



PORTS D&D Project

The Plan for the Waste

More than 1.4 million cubic yards of waste and demolition debris will be generated over the life of the PORTS D&D Project. The Records of Decision, including the Ohio EPA approved waste acceptance criteria, establish the requirements for what stays in an engineered on-site waste disposal facility (OSWDF) and what must be shipped off-site for disposal.

99.7%

of all Radioactive Inventory will be shipped off-site for disposal

The remaining amount (0.3%) will be distributed among the 1.4 million cubic yards of contaminated soil and debris placed in the OSWDF.

Radioactive inventory shipped off-site (99.7%)

- Depleted uranium hexafluoride (DUF6) cylinders
- Packaged radioactive waste
- Equipment used to process highly enriched uranium
- Heavily contaminated nickel from equipment used to process low enrichment uranium

Radioactive inventory disposed on-site (0.3%)

- Contaminated building debris
- Materials exhumed from landfills & groundwater plume areas
- Size reduced processing equipment
- Contaminated soil

The OSWDF is designed to perform for at least 1,000-years and to blend into the regional landscape. Below is a graphic rendering of what it will look like once all waste has been placed and covered with a multi-layered cap consisting of natural and man-made materials and prairie grass.



The OSWDF is a modern designed disposal facility with a multilayer lining and capping system at the location with the best available on-site geology. It is fully protective of human health and the environment and is compliant with federal and state environmental regulations.



Waste - What Stays, What Goes?

The Records of Decision and the Ohio EPA approved waste acceptance criteria (WAC) establish the proper disposal path for each waste stream from the project. All items for on-site disposal must meet the WAC.

D&D Waste Streams

Waste Inventories	Off-site Disposal	On-site in OSWDF
Depleted uranium oxides from DUF6 Conversion Facility	✓	
Natural and enriched uranium in cylinders	✓	
Legacy Inventories of containerized hazardous waste	✓	
Pure uranium compounds from Fernald and other sources	✓	
Refrigerants, acids, lab chemicals, bulk chemicals, oils	✓	
Compressed gas cylinders (chemical)	✓	
Empty Uranium (UF6) cylinders		✓
Highly enriched uranium compounds removed from processing systems	✓	

Soils, Plumes & Landfills	Off-site Disposal	On-site in OSWDF
Contaminated soil (exceeding soil cleanup levels)		✓
Chemically contaminated soil excavated from plumes following any required treatment		✓
Soil and debris meeting WAC exhumed from old landfills		✓
Materials excavated from landfills not meeting WAC (batteries, bulk liquids, etc.)	✓	

Demolition Waste	Off-site Disposal	On-site in OSWDF
Process gas equipment from higher enriched operation (X-326)	✓	
Process gas equipment from lower enriched operations (X-330 & 333)		✓
Nickel bearing materials from lower enrichment equipment (X-330 & 333)	✓	
Bulk organic materials like wood pallets and telephone poles	✓	
Specific regulated building debris including accessible fluorescent light bulbs, batteries, circuit boards (recoverable), etc.	✓	
Non-contaminated spare parts, wire, equipment	Recycle	
Non-contaminated office waste and debris	✓	
Debris from buildings and support facilities including piping, wiring, structural steel, transite, etc.		✓
Size reduced metal shells from equipment segmented for volume reduction and nickel recovery		✓



Waste operations team at PORTS with process gas equipment staged for shipment