

Navy's Response to DOH Comments on Red Hill Pipeline Removal Work Plan, Demolition Work Plan, and Environmental Protection Plan

WORK PLAN, DE23-1592 RED HILL PIPELINE REMOVAL, RED HILL BULK FUEL STORAGE FACILITY, DATED AUGUST 2024

General Comments

1. The Hawai'i Department of Health (DOH) May 2022 Emergency Order (EO) requires the Navy Closure Task Force – Red Hill's (NCTF-RH's) Closure Plan to address the "ultimate disposition of any accumulated sludge or waste material from the 20 Tanks, four surge tanks, and associated piping." For piping outside of the subject plan's scope of work, provide a list of future plans and which pipes they will address. Piping not addressed in this plan includes, but is not limited to, the surge tank pipes, underground pumphouse pipes, AFFF (aqueous film forming foam) concentrate and retention lines, the old telltale system, steam pipes, and unused nozzles protruding from the wall face at the bottom of the main fuel storage tanks and other previously abandoned lines at the facility.

Navy Response -

The Navy recognizes that Aptim's current scope of work does not cover some specific pipelines, such as the surge gallery, AFFF concentrate, and AFFF retention. The Navy plans on addressing all remaining piping and appurtenances by adding it to either the tank cleaning contract or the pipeline removal contract, where they will be handled in accordance with the approved plans. Should additional clarification be needed for specific item, the Navy will coordinate with DOH (and EPA) for clarification.

2. Provide detailed CONOPs (concept of operations) to the DOH for all operations that pose a risk of release to the environment, for example, spool drops, valve removals, and pigging. CONOPs must include details on spill containment measures and how residual fuel checks will be conducted. The DOH must approve or conditionally approve the CONOP before the operation begins. If an operation will deviate from a previously approved general CONOP, a separate CONOP must be approved by the DOH before implementation.

Navy Response -

The Navy concurs.
A detailed CONOPs will be submitted for review prior to APTIM's subcontractor performing the scope of the work. Navy will not start work until CONOPs is approved or conditionally approved.

Specific Comments

3. Page 7 (document page #s), Section 5.1: What is the maximum load the trolley hoist system is expected to be used for?

Navy Response -

The maximum load the trolley hoist system is expected to be used for is 8,300 pounds, during only the initial mobilization and final demobilization of the train locomotives. The

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trolley hoist system will be used regularly for loads between 2,100 and 4,200 pounds for pipe segments and valves without their motorized actuators.

4. Page 8, Section 5.3: Provide a copy of the Existing Conditions report. Will the final methods be determined based on this report?

Navy Response -

A copy of the Existing Conditions report will be submitted when finalized. The final methods will not be determined based on this report.

5. Page 8, Section 5.4.1: Provide a copy of the "asbestos hazard abatement plan."

Navy Response -

APTIM has submitted an asbestos hazard abatement plan to NAVFAC and has received approval on the plan submissions with comments on 15 November 2024. APTIM has revised the submittal based on the comments received by NAVFAC and resubmitted to NAVFAC on 9 December 2024. Once final approval is provided by NAVFAC, the plan will be provided to DOH and EPA.

The asbestos abatement plan and this work plan are separate deliverables by contract. Therefore, NAVFAC will keep them as separate documents. However, as stated above, DOH and EPA will be provided with a copy of the asbestos hazard abatement plan.

6. Pages 9 and 10, Section 5.4.2, No. 2: Provide details on how "Hawaii Administrative Rules 11-260.1-279.1 (Hazardous Waste Management General Provisions) will be complied with."

Navy Response -

The line in Section 5.4.2 of the Work Plan referenced in this review comment states that "Applicable sections of Hawaii Administrative Rules 11-260.1-279.1 (Hazardous Waste Management General Provisions) will be complied with." As such, the Work Plan and EPP spell out compliance with requirements applicable to our waste generation, accumulation, characterization, documentation, training, inspections, packaging, marking/labeling, transport, and disposal.

