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In reply, please refer to:
File:

September 9, 2025

Rear Admiral Brad Collins
Commander, Navy Closure Task Force – Red Hill
850 Ticonderoga St., Ste. 110
Joint Base Pearl Harbor Hickam, HI 96860-5101
[via email only: brad.j.collins.mil@us.navy.mil]

Dear Rear Admiral Collins:

SUBJECT: DOH Comments on *Tank Closure Plan, Supplement 4*

The Hawai'i Department of Health received the Navy Closure Task Force – Red Hill's letter, dated May 30, 2025, enclosed with:

- Enclosure 1: *Tank Closure Plan, Supplement 4, Detailed Closure Design*, dated May 31, 2025;
- Enclosure 2: *Close Out Report for Tank 1*, dated January 23, 2007;
- Enclosure 3: *Preliminary Engineering Report for Red Hill Tank #1 – Center Tower and Catwalk Inspection*, dated March 23, 2022;
- Enclosure 4: SGH memo subject "*Structural Considerations for Decommissioning of Surge Tanks at Underground Pump House, Join Base Pearl Harbor-Hickam, Hawaii,*" dated November 12, 2024, revised January 27, 2025;
- Enclosure 5: *Technical Report, Cleaning and Abandoning of Cross Country Pipelines*, dated January 2005;
- Enclosure 6: *Demolish JP-5 Slop Tank at the Red Hill Fuel Facility, Fleet and Industrial Supply Center, Pearl Harbor, Hawaii, Technical Report*, dated April 2009;
- Enclosure 7: *Final Demolition Report, Demolish Abandoned tank Cleaning Water Piping and JP-5 Pipeline and Appurtenances, Red Hill Bulk Fuel Storage Facility, NAVSUP*, dated June 2012; and
- Enclosure 8: *Tank Coating System Evolution, Tank Coating and CIR History*, last updated May 2025.

We are providing the enclosed comments. If you have any questions, please contact Ms. Kelly Ann Lee, Red Hill Project Coordinator, at (808) 586-4226 or kellyann.lee@doh.hawaii.gov.

Sincerely,

Kathleen Ho

KATHLEEN S. HO
Deputy Director for Environmental Health

Enclosure

c [via email only]:
Jamie Marincola, EPA
Ash Nieman, EPA
Tonya Russi, EPA
RDML Marc Williams, NCTF-RH
CAPT Richard Barkley, NCTF-RH
Joshua Stout, NCTF-RH

Enclosure 1: Tank Closure Plan, Supplement 4, Detailed Closure Design

General Comments

1. We are not providing comments on Section 4. Update on Tank Cleaning Verification Plan at this time, as we understand the Navy Closure Task Force – Red Hill (NCTF-RH) is preparing a submission on this topic with more recent information.

2. Add a reference section with full references for all documents cited in *Tank Closure Plan, Supplement 4, Detailed Closure Design* (*Supplement 4*). We are unable to determine what citations such as "DON 2019" refer to.

3. As stated most recently in our March 13, 2025, response to the groundwater flow model, the NCTF-RH's modeling cannot be used as a line of evidence to support decision-making. The Hawai'i Department of Health (DOH) and U.S. Environmental Protection Agency disapproved the groundwater flow model on March 17, 2022, and have not approved subsequent versions.

Specific Comments

4. **Page 9, 2.1 Update on Beneficial Non-Fuel Reuse Planning:** Will copies of the "DoD [U.S. Department of Defense] feasibility and cost analysis performed by the RAND Corporation in accordance with the 2023 National Defense Authorization Act (NDAA), and an investigation into the potential for energy-related reuses completed by the University of Hawaii" be made available to the public?

5. **Page 11, 3. Update on Removal of Fuel Pipelines:** Refers to "a 16-inch JP-5 pipeline" and "18-inch JP-8 (F-24) pipeline." Our understanding is that the 16-inch pipeline was used for JP-8 and F-24, and the 18-inch pipeline was used for JP-5. Please verify.

6. **Page 11, 3.1 Lower Access Tunnel Pipeline Removal:**
    a. States, "Since the existing pipes are coated in lead paint, a strip of coating will be removed at each location where the pipes will be cut." Our understanding from the NCTF-RH's August 2024 *Demolition Work Plan, DE23-1592 Red Hill Pipeline Removal* (PDF page 16) and January 24, 2025, *Sectional Valve and Reducer Removal Concept of Operation (CONOP)* (page 11), both of which have the DOH's conditional approval, is that the cut locations of pipe will be wrapped with tape. Provide clarification.
    b. States, "Piping and appurtenances that are left in place will be maintained by re-painting and sealing . . . ." What piping will be left in-place, other than the former fuel-oil recovery (FOR) line and utility (e.g., electrical, ventilation) conduits?

