

# Fernald Waste Management Project

# Fact Sheet



*Nuclear material packaged for programmatic use to meet an agreement between DOE-OH and DOE-HQ Office of Material Disposition (6499-64).*

## Description

After several decades of uranium metals production operations supporting the U.S. Defense Program, millions of pounds of waste material and nuclear products remain at the Fernald Environmental Management Project. Safe disposition of these materials is an integral part of Fernald's overall cleanup program. The U.S. Department of Energy (DOE) and Fluor Daniel Fernald have adopted a site-wide remedial strategy to ship higher contaminated waste materials off-site for disposal while disposing of less-contaminated waste in an On-Site Disposal Facility. This balanced approach to waste management also includes the recycling and beneficial reuse of waste materials and uranium metal products.

# Cleanup Plan

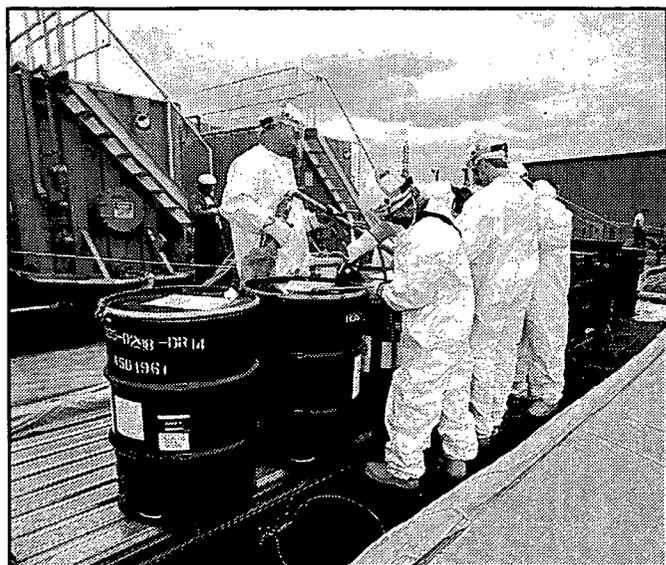
Fernald waste materials are divided into three categories: low-level radioactive, hazardous, and mixed (radioactive and hazardous) waste. The waste materials are stored in silos, in-ground pits, and thousands of 55-gallon drums. Fernald's Waste Management Program involves: characterization, sampling and disposal of low-level waste, treatment of mixed wastes, waste minimization and recycling initiatives, and disposition of nuclear materials.

## Low-Level Radioactive Waste

Since Fernald initiated waste shipments to the Nevada Test Site (NTS) in 1985, over 5.3 million cubic feet of waste have been transported by truck totaling over 4,540 shipments. This waste volume represents approximately 60 percent of all DOE waste shipments to NTS over the same time period, and resulted in a reduction of 167,700 waste containers at the Fernald site. In 1997, Fernald successfully overpacked 5,572 drums of thorium eleven months ahead of schedule and shipped the thorium waste to NTS for safe, permanent disposal.



*Radiological Control Technicians survey a Thorium Overpacking Container prior to the waste leaving the contamination area. (6014-524).*



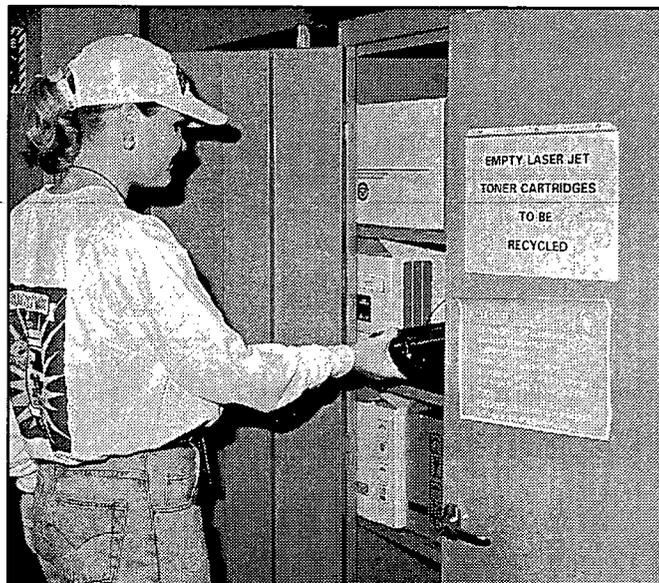
*HazWats pump liquid mixed waste from 55 gallon drums to bulking tanks for transfer to the TSCA Incinerator in Oak Ridge, TN (6107-4).*

