RED HILL TANK CLOSURE PLAN

Response to 9 February 2023 EPA Comments

28 February 2023

Department of the Navy

Responses to 9 Feb 2023 EPA comments on the Red Hill Tank Closure Plan

GENERAL COMMENTS

1. *The Tank closure requirements are established in both EPA regulations and Hawaii Administrative Rules, but these rules do not dictate specific options for tank re-use. Due to the size and complexity of the RHBFSF, NRH will need to conduct a collective decision-making process for determining tank re-use. On January 31, 2023 NRH awarded a contract to Nakupuna Companies, a Native Hawaiian-owned small business to develop and execute a public outreach program to solicit information from the public of possible re-purposing of the RHBFSF tanks. EPA finds this an encouraging first step to ensuring transparent and collective decision-making on this process. Please respond to the following concerns regarding public engagement:*

a. By what methods will Nakupuna Companies solicit comments?

Response: Nakupuna will utilize two methods of fielding the survey. The first method will solicit input from the general population on Oahu via an online questionnaire. This website is currently under development, and people interested in submitting a survey can register online to receive updates as the process is developed. Interested personnel can now register at RH Repurposing (redhillrepurposing.com) to receive updates when the survey is available. The second means of fielding the survey involves mailing out paper copies to homes in the local area with information that can be used to submit a proposal online or returned via mail using the pre-paid stamped envelope.

b. Please provide a schedule establishing dates for major milestones in the stakeholder outreach process.

Response:

Major milestones in the outreach process are provided below.

Feb 2023	Contract Award and Kick-off Meeting
Apr 2023	Online Survey Posted and Mailers Sent Out
May 2023	FTAC Meeting to Discuss Survey Status
Nov 2023	FTAC Meeting Presentation on Survey Results

c. How will NRH develop an impartial grading scale to evaluate the top five ideas for tank re-use? I.e., what do "merit and benefit" mean in this context?

Response: Merit and benefit have essentially been defined by Section 336 of the National Defense Authorization Act for Fiscal Year 2023 (FY23 NDAA). The FY23 NDAA requires a report be submitted to Congress in February of 2024 that considers the following criteria for each alternative use:

- Environmental impact analysis
- Potential military or local economy benefits
- Life-cycle costs including O&M and disposal costs
- Design and construction costs

d. What decision-making process will be used to select the top five ideas?

Response: The Navy will utilize a third party to evaluate the results of the survey and assist the Navy in selecting the top five or six ideas. Ultimately, the decision on repurposing resides with the DoD.

e. *How will local community organizations be involved in the decision-making process?*

Response: Local community organizations will have the opportunity to provide input by responding to the survey on-line or through paper copies. In addition, the Navy will keep local community organizations informed by press releases, website updates, and monthly neighborhood board meetings. Updates will also be provided during engagements with political leaders at the local, state, and national level.

f. *After a top five options are chosen, NRH states that, "[the ideas] will be further evaluated on feasibility considering environmental, engineering, maintenance, safety, cost, and benefit." Please define the "benefit" metric of "feasibility," as used in this sentence.*

Response: The "benefit" portion of the analysis has essentially been defined by Section 336 of the National Defense Authorization Act for Fiscal Year 2023 (FY23 NDAA). In addition, the Navy will consider benefits of the options in terms of their positive environmental, social, and economic aspects. The term feasibility indicates the degree to which the project is practical and achievable, given the constraints presented by the layout of the facility. In addition, a feasible project must comply with all applicable laws and regulations. The Navy intends to utilize a third party to evaluate the feasibility of each concept submitted.

g. *This public engagement process focuses on "recommendations for the Navy to re-purpose the [RHBFSF]." Please confirm that NRH will continue to consider tank closure and abandonment/destruction a possible course of action. Please confirm that all public engagement will clearly explain that there is not a requirement that ranks must be re-repurposed.*

Response: The Navy is currently pursuing tank closure in-place as the permanent tank closure method and has officially requested Hawaii Department of Health (DOH) approval for this course of action. All public engagement will be prefaced with the notion that there is no requirement to repurpose Red Hill Bulk Fuel Storage Facility (RHBFSF). A statement indicating as much will be included on the website and hard copies mailed out to the public. The Navy agreed to pursue the effort for beneficial non-fuel reuse at the request of DOH during a meeting on July 14, 2022. While consideration of non-fuel reuse is dependent on the permanent tank closure method selected, it is a separate process from underground storage tank (UST) closure.