7. **Page 12, 3.1.1 Alternative Closure Strategy for Tank Gallery Pipe Headers:**
    a. In this submission, the NCTF-RH is proposing to fill some pipes with foam instead of removing them because "traditional pipeline removal will be time-consuming and hazardous to both workers and adjacent infrastructure."

   i. What type of foam is the NCTF-RH proposing to use? Provide the foam's name and Safety Data Sheet information.
   ii. The NCTF-RH previously removed an 18-inch bulkhead pipeline from the lower tunnel, which demonstrates that piping can be removed safely from congested spaces in the tunnel. Why do these challenges now warrant leaving the pipe headers in-place in the tank gallery?

b. States, "The foam will also absorb and encapsulate residual fuel and water . . . ." Why would there be residual fuel and water in the pipes? According to the NCTF-RH's August 2024 *Demolition Work Plan, DE23-1592 Red Hill Pipeline Removal* (PDF page 13) and *Pigging CONOP, Version 3*, both of which have the DOH's conditional approval, the pipes should be clean and free of residual fuel and water.
c. Lower tunnel access will be required for long-term soil vapor and groundwater monitoring. Fully removing the 16-inch, 18-inch, and 32-inch pipelines, as conditionally approved by the DOH, will potentially reduce future fall hazards for personnel accessing the lower tunnel.

8. **Page 12, 3.2 Surge Tank Pipeline Removal:** Did Surge Tank 2 also have pressure safety loop piping removed?

9. **Page 14, 4.1.1 Tanks 13, 14, 17, and 18:** States, "After the CIR [Clean, Inspect, Repair] was completed for Tanks 13 and 17 in 2021, Tank 13 was returned to operation but not to service, and Tank 17 was returned to service but not filled." Clarify the distinction between "return to operation but not to service."

10. **Page 15, 4.1.2 Tank 19:**
    a. What documentation was used to support the following statement? "During the last CIR completed in 1999, cleaning steps 1-5, as described in Section 4 above, were conducted for Tank 19."
    b. States, "DOH Form Appendix I *Notification for Underground Storage Tanks* was completed, but it is not known if it was submitted to DOH for review." The DOH received this form, which indicated Tanks 1 and 19 were permanently out of use. The Navy later sent a letter, dated August 19, 2021, clarifying that the tanks are temporarily out of use.

11. **Page 16, 4.1.3 Tank 1:**
    a. States, "The cause of the deteriorated coating was not confirmed, but contributing factors are speculated to include a surface bulge of the spring line of the lower dome . . . ." Has it been verified that there is no trapped product between the liner and concrete tank behind the bulge?
    b. States, "DOH Form Appendix I *Notification for Underground Storage Tanks* was completed, but it is not known if it was submitted to DOH for review." The DOH received this form, which indicated Tanks 1 and 19 were permanently out of use. The Navy later sent a letter, dated August 19, 2021, clarifying that the tanks are temporarily out of use.

12. **Pages 18-22, 5.1 The 20 USTs [Underground Storage Tanks]:**
    a. **Center Tower and Catwalk:** States, "Tanks 5, 6, and 12 have a spiral staircase around the center tower that will be dismantled and removed to the extent necessary to facilitate tank cleaning. The remainder of the spiral staircase will be abandoned in place." If the spiral staircase has no future use, it should be removed in its entirety and not abandoned in place.
    b. **Fuel Oil Recovery (FOR) line(s):**
        i. States, "In the final closure configuration, the existing FOR line will be maintained to provide a long-term egress pathway for moisture that may accumulate inside the tank." What is the long-term plan for inspecting and maintaining the FOR line?
        ii. Some of the tanks are not currently connected to the existing FOR line system, will these tanks be reconnected to the FOR line?
    c. **Sample Lines:** States, "Any sample lines extending above the tank floor will be abandoned in place (if present)." This statement is acceptable if it pertains to Tank 1. In all other tanks, the sample lines should be removed above the tank floor and capped, as stated in the NCTF-RH's February 5, 2025, *Response to DOH Comments on Principal Physical Modifications Memorandum* (response 11).
    d. **Tell-Tale Leak Detection System:** How does the NCTF-RH plan to confirm there is no product trapped in tell-tale piping behind the liner in previously sealed off tanks? Does the NCTF-RH have documentation indicating the tell-tale space behind the plate welds were filled prior to sealing the opening?
    e. **Table 5-1. Summary of Interior Tank Modifications for 6 OOS [Out of Service] USTs:** For Tank 1, has the NCTF-RH considered cutting the bottom of the instrument well to make sure there is no fuel trapped at the bottom?

