FFID: WV39799F789200
Size: 12 acres of former 16,000-acre government plant
Mission: Manufacture smokeless powder (private party operated a batch chemical plant)
HRS Score: 36.3; placed on NPL in September 1983
IAG Status: None
Contaminants: Dioxin, organic and inorganic chemicals, and metals
Media Affected: Groundwater and soil
Funding to Date: $0.6 million
Estimated Cost to Completion (Completion Year): $0.8 million (FY2008)
Final Remedy In Place or Response Complete Date for All Sites: FY2008

Nitro, West Virginia

Restoration Background

Environmental restoration sites at Fike-Artel Chemical have been grouped into five operable units (OUs): disposal of storage tank and drum contents (OU1); decontamination and disposal of storage tanks, surface drums, and aboveground structures (OU2); removal of buried drums (OU3); Remedial Investigation and Feasibility Study (RI/FS) of groundwater and soil (OU4); and RI of the cooperative sewage treatment plant (OU5). Private-sector potentially responsible parties (PRPs) and EPA are leading all environmental restoration activities.

In FY93, an RI was completed for OU1. In FY94, RI activities began at OU2. Twenty PRPs signed an agreement with EPA to remove 7,000 to 16,000 buried containers from OU3.

In FY95, an Interim Action was conducted to remove underground storage tanks (USTs) and aboveground storage containers (OUs 1, 2, and 3). RI activities were completed for OU2 and started for OU5, and RI/FS activities began for OU4.

In FY96, USTs and building OUs were demolished and removed. Final allocation of liability was achieved and a principal agreement was signed. The Consent Decree for OU4 was filed in court and protested by a nonsigning party. The RI work plan was submitted to EPA for approval. EPA and the PRPs and were negotiating a Consent Decree.

In FY97, the PRPs and EPA established a Consent Decree. The PRPs (private and government) revised the RI/FS work plan for OU4, and the plan was submitted to EPA for review and concurrence. In addition, the PRPs completed a UST Removal Action for OU5.

In FY98, The PRPs received EPA approval on the Phase I RI/FS work plan and began soil and groundwater sampling.

FY99 Restoration Progress

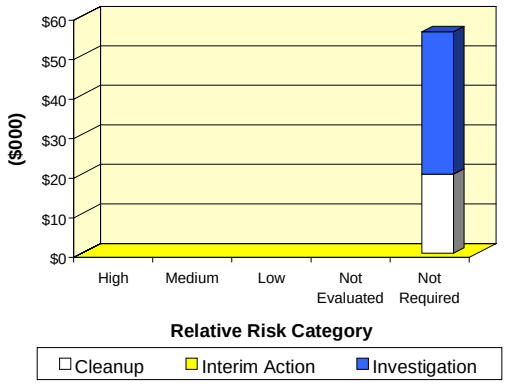
Implementation of Phase I of the RI/FS work plan was completed. The Phase II work plan was developed in conjunction with EPA and the West Virginia Department of Environmental Protection. The Prospective Purchaser Agreement was executed by EPA, the Department of Justice, and the Nitro Redevelopment Authority to allow industrial redevelopment of the site.

The stormwater treatment system was operated in compliance with permit requirements. The Y2K compliance plan was executed. The RI/FS report was not submitted as planned because, at the request of EPA, the PRPs agreed to conduct Phase II sampling.

Plan of Action

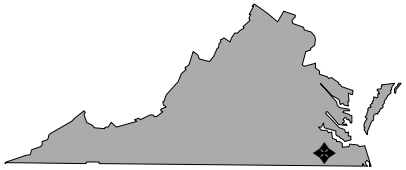
- Secure access and implement Phase II RI/FS work plan in FY00
- Issue RI/FS report for PRP and EPA review and approval in FY00
- Conduct RA, prepare FS, and support EPA efforts for Record of Decision preparations in FY00
- Continue operating stormwater treatment system in FY00

FY00 Funding by Phase and Relative Risk



Former Nansemond Ordnance Depot NPL

FFID: VA39799F156700
Size: 975 acres
Mission: Served as ordnance depot
HRS Score: 70.0; placed on NPL in July 1999
IAG Status: Under negotiation
Contaminants: TNT and pesticides
Media Affected: Soil, groundwater, and sediment
Funding to Date: $6.2 million
Estimated Cost to Completion (Completion Year): $38.8 million (FY2015)
Final Remedy in Place or Response Complete Date for All Sites: FY2015



Suffolk, Virginia

Restoration Background

The Former Nansemond Ordnance Depot consists of approximately 975 acres on the James River, at the mouth of Nansemond River. The property was acquired by the Army between 1917 and 1929. The Army used the depot from World War I until November 1950. The Army leased the site to the Navy from 1950 to 1960. In 1960, the property was excessed and conveyed to Beaszley Foundation, Inc. Tidewater Community College; the General Electric Company; Dominion Lands, Inc.; and Interstate 664 now occupy the majority of the site.

In FY97, the site's first Restoration Advisory Board (RAB) meeting was held at Tidewater Community College. The RAB has 18 members, including representatives of corporations, EPA, and the Virginia Department of Environmental Quality (VDEQ); property owners; civic leagues; and minority interests. The RAB meets bimonthly.

In FY98, the U.S. Army Corps of Engineers (USACE), EPA Region 3, the Biological Technical Assistance Group, and VDEQ began partnering efforts. New work at the burning ground area, the horseshoe-shaped pond, and the background study area was discussed. These studies moved from the Site Inspection (SI) phase to the Remedial Investigation (RI) stage. Also in FY98, a draft SI for the James River beachfront was provided to EPA Region 3 and VDEQ for review.

FY99 Restoration Progress

Former Nansemond Ordnance Depot was listed on the National Priorities List (NPL) in July, 1999. A Removal Action took place to remove impregnite kits from Dominion Lands, Inc., property; 850 tons of impregnite kits and associated soil was removed. Because of this removal, this site was not included in the final listing package. Soil sampling at the TNT removal area indicated that additional monitoring wells needed to be installed. A contract for an Engineering Evaluation and Cost Analysis to determine what Remedial Action should be performed at the James River beachfront area of concern (AOC) was awarded. USACE conducted a geophysical investigation and took samples to determine whether any additional disposal activities took place at the James River AOC. Fieldwork was completed at the James River beachfront source area.

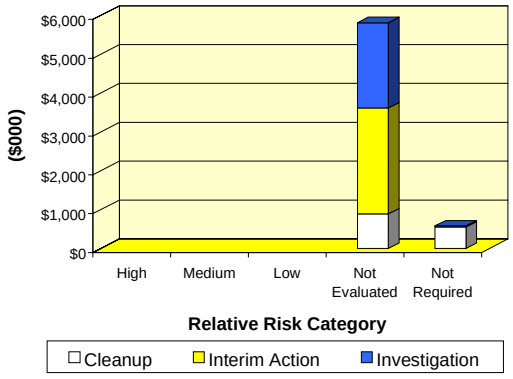
Navy divers investigated two piers associated with the former depot. The investigation did not discover any ordnance around the pier areas in the water.

EPA and USACE completed approximately 85 percent of an interagency agreement related to an anomaly investigation at AOC 5 on Tidewater Community College property. Work began on the anomaly investigation.

Plan of Action

- Complete ordnance and explosives removal and anomaly investigation at main burning ground area in FY00
- Complete an RI and Feasibility Study (FS) and a background study for the main burning ground area and the horseshoe-shaped pond in FY00
- Begin addressing 18 AOCs by implementing an agreed Site Screening Process to determine whether RI/FS or Removal Actions will be required in FY00 and FY01
- Perform Removal Actions at the James River beachfront, the Track K dump, the TNT removal area, the pesticide drum area, and the Nansemond River AOC in FY00 and FY01

FY00 Funding by Phase and Relative Risk



Former Weldon Spring Ordnance Works — NPL

FFID: MO79799F037400
Size: 17,232 acres
Mission: Manufactured TNT and DNT during World War II
HRS Score: 30.26; placed on NPL in February 1990
IAG Status: IAG signed in 1990; amended in August 1991
Contaminants: TNT, DNT, lead, asbestos, PCBs, PAHs, and low-level radioactive material
Media Affected: Groundwater and soil
Funding to Date: $189.5 million
Estimated Cost to Completion (Completion Year): $59.9 million (FY2005)
Final Remedy in Place or Response Complete Date for All Sites: FY2005

St. Charles County, Missouri

Restoration Background

From 1941 to 1944, the Weldon Spring Ordnance Works produced explosives for the Armed Services. The Army currently occupies the 1,655-acre Weldon Spring Training Area. The majority of the remaining property is owned by the state and is maintained as a wildlife area and an agricultural research facility of the University of Missouri. A parcel covering approximately 200 acres was acquired by the Atomic Energy Commission in the early 1950s and used for a uranium ore feed material plant. This site, the Chemical Plant Area of the Weldon Spring site, is being investigated and remediated by DOE as a separate National Priorities List (NPL) site and is not part of the Weldon Spring Ordnance Works project, beyond DoD's providing partial funding for the cleanup through DoD potentially responsible party (PRP) payments.

Two operable units (OUs) exist at the Weldon Spring Ordnance Works: OU1, Soils and Pipeline (lagoons, landfills, burning grounds, TNT/DNT-contaminated soil, and underground wastewater pipelines); and OU2, Groundwater. Contaminants subject to OU1 cleanup are TNT, DNT, lead, polychlorinated biphenyls (PCBs), and polyaromatic hydrocarbons (PAHs). Non-NPL projects include building demolition and debris removals (BD/DR).

