

Types of Waste

	Waste Type	Destination
DOE Waste	Low-Level Waste (LLW) » Mixed » Not Mixed	Nevada Test Site (NV) Hanford Site (WA)* On-Site Disposal**
	Transuranic Waste (TRU) » Mixed » Not Mixed	Waste Isolation Pilot Project (NM)
	High-level Waste (HLW)	Yucca Mountain Geologic Repository***
Commercial Waste	Spent Nuclear Fuel (SNF)	Yucca Mountain Geologic Repository
	Low-Level Waste (LLW) » Class A » Class B » Class C	State Compact System or Licensed Commercial Disposal Facility
	» Greater Than Class C LLW	Federal law requires US DOE to take title to GTCC waste. DOE is currently undertaking a Programmatic Environmental Impact Statement (PEIS) to determine a disposition location for GTCC.

* Not currently available for disposal of waste from offsite.

** On-site disposal of DOE LLW at Fernald, Hanford, INL, LANL, Oak Ridge, and Savannah River.

*** Earliest opening date is 2017. License application scheduled for submittal to NRC in 2008.

Definitions (definitions for DOE waste excerpted from DOE Order 435.1)

Low-level radioactive waste is radioactive waste that is not high level radioactive waste, spent nuclear fuel, transuranic waste, byproduct material, or naturally occurring radioactive material. Some DOE facilities dispose of LLW on-site.

Mixed waste contains both source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954, as amended, and a hazardous component subject to the Resource Conservation and Recovery Act.

Transuranic waste is radioactive waste containing more than 100 nanocuries (3700 becquerels) of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for: (1) high-level radioactive waste; (2) waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the Environmental Protection Agency, does not need the degree of isolation required by the 40 CFR Part 191 disposal regulations; or (3) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61.

High-level waste is the highly radioactive waste 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 other highly radioactive material that is determined, consistent with existing law, to require permanent isolation.

Spent nuclear fuel is nuclear fuel that has been irradiated in a nuclear reactor to the point that it is no longer useful in sustaining a nuclear reaction.

Class A low-level radioactive waste contains the lowest concentration of radioactive materials, and most of those materials have half-lives of less than five years.

Class B contains the next lowest concentration of radioactive materials, and it contains a higher proportion of materials with longer half-lives.

Class C low-level waste has the highest concentration of radioactive material allowed to be buried in a low-level waste disposal facility.

The concentration of radioactive materials in **Greater Than Class C** exceeds the limits for Class C waste specified in 10 CFR 61.55. All Greater Than Class C waste is the responsibility of the federal government and must be disposed of in a geologic repository.