Recommendation No. 111
January 25, 2000

WIPP RCRA Permit/Transuranic (TRU) Waste

Background

The Waste Isolation Pilot Plant (WIPP) is a repository for DOE Transuranic (TRU) wastes built deep within underground salt deposits near Carlsbad, NM. DOE is already operating WIPP to dispose of non-mixed TRU wastes. However, most of DOE's TRU wastes are mixed wastes due to their non-radioactive hazardous content. The State of New Mexico's Environmental Department (NMED) has regulatory authority over the disposal of mixed TRU wastes at WIPP. This authority required WIPP to obtain a Resource Conservation and Recovery Act (RCRA) Part B operating permit before accepting mixed TRU wastes. A RCRA permit is not required for non-mixed TRU wastes.

In Recommendation 77 (WIPP RCRA Part B Permit, January 26, 1999), the SRS Citizens Advisory Board (CAB) voted to open WIPP and to commence the shipment of SRS TRU wastes to WIPP as soon afterwards as possible. On Wednesday, October 27, 1999, NMED issued the hazardous waste permit for WIPP effective at the end of November 1999.

However, on November 3, 1999, the Department of Justice filed suit in federal district court in New Mexico on behalf of DOE. DOE believes that the RCRA permit places onerous and unlawful requirements on its operations that could lead to workers being unnecessarily exposed to hazards, delays in the disposal of TRU wastes at WIPP, and significantly more costs without increasing the protection of the environment.

The CAB commented on similar issues in Recommendation 77. Unfortunately many of the problems identified by the CAB and others remain. The CAB remains concerned that the RCRA permit requires additional visual, x-ray, and intrusive examinations to assay the container contents, which are unnecessary, and a danger to SRS workers. Further, implementing these RCRA permit conditions at SRS will add more delays to the start of shipments of TRU wastes from SRS to WIPP, increasing costs without adding to environmental protection or worker safety.

After reviewing the NMED RCRA permit requirements, the SRS CAB has the following comments and recommendations.

Comments

1. Because WIPP is designed to safely contain TRU waste, primarily plutonium, for 10,000 years, the SRS CAB believes WIPP is already protective of the hazardous waste components going into the repository. The bureaucratic procedures required by NMED RCRA do not increase the protection afforded by disposal at WIPP. Rather they only increase worker health and safety risk. We would accept the additional restrictions in the permit if they increased worker safety and human health and environmental protection, but they do not. Worse, as we predicted in Recommendation 77, the permit provides no flexibility at the generator sites to develop and implement new waste management methods, which could lead to future innovation that could further improve safety, protect the public and the environment, and save tax dollars.

2. It is highly irregular for a State which grants a RCRA permit for a facility in its State to also specify restrictions on waste generators in another State who will be shipping waste to the facility. Usually, the permitted facility is required to establish waste acceptance criteria (WAC) for the generators in other states. Thus, NMED's authority should focus on generator compliance with the WIPP-WAC. Instead, NMED's RCRA permit for WIPP extends far beyond these normal bounds and exceeds their authority without adding significant advantages to protect human health and the environment. In fact, as written, the WIPP permit is a significant threat to SRS workers.

Recommendation

The SRS CAB supports DOE in its lawsuit and in its attempt to reduce administrative burdens without
jeopardizing health, safety, environmental protections, and to minimize costs to the taxpayer. The SRS CAB made previous recommendations regarding the RCRA Part B permit on January 26, 1999, and while the Board appreciates the responses it received, the Board found them to be unsatisfactory. Therefore, the SRS CAB restates its previous recommendations to NMED that the RCRA Part B Permit:

1. Regulate only the operation of WIPP to ensure that TRU mixed-wastes arriving at WIPP meet the WIPP-WAC. NMED should not have regulatory authority over how SRS prepares its waste for shipment to WIPP. SRS mixed TRU wastes are already regulated by the South Carolina Department of Health and Environmental control (SCDHEC). NMED may informally accompany DOE and SCDHEC on field audits, but we object to NMED duplicating SCDHEC's regulatory authority over SRS operations.

2. Provide only criteria for compliance with RCRA at WIPP. The RCRA Permit is too prescriptive in how operations at SRS will meet the WIPP-WAC. The RCRA Permit does not allow for new methods or efficiencies that could reduce costs and improve safety. Some methods specified in the RCRA Permit are outdated and do not currently meet acceptable "As Low As Reasonably Achievable" (ALARA) methods and quality controls.

3. Not attempt to regulate non-mixed TRU wastes. NMED has no regulatory authority over non-mixed TRU wastes.

4. Eliminate the criteria differences for handling and disposing of Remote-Handled and Contact-Handled mixed TRU waste. These fall under DOE's operational authority. This should not be an issue for NMED because the differences between these two operational categories arise from radiation levels, not from hazardous chemicals as part of the waste contents.

5. Delete these two criteria: "The Permittees will receive written notification of all non-conformances identified during the Site Project Manager Review within five days of identification. The Permittees will also receive a nonconformance report within thirty days of identification." First, all non-conformances at SRS will be corrected prior to shipment. Records for them will be kept and reproduced without additional record keeping. Second, whether or not non-mixed TRU wastes conform to WIPP WAC is outside of NMED's regulatory authority.

6. Delete the requirement regarding radiation containment areas. This criterion is under the authority of DOE. Radiation containment areas are a part of operational procedures at the generator site; they should not be part of a RCRA Permit for a Treatment, Storage, and Disposal (TSD) facility.

7. Modify the RCRA Part B permit's TRU waste visual examination requirement from an assumed misclassification rate of 11 percent to the DOE's requested one percent. The current requirement will force DOE to open and visually examine an excessive number of TRU waste drums with no significant increase in waste characterization accuracy, but with a significant, and unnecessary increase in risk to the worker's health and safety.

References

2. SRS CAB Recommendation 11, Implementation of TRU-Waste Retrieval Project - Follow-up to Rec. No. 4 ISPR Results, adopted November 28, 1995
3. SRS CAB Recommendation 18, TRU Waste Treatment Options Recommendation following Blue Ribbon Panel Results - Follow-up to Rec. No. 4., adopted March 26, 1996
5. SRS CAB Recommendation 32, Waste Isolation Pilot Plant Disposal Phase Draft SEIS-II, adopted January 28, 1997 Note that the complete text of references 1 - 5 are available on the SRS web page -www.srs.gov - under Citizens Advisory Board Recommendations
6. SRS CAB Recommendation No. 77 (WIPP RCRA Part B Permit_), dated 1/26/99 RVM 1/22/00.

Agency Responses

Department of Energy-SR