The U.S. Army Corps of Engineers (USACE) conducted several studies that relate to remediation efforts at the site: a biodegradation research study (FY92); a historical survey of activities (FY94); and a study of genetic effects on organisms. Remedial Investigation (RI) of OU2 began in FY91.

In FY94, USACE initiated the Remedial Design (RD) for OU1. RD was completed in FY95. USACE also worked with DOE to prepare final joint RI and Feasibility Study (FS) work plans for OU2 and to complete two rounds of jointly collected quarterly groundwater monitoring.

In FY96, USACE completed the RD and the Record of Decision (ROD) for OU1. The OU1 Remedial Action (RA) contract was awarded in May 1997. The joint RI/FS and Proposed Plan (PP) for OU2 were also submitted in FY97. A Restoration Advisory Board (RAB) was established in January 1997, replacing the previous Technical Review Committee. Quarterly meetings of the RAB began in April 1997.

In FY98, OU1 RA fieldwork began. The Missouri Department of Natural Resources (MDNR) found DOE and USACE joint preparation of the OU2 FS and PP to be unacceptable. Due to technical differences between the DoD and DOE sites, the agencies agreed to proceed independently with each FS and PP for OU2. The RD and construction phase of the BD/DR for Water Treatment Plant No. 2 also was completed.

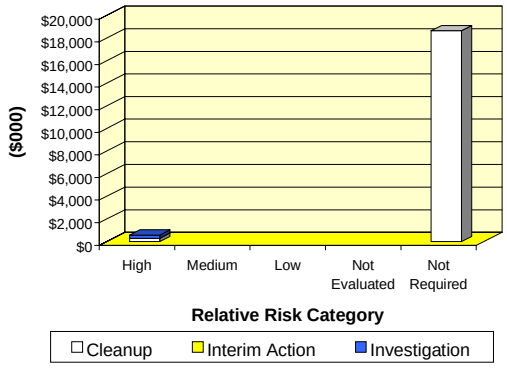
FY99 Restoration Progress

Soil and pipeline incineration activities at OU1 were completed. In conjunction with MDNR and EPA, the installation decided to postpone completion of the OU2 FS, PP, and ROD to allow collection of groundwater data for the next 36 months. These data would allow the installation to assess whether contaminant concentrations were decreasing due to completion of the OU1 RA. Long-term monitoring of groundwater was initiated. The RD and demolition of Power Plant No 2 was deferred due to funding constraints.

Plan of Action

- Complete OU1 RA construction in FY00
- Close out the OU1 project in FY00
- Continue discussions with EPA and MDNR about the OU2 FS and PP in FY00
- Continue OU2 groundwater monitoring in FY00 and FY01
- Continue PRP payments to DOE in FY00 and FY01

FY00 Funding by Phase and Relative Risk



Fort Crowder - Pools Prairie NPL

FFID: MO79799F034700
Size: 42,786 acres
Mission: Served as World War II Signal Corps training facility; Korean Conflict Era reception station; disciplinary barracks; Atlas missile rocket engine manufacture and testing facility; jet engine and component manufacture and repair facility
HRS Score: 50.00; placed on NPL in October 1999
IAG Status: None
Contaminants: VOCs, including TCE and carbon tetrachloride
Media Affected: Groundwater and soil
Funding to Date: $0.6 million
Estimated Cost to Completion (Completion Year): $1.2 million (FY2013)
Final Remedy in Place or Response Complete Date for All Sites: FY2003

Newton County, Missouri

Restoration Background

The former Fort Crowder is located near the city of Neosho, in southwestern Missouri. The Army used the site during World War II as a signal corps training center and again during the Korean conflict as a reception station. In 1956, approximately 3,650 acres was transferred to the Air Force for the establishment of Air Force Plant 65. Approximately 4,358 acres was leased to the Missouri National Guard (MNG) for a training facility, known as Camp Crowder. The remainder of the property reverted to ownership by private parties and local municipalities and now is used for farming, light industry, an airport, a landfill, and a community college.

Air Force Plant 65 operated until 1968 as an Atlas missile manufacturing and testing facility, and later, until 1980, as a jet engine overhaul and testing facility. Plant 65 was a government-owned, contractor- operated facility. The operating contractors were the Rocketdyne Division of North American Aviation (now Boeing) and Continental Aviation (now Teledyne Industries).

The U.S. Army Corps of Engineers (USACE), Kansas City District, began investigating the property as a Formerly Used Defense Site (FUDS) project in 1991. A site investigation was completed in 1993, and a Remedial Investigation (RI) began in 1995.

Trichloroethene (TCE) was discovered in private wells near the property in 1995. USACE, Kansas City District, provided bottled water to residents with affected wells, discontinued the RI, and initiated a potentially responsible party (PRP) project to determine the extent of DoD's liability. The Missouri Department of Natural Resources and EPA Region 7 conducted further investigations on the property and tested additional wells on adjacent property.

EPA named Boeing, Teledyne, DoD, Saberliner, and MNG as PRPs in 1997. The Department of Justice (DOJ) is leading negotiations for the United States, supported by USACE, Kansas City District. The PRPs negotiated an Administrative Order on Consent for a Removal Action in 1998. The Pools Prairie Site was placed on the National Priorities List (NPL) on October 18, 1999. A portion of Air Force Plant 65 is located on the federally owned Camp Crowder. The National Guard Bureau is directing a Removal Action on this site and is planning an RI and a Feasibility Study.

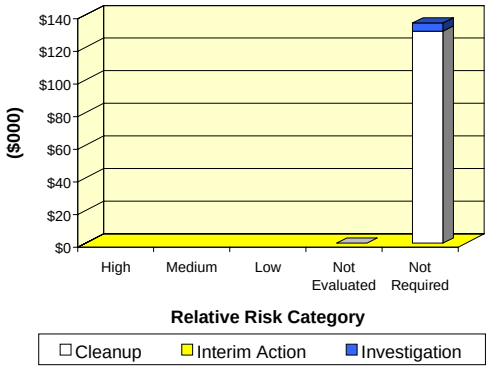
FY99 Restoration Progress

USACE, Kansas City District, negotiated and signed two Administrative Orders on Consent for Removal Actions. A private PRP's execution of a Removal Action to connect approximately 225 residents to city water was monitored. A second Removal Action by a private PRP to conduct further studies at a source area was planned and monitored. DoD's interim contribution for these actions has been paid by the Judgment Fund. A document-sharing agreement was negotiated. Negotiation began on plans for an Alternative Dispute Resolution (ADR) process for allocating liability to PRPs.

Plan of Action

- Finalize plan for and begin ADR process in FY00
- Provide technical and legal support to DOJ in FY00
- Negotiate Administrative Order on Consent for an additional Removal Action in FY00
- Monitor execution of Administrative Orders on Consent by private PRPs in FY00 and FY01
- Conclude ADR process in FY01

FY00 Funding by Phase and Relative Risk

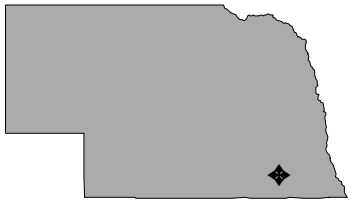


Hastings Groundwater Contamination Site

Formerly Blaine Naval Ammunition Depot

NPL

FFID: NE79799F041100
Size: 48,753 acres
Mission: Produce, load, and store ammunition
HRS Score: 42.24; placed on NPL in June 1986
IAG Status: IAG under negotiation
Contaminants: Explosive compounds, UXO, VOCs, PAHs, and heavy metals
Media Affected: Groundwater and soil
Funding to Date: $60.6 million
Estimated Cost to Completion (Completion Year): $76.1 million (FY2031)
Final Remedy In Place or Response Complete Date for All Sites: FY2018



Hastings, Nebraska

Restoration Background

Operations at the Blaine Naval Ammunition Depot (NAD) Subsite contributed to groundwater and soil contamination at the Hastings Groundwater Contamination Site. The U.S. Army Corps of Engineers (USACE) designated five operable units (OUs) at the site: three OUs for the 2,900-acre Hastings East Industrial Park (HEIP) area (OU4, soil; OU8, vadose zone; and OU14, groundwater); one OU for the former Naval Yard Dump, the Explosives Disposal Area, and the Bomb and Mine Complex Production Facility (OU16); and one OU for a 44,500-acre area whose contamination status is unknown (OU15).

Soil sampling, installation of monitoring wells, and geophysical surveys were conducted for the Remedial Investigation (RI) of the HEIP area. EPA signed a Record of Decision (ROD) to remove surface soil. In FY95, EPA signed an amendment to the ROD for removal of soil from the HEIP area.

RI, Feasibility Study (FS), and Remedial Design (RD) activities were conducted for two OUs. A Time-Critical Removal Action (TCRA) was conducted to remove utility accesses and piping that had been identified as a source of groundwater contamination. Engineering Evaluations and Cost Analyses (EE/CAs) were performed to assess alternatives for environmental restoration in several areas. USACE also completed a preliminary study for the remaining 44,500 acres at the former depot.

