

Fuel Tank Advisory Committee (FTAC) Meeting



Closure



Tank Cleaning

SAFE. DELIBERATE. ENGAGED. COMMITTED.

Step 1 Preparation (Approximately 3 Months)

- Isolate Tank and Disconnect Piping
- Tank Ventilation
- Remove Flowable Sludge
- Install Center Tower Worker Basket System
- Continue Tank Ventilation
- Install Cleaning Infrastructure
- Inspect and Repair Central Tower and Catwalk

Step 2 Boom Installation and Load Testing (Approximately 2.5 Months)

Step 3 Remove Solid Sludge (Approximately 2 Weeks)

Step 4 Pressure Washing (Approximately 2 Months)

- Set-Up Pressure Washing System
- Pressure Wash
- Rinse
- Continuously Remove Rinsate
- Clean and Dry Tank Bottoms
- Regulator Inspection

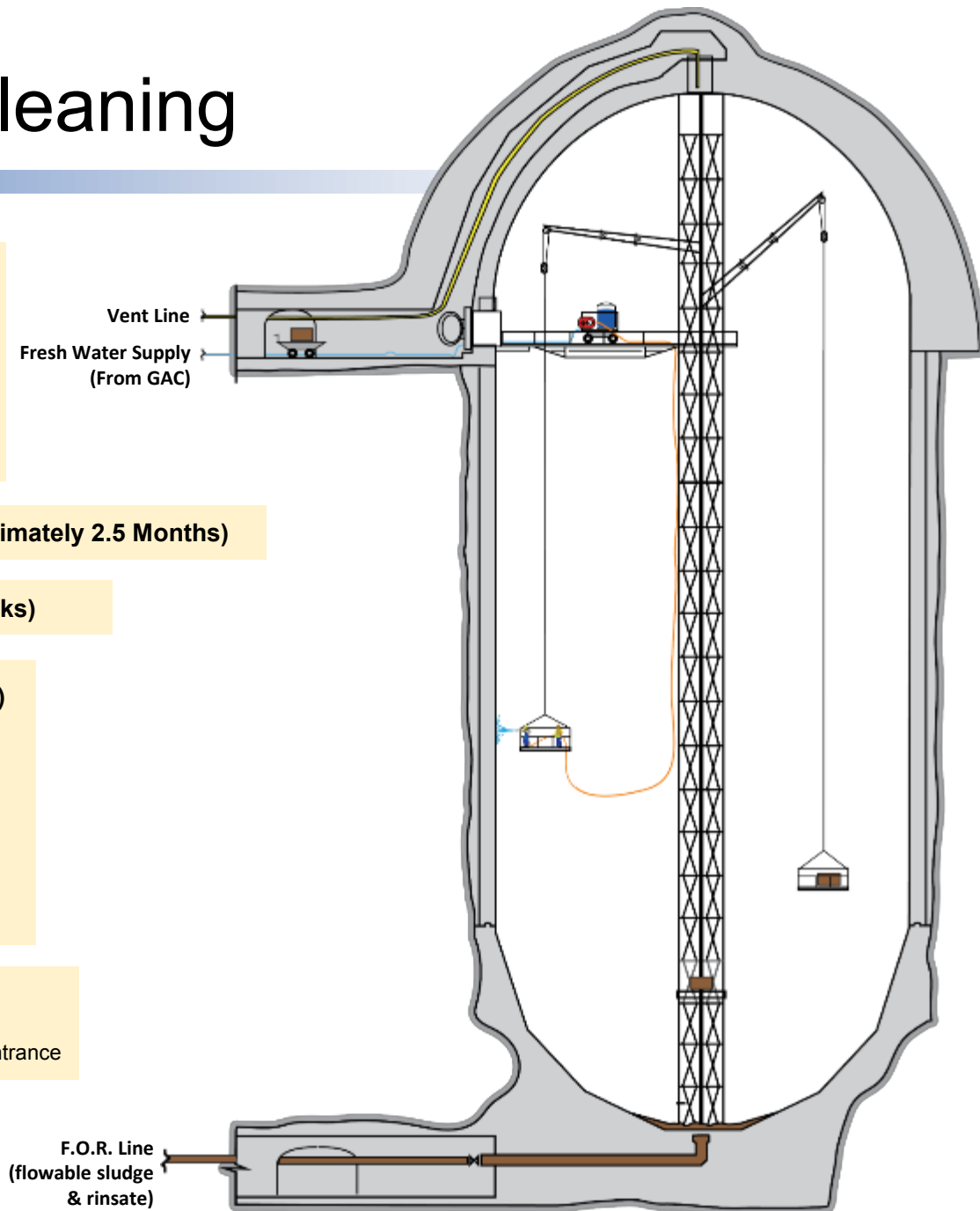
Step 4.1 Collect Verification Sample

Step 4.2 Receive Regulatory Agency Approval

Step 5 De-Mobilization (Approximately 1.5 Months)

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

Sequence of work includes contractor activities in 4-6 tanks at any time, with two (2) tanks in simultaneous activity





Layers of Environmental Release Protection

SAFE. DELIBERATE. ENGAGED. COMMITTED.



