SOIL CERTIFICATION

The site has been cleaned to the standards established by the community. Those *cleanup standards* have been approved by both the U.S. and Ohio Environmental Protection Agencies as being protective of human health and the environment.

HOURS

Preserve Site: Monday – Sunday, 7 a.m. – dusk. Visitors Center: Wednesday – Saturday, 9 a.m. – 5 p.m.



U.S. Department of Energy Fernald Preserve 7400 Willey Road Hamilton, Ohio 45013 (513) 648-6000 **fernald@Im.doe.gov**



Legacy Management

www.lm.doe.gov

cleanup standards established by the community, neighbors, regulators, contractors, and the U.S. Department of Energy have been met

Fernald Preserve



The Fernald property underwent an environmental cleanup of soils and buildings that lasted from 1996 to 2006. Because the Fernald site was once a uraniumprocessing facility, cleanup required the establishment of remediation standards for site soils and the underlying groundwater. After a lengthy study and public discussion, the Fernald site's neighbors and nearby communities collaborated in establishing the remediation standards, which were subsequently approved by both the U.S. Environmental Protection Agency (EPA) and Ohio EPA as being protective of human health and the environment. The site has now been remediated to these standards.

Cleanup involved demolition of buildings and extensive excavation. It required that soil on the Fernald property be certified as meeting the final site remediation standards. The soil-certification process was established in cooperation with federal and state regulatory agencies and required regulatory approval. Soil underlying areas of groundwater cleanup infrastructure will be certified using the same process. Soil underlying the On-Site Disposal Facility (OSDF) was certified clean prior to construction of the facility. The OSDF and the ongoing groundwater cleanup is discussed in a separate brochure.

Certifying that Fernald's soil met cleanup standards involved extensive sampling and analysis. Soil samples were collected and analyzed from areas called "certification units," which defined the areal extent and depth of soil contamination. Once these contamination areas were defined, excavation of the contaminated soil began. Following initial excavation in a certification unit, it was scanned with radiation detectors to determine residual patterns of contamination. These scans were used to direct additional excavation and ensured that the levels of remaining uranium, radium, and thorium met cleanup standards. In addition to radiological scans, soil samples were collected across a certification unit. Laboratory analyses were conducted to determine if contaminant concentrations met cleanup standards or if additional excavation was required. When all certification units within a remediation area met the certification requirements, a certification report was prepared and submitted to the U.S. Environmental Protection Agency. In total, 55 certification reports were submitted and approved. These reports are available for review in the Visitors Center.

After an area received certification, ecological restoration began. The restored site has been converted from an industrial plant to a series of native ecosytems, including 140 acres of wetlands and open water, 400 acres of forests and riparian woodlots, and 360 acres of grasslands.