In FY96, the RD for soil vapor extraction (SVE) and remediation of surface soil at the HEIP area was completed. Phase II of the RD for SVE began at three source areas in OU8. USACE completed an air-sparging pilot study as part of the RI/FS for OU14 and began the TCRA for the air-sparging facility. A comprehensive RI began for OU5. A TCRA for subsurface soil and drums was conducted at the Naval Yard Dump. In addition, a Remedial Action (RA) for surface soil and a Removal Action were initiated at the HEIP.

In FY97, a sitewide groundwater Baseline Risk Assessment began. USACE used shallow and deep soil gas sampling and testing. The property's Restoration Advisory Board (RAB) received risk assessment training.

During FY98, the OU4 RA was completed. EPA completed an RA report on the OU4 soil repository, and operations and maintenance for the repository began. In situ bioremediation and in-well stripping were pilot tested. The OU8 Phase I systems produced significant reductions in contamination. The ordnance and explosives (OE) EE/CA began. RAB members participated in groundwater hydrogeologic training. The Army signed a Federal Facility Agreement, which was later approved.

FY99 Restoration Progress

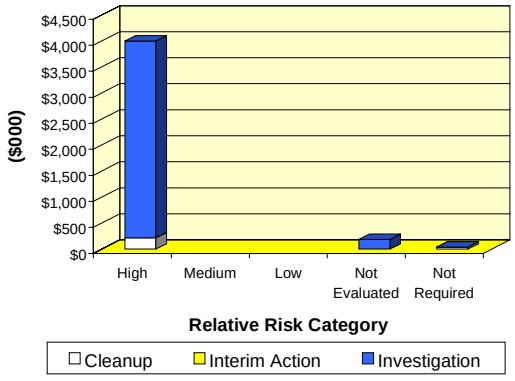
The RAB received Technical Assistance for Public Participation (TAPP) training. The OE EE/CA was completed on time and under budget. The EE/CA found that no further action was necessary for the OE Removal Action. The public availability session for the EE/CA was held. A draft technical memorandum to address carcinogenic polyaromatic hydrocarbons (cPAHs) at OU4 was completed and submitted for review. The OU14 Environmental Risk Assessment (ERA) was completed.

The OU14 groundwater model is in its final stages. Data gaps were identified during groundwater modeling preparation, and additional investigation provided information that allowed work on the model to continue. Annual groundwater monitoring continued to help track the extent and concentrations of the plumes. Design of the OU8 Phase II SVE systems was completed, and construction began. A final draft report for the OU15 ERA was submitted to regulators. The OU16 final draft Explosives Disposal Area Removal Action report and the draft final EE/CA for OU16 were submitted. Field sampling at OUs 15 and 16 was completed. The sitewide plan also was completed. Initial and follow-on partnering sessions were held.

Plan of Action

- Conduct TAPP training for RAB in FY00
- Complete OU4 technical memorandum to address cPAHs in FY00
- Complete OU4 Proposed Plan in FY00
- Complete OU14 groundwater model in FY00
- Complete construction of OU8 Phase II SVE systems in FY00
- Complete OU14 FS, OU15 ERA and EE/CA, and OU16 EE/CA in FY00

FY00 Funding by Phase and Relative Risk



Jet Propulsion Laboratory NPL

FFID: CA99799F546700
Size: 176 acres
Mission: Conduct research and develop aeronautics, rocketry, and space exploration technology
HRS Score: 50.00; placed on NPL in October 1992
IAG Status: IAG between NASA and EPA signed in 1992
Contaminants: VOCs and various inorganic chemicals
Media Affected: Groundwater
Funding to Date: $0.6 million
Estimated Cost to Completion (Completion Year): $0.2 million (FY2001)
Final Remedy in Place or Response Complete Date for All Sites: FY2001

Pasadena, California

Restoration Background

In 1980, samples from drinking water wells of the city of Pasadena were found to be contaminated with volatile organic compounds (VOCs), including trichloroethane (TCA), trichloroethene (TCE), and tetrachloroethene (PCE). NASA and the California Institute of Technology Jet Propulsion Laboratory initiated a study to determine whether the Jet Propulsion Laboratory was a source of the contaminants. A Preliminary Assessment and a Site Inspection were conducted, and an Expanded Site Inspection was completed in FY90.

In October 1993, the Omaha District of the U.S. Army Corps of Engineers (USACE) proposed an Interim Settlement Agreement to NASA and the California Institute of Technology Jet Propulsion Laboratory for DoD participation in funding of environmental restoration activities.

The laboratory site was divided into three operable units (OUs): on-site groundwater contamination (OU1), on-site contamination sources (OU2), and off-site groundwater contamination (OU3). The installation also identified eight waste disposal areas. NASA prepared and submitted a Remedial Investigation and Feasibility Study (RI/FS) work plan to EPA for approval.

In FY94, RI/FS activities began with the installation of groundwater monitoring wells at OU1. RI fieldwork was initiated at OU3. RI/FS activities continued in FY95 with a second sampling round for on-site soil vapor extraction wells. Also in FY95, an Interim Remedial Action was implemented, involving installation of a groundwater treatment system for contaminated municipal wells. Five off-site groundwater monitoring wells were installed, and one round of groundwater samples was collected.

In FY96, NASA conducted a second round of groundwater sampling at five off-site monitoring wells. Three additional monitoring wells were installed to determine the direction of groundwater migration beneath the installation. Four soil-gas probes were installed to determine the extent of vertical migration of contamination.

In FY97, NASA conducted quarterly off-site well sampling and monitoring, and a risk assessment analysis was developed. NASA also completed the on-site RI and began the FS. Pilot treatment plants for VOCs and perchlorates (a previously undetected contaminant of concern) were implemented.

During FY98 the draft RI for OUs 1 and 3 were completed by NASA and the Jet Propulsion Laboratory. An FS perchlorate pilot study using ion-exchange resins and a cathodic system began.

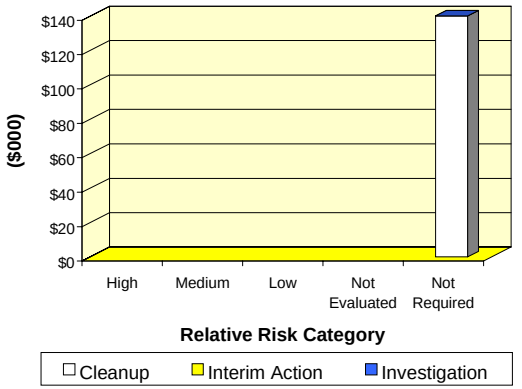
FY99 Restoration Progress

The groundwater hydrology modeling of Raymond Basin was completed. Cost sharing negotiations between USACE, NASA, and the California Institute of Technology began. In addition, NASA and the Jet Propulsion Laboratory completed the final RIs for OU1, OU2 and OU3. The draft FS perchlorate pilot study using ion-exchange resins and a cathodic system was completed.

Plan of Action

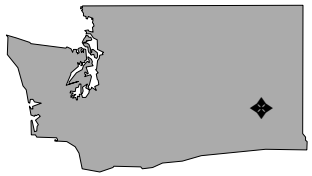
- Continue cost sharing negotiations in FY00
- Complete the final FS perchlorate pilot study in FY00
- Complete a Record of Decision for OU1, OU2 and OU3 by FY01

FY00 Funding by Phase and Relative Risk



Moses Lake Wellfield Contamination Site — Formerly Larson Air Force Base — NPL

FFID: WA09799F331700
Size: 9,607 acres
Mission: Served as tactical air command, air transport, and strategic air command base; provided pilot training
HRS Score: 50.00; placed on NPL in October 1992
IAG Status: IAG signed by EPA and DoD in March 1999
Contaminants: VOCs (specifically TCE), jet fuel, possibly tetraethyl lead and low-level radioactive materials
Media Affected: Groundwater and soil
Funding to Date: $5.7 million
Estimated Cost to Completion (Completion Year): $54.3 million (FY2036)
Final Remedy in Place or Response Complete Date for All Sites: FY2036



Moses Lake, Washington

Restoration Background

Larson Air Force Base (AFB) served as a tactical air command base, then as a military air transport facility and later as a Strategic Air Command base. The installation was sold to the Port of Moses Lake in 1966 and is now operated by the Grant County Airport. Much of the former Larson AFB property serves as a regional aviation, industrial, and educational facility.

Environmental assessments, beginning in FY87, identified four sites that required further investigation: 11 underground storage tanks (USTs) and associated potentially contaminated soil; a trichloroethene (TCE)-contaminated groundwater plume; an area potentially containing low-level radioactive waste; and two disposal areas potentially containing tetraethyl lead. In 1988 the water from the Skyline Water District, south of the former Larson AFB, was found to be contaminated by trichloroethene TCE during routine sampling required by the Washington Department of Health. Two City of Moses Lake potable-water wells were also found to have been contaminated with TCE. The city has performed Remedial Actions at the Wellfield, and concentrations of TCE have been reduced below the levels established in the Federal Drinking Water Standards. The privately owned water supply system of Skyline has not been reconstructed. Other private wells in the study area may be contaminated at levels above allowable Federal levels.

In FY91, a Phase I Remedial Investigation (RI) was initiated by the U.S. Army Corps of Engineers (USACE), Seattle District, to identify potential source areas that would require further characterization. In FY92, 11 USTs were excavated and removed from the site. In FY93, the Phase I RI was completed. In FY94, three additional rounds of groundwater sampling were conducted under an addendum to the Phase I RI. The Port of Moses Lake conducted an Interim Response Action, providing bottled water to the Skyline community from 1994 until July 1999.