## Mixed Waste Project

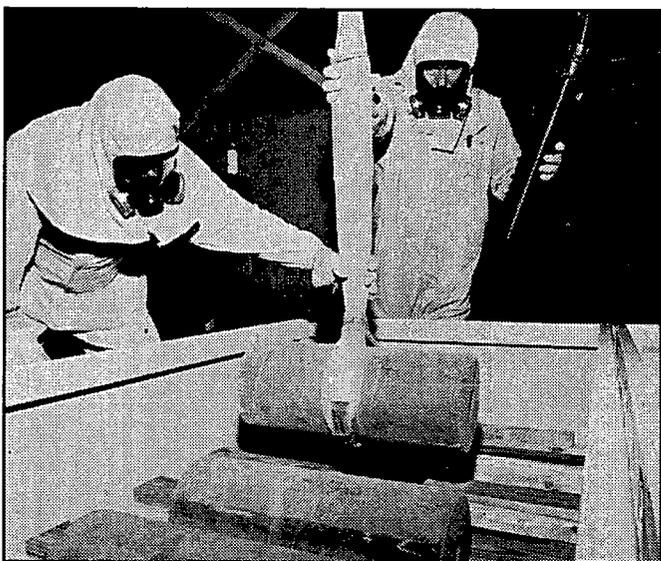
The treatment of hazardous and mixed waste must meet the requirements of the Resource Conservation and Recovery Act of 1976 (RCRA) and its subsequent amendments. The Mixed Waste Project provides safe and efficient treatment and disposal of all EPA regulated waste at the Fernald site. The mixed waste inventory has been reduced from over 4,078 tons in 1992, to 385 metric tons today.

## Waste Minimization and Pollution Prevention Program

Fernald's Waste Minimization and Pollution Prevention Program helps to meet the goals and expectations of DOE, EPA, and stakeholders by reducing the volume or toxicity of waste that cannot be avoided, and recycling as much material as practical to minimize the amount requiring disposal. Some of the items recycled annually by Fernald employees are approximately 2,000 LaserJet cartridges, 10,000 lbs. of aluminum cans, and 175,000 lbs. of paper.



*LaserJet toner cartridges from printers are one of the many items recycled at the Fernald site (6413-1).*



*HazWats package depleted uranium ingots for storage/shipment in advance of Safe Shutdown activities in Plant 6 (6645-4).*

## Nuclear Materials Disposition Project

Since production ended in 1989, about half of the 32 million-net-pound inventory of uranium has been transferred to other DOE sites for their use, returned to suppliers, sold to commercial vendors for non-military use or declared waste. DOE and Fluor Daniel Fernald are working to sell the remaining inventory, or find other disposal options. The remaining inventory of uranium is scheduled to be removed from the site by April 1999.

## For More Information...

More information about the project and other Fernald cleanup projects is available in the Public Environmental Information Center, 10995 Hamilton-Cleves Highway (Delta Building), or at Fernald's Web site address: [www.fernald.gov](http://www.fernald.gov). Stakeholders can also learn about cleanup plans and progress at Fernald's monthly Cleanup Progress Briefings held on the second Tuesday of each month.

For specific questions about this project, call John Sattler, DOE-FEMP project manager at (513) 648-3145, or send an e-mail to: [john\\_sattler@fernald.gov](mailto:john_sattler@fernald.gov).