



United States
Environmental
Protection
Agency

Regulating the Safety of the WIPP

The Continuing Role of the U.S. Environmental Protection Agency

What is WIPP?

The WIPP is the nation's first geologic facility designed for permanent disposal of transuranic (TRU) radioactive waste that was generated as a result of U.S. defense activities. Beginning in the 1980's, DOE excavated a mine 2,100 feet underground in the natural salt formations outside Carlsbad, New Mexico to dispose of this waste. The TRU waste being disposed at the WIPP is packaged into drums and consists mainly of rags, clothing, glassware, equipment, sludges, soils and other materials that are contaminated with americium, plutonium, and other radioactive elements. TRU waste is separate from high-level waste and spent nuclear fuel. The WIPP has a total capacity of 6.2 million cubic feet of TRU waste. Approximately 60% of the TRU waste also contains hazardous chemicals and is referred to as "mixed waste."

Abbreviations

DOE: U.S. Department of Energy

**DOT: U.S. Department of
Transportation**

**EPA: U.S. Environmental Protection
Agency**

**TRU: transuranic (radioactive
waste)**

WIPP: Waste Isolation Pilot Plant

Disposal of TRU mixed waste at the WIPP requires EPA and state approval. (EPA regulates the radioactive components of mixed waste.



The state of New Mexico regulates the hazardous components under a separate permit. For additional information visit the New Mexico Environment Dept. website at www.nmenv.state.nm.us.) The waste that is being disposed of at the WIPP is being transferred to the WIPP by truck in specially-designed transport containers from federal (DOE) facilities across the United States where it has been temporarily stored, in some cases for decades. Some of the waste proposed for disposal at the WIPP is currently being generated as part of the ongoing cleanup of DOE sites contaminated with radioactivity.

EPA's Initial Determination of WIPP's Safety

In 1992, Congress gave EPA responsibility for regulating many of DOE's activities at the WIPP. Based on years of independent technical evaluation and careful consideration of public input, EPA certified in May 1998 that WIPP could safely contain TRU waste, and that it complied with the Agency's radioactive waste disposal standards. The first shipment of waste arrived at the WIPP from Los Alamos National Laboratory in New Mexico in March 1999.

EPA's Continuing Regulatory Responsibility for the WIPP

EPA has an ongoing regulatory role at WIPP to verify independently that it continues to protect public health and the environment. EPA ensures that DOE maintains and operates the facility in a safe manner and that the facility continues to comply with our radioactive waste disposal standards. The Agency performs independent technical reviews and audits of many aspects of DOE's WIPP program. Since 1999, EPA has conducted more than a dozen technical meetings with DOE. EPA's main regulatory activities include:

- Recertifying the safety of WIPP
- Evaluating changes in WIPP activities
- Conducting audits and inspections

◆ Recertifying the Safety of WIPP

DOE is required by law to submit documentation that the WIPP remains in compliance with EPA's certification. This recertification process will take place every five years until WIPP closes in about 35 years. Spring 2004 marks the deadline for DOE's submission of

documentation for the first recertification in this process. EPA is required by law to reach a recertification decision within six months of receipt of the complete documentation from DOE. We will conduct our recertification evaluation based on the results of our continuous regulatory oversight of WIPP, on the documentation provided by DOE, and on public input.

◆ Evaluating Changes in WIPP Activities

DOE is required to report to EPA planned and unplanned changes in activities and conditions at WIPP. EPA reviews the changes and determines whether the initial certification should be modified, suspended, or revoked.

Sometimes DOE may want to make changes to their activities to make improvements or increase efficiency. In many cases, these changes are insignificant. If EPA thinks these changes are significant, the agency will ask for public comments to assist in its

review. Details of changes to WIPP that EPA has reviewed since 1998 may be found in the public docket.

◆ Conducting Audits and Inspections

EPA conducts regular audits and inspections of WIPP-related activities at the WIPP site and at other DOE facilities.

The WIPP Facility

Regulatory Dockets Locations

These dockets contain the information used by EPA in carrying out its WIPP rule-making responsibilities.

