



IDAHO NATIONAL ENGINEERING & ENVIRONMENTAL LABORATORY

Idaho Falls, Bonneville County, Idaho

Office: Idaho Operations Office

Size: 569,600 acres (890 square miles)

NPL Status: Placed on the NPL on November 21, 1989.

Mission: The National Reactor Testing Station was established in 1949 by the U.S. Atomic Energy Commission as an area to build, test, and operate various nuclear reactors, fuel processing plants, and support facilities with maximum safety and isolation. The site was renamed the Idaho National Engineering Laboratory (INEL) in 1974 to reflect the broad scope of engineering activities now conducted at the site. In 1997 it was renamed the Idaho National Engineering and Environmental Laboratory (INEEL) to include the expanded mission of environmental research and development and cleanup. Prior to its establishment, the site was used as a World War II gunnery range for the U.S. Navy and U.S. Army Air Corps.

Overview of Environmental

Conditions: Onsite groundwater and soil contamination from both known and potential sources resulting from past disposal practices. Contaminants of concern include chromium, volatile organic compounds (VOCs), carbon tetrachloride, and radionuclides.

**CERCLA/RCRA Remediation
Funding in FY 98:** \$74,245,000

Progress in Reaching Interagency Agreement

The INEEL Federal Facility Agreement/Consent Order (FFA/CO) and Action Plan between DOE, EPA Region X, and the State of Idaho was executed on December 9, 1991. The FFA/CO supersedes the RCRA 3008(h) Consent Order and Compliance Agreement (COCA) and covers all CERCLA response requirements as well as RCRA corrective action requirements. All parties agreed to initiate the FFA/CO Action Plan under the COCA in September 1991 while the FFA/CO was being finalized. The FFA/CO also includes Argonne National Laboratory - West and the Naval Reactors Facility (NRF), which are located at INEEL.

Specific Cost Estimates and Budgetary Proposals Involved in Each Interagency Agreement

Funds budgeted for environmental restoration under the IAG Action Plan at the INEEL total \$70.4 million of appropriated funding for FY 99 and \$60.7 million for FY 00 according to the request in the President's Budget.

Public Comments Regarding Interagency Agreements

Public attention was focused on INEEL's FFA/CO when the Governor of Idaho was negotiating a settlement agreement with the Federal government over the shipment of Naval spent fuel to the INEEL. One of the provisions of the "Settlement Agreement" is that INEEL's Environmental Restoration Program, as stated in the FFA/CO Action Plan, will be implemented. Additionally, when DOE-Idaho solicited public comments on the draft INEEL Environmental Management Ten-Year Plan (now the draft INEEL 2006 Plan), citizens had two principal concerns: 1) the

Ten-Year Plan (draft INEEL 2006 Plan) be reconciled to the FFA/CO without weakening the FFA/CO; and 2) the FFA/CO continue to receive funding necessary to comply with required cleanup actions that resulted from agency decisions following public comment periods on cleanup plans.

Progress in Conducting Remedial Investigations/Feasibility Studies

Idaho National Engineering and Environmental Laboratory (INEEL):

Major INEEL documents submitted to the EPA and the State of Idaho during FY 98 were:

Waste Area Group (WAG) 1 Test Area North (TAN):

- OU 1-10 (Comprehensive RI/FS):
 - Comprehensive RI/FS Report;
 - Revised draft Proposed Plan; and
 - Draft FS Supplement.
- OU 1-07B TAN Groundwater:
 - FY 98 Groundwater Monitoring Statistical Sampling Plan;
 - Draft In-Situ Chemical Oxidation Implementation Plan; and
 - In-Situ Bioremediation and Natural Attenuation Field Evaluation and Work Plans.

WAG 2 Test Reactor Area (TRA):

- OU 2-13 Comprehensive RI/FS:
 - ROD;
 - Draft & final Remedial Design/Remedial Action (RD/RA) Statement of Work (SOW);
 - Final RD/RA Work Plan; and
 - Final Chemical Waste and Cold Waste Ponds Sampling Plans.

WAG 3 Idaho Nuclear Technology and Engineering Center (INTEC) formerly Idaho Chemical Processing Plant:

- OU 3-13 Comprehensive RI/FS:
 - Draft final RI/FS;
 - Draft & final Proposed Plans; and

- Draft final comprehensive FS Supplement.

WAG 4 Central Facilities Area (CFA):

- OU 4-13 Comprehensive RI/FS:
 - RI/Baseline Risk Assessment (BRA); and
 - Draft RI/FS.
- OU 4-12 CFA Landfill II & III:
 - Remedial Action Report; and
 - Annual Inspection Report.
- OU 4-05 Removal Action:
 - Removal Action Summary Report.

