



Type of legacy waste at Material Disposal Area P

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.

MATERIAL DISPOSAL AREAS AT THE LABORATORY

The 26 material disposal areas (MDAs) at the Laboratory generally include sites where waste material has been disposed of on or below ground surface in excavated pits, trenches, or shafts.

MATERIAL DISPOSAL AREA P RCRA CLOSURE AT TA-16, MDA P

Material Disposal Area (MDA) P is located at TA-16 on the south rim of Canon de Valle on the western edge of the Laboratory. The MDA-P Landfill began receiving waste from the S-Site Burning Grounds in 1950. Debris from WW-II era building was also disposed of at MDA-P. Operation of the landfill was suspended in 1984. ER Project personnel began the closure process at the landfill in 1997. The presence of detonable HE in the landfill required the use of a robotic excavator.

CONTAMINANTS OF CONCERN

The contaminants of primary concern found at MDA P included detonable HE, HE residues in soil, barium, and asbestos. MDA P also contained low levels of uranium and metals such as lead and cadmium.

- 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.

INFORMATION SHEET: MATERIAL DISPOSAL AREA P

ACCOMPLISHMENTS DESCRIPTION

Remote excavation of the landfill began in February 1999 and was completed on May 3, 2000, just before the Cerro Grande fire. Excavation of contaminated soil beneath the landfill using non-remote excavation methods resumed after fire recovery and was completed in March 2001. Phase II confirmatory sampling and geophysics measurements began in June 2001. During Phase II sampling, additional contamination was found. This material was removed in February 2002.

Over 52,500 cubic yards of soil and debris were excavated. This includes hazardous and industrial waste and recycled material.

Other disposal included:

- 387 pounds of detonable HE
- 820 cubic yards of hazardous waste with residual levels of radioactive contamination
- 6,600 pounds of barium nitrate
- 2,605 pounds of asbestos
- 200 pounds of mixed waste
- 235 cubic feet of low-level radioactive waste
- 888 containers of unknown content

Prior to the DOE moratorium, scrap metal and concrete were shipped to recycling facilities. Contaminated soils and industrial wastes were shipped to offsite solid waste landfills; and solid wastes that didn't contain hazardous materials were disposed onsite at TA-54, MDA J.



Material Disposal Area P before cleanup activities



Material Disposal Area P after cleanup activities

OPPORTUNITIES FOR PUBLIC INVOLVEMENT

Contact the Communications & Outreach Team

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