The Hawaii Administrative Rules references the Federal regulations. The Work Plan includes a statement regarding the "applicable" sections of HAR 260.1-279.1. Specifically, Section 5.4.2 of the Work Plan describes how APTIM will:

- Sample and characterize waste for hazardous waste determination,
- Manage waste based on characteristic and volume (referencing the requirements from RFP Section 01 57 19),
- Manage accumulation based on time,
- Minimize generation of hazardous waste,

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- Coordinate hazardous waste disposal with the generator NAVFAC (including providing analytical results, waste profiles, land disposal restriction forms, hazardous waste manifests, hiring a permitted hazardous waste transporter, and disposing at a properly licensed TSDF).

Additionally, Section 5.2 of the EPP describes:

- Documenting the type and quantity of hazardous wastes stored onsite,
- Provides additional detail on accumulation volume and time requirements and how accumulation areas would be established,
- Describes the training, inspections, plans, etc. for accumulation areas,
- Requirements for hazardous waste packaging,
- Requirements for waste storage areas (including requirements for establishing a CAA),
- Requirements for container marking/labeling,
- Further details on waste documentation and analysis,
- Requirements for transport,
- TSDF permitting for disposal facilities, and
- Training for handlers and transporters.

The Navy requests specifics for how to clarify the response to this comment.

7. Page 12, Section 5.4.2, No. 5: How does PCS plan to “assess the recyclability of oil in each drum”?

Navy Response -

A halogen test will be performed for used oil, results will be documented and retained by APTIM. If testing detects halogens in excess of 1,000 ppm, waste characterization will be performed and as appropriate, it will be disposed IAW hazardous waste regulations.

8. Page 17, Section 5.4.5:

a. No. 4: What kind(s) of “spill protection” will be under the tank nozzles that are left open?

b. No. 5: What kind(s) of “appropriate secondary containment” will be under the drums with fuel-soaked pigs?

Navy Response -

APTIM will use funnel style catchments and large area spill containments setup to drain residual fuel into drums. After draining, tank nozzles will be blinded after valve is removed.

APTIM will place drums on secondary containment that will hold 110% capacity of the largest drum volume. Secondary containment will be non-permeable barriers such as spill pallets or walled berms.

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Drums containing fuel-soaked pigs will be stored on containment pallets within a secondary containment area made of non-permeable barriers such as walled berms. The non-permeable liner will have walls sized to hold 110% of the capacity of the largest drum.

A detailed CONOPs will be submitted for review prior to APTIM's subcontractor performing the scope of the work. Navy will not start work until CONOPs is approved or conditionally approved.

9. Pages 18 and 19, Section 5.4.6, No. 4: The last sentence states, "[f]iberoptic or equivalent may be employed by APTIM to verify cleanliness". Would there be a case when verification is not employed? If yes, when would this occur, and how would this be documented?

Navy Response -

Verification of cleanliness will be performed by APTIM's quality control manager on all pipes prior to demolition. The use of a fiberoptic camera would not be needed if APTIM's QC manager can visually inspect the inside of the pipe. APTIM's QCM will document verification of cleanliness in their daily report.

10. Page 23 and 24, Section 5.4.10:

- a. Roughly how many drums will accumulate?**
- b. Where will the accumulation area be?**
- c. For how long will the drums stay in the accumulation area?**
- d. How far will the drums be filled?**
- e. Will the drums contain materials other than oil for disposal? If yes, what materials?**

Navy Response -

- a. APTIM does not have an estimate of how many drums will be utilized for removal of the sample lines and sample tree from tank 1-20.
- b. The following locations are proposed and have not yet been approved by NCTF N45: Lower tunnel Tank 2 Alcove, Lower Tunnel Tank 13 Alcove, Adit 3Y, Adit 2Y and near Pipe Stand 688.
- c. Drums are not anticipated to be stored longer than 90 days.
- d. APTIM's subcontractor will fill the drums to approximately 75% which can be roughly measured by filling up to the 3rd rung in a 55 gal metal drum.
- e. No. Mixing of waste will not occur. A filter will be installed at funnel catchments to ensure that paint chips do not end up in the drums. Funnel catchment will be cleaned out before draining.

