Progress through Action

June 2019

Radioactive Waste Types

The table shows radioactive waste types and current disposal paths for DOE radioactive waste types.

Waste Class	Definition	Current Disposition Path
High-Level Radioactive Waste (HLW)	 (A) The highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and (B) Other highly radioactive material that the Nuclear Regulatory Commission, consistent with existing law, determines by rule requires permanent isolation. (Nuclear Waste Policy Act of 1982, as amended and the Atomic Energy Act of 1954, as amended) 	Future Federal deep geologic repository
Transuranic Waste (TRU)	[DOE defense] Waste containing more than 100 nanocuries of alphaemitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for— (A) high-level radioactive waste; (B) waste that the Secretary of Energy has determined, with the concurrence of the Environmental Protection Agency Administrator, does not need the degree of isolation required by the disposal regulations; or (C) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with part 61 of title 10, Code of Federal Regulations. (Waste Isolation Pilot Plant [WIPP] Land Withdrawal Act, as amended)	WIPP
Low-Level Radioactive Waste (LLW)	(i) Is not high-level radioactive waste, spent nuclear fuel, or byproduct material (as defined in section 11e.(2) of the Atomic Energy Act of 1954 (42 USC 2014(e)(2))); and (ii) The Nuclear Regulatory Commission, consistent with existing law and in accordance with paragraph (A), classifies as low-level radioactive waste (Low-Level Radioactive Waste Policy Amendments Act of 1985)	DOE near-surface on- site disposal and off-site facilities or commercial facilities
Greater-than- Class C (GTCC) LLW	LLW that has radionuclide concentrations exceeding the limits for Class C LLW established in Title 10, Section 61.55. (10 CFR 61.55)	DOE is currently in the process of developing a disposal pathway for GTCC LLW