WAG Power Burst Facility (PBF)/Auxiliary Reactor Area (ARA):

- OU 5-12 Comprehensive RI/FS:
 - Draft Comprehensive RI/BRA.
- OU 5-07 ARA-02 Removal Actions:
 - Time Critical Removal Action Summary Report.

WAG 6/10 Experimental Breeder Reactor-1/Boiling Water Reactor Experiment Reactor /Miscellaneous Sitewide Comprehensive RI/FS:

- OU 10-04 Comprehensive RI/FS:
 - Draft RI/FS Work Plan.
- OU 10-03 Non-Time Critical Removal Action/Ordnance Removal & Remediation:
 - Draft Summary Report for the Non-Time Critical Ordnance Removal Action; and
 - Final Track 2 Summary Report and Action Determination Form.

WAG 7 Radioactive Waste Management Complex (RWMC):

- OU 7-13/14 Comprehensive RI/FS:
 - Interim Risk Assessment and Contaminant Screening Report; and

- Draft and final Work Plan Addendum.
- OU 7-08 Organic Contaminated Vadose Zone (OCVZ) (Groundwater Remediation):
 - Phase I RA Report; and
 - Phase II Remediation Strategy.
- OU 7-10 Staged Interim Action:
 - Pit 9 RD/RA SOW; and
 - Draft & final Stage I Work Plans.

WAG 8

- OU 8-08:
 - Final Comprehensive RI/FS Report; and
 - Final Comprehensive ROD.
- PP based on NRF Comprehensive RI/FS.

WAG 9 (ANL-West)

The final ROD for ANL-West was submitted and approved in FY 98, completing all Remedial Investigation/ Feasibility Study activities for this site.

Progress in Conducting Remedial Actions

Idaho National Engineering and Environmental Laboratory

The following were accomplished through FY 98 at the INEEL:

Assessment:

- Fifteen of 20 RODs;
- Fifteen Release Sites and two Facility Assessments Completed;
- WAG 1 (TAN):
 - OU 1-10 (Comprehensive RI/FS) Draft FS Supplement;
- WAG 1 (TAN):
 - V-Tank Soil Sampling Completed;

- WAG 2 (TRA):
 - OU 2-13 (Comprehensive RI/FS) Draft final ROD;
- WAG 3 (INTEC) OU 3-14:
 - Baseline to start Tank Farm Assessment completed; and
 - 3-D mapping of Tank Farm Utilities completed.
- WAG 4 (CFA):
 - RI/BRA;
 - Completed sampling of the retort staging area and vicinity; and
 - Draft Comprehensive RI/FS;
- WAG 5 (PBF)/(ARA):
 - Draft Comprehensive RI/BRA;
- WAG 6/10 Experimental Breeder Reactor-1/Boiling Water Reactor Experiment Reactor/Miscellaneous:
 - Sitewide Comprehensive RI/FS Work Plan;
- WAG 6/10:
 - Ecological Field Sampling completed.

Cleanup:

- Seven Release Site and four facility RAs completed.
- WAG 1 (TAN):
 - Groundwater Treatment Facility has processed 31,697,588 gallons since 11/96
- WAG 4 (CFA):
 - OU 4-05 Removal Action Completed;
 - Excavation and disposal of CFA-13 drywell components completed;
 - Excavated and transported 5,300 cu yds. of contaminated soils from CFA-17/47; and
 - Excavated and transported 6,400 cu yds. of contaminated soils from CFA-42.

- WAG 5 (PBF/ARA):
 - Asbestos pile from ARA-12, ARA-III Leach Pond removed.
- WAG 7 (RWMC):
 - Four up gradient groundwater monitoring wells and three vapor monitoring wells installed north and east of RWMC;
 - OU 7-08 OCVZ (Groundwater Treatment System) removed 51,444 lbs. of VOCs from the groundwater; and
 - OU 7-06 (Groundwater Pathway) all Aquifer Pumping and Infiltration Test materials from the Temporary Accumulation Area were removed.
- WAG 6/10 Miscellaneous Sitewide Comprehensive RI/FS:
 - Ten pieces of various excavated live ordnance were successfully detonated.
- WAG 8:
 - Demolition of NRF-18B (S1W Spray Pond #2) after additional sampling supported a No Action determination.
- WAG 9 (ANL-West):
 - Cleanup: Bench scale studies for the final remedial action (phytoremediation) were conducted.

Progress in Conducting Removal and Interim Actions

Activities on three removal actions/interim actions were completed (11,700 cubic yds. of contaminated soils removed and disposed). Activities continued on one other removal action/interim actions (removal of unexploded ordnance).