

Commission on Water Resource Management



Navy Closure Task Force–Red Hill

CAO 15 APR 2024



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NCTF-RH Mission



The mission of the Navy Closure Task Force-Red Hill (NCTF-RH) is to safely and expeditiously execute the permanent decommissioning of the Red Hill Bulk Fuel Storage Facility (RHBFSS) and continue long-term environmental remediation efforts in coordination with State and Federal stakeholders in order to protect public health and the environment.



Navy's Commitment

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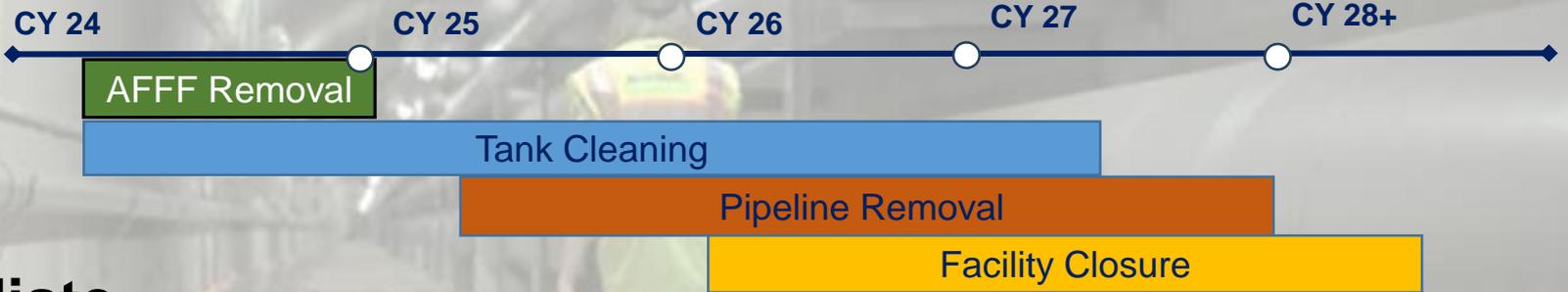
- **Maintain** safe drinking water
- **Decommission** the tanks at Red Hill and remove pipelines
- **Remediate** the environment
- **Ensure** Red Hill is never again used to store hazardous material
- **Communicate** transparently with stakeholders



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Lines of Effort – Long Range