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A detailed CONOPs will be submitted for review prior to APTIM's subcontractor performing the scope of the work. Navy will not start work until CONOPs is approved or conditionally approved.

11. Page 25, Section 5.5.2: Why is a section of the 32-inch pipeline being left in-place? How will this remaining section be cleaned?

Navy Response -

That section of pipe is still being reviewed as a fire water collection point for the current fire suppression system. The Navy is still evaluating future fire protection at Red Hill using a risk based approach.

The contract will be modified to include cleaning this section of the 32" pipeline. The contract may also be modified to remove this section in the future.

12. Page 26, Section 5.5.3, No. 1: Will secondary containment be needed in this area during pigging?

Navy Response -

Yes, installation of secondary containment is identified as item No. 6 of this section.

13. Page 27-31, Section 5.5.4:

a. The flow of water from the sump should be verified, so appropriate spill mitigation measures can be put in-place.

b. This section states the recent re-opening of the groundwater drains in Adit 2 "appears to have significantly reduced the amount of standing water in Adit 2". Does this mean a release in the tunnel could discharge directly into the storm drain? If so, what spill mitigation measures are planned for this?

c. No. 4: Will disabling power to the sump pump system cause the tunnel to start filling with water, making work more difficult?

d. No. 7: What is the maximum expected inflow rate of groundwater accumulation during heavy rains?

e. No. 9.B.ii: Where is Table 2?

f. No. 10: Approximately how many totes of water are expected? If a sheen is detected, how will the water be disposed of?

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Navy Response -

- a. Sump at Adit 2 entrance will be dewatered and inspected once every seven days and after rain events for infiltration. The sump pump at Adit 2 is rated at 85 gallons per minute with 10 feet of head. The sump has a volume of approximately 75 gallons.
- b. Yes. Navy will coordinate the reinstallation of plugs in tunnel drains near Adit 2 during pigging operations and removal of 55 gals drums at Adit 2. Adit 2 sump will be LOTO and covered.
- c. This is correct, if the sump pump is disconnected the branch tunnel to Adit 2 will flood. Therefore, manual dewatering will be used to minimize water accumulation in the tunnel.
- d. The Navy does not have an estimate for groundwater accumulation. Water will mainly flow down the harbor tunnel to the underground pumphouse, where the 5-plex sump pump removes water. When surface flow 'backs up' in the harbor tunnel, overflow occurs into the Adit 2 branch.
- e. Reference should be to API RP 2003. APTIM will provide a revision to the work plan to state, "Refer to API RP 2003 Section 4.2.7 Table 2 for velocities and flow rates for S40 pipe".
- f. A total of 8 250 – 275-gallon totes will be used at the entrance of Adit 2 for the dewatering process. In the case where a sheen is detected during an inspection, the water will be properly treated as water containing fuel which could either be treated at an oil/water separator or removed from the site by PCS and sent to their facility for treatment and disposal. If a tote is removed from the site, a new tote will be provided.

14. Appendix C, Red Hill Pipeline Demolition Sampling and Analysis Plan

a. Page 7, Section 3.1: Where is Table 3-1?

b. Page 10, Section 5.2: States, "[d]ebris/soil sampling will be conducted...." However, Section 4.1 Soil Sampling and Section 4.2 Sediment Sampling on page 8 state no soil or sediment sampling will occur. Provide clarification.

Navy Response -

- a. Concur. Table is missing in report. Table will be provided in revision.
- b. The debris/soil referenced in Section 5.2 is in reference to debris and dust in the tunnels not in reference to soil or sediment sampling. APTIM will not be conducting soil or sediment sampling as part of this project. Report text will be revised to provide clarification.