2. *The successful completion of defueling and closure of the Tanks at the RHBFSF is fully reliant on a robust emergency planning and spill response capability. NRH, Contractors, and State and Federal Regulatory Agencies are all stakeholders in the process. The Closure Plan should be amended to provide greater detail on the roles and responsibilities of all stakeholders, to provide greater detail on emergency spill response capabilities, identify the previous training and exercises that have been conducted as well as a schedule of those that will be conducted prior to the initiation of closure. If this information exists elsewhere, please cite the relevant plans.*

Response: While closure of the Tanks will be initiated after defueling is complete, the Navy will use a process similar to the one used for unpacking and defueling to develop a fully robust emergency planning and spill response capability. Additional information is provided in Supplement 1 to the Red Hill Tank Closure Plan.

3. *The title page describes the plan as a "Tank Closure Plan." Consider re-titling this document to be more inclusive of facility components that are not tanks, but within the scope of closure. Example: "Closure of the RHBFSF Tank System" (or similar).*

Response: For consistency, the Navy prefers not to revise the title of the Tank Closure Plan, even though the plan does include closure of the pipelines and related appurtenances.

4. *Sections There are multiple occurrences of an acronym being defined multiple times. Please correct for clarity.*

   Response: Since the DOH intends to approve supplements to the Tank Closure Plan, rather than the entire plan as a whole, the Navy has no plans to update the language in the original Tank Closure Plan submitted on November 01, 2022. If the EPA can identify locations where acronyms are defined multiple times, the Navy will make revisions in a follow-on supplement.

5. *The lower access tunnel contains Fuel Oil Reclaimed (FOR) sumps and piping that need to be addressed as they are also being "closed." While not identified as Underground Storage Tanks (USTs), the FOR sump in the underground pumphouse should also be addressed.*

   Response: The Navy currently plans to maintain operation of the Fuel Oil Reclaimed (FOR) line, the associated sumps, and the FOR tank (Tank 311) to allow for the removal of any condensate that collects inside the tanks or groundwater that may collect inside the lower access tunnel.

SPECIFIC COMMENTS

6. *Page 12 – This section needs to correctly identify the extent of the UST systems. The 20 Red Hill tanks are part of 3 complex UST systems. Provide narrative description and visual depictions of the separate UST systems subject to this Plan.*

   Response: As requested, the Navy will provide the narrative description and visual depictions of the three UST systems in a future supplement to the Tank Closure Plan.

7. *Page 12 – Provide a description of how NRH will communicate to regulators those instances where portions of the facility (e.g., pipes, valves) have already been adequately assessed and decommissioned.*

   Response: The Navy will provide the regulators with schematics showing the portions of the facility that have been adequately assessed and decommissioned. Because of the critical infrastructure classification of these schematics, the schematics cannot be made available to the public.

8. *Page 20 – The vent description in the last paragraph is unclear. The vent is located at the top of the tank and yet is buried below the floor of the upper tank gallery. Please clarify.*

   Response: Each tank has a vent pipe that runs from top of tank, through the upper access tunnel, and connects to a common vent header that is parallel to and below the floor in the upper access tunnel. Depending on the tank location, the vent piping exits the facility at the top of the ridgeline, through elevator shafts, or through Adit 5.

