



Surplus Plutonium Disposition Supplemental Environmental Impact Statement (SPD Supplemental EIS)



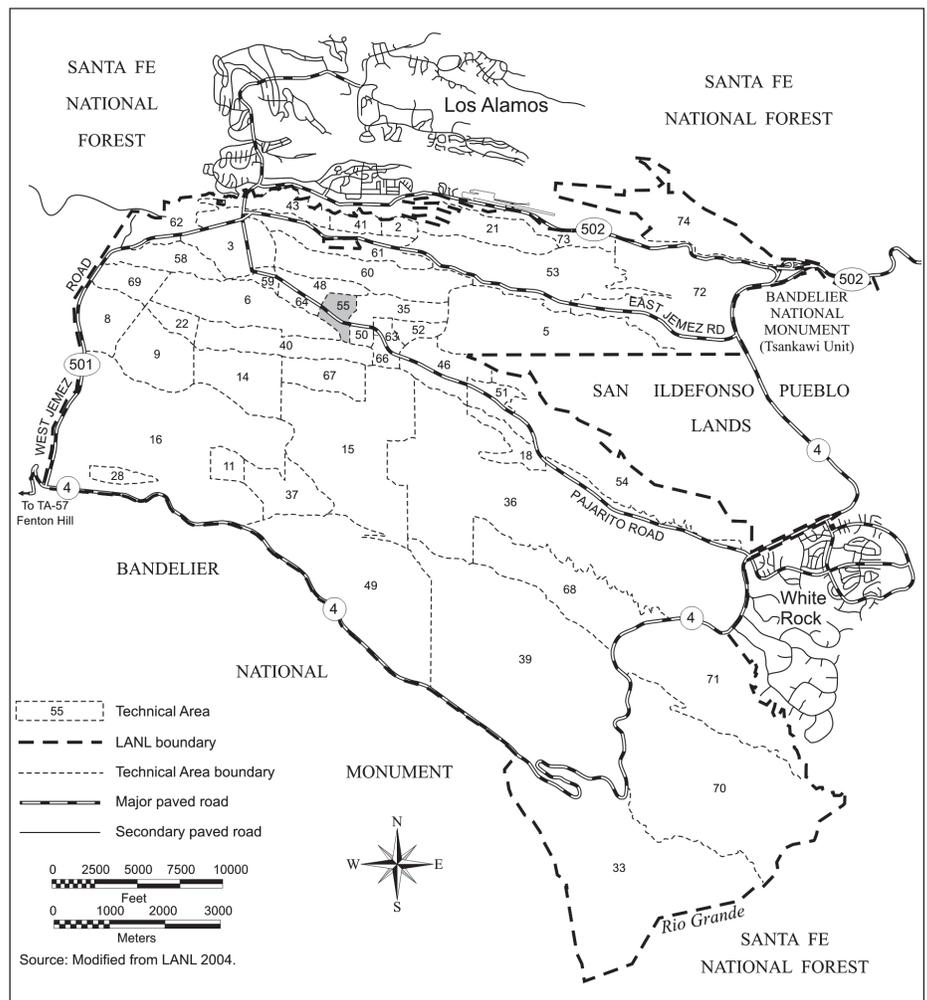
Los Alamos National Laboratory

Los Alamos National Laboratory (LANL)

- 23,680 acres, or 37 square miles
- LANL workforce: ~12,000
- Annual budget: ~\$2 billion

LANL's role in supporting the National Nuclear Security Administration (NNSA) mission objectives includes nuclear materials handling, processing, and fabrication; stockpile management, materials and manufacturing technologies; nonproliferation programs; research and development support for national defense and homeland security programs; and U.S. Department of Energy (DOE) waste management activities.

The Plutonium Facility at Technical Area 55 (TA-55) is located approximately one mile southeast of the central TA-3 and occupies about four acres. The main complex has five connected buildings for administration, technical and office support, warehousing and the 150,000-square-foot main plutonium processing building, known as PF-4. A double security fence surrounds the Plutonium Facility. An access center and other office buildings are located outside the secured area. More than 1,000 LANL and subcontractor employees work at TA-55. Construction began in 1973; and TA-55 has operated continuously without long-term interruption since April 1978.



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Glovebox Line at TA-55

PF-4 is the only fully operational, full capability plutonium facility in the nation. It supports pit manufacturing, surveillance and special plutonium recovery. To meet the varied needs of research, development and plutonium processing programs at the Laboratory, TA-55 provides chemical and metallurgical processes for recovering, purifying and converting plutonium and other actinides into many compounds and forms. TA-55 houses a sophisticated system for nuclear materials accounting, management and modeling; a measurement support operation; and a nondestructive assay laboratory. Additional capabilities include the means to safely and securely ship, receive, handle and store nuclear materials as well as manage the wastes and residues produced by TA-55 operations. In support of the Surplus Plutonium Disposition Program, PF-4 has developed a process for disassembling pits and producing plutonium oxide that would be used as feed material in the Mixed Oxide Fuel Fabrication Facility under construction at the Savannah River Site.

A separate portion of the facility is dedicated to fabricating ceramic-based reactor fuels and to processing plutonium-238, used to make radioisotope heat sources and radioisotope thermoelectric generators (RTGs). These heat sources and RTGs have provided heat to maintain instrument operating temperatures and electrical power for every U.S. deep space mission, including Voyager, Pioneer, Galileo and Cassini.

DOE/NNSA are currently evaluating an option that would expand the existing capabilities at PF-4 to disassemble plutonium pits and provide plutonium metal or oxide to the Mixed Oxide Fuel Fabrication Facility currently under construction at the Savannah River Site.

To Submit Comments or Request More Information:

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