ENVIRONMENTAL MANAGEMENT DISPOSAL FACILITY



FACT: The existing on-site disposal facility is at 85% capacity. The Oak Ridge Office of Environmental Management (OREM) requires additional disposal capacity to complete its critical cleanup projects at the Y-12 National Security Complex (Y-12) and Oak Ridge National Laboratory (ORNL).

CHALLENGE: OREM needs a new disposal facility to maintain its progress at Y-12 and ORNL. Cleanup projects at those sites will generate a significant amount of debris and soil that requires disposal.

SOLUTION: The construction and availability of a second on–site disposal facility will allow OREM to continue its important cleanup efforts without delays. It provides vital capacity and avoids significant costs and time associated with shipping waste across the country.







ENVIRONMENTAL MANAGEMENT DISPOSAL FACILITY



PROVEN SAFETY RECORD

Safety is always OREM's top priority. The program has extensive experience safely constructing and operating disposal sites. Since 2002, OREM has operated the current disposal facility in Oak Ridge without impacting local residents or human health, and it has a proven track record dispositioning waste from large-scale cleanup on the Oak Ridge Reservation.

ADHERING TO STRICT WASTE ACCEPTANCE CRITERIA

The new disposal facility will only accept low-level waste—which is mainly comprised of demolition debris, equipment, and soil from cleanup. The highly contaminated waste, soil, and equipment, that accounts for more than 90% of the contamination levels, will be shipped and disposed of off site.

BENEFITTING THE REGION

Completing cleanup activities at the Y-12 and ORNL will remove environmental risks and support the missions of two of the region's largest employers. The second disposal facility will allow OREM's cleanup mission to continue without delay—keeping a highly trained and qualified workforce active on cleanup projects and supporting cleanup and modernization for both sites to remain at the forefront of their respective fields.



PROJECT STATUS

OREM and its regulators signed the Record of Decision for EMDF in September 2022, and crews have made tremendous progress since that time. The project involves three phases: (1) early site preparation; (2) groundwater field demonstration study; and (3) balance of construction.

In 2024, employees completed early site preparation five months ahead of schedule

and \$12.3 million under budget, and they also completed field work for the groundwater field demonstration.

Field work for the second phase involved clearing and recontouring more than 30 acres of land and installing a geosynthetic cover system. The 1.3 million-square-foot geomembrane layer simulates the effect of lined disposal cells on groundwater elevations, creating an impermeable barrier over the site.

This work allows OREM to gather information about how groundwater elevations change, providing valuable information for the landfill's final design. Employees will monitor groundwater elevations over the next two wet seasons through 2026. That data will be used to inform the final design and enable the final phase of the project, which includes EMDF's construction.

EMDF is slated for completion in 2030.