In FY94, USACE, Seattle District, under contract to EPA, completed an Engineering Evaluation and Cost Analysis (EE/CA) to evaluate the Skyline drinking water system. The EE/CA was distributed for public comment.

In FY95, USACE, Omaha District, completed a search for potentially responsible parties (PRPs) and a cost allocation effort. USACE, Seattle District, also completed the addendum to the Phase I RI, including additional groundwater sampling.

In FY97, the Omaha District Office of Counsel, in coordination with its Department of Justice attorney, negotiated with EPA Region 10 to decide who (EPA, USACE, or PRPs) will take the lead for the RI and Feasibiltiy Study (FS).

In FY98, USACE, Omaha District, in coordination with its Department of Justice attorney, began negotiating with EPA on an Interagency Agreement (IAG) for the RI/FS. The project was turned over to the USACE, Seattle District, for execution of the technical RI/FS.

FY99 Restoration Progress

The IAG was signed and RI/FS work began. The work will determine the extent of the TCE plume. Fieldwork began in July. Twenty-five groundwater monitoring wells were constructed, and several piezometers were installed. Low-flow sampling technology, piezometer data results, geochemical studies of groundwater movement, and other study methods are being used to characterize the extent of contamination in the groundwater. Real estate rights-of entry (ROEs) were obtained for 45 local private residences.

The District sampled and analyzed the water from these private wells to assist in the RI of the contaminated plume.

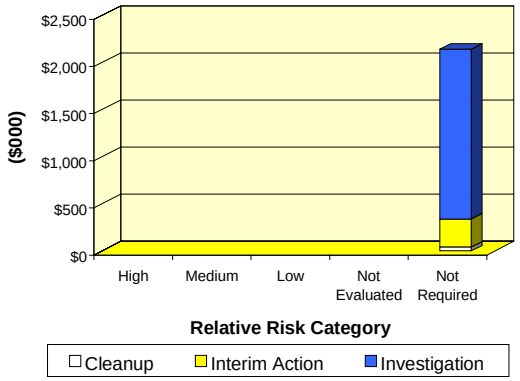
In July, USACE, Seattle District, assumed responsibility for providing bottled water to the Skyline community. A Time-Critical Removal Action (TCRA) was initiated for design and construction of a potable water pipeline from the City of Moses Lake's water distribution system to Skyline. The design was completed. Construction is awaiting receipt of FY00 funding and a Notice to Proceed from EPA.

Contract actions were initiated to expedite the RI of the hangar complex area on the Port of Moses Lake property. Genie Industries Inc. and the U.S. Forest Service have leased property from the Port of Moses Lake in the vicinity of the hangar complex.

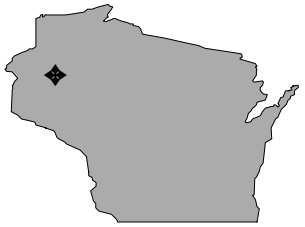
Plan of Action

- Complete the draft RI in July 2000
- Complete the Skyline TCRA pipeline installation in FY00
- Complete an Interim Remedial Action for TCE USTs in FY00
- Perform additional sampling of domestic water wells in FY00
- Complete the draft FS in FY01

FY00 Funding by Phase and Relative Risk



FFID: WI59799F244900
Size: 320 acres
Mission: Manufacture ordnance
HRS Score: 43.7; placed on NPL in June 1986
IAG Status: None
Contaminants: VOCs, including TCE
Media Affected: Groundwater and soil
Funding to Date: $3.2 million
Estimated Cost to Completion (Completion Year): $0.004 million (FY1990)
Final Remedy In Place or Response Complete Date for All Sites: FY1990



Eau Claire, Wisconsin

Restoration Background

Between 1981 and 1985, EPA and the Wisconsin Department of Natural Resources (WDNR) conducted groundwater studies in the general area west of the National Presto Industries (NPI) site (formerly Eau Claire Ordnance Plant No. 1). Volatile organic compounds (VOCs) were detected in groundwater samples. EPA issued an Administrative Order on Consent requiring NPI to design and install an on-site groundwater treatment facility.

In FY91, EPA issued a unilateral order requiring NPI to construct a drinking water system in the town of Hallie. The drinking water system was completed in FY92. Also, in FY92, the U.S. Army Corps of Engineers, Omaha District, awarded a contract for potentially responsible party (PRP) investigation activities, including research into historical activities at the site and evaluation of technical data relating to potential DoD liability. Results of this investigation indicated that DoD has limited, if any, liability.

In FY94, under a Consent Order signed by NPI and EPA, removal activities began at Lagoon No. 1. Final closure of the lagoon is awaiting completion of source removal and issuance of the Record of Decision (ROD). The Remedial Investigation (RI) report identified five source areas and four plumes of groundwater contamination. An on-site groundwater extraction and treatment facility became operational in FY94.

In FY95, a Removal Action was conducted at Lagoon No. 1 to remove waste forge compound liquids and solids. The RI and Feasibility Study (FS) was completed, and a Proposed Plan was issued. A public meeting was held to outline the alternatives included in the RI/FS. WDNR issued a statement on the desired environmental restoration levels; WDNR did not concur in EPA's Proposed Plan.

In FY96, Congress appropriated an additional $15 million for NPI's CERCLA cleanup, and the Army transferred that funding to NPI at the direction of Congress. A ROD was issued with state concurrence.

In FY97, an intermediate design for the Melby Road disposal site was submitted along with an Engineering Evaluation and Cost Analysis and a Remedial Action Plan for Lagoon No. 1. A revised Remedial Design work plan was completed. Work plans also were submitted for the soil vapor extraction (SVE) monitoring wells and ditch and dry well soil sampling. NPI continued to operate several operable units on site. It will continue to extract and treat groundwater for an unknown period.

In FY98, closure of the Melby Road disposal site was completed. Ditch 3 and Dry Wells 2 and 5 were remediated.

FY99 Restoration Progress

Monitoring and operation of the SVE and groundwater systems continued. Closure of Lagoon No. 1 was completed.

Plan of Action

- Continue monitoring and operating SVE and groundwater systems in FY00

FY00 Funding by Phase and Relative Risk

All sites are in the long-term monitoring phase.

Naval Station TODD–Tacoma

Formerly Commencement Bay

NPL

FFID: WA09799F345500
Size: 191 acres
Mission: Served as shipbuilding facility and reserve shipyard
HRS Score: Unknown
IAG Status: None
Contaminants: VOCs, PNAs, PCBs, and heavy metals, including arsenic, lead, and mercury
Media Affected: Groundwater, sediment, and soil
Funding to Date: $0.2 million
Estimated Cost to Completion (Completion Year): $0.02 million (FY2000)
Final Remedy in Place or Response Complete Date for All Sites: FY2000

Tacoma, Washington

Restoration Background

The former Todd Tacoma shipyard is located on Commencement Bay between Hylebos and Blair Waterways in Tacoma, Washington. The 191-acre facility was acquired between 1942 and 1948 for use by the U.S. Navy. In 1960, all but 8.33 acres was conveyed to the Port of Tacoma. The remainder was retained by the Navy for a Navy and Marine Corps Reserve Training Center.

Between 1917 and 1940, the then privately owned property was in use intermittently for shipbuilding. Beginning in 1940, the western portion of the facility, approximately 74.2 acres, owned at that time by Seattle-Tacoma Shipbuilding Corporation (later called Todd Pacific Shipyards Inc., Tacoma Division), was rapidly developed to support the Navy war effort. Adjacent lands were acquired both by the Navy and by the Maritime Commission to expand the plant. By October 1942, the Maritime Commission had transferred all of its contractual and facility interests to the Navy. Land acquisitions continued until the end of the war, and the facility expanded to 191.04 acres.

After the war, the installation was designated a Naval Industrial Reserve Shipyard, and shipbuilding ceased. In September 1948, the Todd-owned property was acquired by the Navy. In October 1958, the installation was declared excess. The Navy and Marine Reserve Training Center retained 8.33 acres, and the remaining property was conveyed to the Port of Tacoma on January 1, 1960. The Port has leased portions of the facility for business and light industry.

In 1983, the Commencement Bay Nearshore/Tideflats Superfund Site was placed on the National Priorities List (NPL). The former naval yard is adjacent to the mouth of the Hylebos Waterway problem area. Sediment sampling revealed high levels of polychlorinated biphenyls (PCBs) and several other contaminants. On December 21, 1994, the U.S. Army Corps of Engineers (USACE), Seattle District, was sent a potentially responsible party (PRP) letter from the Hylebos PRP Group. On February 6, 1995, EPA Region 10, sent a General Notice Letter to the District Engineer. Other major PRPs include ASARCO Incorporated; Elf Atochem of North America, Inc.; General Metals of Tacoma, Inc.; Kaiser Aluminum & Chemical Corporation; Occidental Chemical Corporation; and the Port of Tacoma.

Investigations of the Commencement Bay Nearshore/Tideflats Superfund Site have been in progress for several years. USACE, Seattle District, received approval to initiate PRP investigations using existing field studies and other sources of information in February 1996. Authority has been granted to determine DoD liability and negotiate a settlement with other PRPs for both the FUDS property and the active Navy training center. A Site Ownership/Operational History (SOOH) was undertaken in June 1997 to develop the information required for a determination of liability. In FY98, the scope of the SOOH expanded to include additional information sources and properties.

