



Navy Region Hawaii Agenda

Closure Plan

- Timeline and Status
- Red Hill Tank Closure four Phases
- Beneficial Non-Fuel Reuse (Nakupuna)

Remediation

- Long-Term Monitoring
- Remediation Action Schedule
- Groundwater Monitoring Wells



Red Hill Tank Closure Plan Timeline and Status

- Navy responsible for executing the Red Hill Tank Closure Plan (01 Nov 2022)
 - Iterative Plan
 - Outlined 4 options for Closure
 - Close in place
 - · Close in place for potential beneficial non-fuel reuse
 - Close and fill
 - Close, remove the steel liner, and fill

Navy formally request DOH approval for Closure in Place (~ 3 years)

- Supported by Alternatives Analysis (Jacobs' report)
- Most limited impact to environment and surrounding community; safest
- Other options (Close and fill; Close, remove liner, and fill) very difficult due to Red Hill's size

Four (4) Phases of the Red Hill Tank Closure Plan

- Phase 1: Planning for permanent tank closure (includes 4 surge tanks; associated piping)
- Phase 2: Planning for beneficial non-fuel reuse per DOH request
 - Nakupuna Companies awarded a contract to help solicit public input.
 - Other two (2) efforts: UH Alternative Energy Study and NDAA
- Phases 3 & 4: Preparation and Implementation of Permanent Tank Closure will start after defueling is completed

Supplement 1 (28 Feb 2023)

- Focus on first major milestone of "Cleaning", including HAZMAT management and Spill Plan
- Requesting DOH concurrence by end of June 2023 to start cleaning contract process.

Supplement 2 (31 May 2023)

Provides amplifying information on Closure in Place, Structural Analysis, & responses to EPA comments

Next Steps

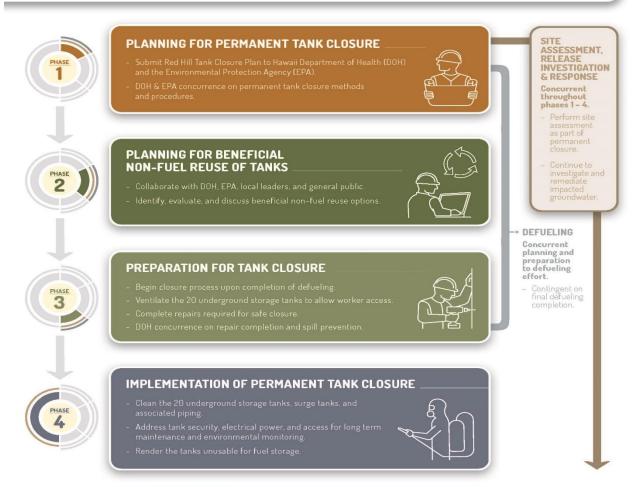
Aligning future Supplements to each major milestone



RED HILL TANK CLOSURE

The DON will be regularly releasing information as the timeline progresses via the following:

- Press Releases
- Website Updates
- Virtual/Online Updates
 Neighborhood Boards



For more information, please see Navy's public website for Red Hill



CNRH Red Hill Website:



Contact us:

cnrh.pao@us.navy.mil



Interviews: 3 Apr to 31 May 2023



What is your opinion of the potential repurposing of the Red Hill Facility after the tanks are defueled and closed?

- Focus should be defueling, not repurposing
- Facility must be permanently disabled
- Only possible if safe for aquifer
- Need community discussion first



Which idea would be the best for the people of Hawaii?

- Return to nature
- Anything safe for environment
- Water storage
- Reduce dependence on imports
- Energy use



What ideas if any would you suggest for repurposing the facility after it is closed?

- Must safely serve community needs
- Return to State/Native Hawaiians/nature
- Energy (solar, hydroelectric, gravity-fed)
- Storage (water, emergency supplies, etc.)
- Agricultural use (vertical farming)
- Emergency shelter
- Museum/attraction/educational
- Landfill for dry non-HAZMAT waste



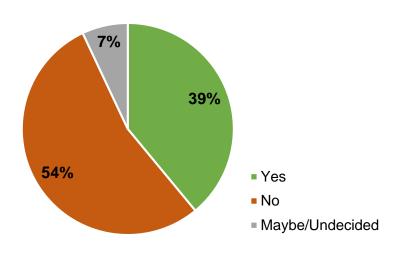
Do you have a preference for either of the four categories?

- DoD: Least popular
- Non-DoD: Most popular
- Energy: Mixed response. (Risk to aquifer)
- Non-Energy Most popular

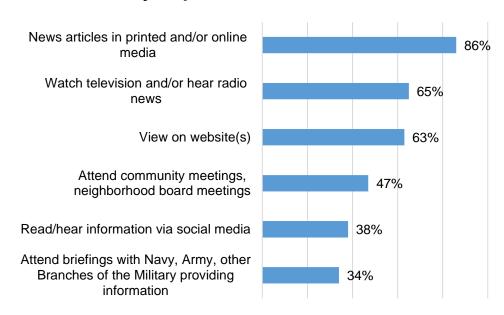


Qualitative Survey: 31 Mar to 31 May 2023

Are you in favor of the Red Hill Facility being Repurposed?



