The large mound on the eastern edge of the Fernald Preserve is the On-Site Disposal Facility (OSDF), which was constructed to support the site’s environmental cleanup mission.
The large mound on the eastern edge of the Fernald Preserve is the On-Site Disposal Facility (OSDF), which was engineered and constructed to safely support the site’s historical environmental cleanup mission.

From 1952 to 1989, the Fernald site produced high-purity uranium products for the U.S. Department of Energy (DOE) and its predecessor agencies as the first link in America’s nuclear weapons production cycle. When production operations ceased in 1989, the site’s mission changed to environmental cleanup. The entire Fernald site has been cleaned up to standards established by site neighbors and stakeholders. These standards were approved by the U.S. Environmental Protection Agency (EPA) and Ohio EPA as being protective of human health and the environment. To accomplish this, DOE—along with the U.S. and Ohio Environmental Protection Agencies, Fernald’s neighbors, and surrounding communities—agreed on a cleanup strategy in which small volumes of more-radioactive waste material were shipped to licensed offsite disposal facilities, and larger volumes of low-level radioactive materials remained at Fernald, safely encapsulated in the OSDF.

The OSDF was completed in 2006 and contains nearly 3-million cubic yards of low-level waste consisting of 85 percent soil and 15 percent building debris. It is 800-feet wide, 3,700-feet long, and 65-feet high. It has a multilayer cap-and-liner system that safely encapsulates waste material and an engineered system that collects liquid that drains from the waste and conveys it to the Fernald wastewater treatment facility. The OSDF is covered with a prairie grass mix that serves the dual purpose of controlling erosion and providing habitat for a variety of grassland birds and raptors.

DOE closely monitors the performance of the OSDF and ensures that the encapsulated materials are not a safety threat to Fernald Preserve employees, visitors, or the environment. Performance reports are provided each year in the Site Environmental Report.

More detailed information, including a cross-sectional model of the OSDF, is available for viewing at the Fernald Preserve Visitors Center.