9. *Page 21 – These seven drainage sumps need to be clearly identified, and it should be determined whether they are part of an UST system.*

   Response: The seven drainage sumps include the five AFFF sumps, the Zone 7 sump and the main sump. Once the tanks and pipelines are closed, the Navy expects these sumps will no longer be considered part of the UST system because the sumps will then be used only to store and convey infiltrating groundwater and any water that may drain from the RHBFSF tanks. Any water collected in these sumps will be discharged into the FOR tank (Tank 311) for removal and proper disposal by vacuum truck to the Navy's FOR Facility (FORFAC) on Joint Base Pearl Harbor-Hickam (JBPHH).

This is the same process currently used to dispose of any fluid in Tank 311.

10. *Page 24 – Section 3.2.2.1(a) of the Closure Plan states that there will be a Spill Response Plan prepared for the contractor's activities connected with closure. Clarify whether this will be separate from the RHBFSF Facility Response Plan, of if this existing plan will be amended (e.g., to cover contractor operations during closure).*

    Response: Supplement 1 to the Tank Closure Plan provides the requested clarifications.

11. *Page 25 - This section needs to specify what testing will be performed (e.g. on steel surfaces or on rinse water) to determine that the tank is satisfactorily cleaned. One concept would be to sample the rinse water to ensure that any contamination is less than any action levels if the water were to be released to the environment. If other methods are proposed, explain how cleaning standards will be established, and what measures will be taken if sampling indicates that standards are not met.*

    Response: Supplement 1 to the Tank Closure Plan provides the requested information.

12. *Page 26 – Section 3.2.1 indicates that the cleaning will be done using various standards which seem to indicate that the piping would be flushed with water to remove all product and residue, but this section indicates that the piping will be cleaned by blowing air through the piping. If this method is determined to be appropriate, then explain why the piping does not need to be flushed to clean them.*

    Response: Supplement 1 to the Tank Closure Plan provides the requested information.

13. *Page 28 – The "Types of Waste Expected…" from the site does not include contaminated piping and appurtenances. Please clarify how these contaminated objects will be handled.*

    Response: The contractor will handle metal piping and appurtenances by removing any free liquid and sending these objects off site for recycling as scrap metal. Scrap metal management is specifically excluded from the regulatory definition of solid waste per Federal regulations and the HAR.

14. *Page 28 – Clarify how EPA will be notified that all recoverable fuel has been transferred out of RHBFSF. Explain the "hand-off" process between Joint Task Force-Red Hill and Navy Region Hawai'i. Describe how this process will ensure knowledge and skill retention as necessary to remove residual waste safely and expeditiously from the tanks.*

    Response: The Joint Task Force-Red Hill (JTF-RH) will notify EPA when all recoverable fuel has been transferred out of the RHBFSF. Once defueling is complete, JTF-RH will hand off responsibility for tank and pipeline closure to the Navy. The Navy will safely and expeditiously remove residual waste, perform cleaning, and complete other closure activities, using qualified personnel, including those who have been working on the Tank Closure Plan and the defueling efforts.

15. *Page 29 – EPA recommends that NRH add a clarification to the following statement that hazardous and non-hazardous wastes require different handling methods: "Collect residue, other contaminated material, and all non-reusable materials, including disposable clothing, sorbents, brushes, rags, brooms, and containers. Package material in United States Department of Transportation (DOT) approved containers. Mark and label containers in accordance with DOT, EPA, and state requirements."*

    Response: Based on the products stored in the RHBFSF, the Navy expects that none of the waste will meet the regulatory definition of a hazardous waste. Nevertheless, as a Best Management Practice (BMP), the

Navy has elected to manage all waste generated and accumulated on site in accordance with the packaging, and accumulation area requirements for a hazardous waste, including weekly inspections and secondary containment and spill kits for liquid waste. Should a hazardous waste be generated, it will be managed and marked in accordance with State requirements (which are required to be consistent with EPA requirements).