How do you prefer to receive information?



How do you think the Red Hill facility should be utilized after it is closed?:

- Clean it out, restore it to how it was before the tanks were installed
 - Return to the State
 - Return to Native Hawaiians
- Renewable energy resource
- Museum/attraction engineering marvel
- Store water potable or non-potable

- Storage for emergency supplies such as food, blankets, tents, etc.
- Other: homeless shelter, grow mushrooms, use for agriculture, emergency shelter
- Tell me what the options are cost/benefit
- Military should find a safe non-fuel use



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JBPHH Water Distribution System Long-Term Monitoring

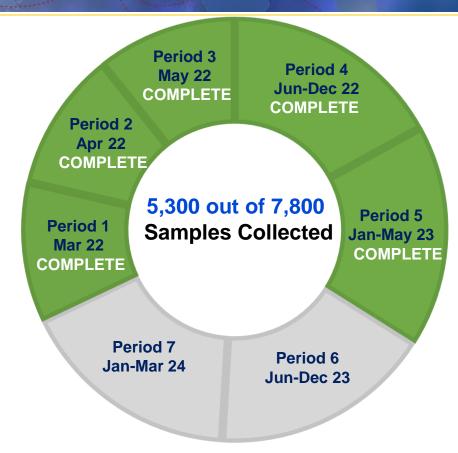
Priority locations Sampled Each Period:

- Schools
- CDC's
- CDH's
- Medical/Dental Offices
- Distribution System

Drinking Water Distribution Sampling:

- sampling continues until Mar 2024
- 65%+ of homes and non-residential buildings sampled
- Zero detections of JP5





Rapid Response Team

The Rapid Response team is available to contact if residents have a concern to perform a house flush and test for TPH. Residents can contact the Water Response Team at (808) 920-3616



Red Hill Remediation Actions Schedule

Planning Phase
Installation Phase
Monitoring Phase
Remediation Phase

Closeout / Report Phase

NOV **FEB** AUG NOV **FEB** AUG NOV **FEB** MAY MAY MAY AUG Effort Continues **Monitoring and Sampling Efforts** 2021 2022 2022 2022 2022 2023 2023 2023 2023 2024 2024 2024 **Groundwater Sampling** Below Tank Soil Vapor Monitoring (18 Tanks) Continuous Soil Vapor Monitoring Pilot (3 Tanks) **Monitoring Well Expansion Program** 9 wells completed; 4 in progress; 9 wells remaining RHP02 RHP03 RHP04B RHP05 RHP07 RHP06 RHMW18 **Adit 3 Site Characterization Efforts** Shallow Soil Vapor Monitoring Points in Adit 3 (1ft) Intermediate Soil Vapor Monitoring in Adit 3 (~20ft) Deep Soil Vapor Monitoring Points in Adit 3 (~75ft) Deep SVE Pilot Study Plan provided to DOH/EPA on Feb 27th Holding Tank and Leach Field Investigation Remote Operated Vehicle Surveys in Development Tunnel **Electro-resistivity and Induced Polarity Study Ground Penetrating Radar Study LNAPL Step Out Borings** Collection, Holding and Transfer Tank Investigation Work Plan submitted to DOH/EPA on Dec 7th; DOH/EPA focused on other priorities Work Plan submitted to DOH/EPA on Feb 22nd; response by Apr 24th **Natural Source Zone Depletion Study Adit 3 Remediation Efforts** Red Hill Shaft Capture Zone (5MGD GAC) Media Changeout Optimization Study Resumed Apr 7th GAC Flow Optimization (Water Reduction up to 60%) Red Hill Shaft Direct Recovery (Skimming/Absorbents) Automated skimming, vice diver-supported Closeout Report provided to DOH/EPA on Feb 24th Holding Tank and Leach Field Excavation Shallow Soil Vapor Extraction / Air Sparging Work Plan submitted to DOH/EPA on Jan 9th; response was requested by May 5th **AFFF Response Efforts PFAS-Specific Groundwater Sampling Adit 6 Remediation Modeling Efforts Groundwater Modeling** Model Disapproval (EPA/DOH) Best Alternative Submission Proj Completion: Sept 2024 University of Hawaii Groundwater Modeling Efforts in support of JTF Defueling **Penetration Sealing and Protections** Future Sealing will be scheduled in advance of JTF Defueling **Groundwater Protection Plan Update** Submission of Plan Update to Regulatory Agencies Well Head Protection Plan Proj Completion: Sept 2024

^{**} Subject to change - dependent on predecessor activity progress, environmental permitting, real estate agreements and negotiations, resource availabilities, and prior activity data interpretation.



Groundwater Monitoring Wellsand Well Network Expansion