Decommission



Remediate



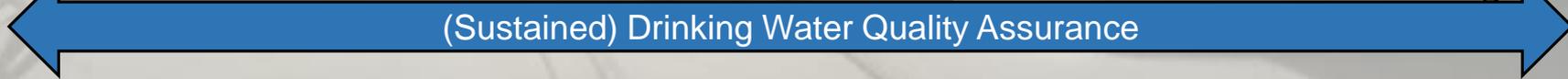
Well Restoration



Site Remediation



Drinking Water



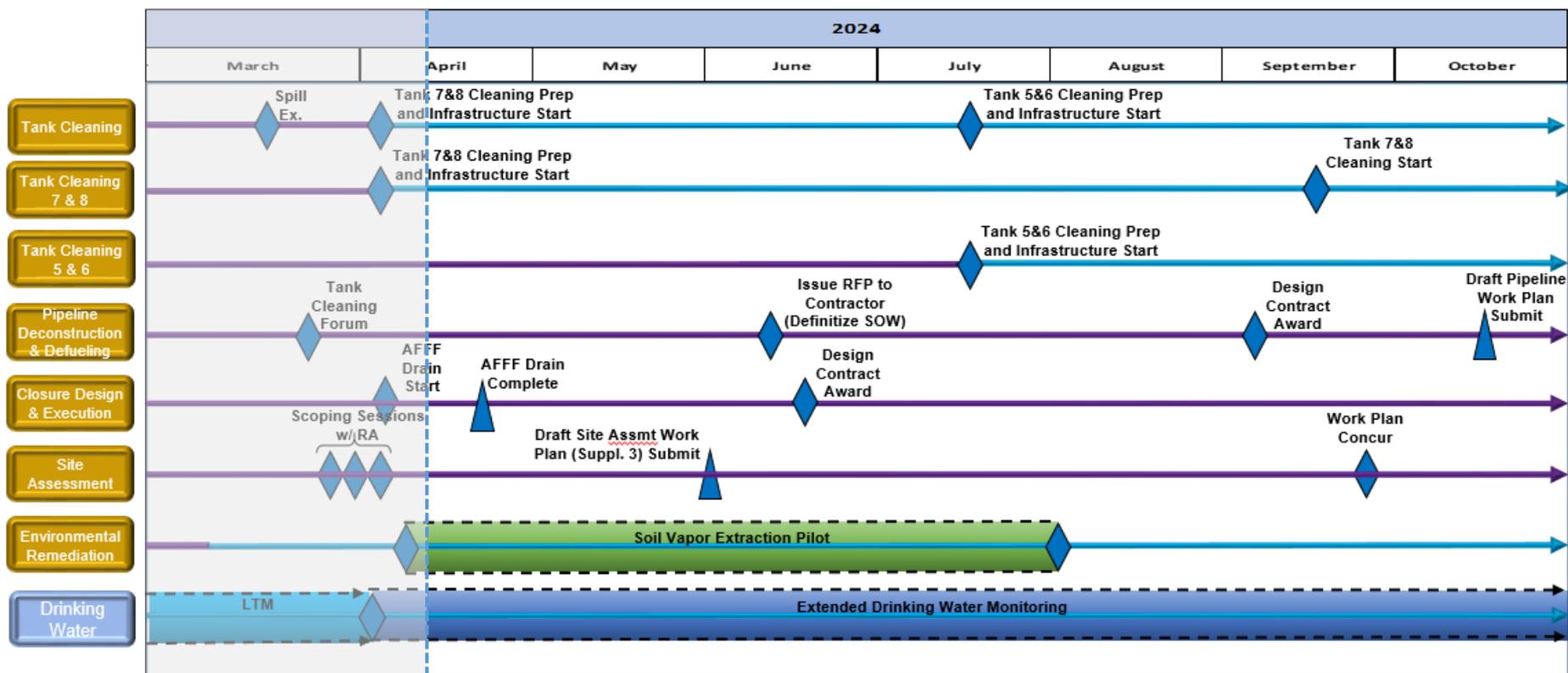
Communicate



REMEDATION AND COMMUNICATION ARE ENDURING TASKS



Lines of Effort – Short Range



Decommissioning





Tank Cleaning

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Step 1 Preparation (Approximately 3 Months)

- Isolate Tank and Disconnect Piping
- Install and Begin Tank Ventilation using Forced Air
- Remove Flowable Sludge

Step 2 Install Cleaning Infrastructure/Remove Solid Sludge (Approximately 3 Months)

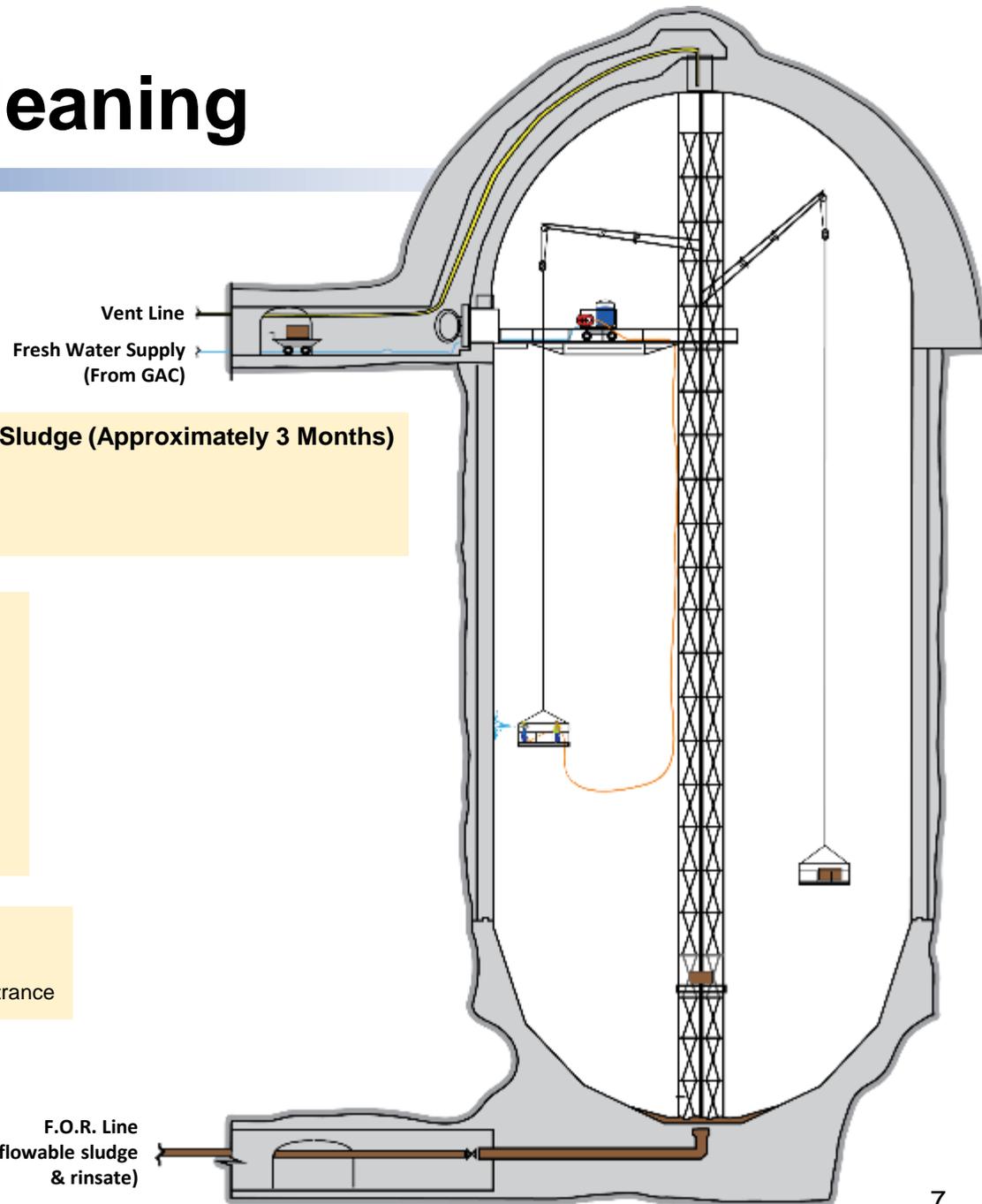
- Install Center Tower Elevator
- Inspect and Repair Central Tower and Catwalk
- Load Test Central Tower and Catwalk
- Remove Solid Sludge

