

Disposing of Waste

waste leaving south carolina

Transuranic waste

The Waste Isolation Pilot Plant (WIPP) is the Department of Energy's (DOE) facility for disposing of transuranic (TRU) waste from across the DOE complex. The Savannah River Site (SRS) made its first shipment of TRU waste to WIPP in 2001, initially making about one shipment a month. Thereafter, SRS increased its shipping schedule to 15 shipments per month and 24 shipments per month in 2003 and 2004, respectively.

In 2005, SRS maintained its accelerated TRU waste shipment program, making 125 shipments. At this rate, SRS expects to complete shipment of its legacy drummed waste in 2007. This target date, compared to the original date, will save taxpayers about \$100 million.

At the start of the SRS shipping program, about 30,000 legacy TRU waste drums (about 6,300 cubic meters) were stored at SRS. SRS has since shipped 17,339 drums (3,641 cubic meters) to WIPP. This number represents over 60 percent of the original inventory of legacy TRU waste drums at SRS, a milestone achieved significantly earlier than the original target date of 2014.

SRS received its final shipment of TRU waste from the Miami-Isburg (Ohio) Closure Project, in 2005, completing the transfer of waste from the Mound Site Closure Project. Over three years, SRS received about 302 cubic meters of TRU waste from Mound, helping DOE achieve the early closure of this surplus facility.



▲ Trucks loaded with TRUPACT-II containers prepare to leave for WIPP.



▲ Employees load TRUPACT II containers on TRU Pad 3 Burial Ground.

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Depleted uranyl nitrate and depleted uranium oxide

Depleted uranium liquids and oxides continued to leave South Carolina in 2005.

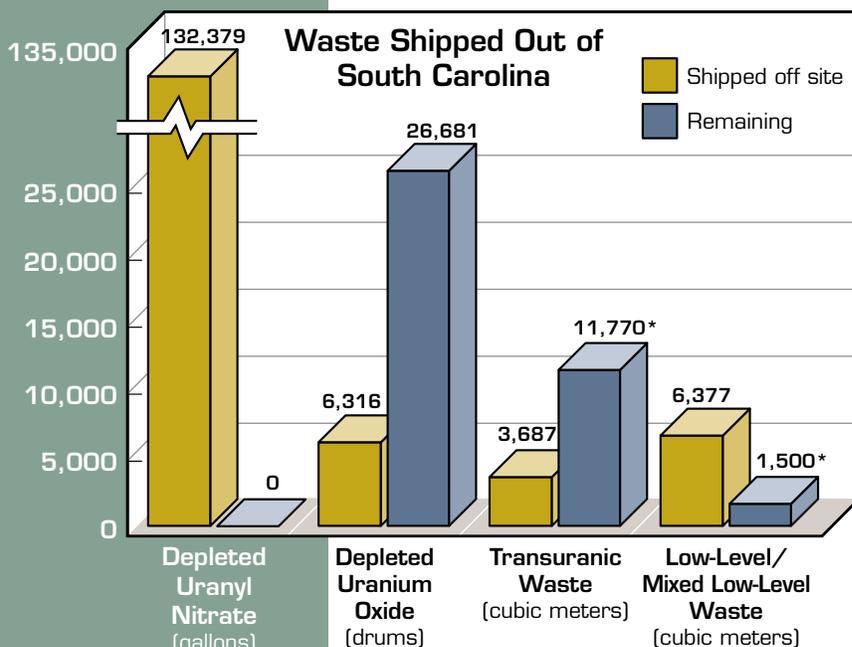
A milestone was reached in June when the final shipment of depleted uranyl nitrate (DUN) left the Savannah River Site (SRS). DUN was shipped from F Area to Permafrix in Tennessee, where it is treated and turned into a grout material. From there, it is sent to the Nevada Test Site (NTS) for final disposition.

Depleted uranium oxide (DUO), a powder-like, low-level radioactive

material that is stored in more than 33,000 55-gallon drums, is being sent by rail to Envirocare of Utah. By the end of Fiscal Year 2005, WSRC had shipped 6,135 of the 33,000 drums scheduled to be dispositioned.

Depending on funding, shipments are expected to be completed by about 2008.

DUN and DUO were by-products of the F Area process.



*Transuranic waste and low-level/mixed low-level waste are still being generated at SRS, so "remaining" numbers are estimates.

Low-level waste

At SRS, the low-level waste (LLW) program primarily involves disposing of waste in shallow land disposal facilities

and vaults, treating wastewater and shipping waste off site to commercial and other Department of Energy facilities for disposal.

The LLW program achieved a major milestone in Fiscal Year 2005 completing the disposal of all legacy LLW stored at SRS. At the start of Fiscal Year 2001, the SRS LLW inventory stood at 12,641 cubic meters, and in just four years, this inventory was reduced to zero, one year ahead of schedule. In addition, SRS disposed of over 21,340 cubic meters of newly generated LLW. The Effluent Treatment Project treated over 16.6 million gallons of wastewater, exceeding the target by 66 percent.

At the end of Fiscal Year 2005, SRS had shipped a cumulative total of over 2,050 cubic meters of LLW off site to NTS and over 1,330 cubic meters of DUO waste to a commercial vendor in support of decommissioning and demolition activities.

Mixed low-level waste

In 2005, SRS completed characterization, manifesting and shipment of 262.37 cubic meters of mixed waste for treatment and disposal. (Mixed low level waste is waste that is both radioactive and hazardous.) The 21 truck-loads of waste were shipped to certified off-site vendors for disposal.