United States Environmental Protection Agency Air and Radiation (6602J)



EPA's Final Certification Decision for the Waste Isolation Pilot Plant

What is WIPP?

The WIPP is the nation's first deep underground facility for disposing of transuranic waste generated from defense activities. DOE is developing the WIPP in southeastern New Mexico, near Carlsbad, approximately 2,100 feet underground in excavated, natural salt formations. Some transuranic waste to be disposed at the WIPP is in a form called "mixed waste." That means that it is material such as rags, clothing, glassware, sludges and equipment which has become contaminated by radioactive elements and hazardous chemicals. The waste that would be disposed of at the WIPP is currently stored at federal facilities across the United States. Most of the waste proposed for disposal at the WIPP will be generated during future cleanup of DOE's radioactive contaminated sites.

What is EPA's Final Decision on the WIPP's Safety?

EPA has determined that the WIPP can safely contain transuranic waste and that it will comply with the Agency's radioactive waste disposal standards. EPA's decision allows the DOE to begin disposing radioactive waste in the WIPP once all other applicable health and safety standards have been met. Commonly Used Abbreviations:

- **DOE:** U.S. Department of Energy
- EPA: U.S. Environmental Protection Agency
- **LWA:** WIPP Land Withdrawal Act
- LANL: Los Alamos National Laboratory

What are EPA's Conditions of Compliance?

In making its decision, EPA is requiring DOE to take additional steps to further assure public safety and environmental protection. EPA's final certification decision is subject to four conditions of compliance:

- DOE must seal WIPP waste storage panels with a strong concrete barrier that can help reduce potential releases in case of intrusion.
- Before WIPP receives any shipments of waste from a waste generator site, DOE must demonstrate to EPA that it can accurately assess or confirm the contents of waste containers stored or assembled at the site.
- Before WIPP receives any shipments of waste from a waste generator site, DOE must demonstrate to EPA that it can implement its quality assurance programs (confirming that waste characterization activities are done properly) at the site.
- DOE must submit a revised schedule showing that markers and other measures (used to warn future generations about the location and contents of the disposal system) will be implemented as soon as possible after closure of the WIPP.

In addition, under existing regulations, DOE must report to EPA any changes in activities or any releases

of radioactive material at the WIPP that might violate EPA's safety requirements.

How did EPA make its final decision?

EPA based its decision on a thorough review of information submitted by DOE, independent technical analyses, and public comments. The Agency compared DOE's compliance certification application and other relevant information, to EPA's compliance criteria for the WIPP. EPA performed independent testing of DOE's performance assessment calculations, which are used to demonstrate that the WIPP will comply with EPA's radioactive waste disposal regulations for 10,000 years. EPA also considered approximately 1400 written and oral comments on the proposed rule by the public.

What is EPA's role in regulating the WIPP?

EPA regulates the disposal of radioactive waste to protect public health and the environment from harmful radiation exposure and contamination. EPA's regulation of the WIPP facility is governed by the WIPP LWA, passed initially by Congress in 1992 and amended in 1996. The LWA requires EPA to certify whether the WIPP will comply with EPA's radioactive waste disposal regulations before waste disposal may begin.

What are EPA's other WIPP-related activities?

To certify whether the WIPP is safe to contain radioactive waste, the LWA required EPA to finalize radioactive waste disposal regulations which apply to all geologic repositories (except for Yucca Mountain) and to develop criteria to implement the disposal regulations specifically at WIPP. In December 1993, EPA issued final radioactive waste disposal regulations which limit radiation releases from facilities for disposal of radioactive waste. EPA issued final compliance criteria for the WIPP in February 1996. Both the radioactive waste disposal regulations and the compliance criteria reflect public comments and suggestions from the WIPP Review Committee of the National Advisory Council for Environmental Policy and Technology.

When will the WIPP open for waste disposal?

Before disposing of radioactive waste at the WIPP, DOE must

- Notify Congress and wait for 30 days after EPA's final certification, as specified in the WIPP LWA.
- EPA must separately inspect and approve the quality assurance programs for waste generator sites and the waste characterization controls to measure and track important waste components. This applies to all waste generator sites. EPA already inspected and approved the waste characterization and quality assurance for some of the waste at the Los Alamos National Laboratory (LANL) as part of its certification decision.
- Before disposing of mixed (chemical and radioactive) waste at the WIPP, DOE must obtain a permit from the State of New Mexico to accept hazardous (chemical) waste. Until that time, WIPP is certified only to accept radioactive waste.

What other agencies have key oversight responsibilities at the WIPP?

Department of Transportation (DOT) - DOT is responsible for working with individual states to establish the surface routes that will be used to transport waste to the WIPP.

Nuclear Regulatory Commission (NRC) - NRC implements EPA's and its own standards for protecting the public from radiation. It also regulates the transportation of nuclear waste.

New Mexico Environment Department (NMED) - NMED is responsible for issuing and enforcing RCRA permits relating to the disposal of transuranic mixed waste.

New Mexico Radioactive Waste Task Force - This Task Force administers the State's WIPP Safe Transportation Program.

Department of Energy (DOE) - DOE is responsible for the development and day-to-day management of the WIPP facility. For more information call DOE's WIPP Information Center at 1-800-336-WIPP.

How will EPA stay involved with WIPP?

- Throughout its operation of the WIPP, DOE must apply for recertification by EPA every five years.
- EPA must review recertification applications to determine whether the WIPP continues to comply with the disposal regulations. As part of its review, EPA will consider public comments.
- EPA may conduct inspections of activities at the WIPP and at other WIPP-related facilities (laboratories, waste generator sites, etc.) to verify continued compliance with EPA's radioactive waste disposal standards.

For More Information on EPA's WIPP Activities: Call EPA's WIPP Information Line at 1-800-331 WIPP or visit our Website at <u>http://www.epa.gov/radiation/wipp.</u>