

More “Hot” Waste Planned for WIPP

The Department of Energy (DOE) opened the Waste Isolation Pilot Plant (WIPP) in 1999 when “Remote-Handled” (RH) transuranic (TRU-plutonium-contaminated) waste was prohibited. Since RH waste has been permitted, DOE still has not shipped RH waste at a rate to use the available capacity. Consequently, about one-half of the planned RH space in the walls of the underground rooms cannot be used because contact-handled (CH) waste has been emplaced. **DOE now wants to bring more RH waste than fits in the remaining designated space. But people can speak out against DOE’s plans!**

What are DOE’s Plans?

DOE has submitted a *Permit Modification Request - Addition of a Shielded Container* so that it can transport and dispose of RH waste in lead shielded containers. In addition, RH waste would continue to be shipped and disposed in large canisters, as has been done since January 2007. If the New Mexico Environment Department (NMED) approves the modification request, RH waste in shielded containers could be trucked to WIPP and emplaced in the underground rooms along with CH waste.

What is Remote-Handled Transuranic (TRU) Waste?

All TRU waste is dangerous to humans and the environment for thousands of generations because plutonium is radioactive for hundreds of thousands of years and in very small amounts will cause lung cancer and other diseases if it is inhaled or ingested. By law, TRU waste must be disposed deep underground to try to prevent humans from contacting it. RH TRU waste also contains radionuclides that are thermally hot and release gamma rays that must be shielded to protect humans. At the surface of containers, RH TRU waste dose rate is more than 200 millirem per hour and can be up to 1,000 rem per hour.

WIPP’s design is to handle RH waste in the RH Bay in the Waste Handling Building, then put it in holes in the walls of underground rooms before CH waste is emplaced on the floor. The salt walls and the canister provide shielding to protect workers that handle CH waste.

How would shielded containers handle RH TRU Waste?

Each shielded container would hold one 30-gallon container of RH waste, which would be trucked to WIPP and disposed as a three-pack. The lead shielding is supposed to keep the container surface dose rate to less than 200 millirem per hour, so that the 3-packs would be handled as if they were CH waste. The 3-packs would be shipped in the HalfPACT shipping container, stored with CH waste in the WIPP Parking Area, unloaded in the CH Bay of the Waste Handling Building, and placed on the floor in underground rooms alongside CH waste.

What are concerns about shielded containers?

Shielded containers have never been used. While DOE says that they could be handled as CH waste at WIPP, that is not completely true. For example, if a CH waste container is damaged or leaking, it can be overpacked into a larger container in the CH Bay and emplaced underground. If a shielded container is damaged or leaking, it could not be overpacked in the CH Bay because RH waste requires shielding to protect workers. The modification request states that shielded containers could be overpacked, but does not describe how that could be done. DOE officials have stated that the shielded containers could be transported to the RH Bay and overpacked there. That procedure is not consistent with CH waste management, and could expose workers to radiation releases.

The entire Waste Handling Building, both CH and RH Bays, is permitted for 194.1 cubic meters of TRU waste, of which 11 cubic meters can be RH waste. The modification request includes no limits on the number of RH shielded containers that could be in the CH Bay, effectively substantially increasing the amount of RH waste allowed.

Because of DOE shipping and disposal practices over the past 12 years, the amount of underground space for RH waste at WIPP has been substantially reduced. DOE does not even know how much RH waste it has to bring to WIPP, when the waste would be ready to be shipped, whether more than the remaining capacity is needed, among other issues. DOE has not provided any estimates about how much RH waste would come in shielded containers. DOE has not described how much CH space would be used by shielded containers of RH waste and whether that will create a shortage of space for CH waste in the future.

DOE also has stated that it would use shielded containers to bring commercial waste, much of which is more radioactive than RH waste, to WIPP in its Greater-Than-Class C waste environmental impact statement. Thus, DOE's plans are to use shielded containers as a way to expand WIPP beyond its legal mission of disposal of up to 175,564 cubic meters of defense TRU waste, the limit set by the WIPP Land Withdrawal Act of 1992.

Should there be more information and a public hearing?

Yes. DOE submitted the shielded container request as a class 2 permit modification, which allows for 60 days of public comment. Within 30 days, which can be extended to 60 days, the New Mexico Environment Department (NMED) must approve the request, deny the request, or decide to use class 3 procedures. If NMED takes no action, the request is deemed approved.

Given the dangers of RH waste, the need for much more information, the complexity of the changes proposed, and the public concern about RH waste, shielded containers require a class 3 modification request, which provides for more extensive public comment and an opportunity for public hearing. Before submitting the request, DOE was told by members of the public that it was a class 3 request. Since DOE ignored that public input, NMED now must decide whether to consider the request as a class 3 modification.

What Can I Do?

Submit written comments to the New Mexico Environment Department (NMED). Tell NMED: *I am very concerned that shielded containers at WIPP allow more remote-handled waste that is dangerous to transport, store, and dispose. I request a public hearing on shielded containers, which should be a class 3 modification to allow additional public comment and hearing.*

The deadline for written comments to NMED is December 5, 2011. Submit to:

Tim Hall, New Mexico Environment Department, 2905 Rodeo Park Drive East, Building 1, Santa Fe, NM 87505, or

E-mail: Timothy.Hall@state.nm.us

The complete permit modification request can be found at:

http://www.wipp.energy.gov/rcradox/rfc/Class_2_Shielded_Container_PMR_9-29-11.pdf

For more information:

Southwest Research and Information Center. (505) 262-1862. www.sric.org

Citizens for Alternatives to Radioactive Dumping. (505) 266-2663. contactus@cardnm.org

Concerned Citizen for Nuclear Safety. (505) 986-1973. www.nuclearactive.org

Nuclear Watch New Mexico. (505) 989-7342. www.nukewatch.org

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