

In 1996, Fernald completed a 10-year environmental investigation to determine contamination levels and develop cleanup plans. This significant investigation resulted in Records of Decision, or final cleanup plans, for five operable units. After completing the engineering designs, Fluor Fernald organized the site's cleanup program into seven major projects to integrate fieldwork and improve safety and efficiency.



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Aquifer Restoration - During 37 years of uranium metal production, Fernald's operations contaminated about 170 acres of the underlying Great Miami Aquifer, one of the nation's largest sources of drinking water. To restore the aquifer, Fernald is pumping contaminated water to the surface and treating it at the Advanced Wastewater Treatment (AWWT) facility to meet EPA's uranium concentration limits. The site is also treating contaminated stormwater and wastewater. Fernald expanded the AWWT's design treatment capacity in 1998 to accelerate aquifer restoration and is using re-injection technology to expedite removal of contaminants. Fernald is scheduled to complete remediation of over 80 percent of the uranium contamination plume in 2006.

Building Demolition - To eliminate risks associated with aging facilities, Fernald is decontaminating and demolishing 223 buildings and components, including 10 major processing plants that produced high-purity uranium metal products. In 1999, Fluor Fernald completed safe shutdown of the processing plants two years ahead of schedule and \$7 million under budget, eliminating a potential environmental hazard and creating a safer environment for demolition crews. Fernald is scheduled to complete building demolition in 2006.



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Soil and Disposal Facility - Fernald is constructing a seven-cell On-Site Disposal Facility (OSDF) to safely contain 2.5 million cubic yards of low-level contaminated waste made up of 85 percent soil and 15 percent demolition debris. When complete, the OSDF will be 800 feet wide, 3,700 feet long and 65 feet high. To ensure the site's soil meets EPA-established cleanup levels, Fernald is characterizing the soil, excavating contaminated portions that exceed the regulatory limit, and sampling the remaining soil to certify that it meets cleanup levels. Fernald is scheduled to complete OSDF construction and finish excavating and certifying about 2.2 million cubic yards of soil, foundations and below-grade piping and structures in 2006.

Silos 1 and 2 - Designed and constructed as temporary waste storage units in the early 1950s, Silos 1 and 2, known as the K-65 Silos, are concrete structures that contain 8,900 cubic yards of low-level radium-bearing waste from the Belgian Congo. Over the years, Fernald has used various engineering techniques to strengthen the aging silos and reduce radon emissions until final disposition. Fernald is working with regulators and stakeholders to expedite waste removal, treatment and off-site disposal. Fernald is scheduled to complete waste removal and demolish the silos in 2006.



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