

CERTIFIED AND READY...THE REMAINING CHALLENGES TO OPENING THE WASTE ISOLATION PILOT PLANT

Mr. Scott G. Van Camp
Acting Director, Office of Western Operations
Office of Waste Management
United States Department of Energy

Ms. Elizabeth C. Saris
Science Applications International Corporation

Mr. Mark W. Frei
Acting Deputy Assistant Secretary
Office of Waste Management
United States Department of Energy

ABSTRACT

The past year of the Department of Energy's Waste Isolation Pilot Plant (WIPP) program was marked by both significant achievement and challenge. In May 1998, the Environmental Protection Agency (EPA) issued the final WIPP Compliance Certification, paving the way for the long-awaited opening of WIPP. The first shipping site, Los Alamos National Laboratory, was certified by EPA for readiness to ship; a Draft Resource Conservation and Recovery Act (RCRA) Part B permit was issued for public comment by the New Mexico Environment Department; and a solicitation for a full-service transportation contractor was issued. However, a number of challenges precluded DOE's ability to open WIPP in mid-1998, as scheduled. In July 1998, the New Mexico Attorney General and other opponents of WIPP met EPA's certification with legal challenge. DOE is also seeking relief from an outstanding 1991 permanent injunction from an earlier lawsuit. With the resolution of the challenges outlined above, DOE is ready and able to begin shipping non-mixed waste for disposal at WIPP. Mixed transuranic waste shipments will commence only after the New Mexico Environment Department issues the final RCRA Part B permit.

Last year marked a significant milestone in the history of our nation's efforts to resolve one of its most pressing environmental problems. For the first time, a geologic repository C the Department of Energy's Waste Isolation Pilot Plant (WIPP) C was certified by the Environmental Protection Agency (EPA) as safe for disposal operations. The EPA certification is a validation that a geologic waste disposal facility can be designed and built to isolate transuranic radioactive waste from our environment for at least 10,000 years.

This was not an easy achievement. The Department of Energy worked hard for over two decades to earn the EPA's certification. This past year, the Department issued the record of its decision to dispose of transuranic waste at WIPP. This decision was prepared in coordination with the Department's decision to prepare and store transuranic wastes prior to where the waste is currently stored or will be generated in the future. Both Records of Decision were published in the January 23, 1998 issue of the Federal Register. Following completion of an Operational Readiness Review the Secretary declared operational readiness to begin disposal operations at WIPP last March. Thus far, costs of the program exceed \$2 billion. Since its inception, the WIPP program has endured many legislative and regulatory changes. These challenges have been met. Litigation and demonstration of compliance with RCRA in the State of New Mexico are now the final challenges.

Congress authorized EPA to certify WIPP in the *Waste Isolation Pilot Plant Land Withdrawal Act*, Public Law 102-579 (1992) as amended by Public Law 104-21-201 (1996). On May 13, 1998, the Secretary of Energy notified Congress that WIPP is ready for disposal operations. This declaration was made just hours following the Environmental Protection Agency final rule certifying that the WIPP facility meets the federal disposal regulations (40 CFR 191). EPA published the final rule in the Federal Register on May 18, 1998.

The Secretary of Energy's performance agreement with the President in FY 98 included two key commitments concerning WIPP. These were to: 1) declare WIPP open for disposal of transuranic wastes and maximize timely shipment of waste from DOE sites; and, 2) ship between 388 and 592 cubic meters of transuranic waste to WIPP for disposal from three DOE sites (the Los Alamos National Laboratory (LANL), the Rocky Flats Environmental Technology Site (RFETS), and the Idaho National Engineering and Environmental Laboratory (INEEL)).

Opening WIPP for disposal operations is by no means the only requirement for solving the nation's nuclear waste problems, but it is one of the most decisive. Both proponents and opponents of nuclear applications recognize the significance of an operational geologic repository for nuclear waste. Once opened, the Department will be able to permanently dispose of transuranic waste generated from defense activities and dismantlement and decommissioning of nuclear weapons production facilities. More generally, successful operation of WIPP will demonstrate that the nuclear cycle can be resolved without significant adverse effects on the environment. DOE currently has approximately 3.7 million cubic feet of transuranic waste as a result of plutonium stabilization activities, environmental restoration, decontamination and decommissioning, waste management, and defense testing and research.

Although Federal regulatory approvals have now been received to allow shipment and disposal of non-mixed transuranic waste at WIPP (waste that does not contain hazardous waste constituents regulated by the Resource Conservation and Recovery Act (RCRA)), WIPP waste shipments are on hold pending the positive resolution of several legal challenges.

