

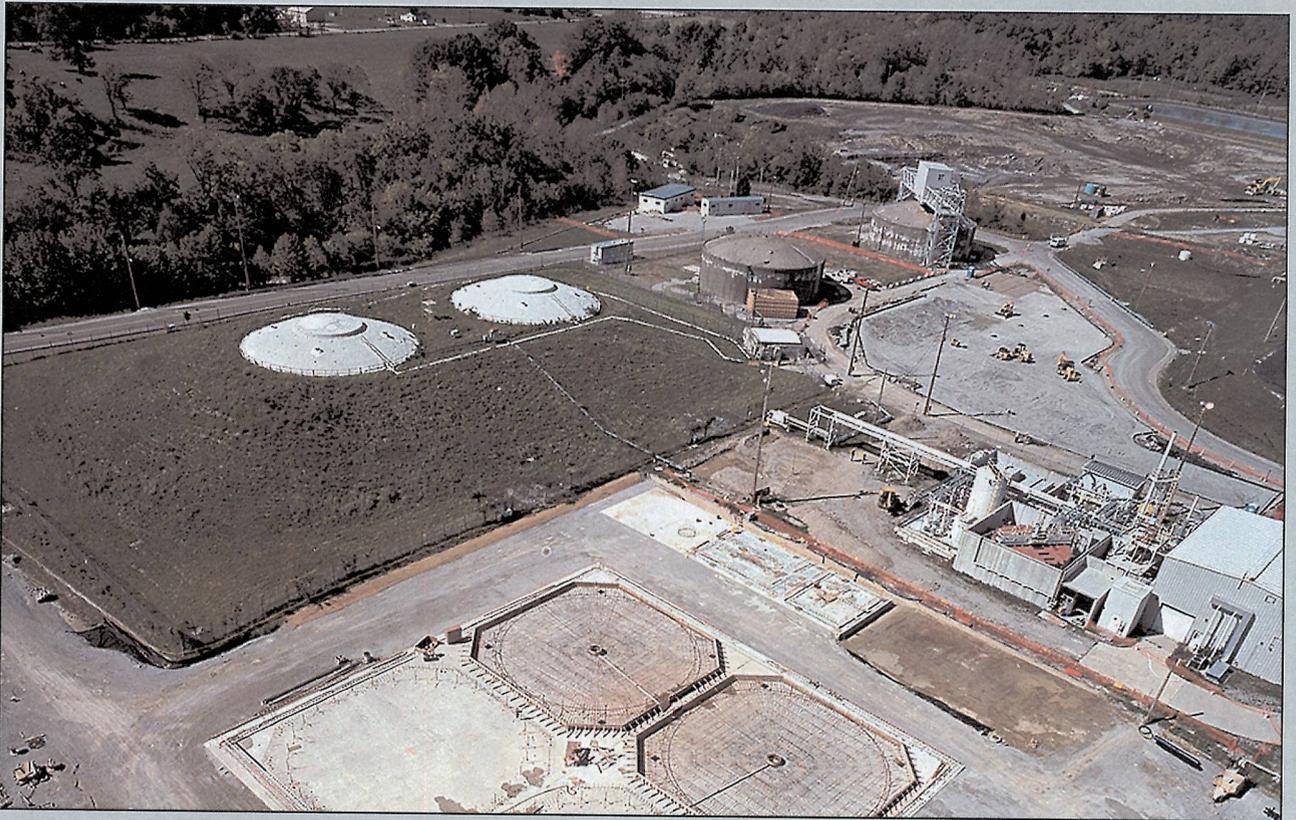


# Fernald · FACT SHEET

Environmental Management Project

March 2001

## Silos Project



*Located on the western periphery of the Fernald site, Operable Unit 4 includes Silos 1 and 2 (K-65 Silos), Silo 3 (metal oxide silo), unused Silo 4 and ancillary structures (7476-292).*

### Description

The Silos Project at the Department of Energy's (DOE) Fernald Environmental Management Project is one of five areas designated by the U.S. Environmental Protection Agency (EPA) as requiring remediation. The project, located on the western periphery of the site, includes Silos 1 and 2 (known as the "K-65" silos), Silo 3, Silo 4 and nearby structures. Silos 1 and 2 contain low-level radium-bearing wastes that remained after extraction of uranium from pitchblende ores received from the Belgian Congo. The great majority of these residues, which date back to the 1950s, were originally generated at the Mallinckrodt Chemical Works in St.

Louis, Missouri, then shipped to the Fernald site for storage. In 1964, an earthen berm was placed around Silos 1 and 2 to reinforce the structural integrity of each silo. Silo 3 contains cold metal oxides, and Silo 4 is unused and empty.

### Cleanup Plan

Plans are underway to remediate the contents of Silo 3 with a goal to safely remove, stabilize and transport the waste to an off-site disposal facility in a timely, efficient and cost-effective manner.

The path forward for Silos 1 and 2 is based upon a formal re-evaluation of the previously selected



*During an overnight concrete pour at Silo 3, a laborer cuts a section of steel mesh used to strengthen the concrete (7325-D214).*

physically removing the waste from Silos 1 and 2 and placing it into transfer tanks, is also in progress. Acceleration of this phase of the Silos 1 and 2 Project should reduce the risk associated with storage in the current silos and will be the first step toward final remediation of the K-65 materials in Silos 1 and 2. Construction of this project is also underway.

Other Silos activities have included closure of the Vitrification Pilot Plant, completion of the Silos 1 and 2 Dome Reseal and completion of the Silos Infrastructure Project. The Dome Reseal was an interim measure to reduce

remedy - vitrification - with stakeholders and regulators. This re-evaluation is documented in the Silos 1 and 2 Revised Feasibility Study (FS). It resulted in a proposed revised remedy of treatment by chemical stabilization followed by disposal at the Nevada Test Site. After formal public

review of the proposed new remedy, the revised Silos 1 and 2 remedy was documented in a Record of Decision Amendment approved by the EPA in July 2000. Preliminary conceptual design for this project has begun. The Accelerated Waste Retrieval (AWR) Project, which involves

radon emissions from Silos 1 and 2. The Infrastructure Project included construction of a new road around the Silos area and electrical upgrades designed to support the AWR and Silo 3 projects, both of which will be proceeding in that area simultaneously.

## For more information . . .

**Visit** the Public Environmental Information Center at 10995 Hamilton-Cleves Highway (Delta Building);  
**Attend** a Cleanup Progress Briefing (second Tuesday of every month at 6:30 p.m. on site);  
**Contact** Nina Akgunduz, DOE-Fernald team leader at 513-648-3110 or at [nina.akgunduz@fernald.gov](mailto:nina.akgunduz@fernald.gov); or  
**View** the Fernald Web site (<http://www.fernald.gov>).