15. Appendix D: Provide Appendix D, which is missing.

Navy Response -

This appendix contains personnel information that was incorrectly redacted, this appendix section will be properly redacted and reissued with document revision.

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16. PDF page 7, Section 3.0: Confirm the branch fuel piping for Tanks 2 through 12, 15, 16, and 20 will be removed under the APTIM Tank Cleaning contract, and is therefore not part of this pipeline removal work plan. If not, who will perform this work?

Navy Response -

The APTIM Pipe Demo project will remove all branch fuel piping, which is all piping between the two skin valves on a pair of tanks. This bullet item is in reference to the skin valves on the tanks. The APTIM Tank Cleaning project will remove the skin valves on tanks 2 through 12, 15, 16, and 20 as part of their project. The APTIM Pipe Demo project will remove the skin valves on tanks 1, 13, 14, 17, 18, and 19 as part of this project. Only the skin flanges will be remaining on the tanks after the completion of both projects.

17. PDF page 101 and 102 , Appendix D:

- a. What is the load rating for Ant Type Electric Forklift?*
- b. What is the load rating for the Duct Jack?*

Navy Response –

- a. Ant forklifts will have a load capacity of 4,189 pounds.
- b. Duct jacks will be provided by APTIM's subcontractor, the load rating is unknown at this time. Details of the load rating will be provided in the CONOPs.

A detailed CONOPs will be submitted for review prior to APTIM's subcontractor performing the scope of the work. Navy will not start work until CONOPs is approved or conditionally approved.

ENVIRONMENTAL PROTECTION PLAN, RED HILL PIPELINE REMOVAL, RHBFSF, DATED OCTOBER 2024

General Comments

18. Regulatory references are incorrect, and some appear incomplete (e.g., reference to 40 Code of Federal Regulations [CFR] part 273 but not part 263 when discussing transportation of hazardous waste). All references to hazardous waste and used oil regulations should be to Hawai'i Administrative Rules (HAR) chapters 11-260.1 to 11-279.1. The state hazardous waste rules are effective in lieu of the federal rules because the state's hazardous waste program is authorized by the U.S. Environmental Protection Agency (EPA). Some examples of differences are that chapter 11-262.1, HAR, requires documentation of weekly inspections of hazardous waste container storage areas by small quantity generators, and chapter 11-279.1, HAR, requires used oil transporters to have a permit. Neither are required in the corresponding federal rules.

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Navy Response –

Concur. EPP to be revised as indicated below:

- Page 16 – Change 40 CFR 260 – 268 to “HAR 11-260.1 to 11-279.1 (as applicable) – References to <90 day storage area (CAA) should be to HAR 11-262.1.
- Page 17 – Change 40 CFR 268 to HAR 11-268.1 Land Disposal Restrictions.
- Page 18 – Change 40 CFR 273 Universal Waste to HAR 11-273.1.
- Page 29 – References - Add “Hawaii Administrative Rules Title 11 Chapters 260.1 to 279.1 as applicable”.

19. In addition to “areas where hazardous materials may be stored[,]” will spill kits also be available around operating equipment? For example, page 11 mentions that handling equipment will be fueled on-site via fuel truck.

Navy Response –

Yes, spill kits will be provided.

20. The plan states in several places that spill containment capacity will be, at minimum, the volume of the largest container, plus 10%. For uncovered areas outside, capacity should also include expected rainfall.

Navy Response –

Concur. However, APTIM does not anticipate having any spill containment that is located uncovered, in areas that are outside.

Specific Comments

21. Page 1, Section 1.1: States, “[i]t is assumed that all-encompassing pipelines to be removed during the duration of this project, have no more than 4k gallons of residual fuel in the pipelines.” What will happen if this assumption is incorrect? Would work continue? Page 11 of the Pipeline Removal Work Plan mentions there is a contractual ceiling at 4,000 gallons.

