



Debris at the Airport Landfill

- 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.

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.

AIRPORT SITE HISTORY

- Operated as a municipal landfill receiving both Los Alamos County and LANL waste - Zia Company 1943-1965.
- Operated as a municipal landfill receiving both Los Alamos County and LANL waste - Los Alamos County 1965-1973.
- Debris routinely burned between 1943 and 1965.
- Debris placed in hanging canyon and excavated trenches.
- Debris moved from western end of landfill to new trenches (PRS 73-001(d)) in 1984.

ENVIRONMENTAL INVESTIGATIONS

Field efforts conducted from 1994 to 1998 at the landfill and associated Potential Release Sites (PRSs) which collected the following types of data including:

- Geophysical;
- Surface/sub surface soils and channel sediments;
- Shallow soil gas; and,
- Vadose monitoring well (leachate/deep soil gas).

CHEMICALS OF POTENTIAL CONCERN

- Soil gas Volatile Organic Compounds (VOCs) such as methane, vinyl chloride, and benzene are well within observed levels as other municipal solid waste landfills.
- Leachate was detected in isolated areas and the level is comparable to other municipal landfills. Leachate is not present as "free liquid" but is being sampled via an applied vacuum. Leachate should have been reduced and/or eliminated due to recently completed surface water run-on control measures.
- Most constituents are below New Mexico Water Quality Control standards.

INFORMATION SHEET: AIRPORT LANDFILL

CURRENT AND REMAINING WORK

- The RCRA Facility Investigation (RFI) report was delivered to the New Mexico Environment Department (NMED) on November 30, 1998.
- The RFI report approved by NMED in 1999.
- High Performing Team was formed in 2000 to work toward the final remedy.

PROPOSED REMEDY

Streamlined closure as a Solid Waste Municipal Landfill. Proposal is based on the following:

- Landfill operated as municipal landfill;
- Contaminants present are within levels seen at other municipal landfills; and,
- Presumptive remedies have been developed by EPA specifically to address municipal landfills.

RESOLUTION

- Due to the nature and age of waste in the landfill, a Subtitle D-Type (municipal) closure was recommended and approved.
- Lack of contaminant levels in excess of levels seen in other municipal (Subtitle D-Type) landfills is indicative of the nature of debris in the landfill and the relatively minor potential for offsite migration via leachate or soil gas.
- Groundwater contamination is extremely unlikely based on the small amount of leachate present, installation of run-on control measures, and depth to groundwater (approx 1200 ft.).
- It is recommended that established presumptive remedies for municipal landfills be evaluated and selected. Coordination on specific NMED requirements regarding solid waste landfill closures will be crucial to selection of the selected remedy.



Employee assessing the debris at the Airport Landfill

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

Contact the Communications & Outreach Team

Carmen M. Rodriguez
Phone: (505) 665-6770
Fax: (505) 665-7369
Email Address: carmenr@lanl.gov

Web site: <http://erproject.lanl.gov>