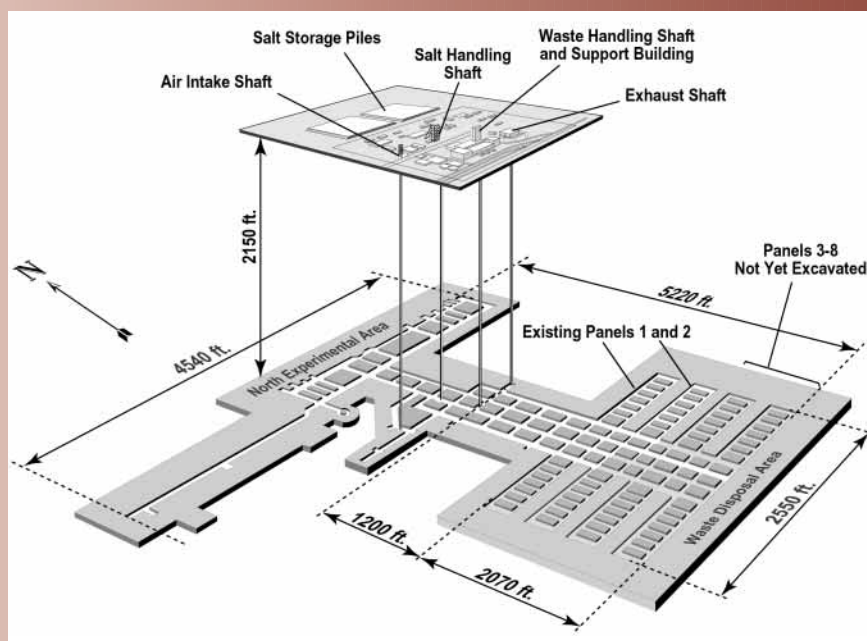
US EPA Air Docket
Waterside Mall Room M1500
401 M St. SW
Washington, DC 20460
(202) 260-7548
(all dockets)

Carlsbad Public Library
101 S. Halagueno
Carlsbad, NM 88220
(505) 885-6776
(all dockets)

Zimmerman Library
Government Publications
University of New Mexico
Albuquerque, NM 87131
(505) 277-5441
(all dockets)

Fogelson Library
College of Santa Fe
1600 St. Michaels Drive
Santa Fe, NM 87505
(505) 473-6576
(Docket A-93-02 only; EPA's WIPP Certification Decision)

New Mexico State Library
1209 Camino Carlos Rey
Santa Fe, NM 87505
(505) 476-9717
(Docket A-98-49 only; EPA's WIPP Recertification Decision)

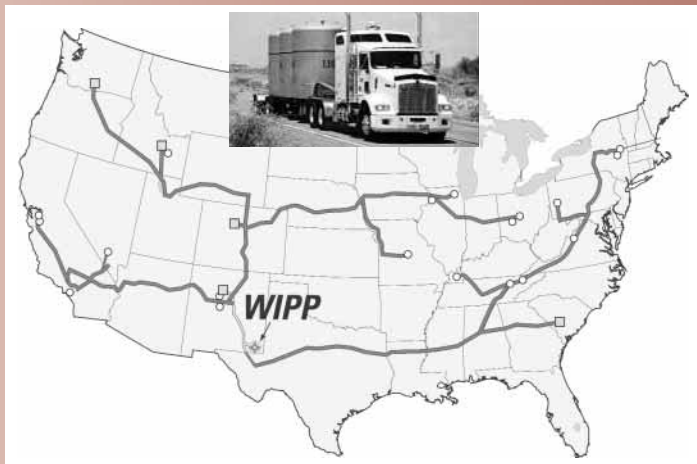


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Transporting Waste to the WIPP

Source: DOE Carlsbad Field Office



Over the next 35 years, the WIPP will receive up to 37,000 shipments from federal (DOE) storage facilities. The shipment containers are specially designed and tested to prevent radioactive releases, even in the event of a severe accident or other emergency. Highways in 30 states and tribal lands will be used to transport TRU waste shipments to the WIPP. Congress did not give EPA authority to select and/or approve the transportation routes. Regulations issued by the U.S. Department of Transportation set guidelines for routing waste to the WIPP, and give the states and Indian tribes authority to designate routes within their borders. These transportation routes follow the most direct interstate highway route. For more information see DOE's WIPP website at: www.wipp.carlsbad.nm.us/

The purpose of the audits and inspections varies. At the WIPP site, we inspect such activities as air monitoring and waste emplacement. We also audit the quality assurance programs of DOE's Carlsbad Field Office (CBFO) and its key technical support contractors. CBFO and its contractors must maintain adequate management controls over activities that could affect the safe containment of waste in the WIPP.