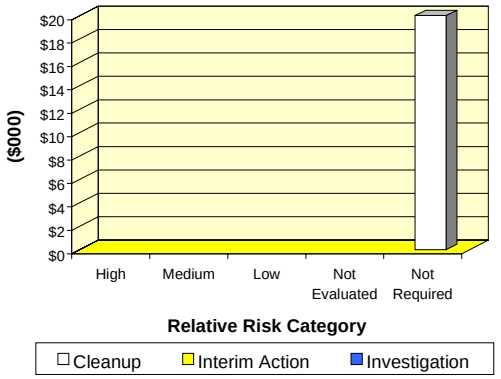
FY99 Restoration Progress

Additional data on past practices were collected and evaluated to enable the Seattle District Office of Counsel to enter discussions with other PRPs. An expanded SOOH was completed in draft, and the new data were evaluated.

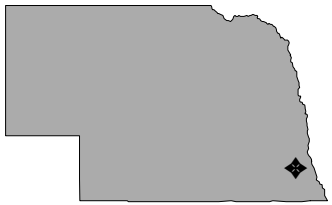
Plan of Action

- Begin discussions with other PRPs to apportion liability for contamination restoration early in FY00

FY00 Funding by Phase and Relative Risk



FFID: NE79799F041800
Size: 17,214 acres
Mission: Performed ordnance storage and manufacturing activities
HRS Score: 31.94; placed on NPL in August 1990
IAG Status: IAG signed in September 1991
Contaminants: Explosives, VOCs, and PCBs
Media Affected: Groundwater and soil
Funding to Date: $54.1 million
Estimated Cost to Completion (Completion Year): $51.2 million (FY2030)
Final Remedy in Place or Response Complete Date for All Sites: FY2005



Mead, Nebraska

Restoration Background

From 1942 to 1956, the Nebraska Ordnance Plant produced munitions at four bomb-loading lines, stored munitions, and produced ammonium nitrate. The property also contained burn areas, an Atlas Missile facility, and a sewage treatment plant. Most of the property is now owned by the University of Nebraska and used as an agricultural research station. Other parts of the property are owned by the Nebraska National Guard and private entities. The U.S. Army Corps of Engineers (USACE) has identified soil contaminated with polychlorinated biphenyls (PCBs) and munitions, and on-site and off-site groundwater contaminated with explosives and volatile organic compounds (VOCs).

In FY94, USACE completed a Remedial Investigation and Feasibility Study (RI/FS) for soil contamination and prepared a draft final RI/FS report for groundwater. A Time-Critical Removal Action for PCBs was completed.

In FY95, a Record of Decision (ROD) for incineration of contaminated soil at Operable Unit (OU) 1 was approved. USACE completed the Proposed Plan and the FS report for groundwater contamination at OU2 and Phase I RI fieldwork at OU3. EPA approved the final Engineering Evaluation and Cost Analysis (EE/CA) and the design for Removal Actions for two trichloroethene (TCE)-contaminated groundwater plumes. USACE installed activated carbon canister treatment systems to treat contaminated drinking water in on-site wells and completed field investigations to identify explosives waste.

In FY96, USACE completed the Remedial Design (RD) for the OU1 incinerator. The draft final ROD for contaminated groundwater at OU2 was completed. USACE completed the PCB Removal Action, the ordnance and explosives EE/CA and Action Memorandum, and the decision documents for the Removal Action at OU2. The Phase II RI field investigation for OU3 also was completed.

In FY97, construction for the Remedial Action (RA) at OU1 was completed. The draft final RI and draft final Baseline Risk Assessment for OU3 were finished. The design for building demolition and debris removal at the Load Line Buildings was completed. An ordnance and explosives Removal Action was accomplished. USACE provided point-of-use water treatment to residences whose water was affected by the groundwater plume.

USACE converted the Technical Review Committee to a Restoration Advisory Board (RAB) in FY97.

In FY98 USACE completed operations of the OU1 incinerator, treating over 16,000 tons of explosives-contaminated soil. The final RA report was approved by EPA. Construction on the OU2 groundwater containment RA began. The 60 percent design for the full-scale system was submitted. The OU3 RI was approved. However, the Army agreed to do further characterization of several areas. Asbestos removal at the Load Line Buildings was completed.

FY99 Restoration Progress

The demolition of four Load Line Buildings was completed. The OU2 contaminant Removal Action was completed and began operating. The RD for OU2 was also completed. Additional characterization fieldwork, including characterization for explosives of the area near the Lower Platte National Resource District (LPNRD) impoundment, was completed for OU3. A Memorandum of Understanding with LPNRD was completed.

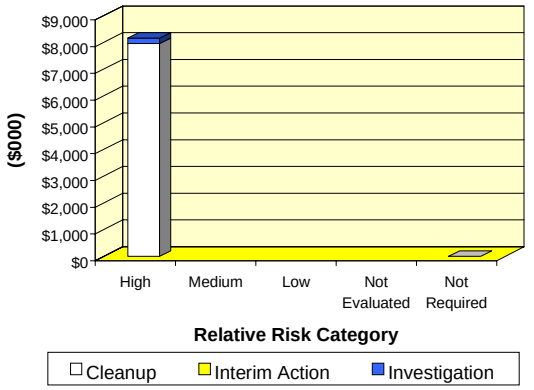
Regional groundwater monitoring continued, as did provision of alternate water supplies to affected residents.

Four RAB meetings were held.

Plan of Action

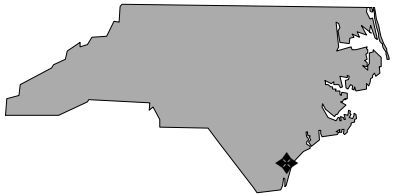
- Award contract for construction of groundwater RA in FY00
- Begin construction of the groundwater RA for OU2 in FY00
- Complete the draft and draft final work plans for the groundwater circulation well pilot study in FY00
- Perform full-scale pilot study to evaluate innovative technologies using groundwater circulation wells in FY00
- Submit the OU3 draft final RI report addendum, revised draft final Baseline Risk Assessment, and draft FS in FY00
- Complete the draft and draft final RD for OU2 Phase II in FY01
- Complete the draft and draft final Proposed Plan and ROD for OU3 in FY01

FY00 Funding by Phase and Relative Risk



New Hanover County Airport NPL

FFID: NC49799F483500
Size: 4 acres
Mission: Served as World War II bomber command and Vietnam-era aerospace defense command
HRS Score: 39.39; placed on NPL in March 1989
IAG Status: None
Contaminants: VOCs and SVOCs
Media Affected: Groundwater
Funding to Date: $1.9 million
Estimated Cost to Completion (Completion Year): $0.8 million (FY2003)
Final Remedy in Place or Response Complete Date for All Sites: FY2003



Wilmington, North Carolina

Restoration Background

In FY87, a Preliminary Assessment and a Site Inspection identified groundwater contamination caused by fire training activities conducted at New Hanover County Airport from FY68 through FY79. Fire training activities involved burning jet fuel, gasoline, fuel oil, and kerosene. The site included a burn pit, a mockup of an aircraft, and a 10,000-gallon aboveground storage tank that supplied fuel to the burn areas. The site also contained several other fire training stations, including a fire smokehouse, a railroad tanker car, and several automobiles. As a result of fire training activities, groundwater was contaminated with benzene.

EPA has identified DoD, New Hanover County, Cape Fear Community College, and the City of Wilmington as potentially responsible parties (PRPs) for the site.

A Removal Action completed in FY91 involved removal of waste materials, contaminated water, contaminated surface and subsurface soil, and structures associated with the fire training activities. Confirmatory soil sampling resulted in a recommendation for no further action at the site.

In FY92, EPA completed the Remedial Investigation and Feasibility Study (FS) for groundwater contamination, and the Record of Decision (ROD) for cleanup was signed. In FY94, PRPs began Remedial Design (RD) work at the airport to collect additional data on groundwater quality. In FY95, two monitoring wells were installed to confirm that contamination had not migrated to the lower groundwater aquifer. A 60 percent RD document was sent to EPA with a recommendation that air sparging be used as a more cost-effective treatment technology.

In FY97, the PRPs used a low-volume, low-flow sampling technique to reevaluate metal contamination in the groundwater. The reevaluation showed that metals were no longer a contaminant of concern. This finding was instrumental in obtaining approval from EPA and the State of North Carolina for implementation of the air-sparging pilot study.

In FY98 the PRPs conducted geoprobe studies to determine the direction of groundwater flow. The air-sparging pilot test and an evaluation of the technology's efficacy were completed.

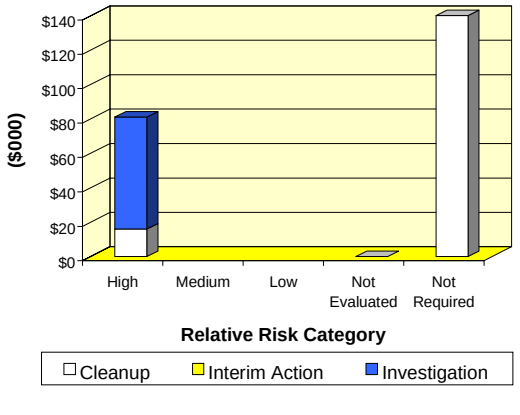
FY99 Restoration Progress

The PRPs installed additional wells and piezometers to aid in RD. The air-sparging pilot test Treatability Study report was completed. Full-scale utilization of the air-sparging technology did not begin because the ROD was not amended by EPA. After an FS amendment was completed, EPA began amending the ROD. However, the ROD could not be implemented in FY99 because the EPA amendment process was not completed. The revision of the RD and evaluation of the settlement of DoD liability have not been accomplished due to a delay in approving the ROD amendment.