Navy Response –

4,000 gallons of residual fuel was specified to evaluate a firm fixed price contract proposal. APTIM will proceed and dispose of any additional remaining fuel in the same manner as the 4,000 gallons.

NAVFAC will modify the contract appropriately to account for any fuel in excess of 4,000 gallons.

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22. Page 1, Section 1.2: Provide a copy of the Site Specific Spill Prevention, Control, and Countermeasures (SPCC) Plan.

Navy Response –

Concur. Will be provided as a separate submittal.

23. Page 1, Section 1.3: What training does “[a]ll required training by contract” consist of?

Navy Response –

The Environmental Manager must complete applicable ECATTS training modules (installation specific or general) prior to starting respective portions of on-site work under this contract. ECATTS training modules must include NAVFAC Construction Contractor (Prime), Resource Conservation and Recovery Act (RCRA) Annual Refresher and Sediment and Stormwater Construction Training.

24. Page 2, Section 1.4: Provide copies of the “[s]pecific AMS [APTIM Management System] documents applicable for this EPP” that are listed.

Navy Response –

All pertinent AMS information is summarized in the EPP document and detailed CONOPS. APTIM does not provide copies of general corporate internal living documents that are updated and adapted as needed. The project plans are written for the use of the APTIM team, and Aptim keeps the AMS references in to ensure that the Aptim team has access to the appropriate internal documentation, but as a practice Aptim does not publicly share proprietary internal procedures. These references are living documents which may have broader scope than this specific project, which is why pertinent information is summarized in the EPP and CONOPS. If there are deficiencies in the EPP or CONOPS Aptim can address those without publishing the proprietary AMS documents, however Aptim needs to keep those AMS references in the documents for the end user of the plans, which is APTIM personnel. APTIM will redact the AMS reference numbers before resubmitting to DOH/EPA.

25. Page 8, Section 2.1: Will county or state roads be used to move waste, or only federal roads? The NCTF-RH should ensure that roads are clear, and there is a contingency plan in-place should there be a release.

Navy Response –

County and State roads will be utilized as well as federal roadways. PCS to follow all USDOT requirements when using roadways to transport waste.

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26. Page 10, Section 4.1: Loading pipe sections outside of the adits prior to transportation should be added to the list of “[a]ctivities exposed to storm water with the potential for pollutant generation”.

Navy Response –

Navy does not concur. Pipes will be cleaned (pigged) prior to removal from Adit 2, pipes will go directly from Adit 2 to an enclosed storage shipping container. Pipe sections will not be exposed to storm water.

27. Page 11, Section 4.1.1.1: Will fueling of material handling equipment on-site via fuel truck be done on a containment pad?

Navy Response –

This is in reference to fueling the forklift that will be used to transport pipe from the ADIT 2 entrance to the shipping containers. APTIM will place “Duck Ponds” (duck pond mini berm secondary spill containment) under the forklift when fueling from a fuel truck.

28. Pages 12 and 13, Section 4.4:

a. There should be a checklist of items for inspection to ensure there have been no releases.

b. We recommend inspecting more often than weekly, especially after inclement weather. In particular, vehicles and equipment on-site should be inspected for leaks and spills at the beginning of each workday.

c. Will the “impermeable plastic-lined berm” mentioned in the second to the last bullet be covered?

Navy Response –

a. Concur, APTIM will continue to utilize checklist of equipment for inspection to ensure that there have been no releases.

b. Concur, items stored outside with potential to effect storm water, will be visually inspected before each workday.

c. If needed, plastic-lined berm secondary containment area will be stored under cover.

29. Page 14, Section 4.5.1.3: “Concrete or paved surfaces” are only considered acceptable secondary containment if there are no joints or cracks in the concrete.

Navy Response –

Concur. APTIM will update requirements in EPP for storage on concrete or paved surfaces.