Step 3 Pressure Washing (Approximately 2 Months)

- Set-up Pressure Washing System
- Pressure Wash w/ 3% Simple Green
- Rinse
- Continuously Remove Rinsate
- Dry Tank Interior
- Validate Tank Cleanliness
- Submit Tank Cleaning Report
- Receive Regulatory Agency Approval

Step 4 De-Mobilization (Approximately 2 Months)

- Remove Booms and Infrastructure
- Install Permanent Lockable Steel Hatch at 8-foot entrance

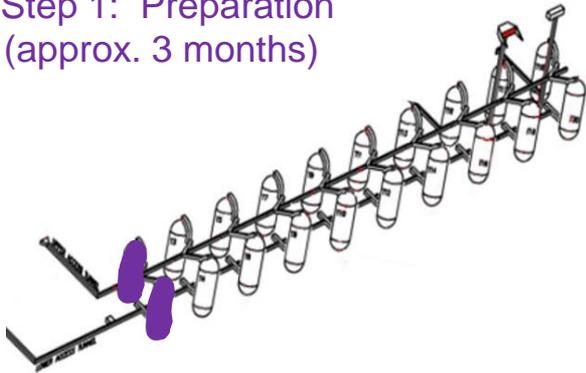


F.O.R. Line
(flowable sludge
& rinsate)

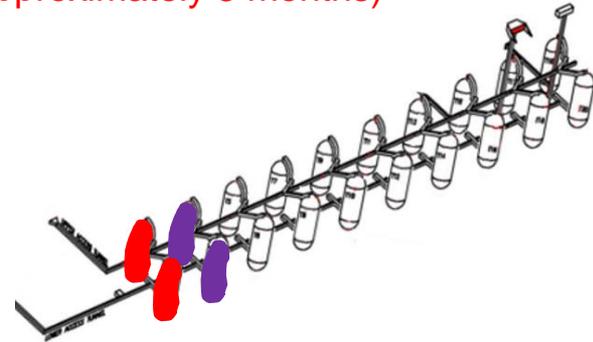


Tank Cleaning Sequence Concept

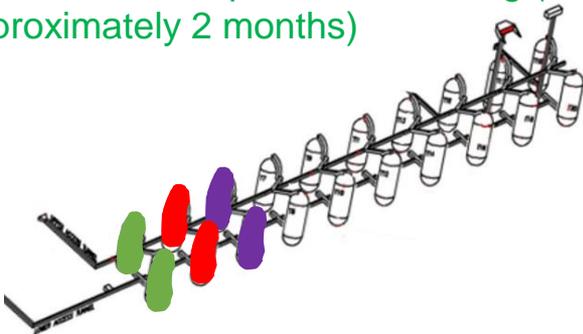
- Step 1: Preparation (approx. 3 months)



