

Table ES-2. Components of Remedial Alternatives

Alternatives	Limited Action					Removal Technologies			Containment			Ex Situ Treatment Technology			In Situ Treatment Technology	Residual Water Treatment	Restoration and Cap Maintenance	Residual Air Treatment	Disposal					
	Deed Restrictions	Zoning	Groundwater Monitoring	Radiation Exposure Monitoring	Fencing	Conventional Excavation	Pipe Removal (OU IV)	Concrete Vault Removal	Asphalt Removal	Cap to Reduce Radiation Exposure	Cap to Prevent Infiltration and Reduce Radiation Exposure	Conventional Storage Containers - Steel Box (1)	Soil Washing	Solidification/Stabilization	Vitrification (2)	Volume Reduction	Vitrification (2)	Various Process Options As Required (3)	HWMF Wetland Restoration	Long-Term Cap Monitoring and Maintenance	Granular Activated Carbon	Onsite Consolidation (Soil)	Offsite Disposal(4) (Soil)	On Site Treatment Facility (3) (Water)
1. No Action with Monitoring			●		●																			
2A. Soil Cap	●	●	●	●	●	●	●		●									●	●		●	●		
2B. Geomembrane Cap	●	●	●	●	●	●	●			●								●	●		●	●		
3A. Moderate Excavation, Offsite Disposal, and Geomembrane Cap	●	●	●	●	●	●	●	●		●	●		●		●			●	●			●	●	
3B. Large-Scale Excavation and Offsite Disposal	●	●	●	●	●	●	●	●			●		●		●			●				●		
4A. Moderate Excavation, Soil Washing, Offsite Disposal, and Geomembrane Cap	●	●	●	●	●	●	●	●		●	●	●	●		●		●	●	●			●	●	●
4B. Large-Scale Excavation, Soil Washing, and Offsite Disposal	●	●	●	●	●	●	●	●			●	●	●		●		●	●				●		●
5A. Moderate Vitrification and Geomembrane Cap	●	●	●	●	●	●	●	●		●				●	●	●		●	●		●	●	●	
5B. Large-Scale Vitrification	●	●	●	●	●	●	●	●						●	●	●		●			●	●	●	

(1) Conventional storage boxes are included as contingency to store mixed wastes on site if no disposal facility is available.

(2) In Situ and Ex Situ Vitrification are under consideration for Alternatives 5A and 5B. The selection is a design issue. In Situ Vitrification has been assumed for costing purposes in this FS.

(3) Residual water treatment is included as a contingency for soil washing effluent treatment, if an integral effluent treatment system is not available or if the on site wastewater treatment facility is not available.

(4) Offsite disposal for Soil Cap, Geomembrane Cap, and two Vitrification Alternatives only includes long-lived radionuclide-contaminated soil from OU IV.