

The Environmental Restoration Disposal Facility The Hub of Hanford Cleanup – 16M tons of contaminated material safely and compliantly disposed

What is ERDF?

The Environmental Restoration Disposal Facility is the onsite disposal facility for low-level radioactive, hazardous and mixed wastes generated during cleanup activities at the 586-square-mile Hanford Site in south-central Washington state. Washington Closure Hanford manages ERDF for the U.S. Department of Energy's (DOE's) Richland Operations Office. The facility, which began operations in July 1996, is regulated by the U.S. Environmental Protection Agency and does not accept non-Hanford waste.

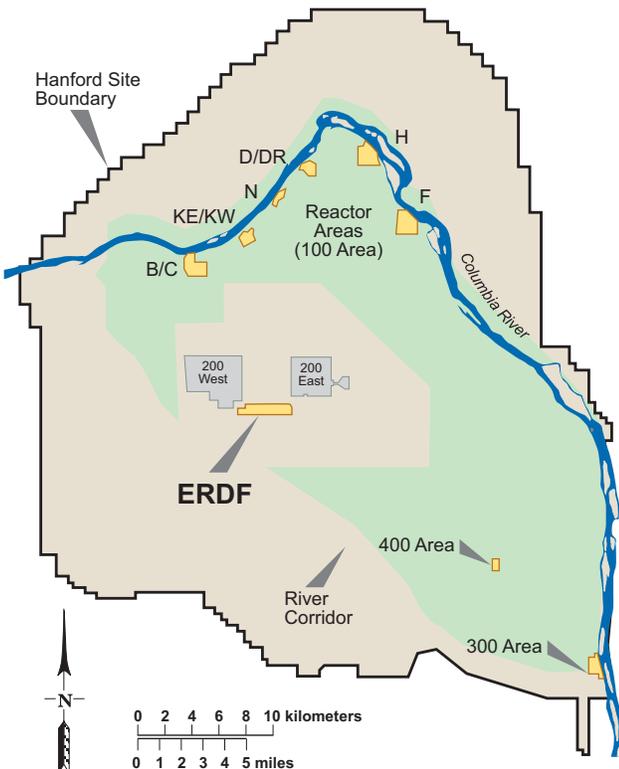
Where is the waste that is disposed at ERDF generated?

The majority of cleanup waste comes from the 220-square-mile River Corridor, located along the banks of the Columbia River. The waste consists mainly

of soil contaminated by the effluent of Hanford's nine plutonium production reactors, which operated from 1943-1987. In addition, ERDF also receives cleanup waste from other Hanford contractors.



Hanford's Environmental Restoration Disposal Facility



What type of waste does ERDF receive?

Low-level waste is a term used to describe nuclear waste that does not fit into the categorical definitions for high-level waste, spent nuclear fuel or transuranic waste. Waste from the River Corridor primarily consists of soil contaminated with fission and activation products – this includes: waste sites, burial grounds and buildings contaminated with radionuclides, as well as hazardous materials such as mercury, asbestos, beryllium, chromium and lead.

Where is the waste disposed at ERDF?

ERDF consists of disposal areas called cells. The facility's first eight cells were constructed two at a time. The cells are constructed with bottom and side liners consisting of multiple layers of natural and man-made materials that form an impermeable barrier, along with a system to catch liquids as they drain through the waste materials. Each pair of cells is 500 feet wide, 1,000 feet long and 70 feet deep – large enough to hold about 2.8 million tons of material.

In February 2011, ERDF completed construction of super cells 9 and 10. Each super cell is equivalent in size and capacity to a pair of cells. The addition of the super cells increased ERDF's capacity by 5.6 million tons to a total capacity of 18 million tons. ERDF currently contains about 16 million tons of waste material.



More than 16 million tons of waste has been disposed of at ERDF since 1996.

How did Recovery Act funding improve ERDF?

The construction of super cells 9 and 10 was part of a \$100 million expansion and upgrade of ERDF funded by the American Recovery and Reinvestment Act (ARRA). Washington Closure also used Recovery Act dollars to construct three maintenance facilities and an operations center. In addition, ARRA money was used to purchase equipment to support ERDF's disposal efforts, such as an automated scale, 150 waste containers, 20 shuttle trucks, four bulldozers, and two water trucks.



Waste is disposed off one of several disposal ramps at ERDF.



ARRA dollars were used to enlarge ERDF's container storage area.

How much waste does ERDF receive?

In 2008, Washington Closure disposed an average of 200 waste containers a day, each containing about 22 tons of waste. Now the average is closer to 500. In fiscal year 2011, the Waste Operations team disposed of nearly 2.3 million tons of material, shattering the previous record of 1.6 million tons set in 2010. The volume of debris per year is reducing as cleanup along the River Corridor nears completion.

Safety is paramount at ERDF

Safety is the key to the overall success of ERDF. Workers are dedicated to maintaining and enhancing the facility's strong safety culture. To date, the project has certified more than 50 employees as safety trained supervisors. Since Washington Closure assumed management of the River Corridor Closure Project in 2005, waste transport drivers have logged about 16 million miles with only one accident. Employees also have worked the life of the waste disposal subcontract with only one lost-time injury.

Washington Closure Hanford, a limited liability company led by URS and its partners, Bechtel National and CH2M Hill, is 91 percent complete with its mission of cleaning up the Columbia River corridor, a 220-square-mile section of the U.S. Department of Energy's Hanford Site in southeastern Washington state. The River Corridor was home to Hanford's nine plutonium-production reactors and fuel development facilities, and hundreds of support structures. Through April 2014, Washington Closure has demolished 299 of 333 buildings, cleaned up 490 of 592 waste sites, placed two nuclear reactors in interim safe storage, and disposed of 9.9 million tons of contaminated material in the Environmental Restoration Disposal Facility.