NPL Site Narrative for Idaho National Engineering Laboratory (USDOE)

IDAHO NATIONAL ENGINEERING LABORATORY (USDOE)
Idaho Falls, Idaho

Conditions at proposal (July 14, 1989): The Idaho National Engineering Laboratory (INEL), now owned by the U.S. Department of Energy (USDOE), covers 890 square miles in southeast Idaho near Idaho Falls. INEL is in parts of Bingham, Butte, Clark, Jefferson, and Bonneville Counties.

The Atomic Energy Commission, predecessor to USDOE, set up the National Reactor Testing Station on the grounds in 1949 to build, test, and operate various nuclear reactors, fuel processing plants, and support facilities. Earlier, parts of the 890 square miles had been used by the Department of Defense. In 1974, the facility assumed its present name to reflect the broad scope of engineering activities it conducts.

INEL consists of a number of major facilities, including these three: Test Reactor Area (TRA), Central Facilities Area (CFA), and Idaho Chemical Processing Plant (CPP). Most are operated by one of five contractors. The prime operating contractor is EG&G Idaho, Inc. All three facilities contribute contaminants to the Snake River Plain Aquifer and draw water from the aquifer. Approximately 17,300 tons of hazardous materials were deposited at TRA via a 560-foot injection well extending 100 feet into the Snake River Plain Aquifer and also into numerous unlined ponds and an earthen ditch. The materials included chromium-contaminated cooling tower blowdown water, waste solvents, sulfuric acid, radionuclides, and laboratory wastes.

Hexavalent chromium is present in on-site monitoring and drinking water wells on TRA and CFA, according to 1985 and 1986 reports of the U.S. Geological Survey (USGS). The Snake River Plain Aquifer is the source of all water used at INEL and is an important water resource in southeastern Idaho. Over 3,000 people draw drinking water from wells within 3 miles of hazardous substances at INEL.

Recent testing has identified contamination in additional areas of INEL. Tests conducted in 1987 by INEL and USGS at the Radioactive Waste Management Complex indicate that carbon tetrachloride and trichloroethylene (TCE) have migrated from where they were buried to the Snake River Plain Aquifer and that transuranic radionuclides have migrated to ground water. In December 1988, TCE was found in drinking water wells in Test Area North. Workers in the area are now being supplied with bottled water. USDOE has identified 300 areas that require additional investigation at INEL.

In July 1987, EPA and INEL signed a Consent Order and Compliance Agreement under Section 3008(h) of the Resource Conservation and Recovery Act calling for investigation and cleanup.

Status (November 21, 1989): Negotiations are underway for an Interagency Agreement under CERCLA Section 120 for oversight of activities at INEL.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be

found on the Internet at ATSDR - ToxFAQs (http://www.atsdr.cdc.gov/toxfaqs/index.asp) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.