16. *Page 29 – EPA recommends that NRH add additional details relating to ventilation procedures to the following statement/section, and potentially refer to a figure or additional plan to better clarify: "Thoroughly ventilate affected areas, especially if it is within an enclosed area. Comply with all safety, health and fire protection requirements."*

    Response: Supplement 1 to the Tank Closure Plan provides additional details related to ventilation procedures.

17. *Page 29 – EPA recommends that NRH include additional information or re-write portions of section "4.1.2 Waste Regulatory Framework," to describe the manifesting process in clear and sequential terms. For example, the following phrase could be changed to include information on regulatory requirements establishing manifest transfer protocol: "… and the HW must be manifested when it leaves the generator's control through final disposal."*

    Response: All hazardous waste generated during closure will be managed using a hazardous waste manifest in accordance with the detailed requirements of 40 CFR 262.20 through 262.29, which lay out the sequential steps for manifesting. For solid waste, shipping papers will be employed in lieu of a manifest.

18. *Page 29 – Identify the type of nozzle being used for cleaning to ensure the tool is appropriate for managing rinsate and sludges. Consider updating Section 3, Sequence and Process for Cleaning of Tanks and Piping System, with this information.*

    Response: The nozzle referenced on page 29 of the Tank Closure Plan is not for cleaning, but instead is part of the pipe that exits the bottom of the tank.

19. *Page 30 – Quantify the amount of non-hazardous waste that would be considered "large," thus necessitating a secondary storage area. What are possible scenarios, besides accumulation of wastes, that would necessitate moving waste material? What closure activities might interfere with storage?*

    Response: Supplement 1 to the Tank Closure Plan provides the requested information.

20. *Page 30 – Once NRH has determined a waste accumulation storage area, EPA recommends that NRH make preemptive measures to protect sensitive receptors and migratory pathways to water resources. This information should be incorporated or addressed in some manner by the Environmental Protection Plan.*

    Response: Per regulation, all hazardous wastes shall be accumulated at or as practicably near the point of generation, and are required to have protective measures. As BMPs for solid wastes, the Navy has proactively elected to manage all waste generated and accumulated on site in accordance with the packaging and accumulation area requirements for a hazardous waste, including weekly inspections and secondary containment and spill kits for liquid waste. The Navy will establish all waste accumulation areas as far away as practicable from storm drains, ditches, swales or drainage systems that lead to streams, rivers or Pearl Harbor. Additionally, existing paved areas will be used to accumulate waste, and all liquid wastes will be required to be accumulated in secondary containment. Finally, accumulation areas will be inspected weekly for container deterioration and leaks. As described in Supplement 1, the contractor will be required to document these procedures in the Environmental Protection Plan submitted to the Navy for approval.

21. *Page 30 – Specify required minimum contents of spill kits.*

Response: Specification of spill kit contents and amounts of response equipment is not possible until the contractor proposes how much waste is to be generated and accumulated, in what type of container, and the frequency of removal. As described in Supplement 1, the contents of the spill kit will be established in the contractor's EPP and will be based on the volumes, waste type, container, and frequency of waste removal. The EPP will be approved by the Navy and will be provided for review to DOH and EPA. Spill kits will contain sufficient absorbents, clean up tools, containers and appropriate personal protective equipment (PPE) such as gloves, boots, coveralls, safety glasses and first aid kit to address the volumes and type of waste accumulated at each accumulation point.

22. *Page 30 – Specify distance and estimated time to deployment for primary spill kits near waste accumulation areas. Specify distance and estimated time to deployment for secondary spill kits near waste accumulation areas.*

    Response: The distance and estimated time to deployment for primary and secondary spill kits will be documented in the contractor's EPP, as described in Supplement 1 to the Tank Closure Plan. The EPP will be approved by the Navy and will be provided for review to DOH and EPA.

