Overview

- Site Background
- Proposed Remedial Action
- Team Description
- Remedial Action Status
- Summary
Site Background

- Estimated 8,500 yd³ of PCB- and lead-contaminated soils caused by battery and transformer processing
- <10 yd³ of pesticide- and dioxin-contaminated soils
- Over 45,000 yd³ of scrap materials present
- Numerous waste drums, 5000 yd³ of tires, transformers, 83 trailers, and >400 pressurized gas cylinders
- Old military landfill present
- Site listed on NPL in 1990
Originally Proposed Remedial Action

- ROD selected solvent extraction for PCB-contaminated soils and stabilization for lead-contaminated soils
- Estimated 3 - 4 years for completing RA at $34 - $38M + UXO Cost
- Performance-Based Environmental Restoration Management Assessment (PERMA) conducted June 2002
- Recommended stabilization and on-site placement of PCB- and lead-contaminated soils

- Remedial Process Optimization (RPO) estimated RA to be completed in < 2 years for $3.6M + UXO cost

Integrity - Service - Excellence
PBM & RPO Team

- HQ Defense Logistics Agency
- Defense Reutilization Marketing Service
- HQ Air Force Center for Environmental Excellence
- US Environmental Protection Agency
- Alaska Department of Environmental Conservation

Contractors
- Mitretek
- Earth Tech
Remedial Action Status

- Conducted treatability studies Sept - Nov 2002 to demonstrate viability of proposed stabilization process
- Obtained funding from US ARMY - $2.5M
  - Time and materials contract awarded Sept 2002
    - Clear terrain
    - Separate and decontaminate scrap
    - Identify and separate expended munitions and potential unexploded ordinance
  - Field activity initiated in Oct 2002
Remedial Action Status (Cont.)

- Awarded Firm Fixed Price Task Order March 2003
  - Stabilization/solidification of contaminated soils
  - On-site placement of up to 8,500 yd$^3$ of soils in landfill
  - 5 years of O&M
  - Costs negotiated at $3.45M

- Started field work May 2003
- Completed Explanation of Significant Differences (ESD) and held public meeting June 2003
- Completed stabilization of 10,000 yd$^3$ of soils
- Placed soils in new landfill cell Aug 2003
Remedial Action Status (Cont.)

- Completed landfill and multilayered cap construction by October 2003
- Excavated 100 yd³ of PCB “hot spots” and 10 yd³ PCB/Dioxin soils for off-site disposal
- Off-site disposal completed in December 2003
- Remedial Action completed in 7 months
- No cost increases for additional soil stabilization or off-site disposal
Remedial Action Status (Cont.)

- Regulatory agencies appreciated prompt execution of site cleanup
- Institutional Controls agreements with site owners signed October 2003
- Administrative Order of Consent (AOC) signed with US EPA December 2003
- Analytical data reviewed by USEPA Staged Electronic Data Deliverable implementation
- Currently under NPL delisting process
- Anticipate US EPA approval on delisting by Sept 2005
Other Waste Materials

- Inspected scrap materials for expended munitions
- Scanned scrap for radiation
- Transferred over 65,000 yd³ scrap to local recycler
- Disposed waste drums, gas cylinders, trailers, and transformers in accordance with state and federal regulations
- Gas cylinders containing CFCs (Freon) transferred to Defense Supply Center Richmond for recycling
Expended Munitions (EM)

- EM materials discovered site Sept 2002. EM DEMIL started Nov 2002
- Over 98,000 units EM materials removed
- Over 50 types EM materials identified
- DEMIL EM materials disposed to local landfill to avoid future liability
- 19 live primers identified and disposed by Eielson AFB Explosive Ordinance Disposal (EOD) personnel. Over 330 energetic items (frag. bombs, etc.) identified and disposed
- EM DEMIL completed by Feb 2004. Geophysical verification survey completed Mar 2004
Radiation Wastes

- Radiation waste discovered during EM DEMIL operations
- Over 10 types of radiation items identified including instrument check sources and vehicle dials
- Site cleared of radiation wastes
- Geosurvey for EM materials up to 4 feet below ground surface completed Mar 2004
ASSY Remediation Progress
Remediation-Complete Celebration

PCB/Lead RA Complete
Landfill paved to serve as parking lot
6 October 2003

Regulators
Contractors
Emergency Service Personnel
Local Residents
Site Owners
Eielson AFB, AFCEE, DLA, & DRMS
I n t e g r i t y  -  S e r v i c e  -  E x c e l l e n c e

Institutional Controls
Complete

16 December 2003
RPO team recommended alternative soil cleanup strategy using stabilization for PCB and lead contaminated soils

- Cost savings exceeded $30 million...Cheaper
- Schedule accelerated by > 2.5 years...Faster

Alternative cleanup strategy demonstrated to regulators and public for concurrence

- More protective than original ROD...Better
  - Exceeded lead fixation requirement
  - Exceeded PCB cleanup requirements
  - Removed low radioactive waste and UXO
Examples of Community Cooperation

- Fire Department – Training Exercises
  - Pressurized tanks ($150K saved)

- Eielson AFB EOD – Disposed of all live munitions and incendiaries (334) at no cost to project ($50K - $500K Saved)

- City Landfill refused to waive tipping fees
  - Local recycler agreed to accept all scrap at no cost to project ($1 M saved)
Arctic Surplus Salvage Yard Summary

- PERMA implementation results:
  - Protective remedy with minimal adverse impact to human health and environment
  - Cost savings ~ 90% of original estimate
  - Remediated UXO and low-RAD waste for $5.8M
  - Accelerated schedule by > 2.5 years
  - Optimized LTM strategy
  - Beneficial use of 100% of site
  - NPL delisting (to be completed by Sept 2005)

June 2004
Summary

- ADEC Referred to Arctic Surplus as a MODEL to follow for environmental cleanup
  - Team work and trust
  - Regulatory involvement from planning stages
  - First application of Performance-Based Environmental Restoration Management Assessment (PERMA) [developed by AFCEE]
  - Open and frequent communication
  - Real-time document reviews by all stakeholders
  - Model presently being followed at Galena AFB and King Salmon AFB, AK