Plan of Action

- Revise and finalize the RD to include air sparging in FY00
- Begin full-scale utilization of the air-sparging technology in FY00
- Finalize amendment and implement ROD in FY00 and complete ROD in FY05
- USACE and the Department of Justice will evaluate possible settlement of DoD liability in FY00

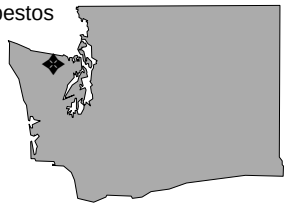
FY00 Funding by Phase and Relative Risk



Old Navy Dump/Manchester Annex

NPL

FFID: WA09799F832600
Size: 350 acres
Mission: Originally provided harbor defense for Puget Sound; during World War I, tested torpedoes and stored fuel; later served as a fire training school for the Navy and housed an antiaircraft artillery battery
HRS Score: 50.00; placed on NPL in May 1994
IAG Status: IAG signed in July 1997
Contaminants: PCBs, heavy metals, petroleum hydrocarbons, dioxins and furans, and asbestos
Media Affected: Surface water, sediment, and soil
Funding to Date: $5.7 million
Estimated Cost to Completion (Completion Year): $3.2 million (FY2032)
Final Remedy in Place or Response Complete Date for All Sites: FY2008



Kitsap County, Washington

Restoration Background

The Navy owned the Old Navy Dump/Manchester Annex from 1919 to 1960. During that time, a net depot, a fire training area, and a landfill were established at the site. Activities at the property included maintenance, painting, sandblasting, and storage of steel cable net. Domestic waste, wood, and metal waste from the site and the Puget Sound Naval Shipyard were disposed of in a landfill. Currently, the National Oceanic and Atmospheric Administration, the National Marine Fisheries Service (NMFS), an EPA laboratory, and a portion of Manchester State Park occupy the site.

Preliminary Assessments and Site Inspections (PAs/SIs) conducted at the site since FY87 identified past releases of hazardous substances from the three areas. Contaminants include heavy metals, polychlorinated biphenyls (PCBs), petroleum hydrocarbons, dioxins and furans, and asbestos. Contaminants have been detected in soil at the landfill and at the fire training area, as well as in surface water and sediment at the site.

In FY94, the U.S. Army Corps of Engineers (USACE) completed the PA/SI process, and the Manchester Work Group was established to facilitate restoration efforts. The group includes representatives of EPA, the Washington State Department of Ecology, the U.S. Fish and Wildlife Service, tribal governments, and the local community.

During FY95, Phase II Remedial Investigation and Feasibility Study (RI/FS) fieldwork began, and a potential unexploded-ordnance area was identified. USACE, Huntsville Division, determined that the area is not accessible to the general public and thus should be considered for No Further Action.

In FY96, USACE completed the draft RI/FS report. It was determined that Interim Remedial Actions (IRAs) are not appropriate for the site. Additional rounds of groundwater sampling for Phase I and II investigations were conducted. In FY97, the Interagency Agreement (IAG) was signed and the RI/FS was completed. USACE prepared a Proposed Plan, issued a Record of Decision (ROD), and initiated the Remedial Design (RD) and Remedial Action (RA). The RI/FS process was accelerated by use of a landfill cap as a presumptive remedy.

In FY98, the RD/RA scope of work was completed, additional data collection was performed, and the results were documented in an Auxiliary Data Collection Technical Memorandum. The 35 percent RD was submitted for work group review.

Also in FY98, cleanup of the fire training area simulator structures was completed. Dioxin-contaminated debris and soil were excavated from within the simulator structures and disposed of off site. The concrete simulator structures were demolished and disposed of off site. Underground storage tanks (USTs) adjacent to the simulators were cleaned and closed in place. The site was restored by backfilling with clean fill and grading to create a parking lot for NMFS employees.

FY99 Restoration Progress

The final RD for the overall cleanup remedy was completed. Interim submittals at the 35 percent and 95 percent RD stages were coordinated and reviewed by the Manchester Annex Work Group to ensure that all concerns had been addressed before the RD was finalized.

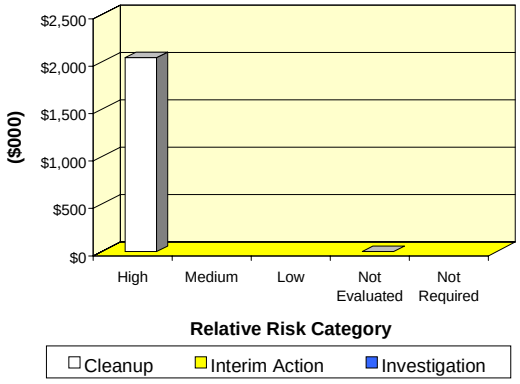
An RA construction contract was awarded for completion of the overall cleanup remedy as specified in the ROD. The contract includes excavating landfill debris from the Clam Bay intertidal zone and constructing a shoreline protection system; placing clean sediment over intertidal Clam Bay sediment areas that exceed cleanup levels; installing a cap over the upland portion of the landfill, and a hydraulic cutoff system along the upgradient edge of the cap; and cleaning and filling in place the remaining USTs.

Design and review meetings were held with the Manchester Annex Work Group to assure members that all concerns about the RD had been addressed. USACE met with Washington State Parks to coordinate the required access agreements and property easements for the RA work. The NMFS and the U.S. Fish and Wildlife Service were also consulted on preparation of a biological assessment for the RA to ensure that threatened and endangered species will not be adversely impacted by RA activities.

Plan of Action

- Complete Phase I of RA construction in FY00
- Initiate Phase II of RA construction in FY00
- Complete Phase II of RA construction in FY01
- Initiate long-term monitoring, operation and maintenance in FY01

FY00 Funding by Phase and Relative Risk



Ordnance Works Disposal Areas — Formerly Morgantown Ordnance Works — NPL

FFID: WV39799F346200
Size: 825 acres
Mission: Manufactured chemicals for ordnance
HRS Score: 35.62; placed on NPL in June 1986
IAG Status: None
Contaminants: PCBs, PAHs, inorganic compounds, arsenic, and mercury
Media Affected: Groundwater and soil
Funding to Date: $2.0 million
Estimated Cost to Completion (Completion Year): $0.3 million (FY2003)
Final Remedy in Place or Response Complete Date for All Sites: FY2003

Morgantown, West Virginia

Restoration Background

On the basis of environmental studies, sites at the Ordnance Works Disposal Areas in Morgantown were grouped into two operable units (OUs). OU1 consists of an old landfill, a shallow disposal area from which topsoil has been removed, and two lagoons from which sludge has been excavated. OU2 consists of all other sites, particularly those located in processing areas.

The Remedial Investigation and Feasibility Study (RI/FS) for OU1 was completed in early FY88. The Record of Decision (ROD) for OU1, signed in FY89, stipulated that soil contaminated with polyaromatic hydrocarbon (PAH) compounds was to be excavated and treated in a bioremediation bed. Soil washing was selected as an alternative remedy if bioremediation proved infeasible.

In FY90, EPA issued Consent Orders for both OUs. In the same year, the potentially responsible parties (PRPs) signed a participation agreement for OU2. In FY94, a pilot-test work plan was approved for the cleanup of soil contamination at OU1, and remedial work began. In FY95, the draft work plan for OU1 Phase II Interim Remedial Actions was submitted to EPA for review.

In FY95, the draft RI report for OU2 was submitted to EPA for review. OU2 areas contained elevated levels of organic and inorganic contaminants. Removal Actions were required for five areas of OU2, two at the main processing building and three at the coke ovens and the by-products area. A Time-Critical Removal Action was proposed for limited areas. This proposal of a Removal Action after the RI phase eliminated the need for an FS.

In FY96, the U.S. Army Corps of Engineers (USACE) reached an agreement on allocating the cost of remediation at OU1.

During FY97, the PRP group, which includes USACE, completed the Removal Actions at OU2 and received EPA concurrence on completion. To improve site management at OU1, the PRP group submitted a Focused Feasibility Study (FFS) to EPA for the OU1 remedy. In August 1998, after state concurrence, EPA approved the remedy proposed for OU1 in the FFS.

A new ROD for OU1 was issued by EPA on September 28, 1999. This supersedes the previous ROD signed in 1989.

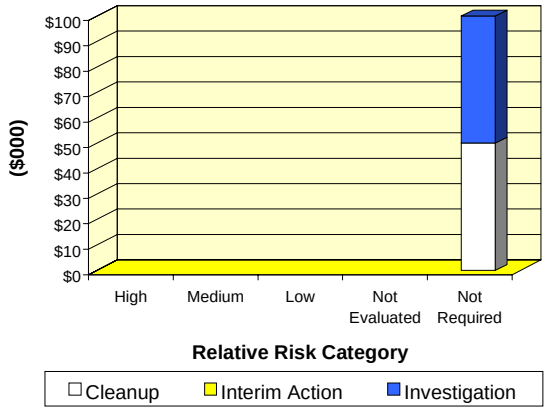
FY99 Restoration Progress

EPA issued a new ROD for OU1 based on the approved FFS. Consent Decree negotiations were not initiated as planned, and the Proposed Plan was not submitted, due to delays in the EPA ROD issuance process.