23. *Page 30 – Clarify responsibilities for hazardous waste inspection, identifying who will be performing the inspections and how inspection procedures may differ between hazardous and non-hazardous waste: "Waste accumulation areas shall be inspected weekly and the inspections will be documented." This information may be relevant to the Environmental Protection Plan.*

    Response: While hazardous waste is not anticipated to be generated, the Navy has elected to manage all solid waste generated and accumulated on site in accordance with the packaging, and accumulation area requirements for a hazardous waste, including weekly inspections and secondary containment and spill kits for liquid waste. The contractor will perform the weekly inspections, and the Navy will provide compliance oversight in accordance with the existing Waste Accumulation Point manual for JBPHH. The contractor's method and means to conduct the weekly inspections will be established in the contractor's EPP that must be approved by the Navy.

24. *Page 31 – Establish a minimum distance between established waste accumulation areas and drainage systems/waters.*

    Response: As BMPs, the Navy will establish solid waste accumulation areas as far as practicable from storm drains, ditches, swales or any drainage system that leads to streams, rivers, or Pearl Harbor. Additionally, although not required for non-hazardous waste, all liquid waste accumulation will be located within secondary containment and solid waste will be stored on lined areas or in lined containers.

25. *Page 31 – Consider frequent inspections of waste accumulation areas. Suggested frequency is daily.*

    Response: State and federal regulations require weekly inspections of hazardous waste accumulation containers. There is no similar federal or state inspection requirement of solid waste accumulation containers. Based on the products involved, the Navy expects no waste generated will meet the regulatory definition of a characteristic or listed hazardous waste. As a BMP, the Navy believes the weekly inspection of the solid waste accumulation areas and the use secondary containment is sufficient.

26. *Page 32 – Under "4.4 Waste Determination," NRH indicates that "[waste characterization] …will be done through user's knowledge of the materials or the process by which these materials became wastes." Please clarify how one will determine if field sampling and laboratory analysis will be required for waste characterization. Reference staff/contractors who will be empowered to make this*

decision.

Response: The Navy will follow 40 CFR 262 to determine if sampling and analysis will be needed for waste characterization. In accordance with 40 CFR 262.11 a person who generates a solid waste must make an accurate determination as to whether that waste is a hazardous waste. The determination must be made at the point of waste generation and must apply knowledge of the hazardous characteristics of the waste in light of the materials or processes used to generate the waste. When available knowledge is inadequate to make an accurate waste determination, the contractor will employ testing in accordance with the applicable methods provided in Subpart C of 40 CFR part 261. Appendix B Form 1 of the Closure Plan documents the factors used in making the waste determination, waste classification, container storage type, volume, accumulation area and disposal option selected in a single form per waste stream to simplify required recordkeeping. The closure plan requires the contractor to perform the waste determination. However, ultimate responsibility for approval of the waste determination will be made by JBPHH Environmental Service staff authorized by the Commanding Officer of JBPHH.

27. *Page 33 – The Plan states that, "[a]ny spills will be addressed per local procedure…" Please clarify which procedures will be followed, other than the Facility Response Plan for the RHBFSF.*

    Response: As described in Supplement 1 to the Tank Closure Plan, once the contractor has provided the specific methods and means for tank cleaning and waste management, the Navy will prepare an addendum to the Red Hill Fuel Storage Facility Response Plan (FRP) for DOH and EPA review and comment. The FRP addendum will cover spill prevention and control measures related to tank cleaning and waste management.

28. *Page 33 – EPA requests access to hazardous waste manifests. Please clarify if these requests will be honored, and in which timespan a response will occur.*

    Response: The Navy expects all returned hazardous waste manifests will be recorded and placed in the operating record of the RHBFSF. Although not required by regulation, the Navy will require solid waste shipping papers to be returned after disposal facility receipt of the material. Returned hazardous waste manifests and solid waste shipping papers will be recorded in the RHBFSF operating record within 10 working days of receipt. As required by RCRA and the HAR, regulator access to the operating record will be provided upon request.

