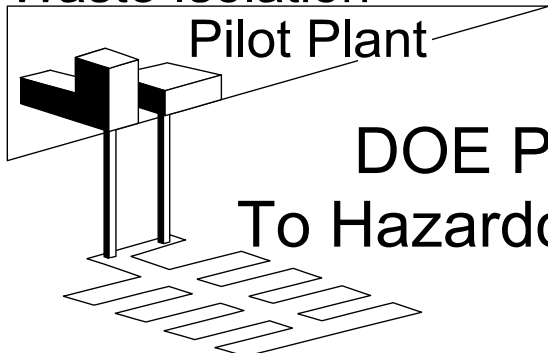


Waste Isolation

Pilot Plant



DOE Proposes Modification To Hazardous Waste Facility Permit

Remote-Handled Transuranic Waste Operations at WIPP

Background

The U.S. Department of Energy (DOE) has proposed a modification to its Hazardous Waste Facility Permit for the Waste Isolation Pilot Plant (WIPP) to support DOE's national cleanup effort.

DOE is responsible for the safe and environmentally sound management of defense-generated transuranic (TRU) waste, a byproduct of the nation's nuclear weapons program. DOE built WIPP, a deep geologic repository, to permanently dispose of TRU waste now temporarily stored at DOE facilities around the country.

In the Class 3 request to the New Mexico Environment Department (NMED) to modify its permit, DOE seeks to manage, store and dispose of defense remote-handled (RH) TRU waste at WIPP. Stringent procedures for RH-TRU waste transportation and management will ensure the safety of workers, the public and the environment. Moreover, disposal of RH-TRU waste will not adversely affect ongoing contact-handled (CH) TRU waste disposal operations.

What is RH-TRU?

RH-TRU waste is one of two categories of TRU waste authorized by Congress for disposal at WIPP—the other is CH-TRU waste. TRU waste consists of rags, tools, laboratory equipment, debris and other disposable items that are contaminated with radioactive elements such as plutonium. The distinction between the two categories is based on the primary type of radiation the waste emits.

RH-TRU waste emits more penetrating radiation than does CH-TRU waste and must be handled with robotic equipment and transported in shielded casks to protect workers, the public and the environment. Some TRU waste also contains hazardous components such as paint or solvents and is referred to as mixed waste.

RH-TRU waste is not high-level waste or spent fuel that, by law, may not be disposed at WIPP.

RH-TRU waste will constitute approximately four percent of the total volume of waste to be disposed of at WIPP. At the present time, WIPP receives only CH-TRU and CH-TRU mixed waste.

RH-TRU waste will be shipped in two types of shielded casks designed to protect the waste during shipment. The RH-72B and CNS 10-160B shipping casks were certified by the Nuclear Regulatory Commission following rigorous safety testing.

DOE operates WIPP under a compliance certification from the U.S. Environmental Protection Agency (EPA) and a hazardous waste facility permit issued by NMED. WIPP cannot begin to receive RH-TRU waste without the approval of these regulators.

To ensure that only permitted wastes are sent to WIPP for disposal, DOE must provide regulators with a plan that describes how RH-TRU waste will be characterized. Characterization is the process that determines the relevant physical, chemical and radiological properties of the waste.

DOE has prepared an RH-TRU Waste Analysis Plan that describes the methods DOE will use to characterize RH-TRU waste. The Waste Analysis Plan, along with detailed descriptions of the processes and facility changes necessary to handle RH-TRU waste once it arrives at WIPP, is part of the permit modification request to NMED. A separate request will be submitted to EPA.

**The
Characterization
Process**

DOE's Waste Analysis Plan proposes characterizing most of the waste as it is being packaged. Approximately 95 percent of RH-TRU waste has not yet been packaged for final shipment.

In addition to visually examining the waste during the packaging process, technicians will verify radiological and chemical waste components using historical records such as sampling and assay records, quality control data and information about the processes that generated the waste. These records, called acceptable knowledge, will be the primary characterization method for a small percentage of waste that has already been packaged for shipment to WIPP.

The plan proposes alternate characterization methods for testing the waste if the required information cannot be obtained during packaging, from records, or if the waste has already been packaged for shipment. One method would be to open the containers, pull the contents out, and examine the waste while videotaping its contents. Radiography (X-ray) is another method proposed for verifying container contents.

Waste that cannot be adequately characterized will not be shipped to WIPP for disposal.

**Facility
Modification**

In addition to the waste analysis plan, DOE will submit information about modifications made to the facility to prepare for RH-TRU waste operations. Included in the facility modification package are descriptions of the RH-TRU waste handling process, waste storage procedures, RH-TRU emergency preparedness plans, lists of equipment that would be used in the waste handling process, and maintenance schedules and record keeping information for that equipment.

**What are
the Benefits?**

DOE has a mandate to clean up and permanently dispose of the nation's defense-generated TRU waste. RH-TRU waste is now temporarily stored at 13 sites around the country. WIPP was designed to safely isolate long-lived radioactive waste from the accessible environment. This modification request will assist DOE in expediting its nationwide cleanup efforts.

Comments

The Permittees and NMED have agreed to extend the comment period for this permit modification request to 120 days to allow the public ample time to review the request and formulate constructive comments.

Written comments for the record must be sent to Mr. Steve Zappe, New Mexico Environment Department, 2905 Rodeo Park Drive East, Building 1, Santa Fe, NM 87505. They may also be e-mailed: **steve_zappe@nmenv.state.nm.us** or faxed to 505-428-2567. Only written comments will be accepted and must be received no later than 5 p.m. on October 30, 2002. A copy of the permit modification request may be viewed or copied at the NMED offices of Mr. Steve Zappe.

To obtain a copy of the permit modification request, contact the WIPP Information Center at 1-800-366-WIPP (9477). If you have questions or comments relative to the permit modification request that you would like addressed by the permittees, please contact Ms. Susan Scott, Westinghouse TRU Solutions LLC, P.O. Box 2078, Carlsbad, NM 88221, by October 23, 2002.

For more Information

For more information about WIPP, to be placed on the WIPP mailing list, or to receive a CD describing the RH-TRU waste disposal process at WIPP, call the WIPP Information Center at 1-800-336-WIPP (9477). You also may visit the WIPP Home Page at <http://www.wipp.ws>.

If you prefer, write to:
WIPP Information Center
U.S. Department of Energy
Carlsbad Field Office
P.O. Box 3090
Carlsbad, NM 88221