PIPELINE WRAP

- Expertly Designed to Absorb Any Pipeline Seepage

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
- Secondary Valve Containment
- Soil Vapor Points and Vault Sealing
- Sump Station Additive Barriers

SECONDARY & TERTIARY CONTAINMENT

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

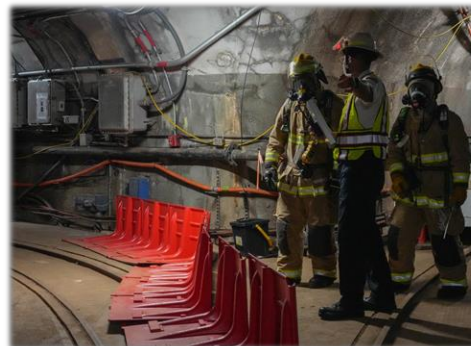
- Navy-Led Drills Aligned with Facility Spill Response Plan
- Realistic Spill Scenarios for Optimal Readiness
- Regulator (EPA & DOH) Supervision for Quality Assurance

DEDICATED SPILL RESPONSE

- Red Hill Qualified Individuals (QI)
- 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



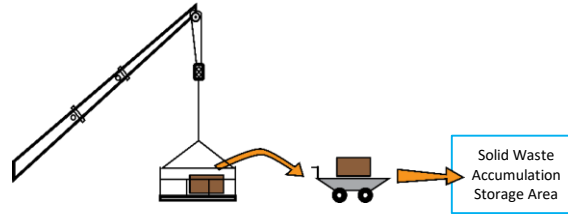


Sludge Waste Disposal Process

SAFE. DELIBERATE. ENGAGED. COMMITTED.

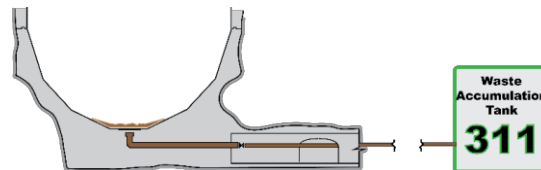
SOLID SLUDGE PROCESS

- After tank ventilation, solid sludge is shoveled into special containers which are then sealed
- Containers lifted out of tank & placed on carts to move waste to an accumulation area
- Containers are kept with a Spill Kit & inside of secondary containment throughout transport
- Characterize waste
- Accumulation area inspected weekly, containers are labeled and marked to contents, area is provided spill equipment and has secondary containment
- Containers loaded onto a truck, taken to Port, then loaded on a ship
- Truck and Ship are HW permitted transporters
- Waste to be sent to a off-island HW Landfill for ultimate disposal



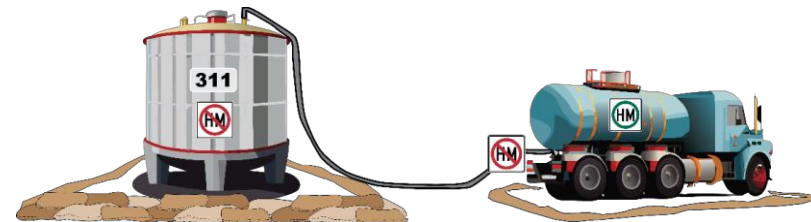
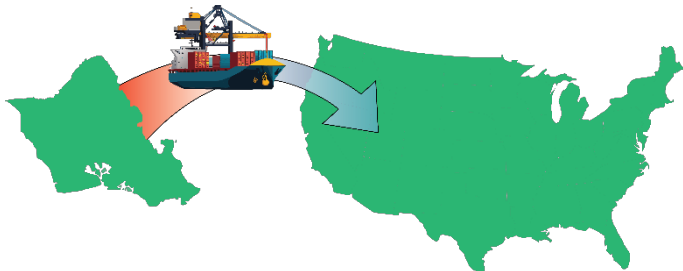
Common Handling Notes

- Manifest is created identifying generator, transport, and disposal facility. Each sign upon receipt final copy comes back to Navy to confirm disposal facility received.
- Manifest from disposal facility is received by the Navy
- Copies of manifests sent to DOH/EPA upon their request



LIQUID SLUDGE PROCESS

- Tank flooded and discharge down the FOR Line to tank 311
- Adit - 3 tank 311 is the waste accumulation area
- Tank inspected weekly, label and mark tank to contents, provide spill equipment inside secondary tank containment
- Characterize waste
- Tank 311 is pumped down to a tanker truck
- Tanker truck is a HW permitted transporter
- Waste to be sent to an on island oil recovery facility (PCS) in Kapolei
- PCS will separate oil from waste water at a pre-treatment facility
- Recovered oil is sold by PCS for energy recovery/re-refining
- Left over waste water sent off for further treatment at waste water treatment plant



The Navy Will track the sludge from removal to disposal.



Pipeline Removal

SAFE. DELIBERATE. ENGAGED. COMMITTED.

- Three pipelines will be removed during decommissioning
- The Navy will drain all residual fuel from the pipelines with robust containment measures prior to any removal
- Pipelines will be safely cut, removed, and transported in accordance with all applicable laws and regulations
- The Navy's contractor will ensure proper disposal or recycling of the removed pipelines



During decommissioning, Red Hill pipelines are estimated to contain approximately 4,000 gallons of residual fuel



JP5

F24

F76

If extended end-to-end, the total length of pipelines would match the distance from Pearl Harbor to Diamond Head!

OVER 10 MILES OF PIPELINE WILL BE REMOVED WHEN CLOSING THE FACILITY