29. *Page 35 –It is concerning that Navy could delay all work to close the tanks because they have not been able to address the issues of handling, transportation, and disposal of the waste products. Please explain how these tasks will be addressed in a timely manner, to not slow down the work of completing tank closures.*

    Response: Section 4.7 of the Closure Plan documents EPA acknowledgement of a nationwide capacity deficiency for the management of hazardous waste that requires incineration. For Red Hill tank closure, the incineration backlog is only a concern if the residuals removed are determined to be a land disposal restricted hazardous waste. During the closure process, no waste is expected to meet the definition of a listed or characteristic hazardous waste, so the Navy does not expect the national capacity shortfall to affect the closure process.

30. *Page 38 – The last paragraph of this section indicates that navy will perform a structural analysis to evaluate the long-term integrity of the empty tanks. Will this analysis also address the concrete that is encasing the steel tank? As the concrete degrades there will be more water/precipitation that will*

impact the steel tanks which will impact the long-term integrity of the steel.

Response: In the structural analysis, the Navy will address the general risk of long-term failure, including the steel and the concrete. This information will be provided to the EPA and DOH as part of Supplement 2.

31. *Page 40 – Paragraph 4.b.i needs clarification as to how the venting will be handled.*

    Response: Supplement 1 to the Tank Closure Plan provides clarification and additional information on the venting procedures.

32. *Page 40 – Paragraph 8 needs to recognize that the UST system includes more than an individual Red Hill tank.*

    Response: The Navy acknowledges that the UST system includes piping as well as the RHBFSF tanks.

33. *Page 56 – This section needs to fully describe the extent of the UST systems being closed.*

    Response: In a future supplement to the Tank Closure Plan, the Navy will fully describe the extent of the UST systems being closed. In summary, the portion of the UST system being closed includes the twenty underground storage tanks, the four surge tanks, and the associated piping between the storage tanks and the Underground Pump House (UGPH) for all three types of fuel stored at the RHBFSF.

34. *Page 62 – There is a reference to Appendix A in the table. This reference doesn't seem appropriate as it appears to be referring to a scoping completion letter rather than the POAM.*

    Response: The reference is to the COPC screening criteria provided in Appendix A of the scoping completion letter, dated February 4, 2016.

35. *Page 82 – HAR is used as an abbreviation for the Hawaii Administrative Record but all other references it is for the Hawaii Administrative Rules.*

    Response: The Navy acknowledges that HAR is an acronym for Hawaii Administrative Rules, and this will be corrected in a future supplement.

36. *Page 84 – Please specify what type of milestone updates will warrant a public meeting.*

    Response: In Appendix A of the Closure Plan, a Plan of Action and Milestones outlines closure milestones and quarterly public stakeholder engagements through 2023. The public will be kept informed by press releases, website updates, social media updates, and the Navy's attendance at monthly neighborhood board meetings with the community. Additionally, the Navy will provide updates during engagements with political leaders at the local, state, and national level.

37. *Page 97 – Please describe the type of Public Stakeholder Engagement activities planned for the following tasks listed in the Gantt Chart timeline: 2.2 - 2.7, including whether the activity will be open to the public and if public will have an opportunity to ask questions and submit comments.*

    Response: The expectation is that public outreach will center on two activities: 1) release investigation and response, and 2) potential beneficial non-fuel reuse. The Navy has begun the process for obtaining proposals from the public for the beneficial re-purposing of the Red Hill Bulk Fuel Storage Facility. The Navy hired a third party on-island public relations firm to develop a process for obtaining proposals from the public for the

beneficial re-purposing of the facility prior to the next regularly scheduled Fuel Tank Advisory Committee in the spring of 2023. The Navy expects the public relations firm to solicit input from the public before collecting all information. The public relations firm will be responsible for delivering a final report to the Navy recommending the proposed beneficial reuse for the Red Hill Bulk Fuel Storage Facility. The Navy will announce the recommended proposed beneficial re-purposing option to the Regulatory Agencies and the general public. The public will be kept informed by press releases, website updates, social media updates, and during monthly neighborhood board meetings with the community. Additionally, updates will be provided during key leader engagements with political leaders at the local, state and national level.