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30. Pages 16 and 17, Section 5.2:

a. This section discusses the accumulation of less than 55 gallons of waste at the point of generation (called a "satellite accumulation area" in the hazardous waste regulations) and possible establishment of a "less than 90-day accumulation site" or "90-day accumulation site" (called a "central accumulation area" in the hazardous waste regulations). It then goes on to say, "[f]or less than 90-day accumulation sites, 40 CFR 260-268 requirements shall be met...." This implies most generator requirements only apply when a central accumulation area is established and not when all hazardous waste is managed using satellite accumulation areas. This is not entirely correct. The preparedness, prevention, and emergency procedures for small and large quantity generators apply based the amount of hazardous waste generated regardless of whether a central accumulation area is used. Different requirements apply based on the amount of waste generated in a calendar month for the entire site and cannot be avoided by managing all hazardous waste in satellite accumulation areas [see 40 CFR section 262.15(a)(7) and (8), as incorporated and amended in chapter 11-262.1, HAR]. If the site generates enough waste to be a large quantity generator, so that the contingency planning requirements that come with this status apply, these requirements also apply to satellite accumulation areas.

b. No. 3: Instead of a general "description of the contents," each hazardous waste container must be labeled with an "indication of the hazards of the contents." This is required even for waste stored in satellite accumulation areas [40 CFR section 262.15(a)(5)(ii), as incorporated and amended in chapter 11-262.1, HAR].

c. No. 3: Non-hazardous waste containers should also be dated and labeled with contents and a current emergency contact.

d. No. 10: Note that Joint Base Pearl Harbor-Hickam has multiple EPA ID numbers for different sections. The number for Navy Region Hawai'i – Halawa Red Hill should be used if waste is being removed and shipped from adit locations near the Red Hill tanks, as is described for other wastes, recyclable pipeline segments, etc. in the Pipeline Removal Work Plan.

Navy Response –

- a. Concur, Paragraph 5 of this section will be edited to include verbiage to distinguish Satellite Accumulation Area (SAA) from a Central Accumulation Area (CAA). Regardless, APTIM acknowledges that preparedness, prevention, and emergency procedures for generating hazardous waste applies to any amount generated, regardless of whether its in a SAA or CAA. It is unlikely that APTIM will generate enough waste to be considered a large quantity generator. However, APTIM acknowledges that if enough waste is generated, more stringent planning requirements will apply and need to be met.
- b. Concur, APTIM will edit the verbiage for point number 3 to reflect a more descriptive label for our hazardous waste containers.

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- c. Concur; however, section 5.2 is regarding hazardous waste only. It will be noted that if non-hazardous waste containers are to be stored in the same area, these non-hazardous waste containers will also be dated and labeled with contents and a current contact.
- d. The Navy will provide guidance to APTIM regarding EPA ID numbers to be used for Red Hill.

31. Page 18, Section 5.2.2: On-island disposal of non-hazardous waste shall be at a DOH-permitted solid waste management facility.

Navy Response –

Concur.

32. Page 21, Table 3: For the aboveground storage tank containing diesel, what is the plan to prevent or manage potential releases from the pipes or pipelines?

Navy Response –

It is a double walled tank. Permanent piping or hoses will be used to eliminate the need for filling with a nozzle. Hose connection points will be wrapped with absorbent pads and clear waterproof wrapping for visual inspection.

33. Page 26, Section 7.0: In addition to the DOH Environmental Management Division, the DOH HEER (Hazard Evaluation and Emergency Response) Office should also be notified if there is a release of hazardous substances, including oil, lead, asbestos, and other chemicals, per Hawai'i Revised Statutes Chapter 128D.

Navy Response –

Concur. The Navy will include DOH HEER Office, not APTIM.

34. Attachment 3.1: Add the DOH HEER Office. The phone number is 808-586-4249 during the day and 808-236-8200 after-hours.

Navy Response –

Concur. APTIM will add this information to the plan.