13. **Page 26, 5.2 Surge Tanks:** States, "The venting pathway will be plugged inside the tank in a manner to be determined." We understand the main fuel tanks will be passively vented to prevent condensate from accumulating. What is the rationale for plugging the Surge Tank venting pathway?

14. **Pages 29-31, 7. Post-Closure Tank Monitoring:**
    a. For the *Long-Term Structural Integrity Assessment of the Red Hill Underground Storage Tanks*, dated May 26, 2023, the acronym "SGH" refers to the Navy contractor that prepared the report, Simpson Gumpertz & Heger Inc., not "Seismic and Geotechnical Hazard."
    b. States, "Soil vapor probes installed at multiple depths (~5' and ~20') below each UST have been monitoring hydrocarbon vapors monthly since 2006." We understand there are two to three soil vapor probes under Tanks 2 through 18, but not under Tanks 1 and 19. Please verify.

d. States, “natural attenuation processes are actively degrading hydrocarbons over time . . . These lines of evidence collectively demonstrate that there is no active migration of legacy fuel trapped behind the tank shell . . . .” While there may be some natural attenuation, this is not a line of evidence that there is “no active migration of legacy fuel.” Fuel can still migrate when natural attenuation is occurring.
e. What is the NCTF-RH's plan to determine if the “legacy fuel trapped behind the tank shell” is present at volumes that may warrant concern? Provide details on how this determination will be made.
f. Page 30 states, “Initial testing of the temperature and humidity inside of Tanks 3 and 13 confirmed stable environmental conditions.” However, page 16 states, “In 2021, approximately 1,600 gallons of non-hazardous water was drained from Tank 1. The source of the water was not confirmed but it was speculated that it could have been due to a lack of ventilation resulting from the blinds installed by Dunkin & Bush in 2006.” Was the testing in Tanks 3 and 13 done under similar conditions as Tank 1, i.e. little ventilation? If conditions were similar, why did 1,600 gallons of water collect in Tank 1, while the humidity in Tanks 3 and 13 was “stable?”
g. This section states that the twenty main fuel tanks and four surge tanks were coated with zinc chromate. Provide a written risk evaluation of the potential for zinc chromate, and any of its constituents, to impact groundwater. Include a written description of how the risk evaluation will inform the NCTF-RH’s approach to proactively address potential risk before contaminants impact the environment.

15. **Page 36, Photo Log:** There are no photos. Add missing photos.

Enclosure 3: Preliminary Engineering Report for Red Hill Tank #1 – Center Tower and Catwalk Inspection, Dated March 23, 2022

16. **PDF page 3:** States, “Once the repairs to the center tower and catwalk are complete and inspected, HEG will issue a final report . . . .” Were the repairs completed, and was the final report issued?

Enclosure 5: Technical Report, Cleaning and Abandonment of Cross Country Pipelines, PRL 03-13, Pearl Harbor, Hawaii, Dated January 2005

17. **Page 2-2, 2.1.3 Abandonment of Valve Chambers:** Were there any historical leaks in the valve chambers?

18. **Page 2-3, 2.2.2.2 VC-5 to VC-4 (East Bank of West Loch):**
    a. States “The leak repairs must be performed before this pipeline segment can be pigged.” Were the leak repairs done, and was the segment pigged?
    b. States, “The cleaned pipeline was not filled with grout because the pipeline may be transferred from FISC [Fleet Industrial Supply Center] to the Board of Water Supply.” Was it transferred? If not, does it need to be filled with grout?

19. **Page 2-3, 2.2.3 Abandonment of Valve Chambers:** States, “The valve chambers were not backfilled or covered with a concrete cap because the pipeline may be transferred from FISC to the Board of Water Supply.” Do these chambers need to be closed now, or were they transferred?

Enclosure 7: Final Demolition Report, Demolish Abandoned Tank Cleaning Water Piping and JP-5 Pipeline and Appurtenances, Dated June 2012

20. **Page 4-4, 4.4.1 Truck Fill Stand:** States, “The pipeline sections remaining in place were plugged with concrete and the area was subsequently backfilled.” Were the sections only plugged at the ends? If so, could there be residual fuel trapped inside?