



# Low-Level Burial Grounds

U.S. Department of Energy • Richland Operations Office

The Low-Level Burial Grounds (LLBG) at Hanford provide for disposal of low-level radioactive wastes (LLW), storage and disposal of mixed low-level wastes (MLLW), and disposal of defueled Naval reactor compartments. Also, some transuranic wastes (TRU/TRUM) are retrievably stored in the LLBG. DOE-RL's Waste Management Division has programmatic responsibility for the burial grounds; Fluor Hanford, Inc. is the operating contractor.

Specified offsite generators are approved to send low-level waste to the LLBG for disposal. The average rate of disposal of offsite waste is about 200,000 ft<sup>3</sup> per year. The estimated remaining capacity of the LLBG is approximately 4.25M ft<sup>3</sup>. Disposal of currently projected wastes, both onsite and offsite, will consume about 30% of this capacity over the lifetime of the cleanup mission.

Over the past 50 years the burial grounds have received radioactive solid wastes from the various missions at the Site as well as from off-site generators. From 1944 until April 1970, all of the solid waste on the site, regardless of



*The LLBG are located in the central plateau of the Hanford Site, two in the 200 East Area, and six in the 200 West Area. Total area of the LLBG is 222 hectares (556 acres). **Top Right:** The primary type of trench in the LLBG is the wide bottom configuration*

## Quick Facts

Burial Ground	Area(acres)	Service Date	Waste Types
218-E-10	90	1960	Remote- and contact-handled LLW; most in concrete boxes
218-E-12B	173	1962	LLW; three trenches of TRU; defueled reactor compartments
218-W -3A	50	1970	LLW; MLLW; TRU; TRUM
218-W -3AE	50	1983	Remote-handled LLW; large equipment
218-W -4B	9	1967	TRU and TRUM (some in caissons)
218-W -4C	50	1978	TRU (some combustible); test reactor fuel waste
218-W -5	93	1986	LLW; MLLW (two mixed waste trenches); an additional 577 acre expansion area is available
218-W -6	40	Not yet in Service	Reserved for MLLW trenches



*Left: Transuranic waste in retrievable storage. Below: LDR-compliant MLLW will be disposed in the Mixed Waste Trenches.*



radionuclide content, was buried in shallow trenches. In 1970, waste management policy changed so that transuranic waste was segregated from low-level waste and buried in a retrievable configuration. Retrieval of this TRU waste was initiated in 1994. In 1999 mixed low-level waste disposal began, in a permitted Mixed Waste Trench. Burial grounds that are closed, inactive, or retired before 1970 are the responsibility of the Hanford Site 200 Area Remediation Program



*Above: Defueled Reactor Compartment Disposal in the LDBG. Left: Category 3 LLW in High Integrity Containers*



#### Historical Note

The U. S. Department of Energy's Richland Operations Office owns the Hanford Site in southeastern Washington State. Hanford was established during World War II as part of the top secret Manhattan Project to produce plutonium for nuclear weapons. Weapons material production was halted in the late 1980's. The Hanford Site is now engaged in the world's largest cleanup effort to deal with the legacy of radioactive and hazardous wastes that resulted from the plutonium production era. Hanford's cleanup program is regulated by the U. S. Environmental Protection Agency and the Washington Department of Ecology under a long term compliance contract called the Tri-Party Agreement. This agreement sets the framework and timelines on the cleanup work so that Hanford meets current environmental standards. The Low-Level Burial Grounds have an important role in meeting these environmental laws and standards.