Plan of Action

- Initiate Consent Decree negotiations in FY00
- When PRP allocation issues have been resolved for OU1, begin work on the Proposed Plan for the site, consisting of off-site thermal treatment and on-site landfill capping

FY00 Funding by Phase and Relative Risk



FFID: TX69799F676300
Size: 16,000 acres
Mission: Produced and stored military weapons
HRS Score: 51.22; placed on NPL in May 1994
IAG Status: Under negotiation
Contaminants: VOCs, SVOCs, heavy metals, chlordane, UXO, and explosives
Media Affected: Groundwater, surface water, sediment, and soil
Funding to Date: $0.3 million
Estimated Cost to Completion (Completion Year): $3.7 million (FY2004)
Final Remedy in Place or Response Complete Date for All Sites: FY2004

Pantex Village, Texas

Restoration Background

The former Pantex Ordnance Plant began operations in 1942 as an Army Ordnance Corps facility. The property is owned by the U.S. Department of Energy (DOE) and Texas Tech University. Operations conducted there include fabrication, assembly, testing, and disassembly of nuclear ammunition and weapons. Sources of contamination have included burning of chemical waste in unlined pits, burial of waste in unlined landfills, and discharge of plant wastewaters into on-site surface water.

Environmental studies of the southern 5,000 acres, owned by Texas Tech University, began in FY88. A Preliminary Assessment and Site Inspection in FY90 identified nine areas of emphasis (AOEs) for investigation. It was suspected that some AOEs contained ordnance and explosives (OE). An Interim Remedial Action was conducted at three AOEs to remove OE from soil to a depth of 3 feet.

In FY94, a Phase I Remedial Investigation and Feasibility Study (RI/FS) began for two AOEs. RI/FS activities included sampling of surface and subsurface soil, sediment, surface water, and groundwater. The analysis indicated that explosives, mercury, lead, chromium, and chlordane were the primary contaminants of concern. The installation began an Engineering Evaluation and Cost Analysis (EE/CA) of four AOEs where Non-Time-Critical Removal Actions might be necessary.

In FY95, the final Phase I RI report was completed for the hazardous, toxic, and radioactive waste (HTRW) project, and the draft EE/CA report was completed for the OE project. In addition, a public meeting was held to present information about environmental restoration projects at the installation. DOE and Texas Tech University established a partnership with the Texas Natural Resource Conservation Commission (TNRCC) to continue quarterly groundwater sampling.

In FY96, representatives of Texas Tech University, DOE, the community, and TNRCC met to review the site's status and discuss concerns. TNRCC did not agree with the recommendation of the EE/CA report. Therefore, the cleanup remedy recommended in the report was not implemented.

In FY97, contracts were awarded for the DOE potentially responsible party (PRP) and the Texas Tech property record search. The Phase II HTRW investigation began for the Texas Tech property. The DOE record search was completed, and a final report was submitted.

In FY98 the HTRW investigation for Texas Tech and the findings report were completed. The PRP record search for Texas Tech also was completed.

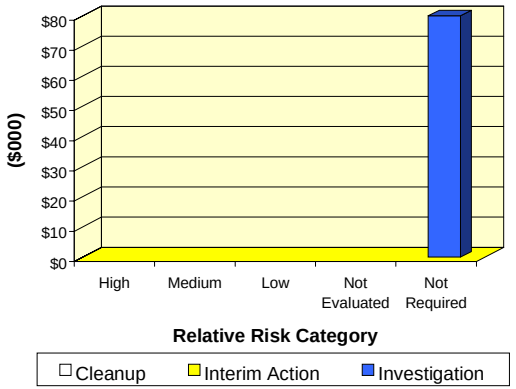
FY99 Restoration Progress

Although the RI of the Texas Tech site has been completed, further long-term sampling is required. Some data from the original site investigation and from the RI were analyzed by ITS Laboratory of Richardson, Texas. ITS has since admitted that it committed laboratory fraud. The Department of Justice is investigating this case, and all suspect data have been forwarded to it. Further sampling is required to substantiate the conclusions of the previous, possibly tainted samples. Because of the need for additional testing at the site, the proposed FY99 meeting with DOE and Texas Tech to determine PRP responsibility and the HTRW investigation reports has been delayed until FY00. The recommended cleanup of the EE/CA report for Texas Tech was completed.

Plan of Action

- Complete additional confirmation testing in FY00
- Complete HTRW investigation report in FY00
- Meet with DOE and Texas Tech in FY00 to determine PRP liability

FY00 Funding by Phase and Relative Risk



San Bernardino Engineering Depot NPL

FFID: CA99799F558700
Size: 1,663 acres
Mission: World War II Engineer storage depot, Quartermaster repair facility, and prisoner of war camp
HRS Score: Unknown
IAG Status: None
Contaminants: TCE, PCE, and Freon 11 and 12
Media Affected: Groundwater
Funding to Date: $4.9 million
Estimated Cost to Completion (Completion Year): $1.7 million (FY2000)
Final Remedy in Place or Response Complete Date for All Sites: FY2000

San Bernardino, California

Restoration Background

The former San Bernardino Engineering Depot, commonly known as Camp Ono, consists of 1,662.82 acres and is located 4 miles northwest of central San Bernardino, California. The site of the former camp is now largely within the boundaries of that City. The property comprising Camp Ono was leased by the U.S. Army beginning on December 15, 1941. The San Bernardino Engineer Depot was used as a military storage depot, a tent repair facility, and a prisoner of war (POW) camp. For a time, the site served as part of the Communications Zone of the Desert Training Center, a large multistate area where troop maneuvers were held. Operations included routine vehicle maintenance, supply, storage, tent repair, motor pool operations, a sewage disposal system, and a station hospital. A POW camp occupied the upper reaches of the site, having taken over the station hospital 6 months after its completion. At the depot, POWs performed routine repairs on Army vehicles, loaded and unloaded stored materiel, and operated a large facility where tents and web and duck goods were repaired. The camp was closed in mid-1947, and all leases terminated by the end of 1948. Uses of the property after the Army's departure included a steel rolling mill, mineral processing, machine shops, steel fabrication, poultry farms, agricultural commodities storage, gasoline service stations, and various private manufacturing and warehousing operations. Current land development includes industrial buildings, shopping centers, multifamily apartment buildings, and single-family homes. Some areas remain undeveloped.

There are five parcels of depot property within the Newmark Groundwater Contamination Site. The site was added to the National Priorities List (NPL) in 1989, after discovery of groundwater contamination during a water supply monitoring program. The Newmark and Muscoy operable units (OUs) are located on the east and west sides of the site, respectively.

The discovery of tetrachloroethene (PCE) and trichloroethene (TCE) in the groundwater resulted in the closure of a number of water supply wells. The state brought some of the wells back into operation by installing air-stripping towers on eight wells and carbon filtration systems on the other four.

An EPA investigation was initiated in FY90 to identify the source of the Newmark plume contaminants and to identify ways of controlling continued downgradient migration while removing contaminants. EPA conducted Remedial Investigation and Feasibility Study activities in FY91, FY92, and FY95 and completed two Records of Decision in FY93 and FY94. The site has been divided into three OUs. In FY92, an investigation of the Muscoy OU was initiated. EPA separated the area into two projects in FY94: one to address the spread of contamination and the other to investigate the source of contamination.

The U.S. Department of Justice and the U.S. Army Corps of Engineers (USACE) have been working closely with EPA to investigate the nature and extent of the contamination. Efforts by USACE have included research of military archives, numerous interviews, seismic and magnetometer surveys of the subsurface, soil gas sampling, soil borings, and construction of six monitoring wells.

During FY98, USACE developed an overall investigation strategy and technical approaches for investigating potential sources. USACE's investigation work plans undergo a stringent EPA concurrence process. Consultation with the U.S. Fish and Wildlife Service was completed concerning potential impacts on several endangered species; the San Bernardino Kangaroo Rat was listed as an endangered species.

FY99 Restoration Progress

Installation of 11 soil gas borings (0 to 150 feet), installation of 3 groundwater monitoring wells, and testing of the groundwater were completed in the area of the former sewage treatment facility. A site investigation report was completed and submitted.

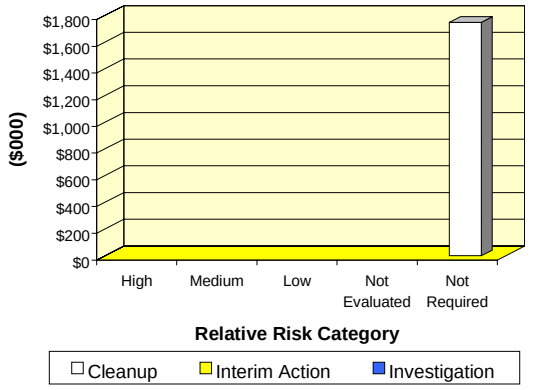
The work plan for investigation of the upper portion of Parcel 1 of the former engineering depot was approved. Under this plan, a seismic survey, 50 soil gas borings (0 to 30 feet), 20 bedrock borings, three groundwater monitoring wells, and testing of groundwater were completed. The resulting data are being analyzed.

The work plan for investigation of the former engineering depot operational sites throughout all five parcels is under development. This investigation is meant to find indications of surface releases. The work set forth in this plan will cover nine potential areas with 110 soil gas surveys.