- Next Set begin Step 1
- Step 2: first set - install cleaning infrastructure (approximately 3 months)



- Next set begin step 1
- Second set begin step 2
- Step 3: first set – pressure washing (first set - approximately 2 months)



- Next set begin step 1
- Third set begin step 2
- Second set begin step 3
- Step 4: first set - demobilization (approximately 2 months)



Notional Diagram Layout – Not reflective of actual tank order



Layers of Environmental Protection

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All the waste from tank cleaning (sludge, simple green, etc.) will have the same level of protection as fuel during defueling

SANDBAG PLACEMENT/BARRIERS

- Absorbs and Channels Potential Overflow-
- Redirects Potential Spills Away From Drains to Designated Collection Points
- Robust Containment System to Halt Accidental Spillage

AQUIFER PROTECTION

- French Drain Sealing
- Groundwater Monitoring Well Sealing
- Soil Vapor Points and Vault Sealing
- Pump Station Additive Barriers

Fuel Oil Reclamation Line

- Daily rover inspection
- Integrity Testing

CAMERA SURVEILLANCE SYSTEM

- Around the Clock Facility Monitoring with 52 Cameras
- Ensure Equipment Security and Environmental Safety
- Early Anomaly and Risk Detection

SPILL RESPONSE DRILLS

- Navy-Led Drills Aligned with Facility Spill Response Plan
- Realistic Spill Scenarios for Optimal Readiness
- Regulator (EPA & DOH) Supervision for Quality Assurance

DEDICATED SPILL RESPONSE

- Red Hill response staff
- Spill kits located throughout Facility

FIRE WATCH TEAM

- 24 Hour Surveillance via Roving Watchstanders
- Tailored Training for Hazard Detection, Rapid Response and Fed Fire Dept Coordination



DELIBERATE PREVENTION, PROTECTION AND PREPARATION

Drinking Water Update





JOINT BASE PEARL HARBOR-HICKAM DRINKING WATER PROGRAM

ENSURING SAFE AND COMPLIANT DRINKING WATER



Water Quality Action Team

- 24/7 Response to Consumer Concerns through Emergency Operations Center
- Full Water Quality evaluation for consumer concerns, includes Water Quality Professional
- Includes investigations of hydrocarbons, bacteria, residual chlorine, water heater, and plumbing concerns



Compliance Monitoring

- Recurring monitoring in accordance with the Safe Drinking Water Act for all Drinking Water Systems
- Full Drinking Water analytes sampled for plus required operational testing (bacteria/chlorine/etc.)
- Reported to all consumers by the JBPHH Consumer Confidence Report which is completed each summer



Extended Drinking Water Monitoring Program

- Follow-on to Long Term Monitoring Program, will be conducted for an additional 12 months
- Focus of the monitoring will be on petroleum hydrocarbon and fuel-related constituents



Drinking Water System Operations and Maintenance

- Source Water and Wellhead Protection Plan
- Unidirectional Flushing
- Backflow and Cross Connection Program



Medical Monitoring

- Established Red Hill Clinic and authorizing eligible community members to use the clinic
- Established Defense Occupational and Environmental Health Readiness Red Hill Incident Report
- Ongoing CDC/ATSDR Public Health Assessment and establishing Red Hill Registry
- Epidemiological Studies and Medical Record Reviews



Navy Cluster Task
Force Red Hill



JBP111



Petroleum Hydrocarbon Detections

- Preliminary assessment of premise plumbing
- Exploration of alternate extraction method used for sample analysis
- Began split-sampling leveraging alternate, EPA-certified labs
- Convened Drinking Water Subject Matter Experts to 'swarm' concern
 - Deliberate root cause analysis
 - Detailed review of analytical methods used to analyze TPH
 - TPH not a drinking water analyte
 - Considerations of EPA-approved method for TPH analysis
 - Develop concept for continued monitoring beyond end of LTM
 - Regular touchpoints with U.S. EPA & HI Dept of Health
 - Continue daily discussion and coordination

