showing general locations of photographs and cloth rub tests” as items in the QV reports. These were replaced by “Summary Drawing of Sample Locations” in the July 26, 2024 Tank Cleaning Verification Plan, so it is unclear where the shell roll out diagrams will be included in the QV reports.
7. **Section 6: Sample Size, Enclosure 1, Pages 12-13:** This section was not updated to reflect the minimum required confirmation sample frequency of 96 samples per tank, which is discussed in Section 3.1.2. Update Section 6 and the *NCTF-RH Quality Validation Plan Addendum* (Enclosure 2), which still states “[c]loth rub testing is not set at a frequency, but rather by visual indication of contamination.”