

Installation Restoration Program

Former Naval Ocean Systems

Center Site (Area of Interest)

- Reports of residual liquids being poured on the ground from empty drums
- **2015 Site Inspection:**
 - Soil sampled for metals, solvents, paints, fuel/oil, PCBs and pesticides.
 - Results support No Further Action (NFA)
- Requesting **No Further Action** concurrence from Hawaii DOH



Salvage Yard – Geoprobe Sampling

Fuel Farm Sites: JP-5 Fuel Tank Spill / Sludge Disposal Area

- In 1973, sludge cleaned out from various tanks was disposed in disposal pits. In the 1980s Fuel Farm Storage Tank 1253 had a fuel oil spill. The tank has been repaired and secondary containment installed.
- **October 2009 and May 2013 (Revision) Environmental Hazard Evaluation / Management Plan (EHE/EHMP):**
 - Evaluated soil, soil gas and groundwater results from previous studies for the two sites
 - Found no significant risk to human health or the environment and recommended contamination be managed in place
- **April 2010 and September 2014:** DOH approved No Further Action with Land Use Controls for both sites
- **2015 and 2018:** Oil levels in groundwater wells will be measured to confirm no further actions are needed due to Tank 1253.



Fuel Farm – Soil Gas Sampling



Fuel Oil Pipeline
Installing Groundwater Well

Quarry Pit Landfill

- 1972 – 1976 - Received waste from base operations.
- **2012/2013 Remedial Investigation/ Feasibility Study:**
 - Evaluated groundwater, sediment, surface water, and soil gas data and recommended land use controls (LUCs) to prevent direct contact with landfill waste or contaminant migration.
 - Decision document signed in 2014 with LUCs as remedy.
- **July 2015 LUC Plan:**
 - Identifies actions to maintain adequate landfill cover and prevent unauthorized removal of waste and contaminant migration.
 - Specifies 5-Year Reviews to evaluate effectiveness of LUCs.



H-3 Landfill Sheet Pile Wall Side Slope Stabilization

PCB Transformers

- Seventy-six former transformers with PCB fluid disposed on ground.
- **2012 Site Inspection:** Identified 10 transformers with excessive levels of PCB in soil.
- **2012-2014 Removal Action:** Conducted soil sampling and removal and disposal of 127 tons of soil
- **April 2015 Remediation Verification Report:**
 - Soil at 9 transformers was cleaned up to levels which are safe for unrestricted use
 - At the 10th transformer, since all impacted soil could not be removed, a concrete cap was installed and land use controls will be put in place.

Salvage Yard Storage Area

- Former facilities storage area for various debris and waste.
- **2012 Site Inspection:** Identified PCB as the only contaminant.
- **2014 Removal Site Evaluation:** Measured levels of PCBs in surface and subsurface soil.
- **August 2015 Removal Action:** Work began to excavate and dispose of approximately 1,500 cubic yards of PCB-contaminated soil.

Fuel Oil Pipeline

- **2012 Site Inspection:** Groundwater sampling indicated that fuel oil from a leak has not migrated far from the pipeline and is not impacting the nearby Marina.
- **February 2013 Environmental Hazard Management Plan (EHMP):** EHMP specified precautions to safely manage and minimize future exposure to the fuel oil that remains in place. EHMP recommended a final round of groundwater sampling.
- **October 2013 Groundwater Monitoring Report:** No fuel detected on the groundwater
- **May 2014:** DOH approved **No Further Action** with Land Use Controls

H-3 Landfill

- 1940s to 1972 - Received waste from base operations.
- **2012/2013 Remedial Investigation/ Feasibility Study:**
 - Evaluated groundwater, sediment and surface water data
 - Recommended land use controls to prevent direct contact with landfill waste and side slope stabilization to prevent erosion and waste exposure.
- **2013-2014 Side Slope Stabilization:**
 - Installed 1700 feet of sheet pile wall and 660 tons of stone to fortify 2000 feet of landfill shoreline.
 - Decision Document signed in 2014 with Land Use Controls as remedy.
- **September 2015 Sampling Plan:** Requested by US Fish and Wildlife Service to collect additional groundwater, sediment and surface water data to confirm that ecological risks are acceptable.

Base Motorpool

- Sampling conducted at former tank sites
- **June 2015 UST KB-100 Site Inspection:** Results confirm that residual contamination is continuing to degrade and support **No Further Action**.
- **July 2015 UST KB-91 Environmental Hazard Evaluation:**
 - Results confirm that residual fuel/oil contamination is confined and does not pose an unacceptable risk to human and ecological receptors.
 - An Environmental Hazard Management Plan will be prepared to document land use controls to limit future exposure.

Munitions Response Program

Moving Target Range

- Site was a former machine gun practice range in 40s and 50s adjoining Nu'upia Ponds Wildlife Management Area (WMA).
- **2013 Remedial Investigation (RI):** Soil, sediment, groundwater, surface water sampled and munitions survey conducted. No contaminants were found exceeding action levels and the RI recommended no further sampling. The RI found potential munitions concerns needing further response action due to .50 caliber rounds and grenade fragments.
- **2013 Feasibility Study (FS):** FS recommended Site munitions clearance and Land Use Controls to address concern. Hawaii State DOH has concurred with RI and FS findings and recommendations.



Moving Target Range – Visual Inspection



Skeet/Trap Range – Installing a Monitoring Well

Skeet/Trap Range

- Site consisted of three former trap and four former skeet shooting platforms adjoining Nu'upia Ponds WMA.
- **2013 RI:** Soil, sediment, groundwater, surface water sampled and munitions survey conducted. No munitions of explosive concern were identified in the field survey and no further action was recommended. The RI found that elevated contaminant concentrations in surface soil originating from skeet and trap shot and associated target fragments required further response action.
- **2013 FS:** FS recommended Land Use Controls to address surface soil contaminant concerns by minimizing exposure potential. Hawaii State DOH has concurred with RI and FS findings and recommendations.