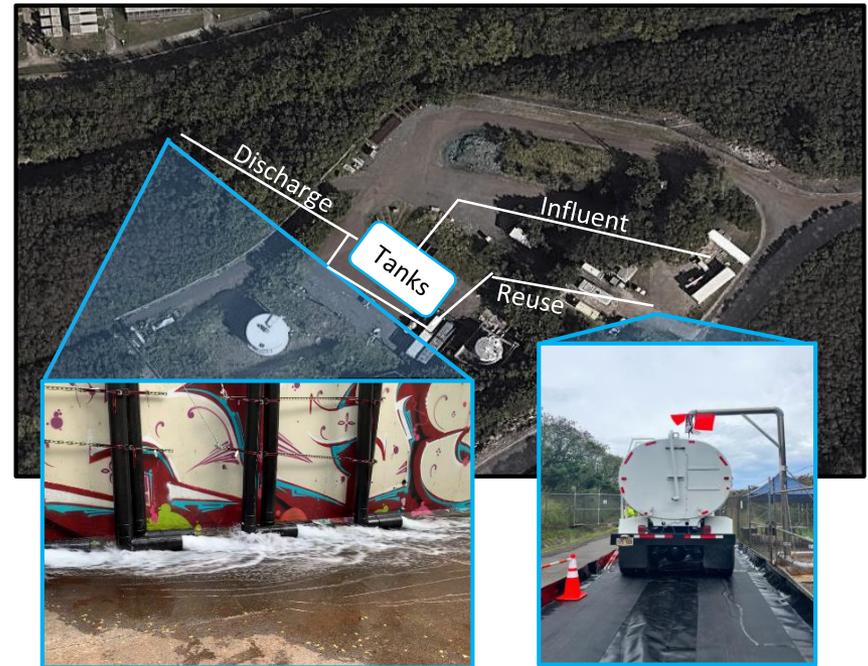


Red Hill Shaft Flow Optimization & Beneficial Reuse

Flow Optimization

Navy is positioned to reduce GAC pumping by ~60%, upon Regulatory Approval. Currently pumping ~4.1MGD; requesting 1.8MGD.

- June 2023: Navy completed three-month flow optimization survey.
- Aug 1, 2023: Navy requested reducing pumping to DOH.
 - Aug 30, 2023: DOH rejected the requested; cited need for final report, post-processed data, evaluation of lines of evidence
- Sept 20, 2023: Navy finalized report, addressed feedback, and urged DOH and EPA to re-consider reduced pumping rates.
 - Nov 15, 2023: DOH provided feedback outlining a path forward with increased monitoring and evaluation.
- Jan 11, 2024: Navy incorporated increasing monitoring and evaluation during periods of reduced pumping.
 - Jan 30, 2024: DOH provided additional feedback.
 - Mar 4, 2024: EPA provided feedback.
- Mar 15, 2024: Navy incorporated additional EPA and DOH feedback into the increased sampling plan. Requested reduced pumping. Only outstanding comments are PFAS related.
 - ***Awaiting Response from Regulatory Agencies.***



Beneficial Reuse

Navy has installed a truck fill station at Adit 3, utilizing post-GAC treated water for tank cleaning effort as a beneficial reuse.

- The Navy is continuing to evaluation other potential beneficial reuses, given the physical site constraints and available infrastructure.

Navy installed a fill station to utilize water discharged. The Navy has continued to request reduced pumping rates since August 2023. Consensus has not been reached on PFAS sampling – PFAS is covered under separate regulatory authorities.



Resident Water Concerns PSA

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Resident Water Concerns PSA



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<https://www.youtube.com/watch?v=G-q-G0nHEm4>



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Red Hill Information Resources



Navy Closure Task Force – Red Hill

navyclosurereport.navy.mil

- Document library for defueling & closure of Red Hill Bulk Fuel Storage Facility
- Photos & media gallery related to water response efforts & drinking water testing



Navy Region Hawaii Facebook Page

facebook.com/NavyRegionHawaii

- Frequent updates & information about Joint Base Pearl Harbor-Hickam drinking water



Joint Base Pearl Harbor-Hickam Facebook Page

facebook.com/JBPHH

- Features daily joint base water updates
- Imagery & resources related to water response efforts
- Infographics & information



Joint Base Pearl Harbor-Hickam Safe Waters

jbphh-safewaters.org

- Ongoing information on Navy efforts regarding water on the island of Oahu
- Two primary areas: Drinking Water System & Red Hill Environmental Remediation