Plan of Action

- Complete site investigation reports for upper portions of Parcel 1 in FY00
- Complete work plan and execute field activities for soil gas surveys in the vicinity of San Bernardino Engineering Depot project in FY00
- Complete the work plan and execute field activities near former non-DoD airport in FY00
- Evaluate all data that indicate presence of contaminant plumes for the possibility of surface releases in FY00

FY00 Funding by Phase and Relative Risk



Sangamo Electric Dump/Crab Orchard National Wildlife Refuge

Formerly Illinois Ordnance Plant **NPL**

FFID: IL59799F221600
Size: 43,000 acres
Mission: Manufacture and load ordnance for shipping
HRS Score: 43.70; placed on NPL in July 1987
IAG Status: IAG signed in September 1991
Contaminants: Organic solvents, inorganic compounds, PAHs, PCBs, munitions, and heavy metals
Media Affected: Groundwater and soil
Funding to Date: $0.8 million
Estimated Cost to Completion (Completion Year): $34.1 million (FY2014)
Final Remedy in Place or Response Complete Date for All Sites: FY2014

Carterville, Illinois

Restoration Background

The former Illinois Ordnance Plant, which operated from 1942 to 1945, is located on the eastern portion of the U.S. Fish and Wildlife Service's Crab Orchard National Wildlife Refuge. The ordnance plant served as a manufacturing and loading site for high-explosive shells, bombs, and other weapons components.

Thirty-three areas were identified for site investigation. These areas were grouped into four operable units (OUs): the PCB OU, the Metals OU, the Miscellaneous OU, and the Explosives and Munitions Manufacturing Area OU. EPA was established as the lead agency for the PCB OU through a Consent Decree issued to Sangamo Electric, Inc. The U.S. Fish and Wildlife Service (USFWS) is responsible for the Metals OU and the Miscellaneous Area OU. The Department of the Army, represented by the U.S. Army Corps of Engineers (USACE), is responsible for the Explosives and Munitions Manufacturing Area OU.

In FY88, a Preliminary Assessment (PA) was conducted at the areas associated with the ordnance plant. A Site Inspection (SI), focusing on 14 sites, also was completed. Results of the PA and the SI did not indicate widespread contamination. Two surface munitions bunkers were demolished in FY92. Other unsafe buildings were demolished in FY93.

In FY93, a Remedial Investigation and Feasibility Study (RI/FS) was completed for the PCB OU and the Metals OU. A Record of Decision (ROD) designating the environmental restoration alternative for the Metals OU was signed, and most Remedial Design and Remedial Action (RD/RA) activities for that OU were completed in FY95. The ROD for the PCB OU was completed.

An RI was completed to study the presence and magnitude of contamination at the Explosives and Munitions Manufacturing Area OU. Fieldwork at the OU included installation of monitoring wells, collection of soil borings and sediment samples, and excavation of magnetic anomalies. In FY95, the FS for this OU was completed, the RI began at the Miscellaneous Area OU, and an Engineering Evaluation and Cost Analysis (EE/CA) for ordnance and explosives waste (OEW) was undertaken.

In FY96, USACE completed the ROD for the Explosives and Munitions Manufacturing Area OU and began fieldwork for the OEW EE/CA. A draft report was issued; preliminary study indicated a need for institutional controls. The parties involved determined that the U.S. Fish and Wildlife Service must provide preliminary investigations for uncharacterized sites.

In FY97, the ROD for the Explosives and Munitions Manufacturing Area OU was signed, and cleanup of the PCB OU was completed. USACE expedited approval of well abandonment plans by adapting previously approved work plans.

During FY98, risk evaluations were completed for all sites. Facilitated partnering was discontinued in July 1998, at which time Illinois EPA withdrew from the partnership. The RA for hazardous, toxic, and radioactive waste and OEW at the Explosives and Munitions Manufacturing Area OU began. The USACE, EPA, Illinois EPA, and USFWS participated in formal partnering from November 1996 through July 1998.

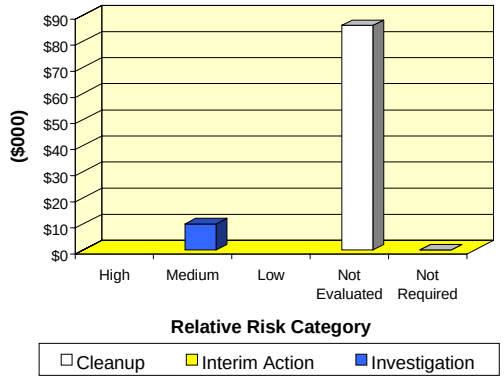
FY99 Restoration Progress

The scheduled RA for the Explosives and Munitions Manufacturing Area OU was not completed because additional contamination was found at the site, which requires removal.

Plan of Action

- Complete the RA for Explosives and Munitions Manufacturing Area OU by June 2000

FY00 Funding by Phase and Relative Risk



West Virginia Ordnance Works — NPL

FFID: WV39799F346100
Size: 2,704 acres
Mission: Manufactured TNT
HRS Score: 35.72; placed on NPL in September 1983
IAG Status: First IAG signed in September 1987; second IAG signed in July 1989
Contaminants: TNT, DNT, and organic compounds
Media Affected: Groundwater, surface water, sediment, and soil
Funding to Date: $52.2 million
Estimated Cost to Completion (Completion Year): $38.9 million (FY2027)
Final Remedy in Place or Response Complete Date for All Sites: FY2005

Point Pleasant, West Virginia

Restoration Background

From 1941 to 1946, West Virginia Ordnance Works manufactured TNT from toluene, nitric acid, and sulfuric acid. By-products of the manufacturing process included TNT, DNT, and organic compounds, which were released into groundwater, soil, surface water, and sediment. Principal sites include TNT manufacturing areas, wastewater sewer lines, and wastewater ponds known as the "Red and Yellow Water Ponds."

Preliminary Assessments and Site Inspections (SIs) in FY81 and FY82 identified two operable units (OUs). The property is now divided into 13 OUs. From FY88 to FY93, contaminated soil was capped in the TNT manufacturing area. Caps for the ponds and the reservoir (OUs 2 and 3) were completed, and the installation began Remedial Investigation and Feasibility Study (RI/FS) activities at OUs 8, 9, and 11. The U.S. Army Corps of Engineers (USACE) began operations and maintenance and long-term monitoring (LTM) for OUs 1, 2, and 3. OU13 is the Pantasote Area. EPA has the lead on this OU.

In FY94, the Site Management Plan for the former installation was completed. Remedial Design (RD) activities were completed for OU4 and the groundwater extraction and treatment system. Expanded SIs (ESIs) began. USACE removed 546 tons of hazardous material from the TNT manufacturing area and backfilled open pits and manholes.

In FY95, USACE completed Removal Actions for asbestos in the acids area and two powerhouses and performed follow-on building demolition. USACE also began quarterly LTM of the adjacent Point Pleasant and Camp Conley municipal water supply wells. At OU6, sampling was completed, and the RD began for construction of wetlands. Potentially responsible party (PRP) efforts were initiated for OU7. A risk assessment began at OU11.

During FY96, USACE submitted a risk assessment and an RI report to EPA Region 3 and started an FS at OUs 8, 9, and 11. It also initiated final Baseline Risk Assessments for OUs 10 and 12.

In FY97, USACE completed construction of the groundwater extraction and treatment system and submitted a Remedial Action report for OU4. The final Alternative Analysis report for OU5 and the final Baseline Risk Assessment for OUs 10, 11, and 12 also were submitted to EPA. USACE presented a draft FS for OU10, a draft risk evaluation for ESI 3, and a Proposed Plan for OU11. The conceptual design for OU5 was initiated.

USACE worked with the Technical Review Committee (TRC) to reestablish project priorities. A draft no-action Record of Decision (ROD) for OU11 was developed in FY97.

During FY98, USACE completed a sitewide groundwater model and converted the TRC to a Restoration Advisory Board (RAB). A draft FS for OU4 Alternative Analysis was completed to identify ways of bringing the system into compliance with state discharge standards. USACE developed draft decision documents for ESIs 1, 2, 3, 8, and 9. Draft Proposed Plans for OU10 and OU12 were completed.

FY99 Restoration Progress

The ROD at OU5 and the final documents for ESIs 1, 2, 3, 8 and 9 were not completed, due to a backlog of documents at EPA. The OU1 burning ground investigation was completed. The Proposed Plan for OU12 was completed and presented to the public for comments. The Proposed Plan for OU10 was delayed because the state requested additional sampling. The FS for OU4 Alternative Analysis was completed. A 5-year review report was submitted, and a UST confirmation study was completed. A Removal Action at ESI 8 was initiated. Additional sampling at ESI 3 was completed. Partnering with EPA is under way to relieve the backlog of documents awaiting EPA review.

Plan of Action

- Complete RODs for OUs 5, 10, 11, and 12 in FY00
- Complete the final decision documents for ESIs 1 and 3 through 9 in FY00
- Complete OU4 corrective action RD in FY00
- Complete UST removal at ESI 5 in FY00
- Continue LTM activities at OUs 1, 2, 3, and 11 and AOC 2 in FY00 and FY01
- Complete OU4 corrective action in FY01
- Complete FS for OU8 and OU9 in FY01
- Complete ESI 2 final decision document in FY01

FY00 Funding by Phase and Relative Risk