



New Mexico May Be the Dump for DOE's Catch-all Category of Radioactive Wastes

The United States has a lot of nuclear waste that we don't know what to do with. For one type of waste, the Department of Energy (DOE) proposed solution is sadly, once again, to bury it in the ground -- perhaps in New Mexico. After 20 years of essentially ignoring "Greater Than Class C" (GTCC) waste, DOE is now giving the public a chance to comment on its disposal plans.

What are DOE's Plans?

GTCC wastes are currently stored at a few DOE sites and various commercial facilities across the country. DOE is proposing to bury the waste at its following sites: the Waste Isolation Pilot Plant (WIPP) and the Los Alamos National Laboratory (LANL) in New Mexico, Yucca Mountain in Nevada, the Hanford Nuclear Reservation in Washington State, the Idaho National Laboratory, the Nevada Test Site, the Oak Ridge Laboratory in Tennessee, and the Savannah River Site in South Carolina. Other possibilities include an unspecified site near WIPP or elsewhere in the country, possibly at an existing nuclear power plant.

What is Greater Than Class C (GTCC) Waste?

GTCC is a catch-all term for the most radioactive Low-Level Waste (LLW) and is dangerous to humans and the environment for hundreds of years. GTCC is classified as sealed sources, activated metals, and other wastes. **Sealed sources** are highly radioactive materials enclosed in metal containers. These sources are commonly used to detect flaws in pipes and welds, determine moisture content in soil, and diagnose and treat illnesses. **Activated metals** result from decommissioning nuclear reactors. The activated metals consist of internal nuclear components of reactor vessels that have become highly radioactive from neutron absorption. **Other waste** includes radioactively contaminated equipment, debris, trash, and scrap metal.

How Much GTCC is Out There?

The current (stored) volume of GTCC waste is estimated to be about 1,000 cubic meters. An additional 4,600 cubic meters of GTCC waste is projected in the future, primarily from decommissioning aging nuclear power plants, which will produce about 80% of the total radioactivity.

DOE's Proposed Alternatives Being Considered

- #1. *No Action Alternative:* GTCC waste would remain stored as it is currently handled.
- #2. *Geologic Repository Disposal at WIPP:* Currently, WIPP cannot even accommodate the volumes of bomb production waste that DOE has projected for it, let alone new wastes. Moreover, WIPP is not allowed to dispose of GTCC wastes unless existing law were to be changed.
- #3. *Geologic Repository Disposal at Yucca Mountain:* Yucca Mountain is not an operational facility and is riddled with problems that have stalled the facility from moving forward. Moreover, Yucca Mountain's stated mission is to bury high-level radioactive wastes (such as spent reactor fuel rods), not GTCC waste.
- #4. *Enhanced Near-Surface Disposal:* Involves placing the wastes in trenches, vaults, or other similar facilities. In most cases, this practice is basically dumping contaminated materials into the ground and covering them with dirt (hardly enhanced).
- #5. *Borehole:* Waste is placed in a hole that is drilled into the ground more than 30 meters from the surface.

Why is This Important to New Mexicans?

LANL buries its low-level radioactive waste in unlined trenches, pits and shafts at its materials disposal Area G. LANL has also collected around 15,000 sealed sources from across the country. Now DOE is proposing to permanently bury them there. The final determination by DOE and the New Mexico Environment Department (NMED) of what hazardous and radioactive wastes will permanently remain at Area G has not yet been made and is a controversial issue. Large amounts of GTCC waste should not be brought to LANL, when existing wastes have not been cleaned up and continue to threaten groundwater.

At WIPP, the GTCC wastes could be disposed in the geologic repository or in surface boreholes. Both methods would make the wastes irretrievable. Changing the law so that WIPP could accommodate GTCC wastes risks opening it up to other types of wastes, including high-level radioactive wastes.

New Mexican decision-makers remain skeptical about GTCC wastes. Senator Bingaman stated, "It's clear to me that LANL is not an ideal location for this type of 'enhanced near-surface facility,' especially given that DOE does not yet have a complete understanding of the geological formation on which the lab rests." Senator Domenici stated, "We need to focus on characterization of the existing cleanup activities and work on finishing the current cleanup within the terms of the [NMED-imposed] Consent Agreement." Jonathan Goldstein, NMED Director of Water and Waste Management, said, "...given DOE's recent troubling mishandling of waste already approved for disposal at WIPP, we plan to examine this proposal very, very carefully."

There is a Different Alternative!

There are more alternatives than what DOE claims for GTCC radioactive waste. We strongly urge that a 6th alternative, "Hardened On-Site Storage" (HOSS), be considered and implemented as the best means of protecting human health and the environment. HOSS would allow long-term storage of GTCC wastes so that they can be monitored and retrieved until a better solution is found. As it stands now, DOE is proposing only permanent, irretrievable disposal.

The "hardened" in HOSS means that the storage facility would be designed and reinforced against potential terrorist attacks, such as an intentional aircraft crash that could result in offsite contamination. Keeping the waste in hardened onsite storage would reduce the risk of accidents or a terrorist attack during transport. While HOSS is not a permanent solution, it would be more protective of the environment than any of DOE's current dumping practices. HOSS would be a safe way of storing our radioactive wastes to protect our communities until a scientifically sound, publicly acceptable solution is found. Part of that future solution, of course, should be drastically minimizing the generation of those wastes to begin with.

**DOE should analyze HOSS facilities as the best solution for GTCC wastes.
Tell DOE to do just that!**

What Can I Do?

Voice your opinion at upcoming public scoping meetings and submit comments.

Public meetings in New Mexico will be held at the following locations and times:

- *Carlsbad*: Pecos River Village Conference Center, Carousel House, 711 Muscatel Avenue, Carlsbad, Monday, August 13, 2007, 6 - 9 p.m.
- *Los Alamos*: Hilltop House Best Western, La Vista Room, 400 Trinity Drive, Los Alamos, Tuesday, August 14, 2007, 6 p.m. - 9 p.m.

The deadline for written comments to DOE is September 21, 2007, and can be also be submitted by mail to: James L. Joyce, Document Manager, Office of Regulatory Compliance (EM-10), U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585-0119 Telephone: (301) 903-2151. Fax: 301-903-4303. E-mail: gtcceis@anl.gov.

More information can be found and written comments can be submitted on the scope of the GTCC wastes proposal at <http://www.gtcceis.anl.gov>.