TRU waste destined for the WIPP is currently stored at numerous DOE facilities across the U.S. Before the waste may be disposed in the WIPP, EPA requires that it be sufficiently "characterized"—that is, inventoried—so that the important contents of the material are properly understood. DOE must measure and track radioactive isotopes and other materials. Through inspections, EPA verifies that each facility has in place a system of controls for waste characterization. When we inspect DOE waste-generating facilities, the purpose is to evaluate waste characterization activities for compliance with our regulations. EPA also verifies that each site applies adequate quality assurance measures to waste characterization activities.

EPA has conducted dozens of inspections at DOE facilities since 1998. To date, we have approved five federal TRU waste sites to ship waste to the WIPP:

- 1) **Los Alamos National Lab**, New Mexico
- 2) **Idaho National Engineering Lab**, Idaho
- 3) **Hanford National Lab**, Washington
- 4) **Rocky Flats Environmental Technology Site**, Colorado
- 5) **Savannah River Site**, South Carolina (including a mobile waste characterization unit under DOE's Central Characterization Program).

Eighty percent of the waste will come from these five sites and from the Oak Ridge site in Tennessee. Eventually waste could come from an additional 20 or so sites, based on DOE estimates of TRU waste in the U.S.

Announcements about our waste characterization activities, including approvals, upcoming inspections and opportunities to comment may be found on EPA's WIPP website. Copies of EPA inspection reports are available in our docket.

EPA's Commitment to the Public

EPA will develop explanatory information to assist the public in understanding our process of independently evaluating and verifying the ongoing safe containment of TRU waste at the WIPP.

We will seek public comment on WIPP TRU waste activities and changes proposed by DOE during the recertification period. You can find announcements about opportunities for public comment on our website and in the *Federal Register*.

We invite the public to contact us with comments, concerns, or questions regarding our WIPP program at any time. We will listen and respond to your concerns.

You may reach us at our WIPP Information Line at 1-800-331-WIPP or through our webmaster at webmaster.oria@epa.gov. Or visit:

<http://www.epa.gov/radiation/wipp>

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From Top to Bottom:

1. Workers excavate the WIPP mine 2,100 feet underground in the natural salt formations (source: DOE Carlsbad Field Office)

2. Arriving shipments of TRU waste are inspected prior to disposal (source: DOE Carlsbad Field Office)

3. Barrels are permanently stored in mined vaults (source: DOE Carlsbad Field Office)

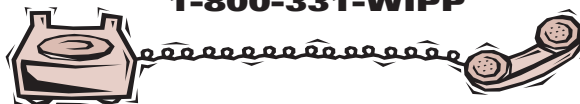
4. EPA meets with DOE and key stakeholder groups

EPA's WIPP Activities 2002

Date*	Issue	Public Activities
Winter	EPA Receives Annual WIPP Change Report From DOE	Available in EPA Dockets
	Technical Meeting with DOE, Carlsbad, NM	Meeting summaries available in EPA Dockets
	Meetings with Stakeholder Groups in New Mexico	Information on meetings printed in <i>WIPP Bulletin</i>
Spring	Publish Proposal on Revisions to EPA's Compliance Criteria for the WIPP	EPA Opens 120-day Public Comment Period
	Technical Meeting with DOE, Washington, DC	Meeting summaries available in EPA Dockets
	EPA Issues Decision on DOE's Annual Change Report to WIPP	Available in EPA Dockets
Summer	Public Hearings in New Mexico on EPA's Proposed Revisions to WIPP Compliance Criteria	Opportunity for Public Testimony - Call EPA's WIPP Information Line at 1-800-331-9477 for details
	Proposed Technical Meeting with DOE (Location: TBD)	Meeting summaries available in EPA Dockets
	DOE's Proposal for Remote Handled Waste (RH) at WIPP	Public Comment Period Opens
	Proposal on Revisions to EPA's Compliance Criteria for the WIPP	Public Comment Period Closes
Fall	Proposed Technical Meeting with DOE (Location: TBD)	Meeting summaries available in EPA Dockets
	Meetings with Stakeholder Groups in New Mexico	Information on meetings printed in <i>WIPP Bulletin</i>
	Performance Assessment Related Proposal	Public Comment Period (TBD)
	Publish Final Decision on Revisions to EPA's Compliance Criteria for the WIPP	Available in EPA Dockets

* Dates for EPA's WIPP Activities are based on projected timeframes for receiving information from DOE.

For Further Information on EPA's WIPP Activities
 Please Call the WIPP Information Line
1-800-331-WIPP



or visit our website at:

<http://www.epa.gov/radiation/wipp>