



Former fill station

- 1940s** The Laboratory was founded in 1943 as part of the Manhattan Project. Processes used to carry out the Laboratory's past and present missions involve the use of hazardous and radioactive materials.
- 1950s** During and after World War II, materials were disposed of on the Laboratory site or otherwise released into the environment.
- 1960s** Congress enacted basic legislation to protect the environment. The Department of Energy's predecessor, the Atomic Energy Commission, and the Laboratory began to conduct surveys and to clean up areas where spills and disposal had occurred.
- 1970s** Congress enacted the Resource Conservation and Recovery Act (RCRA) that governs the day-to-day operations of hazardous waste generation, treatment, storage, and disposal facilities (sites).
- 1980s** Congress amended RCRA by passing the Hazardous and Solid Waste Amendments (HSWA). HSWA prescribes a corrective action process that focuses primarily on the investigation and cleanup, if required, of inactive sites.
- 1989** Environmental restoration began at the Laboratory to clean up sites that were formerly involved in weapons research and production.
- 1990s** The ER Project investigates
- Present** and cleans up sites that have the potential to affect human health or the environment, in accordance with the Laboratory's RCRA permit.

LOS ALAMOS NATIONAL LABORATORY

Los Alamos National Laboratory (the Laboratory) is a multidisciplinary research facility owned by the Department of Energy (DOE) and managed by the University of California. The Laboratory is located in north-central New Mexico approximately 20 miles northwest of Santa Fe. The Laboratory covers 43 square miles of the Pajarito Plateau; the Plateau consists of a series of finger-like mesas that are separated by deep canyons containing perennial and intermittent streams running from west to east.

RISK REDUCTION AND ENVIRONMENTAL STEWARDSHIP ENVIRONMENTAL RESTORATION PROJECT

The Laboratory's Environmental Restoration (ER) Project (implemented by the Risk Reduction and Environmental Stewardship [RRES] Division) is a part of a DOE nationwide program. DOE's environmental restoration efforts began in 1989. The ER Project investigates whether hazardous chemicals and/or radioactive wastes are present as a result of past Laboratory operations and cleans up and restores such sites as needed.

DP TANK FARM DESCRIPTION

DP Tank Farm is located east of the Knights of Columbus and the intersection of DP Road and Trinity Drive in the Los Alamos townsite. DP Tank Farm was the primary fuel storage area supporting Laboratory operations from January 1946 to February 1988, and consisted of 2 fill stations and 15 petroleum product storage tanks. Minor spills and leaks during the 42 years of day-to-day operations at the site resulted in the release of diesel fuel and gasoline into the environment, including two petroleum hydrocarbon seeps in DP Canyon. Over the years, petroleum hydrocarbons migrated slowly through the tuff, and along rock fractures and clay beds.

INVESTIGATION AND CLEANUP

The tank farm was decommissioned in 1988 resulting in the removal of all tanks, piping, and related equipment, along with some contaminated soils. The subsequent RCRA Facility Investigation (RFI) was conducted in accordance with the requirements of RCRA corrective action and New Mexico Environment Department underground storage tank (UST) requirements. The investigation was conducted in phases over the last several years. During the initial phase of the RFI, numerous samples were collected to locate and characterize the residual contamination at the site. Results from the investigation led to the removal of approximately 1720 cubic yards of petroleum-contaminated soil identified at the former location of the East Fill Station in 1996.

During the second phase of the RFI, conducted from April 2000 through July 2001, the nature and extent of residual contamination at the former tank farm was defined and the source of two related petroleum hydrocarbon seeps in DP Canyon confirmed. The data collected during the Phase II RFI was used to fill data gaps remaining after previous investigations.

INFORMATION SHEET: DP TANK FARM



1988 Decommissioning activities ~ Tank 17



1988 Decommissioning activities



2000 Investigation activities

SAMPLING AND CONTAMINANTS OF CONCERN

Laboratory scientists have confirmed that no bulk sources of contamination or subsurface structures remained at the site, identified the source of the two petroleum hydrocarbon seeps, and performed a risk assessment of the traces of residual hydrocarbon contamination in the subsurface beneath the mesa top to make certain that they would not pose an unacceptable risk to human health or the environment.

During the Phase II RFI, a total of 179 samples were collected, including sediment from DP Canyon and subsurface soil and tuff from the mesa top portion of the site. The samples were submitted to an off-site contract laboratory and analyzed for a variety of contaminants including total petroleum hydrocarbons (TPH), both volatile and semi-volatile organic compounds, and lead present in leaded gasoline previously stored at the site. Sample results confirmed that no bulk sources of contamination remain at the site and confirmed the nature and extent of the traces of residual hydrocarbon contamination still present. The traces of residual subsurface hydrocarbon contamination do not pose an unacceptable risk to human health or the environment. Regular inspections of the hydrocarbon seeps are conducted to document any changes in relation to seasonal changes and precipitation. The results show there is some seasonal variability in the presence of hydrocarbons in the canyon but there is little physical evidence of hydrocarbon contamination in DP Canyon.

ACCOMPLISHMENTS

The ER Project prepared and submitted a Phase II RFI report to the New Mexico Environment Department (NMED) recommending no further action for the site. The NMED approved the Phase II RFI Report for DP Tank Farm on January 14, 2002, and will remove this site from the Laboratory's permit when the NMED approves a permit modification later this year. The property will be transferred from the Department of Energy to Los Alamos County in September 2002.

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

Contact the Communications & Outreach Team

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