Non-mixed waste destined for the first shipments to WIPP from the Los Alamos National Laboratory comes from a thoroughly characterized waste stream that is non-mixed. However, in order to provide additional assurance to the State of New Mexico, DOE agreed to perform confirmatory testing and analysis of the waste to prove that hazardous chemicals were not present in the material. As agreed to by New Mexico and the Department of Energy in the *Confirmatory Sampling and Analysis Plan*, the Department performed testing for hazardous chemicals from a random sampling of 55 gallon drums to be disposed of in the WIPP underground. The preliminary results showed that all readings were below regulatory limits. This testing validated the use of Acceptable Knowledge for waste characterization and verified the suitability of the LANL waste for disposal at WIPP as non-mixed waste. In early December 1998, the New Mexico Environment Department (NMED) agreed with DOE that LANL waste is indeed non-mixed waste.

In May of last year, NMED issued for public comment its initial draft of the RCRA Part B Permit for the disposal of transuranic waste containing hazardous constituents regulated by RCRA. Then, in November, a revised draft RCRA Permit was issued for public comment. Public hearings on the draft permit began February 22, 1999. Shipment of mixed transuranic waste will begin only after the State issues the Final RCRA Part B Permit for the WIPP site. The New Mexico hazardous waste final RCRA Part B Permit is not expected to be issued until later this year.

The WIPP program is relying on privatization of contact-handled and remote-handled transuranic waste transportation services to reduce costs. Approximately 6,000 contact-handled transuranic waste shipments are scheduled through 2006, the majority of these shipments from INEEL, LANL, and RFETS. Additionally, about 1,600 shipments of remote-handled transuranic waste are scheduled through 2006 with the majority of these shipments coming from Oak Ridge National Laboratory. Shipments are expected to reach a peak rate of seventeen shipments per week distributed between INEEL, LANL, and RFETS.

Disposal operations are expected to begin later this year, provided that the legal issues have been resolved. The Department cannot anticipate the time necessary to resolve current and potential litigation seeking to delay shipments of transuranic waste to WIPP. Three lawsuits were filed with the U.S. Court of Appeals for the District of Columbia Circuit challenging EPA's certification that the WIPP facility complies with federal radioactive disposal standards. These three separate suits were combined into one suit. The Southwest Research and Information Center in Albuquerque requested that EPA start the certification over from the beginning. The lawsuits claimed that EPA wrongly certified WIPP for operation. Specifically, these lawsuits contend the proposed procedures for the operation of WIPP could result in the accidental release of radiation that would reduce property values, reduce tax revenues to the state and cause "fear and apprehension" among citizens and visitors. The lawsuits challenge the procedures and conclusions of a several-year process that led the EPA to certify WIPP for operation last May. There is nothing that prevents the Department from initiating shipments to WIPP at the present time unless the Court issues a ruling in the plaintiffs' favor.

WM'99 CONFERENCE, FEBRUARY 28 - MARCH 4, 1999

Additionally, there is an existing Permanent Injunction against the DOE that prohibits waste shipment to WIPP. Until the Court rules on the Permanent Injunction WIPP will remain on standby status. The WIPP facility startup and continued operation is required to meet the objectives of DOE's *Accelerating Cleanup: Paths to Closure Plan*. It is also imperative for other generator sites in the Department's complex to meet state compliance agreements such as the Idaho Settlement Agreement and the Rocky Flats Cleanup Agreement. Within these legal constraints, the Department remains committed to doing all it can to meet its obligations for cleanup of its sites.

DOE firmly maintains that the entire transuranic waste system, from each temporary storage location, to the transportation system, to the WIPP site itself, is safe and is ready to operate. DOE was provided further assurance in June of last year when the Defense Nuclear Facilities Safety Board, an independent agency created by Congress to oversee DOE safety activities, notified the Department that it had determined that the WIPP facility can be operated safely. This adds to the conclusions of the National Academy of Sciences which concluded in October 1996 that as long as the WIPP is sealed effectively and undisturbed by human intrusion, radioactivity would not be released from the repository.

Twenty years ago, in 1979, the Waste Isolation Pilot Plant was authorized by Congress (Public Law 96-164) as the nation's first research and development facility to demonstrate the safe geologic disposal of defense transuranic wastes. In September 1996, President Clinton signed the FY 1997 Authorization Act (Public Law 104-201) containing amendments to the 1992 WIPP Land Withdrawal Act which specified the sense of Congress for DOE to begin disposal operations at the WIPP facility no later than November 30, 1997, provided that all applicable health and safety standards are met and all applicable laws complied with. Today, more than a year beyond Congress's expectations that WIPP would be operating, the Department continues to face challenges that are beyond its control. Nonetheless, the Department remains steadfast in its commitment to begin disposal operations at the Waste Isolation Pilot Plant. The WIPP facility provides a safe solution for the permanent disposal of the nations's transuranic waste inventory.