

Vertical Expansion of the Environmental Restoration Disposal Facility

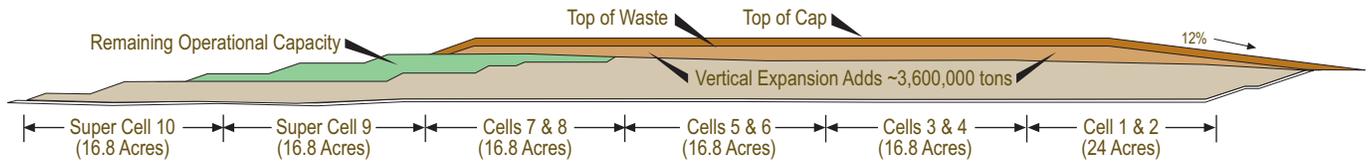


Conceptual view showing the vertical expansion of the Environmental Restoration Disposal Facility (ERDF). Washington Closure Hanford manages the facility for the U.S. Department of Energy.

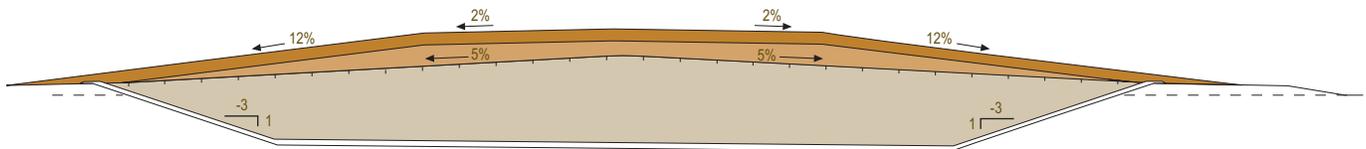
Key Facts

- ERDF currently has a capacity of 18 million tons for permanent disposal of waste material. According to current waste generation projections, the landfill is expected to be filled in 2017.
- Vertical expansion is a safe, cost-effective method to increase ERDF capacity for waste material. Vertically expanding the landfill instead of building additional disposal cells will save an estimated \$30 million in construction costs that could be used for cleanup work.
- The Environmental Protection Agency has approved vertical expansion and it is being executed.
- Receiving approvals, funding, excavating, and constructing a new super cell is a multi-year process. Vertical expansion allows ERDF to continue full operations, thus avoiding potential cleanup delays across the Hanford Site.

East-West Section at Center of Cell



South-North Section at Center of Cells 9 & 10



- Vertical expansion will create additional disposal capacity, equivalent to a pair of cells or one super cell (approximately 3.6 million tons).
- The existing ERDF liner, leachate collection, and lysimeter systems have sufficient strength and capacity to accommodate the vertical expansion.
- Vertical expansion increases the peak of the landfill by 20 feet.
- The existing interim cover over cells 1 through 4 will be removed or penetrated to allow leachate from waste in the vertical expansion to infiltrate into the underlying waste and leachate collection system.
- Surface water runoff (liquid that has not contacted waste) will be controlled to minimize contact with waste. Fixatives, vegetative cover, aggregate surfacing, berms, and surface grading are currently used to minimize erosion.
- The ERDF vertical expansion meets the requirements stipulated in the ERDF ROD (40 CFR Part 264) and is within the bounds of the ERDF Performance Assessment (DOE O 435.1) model parameters.