

**ATTAINING PUBLIC CONFIDENCE:  
MOVING TOWARD THE OPENING OF THE WASTE ISOLATION PILOT PLANT\***

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**ABSTRACT**

The Waste Isolation Pilot Plant (WIPP) was scheduled to open October 1988; however, the opening date has been moved forward to allow the Department of Energy (DOE) sufficient time to address questions posed by the Environmental Protection Agency (EPA), the Nuclear Regulatory Commission, the National Academy of Sciences (NAS), and other agencies and organizations.

The delayed opening of WIPP, combined with new scientific questions, has imposed a greater need to provide factual information to a broader public audience.

**INTRODUCTION**

Public confidence is essential for the success of any project whose purpose it is to dispose of nuclear waste. Because of the public's general fear of anything associated with radioactive waste, projects of this nature must contend with resistance commonly called NIMBY (Not in My Backyard). Without earning the support of the public, such disposal projects are unlikely to move forward.

Gaining public confidence for the WIPP, a research and development project to demonstrate the safe disposal of transuranic (TRU) waste, has been a priority since the project was authorized by Congress in December 1979. To accomplish this, project officials recognized that transportation concerns could extend the NIMBY syndrome beyond southeastern New Mexico where the plant is located. Public confidence would have to be obtained in 23 states and 26 Indian nations through which the waste will be transported from the 10 federal nuclear generator or storage sites located across the United States.

**STRATEGIES TO ADDRESS PUBLIC CONCERNS**

The WIPP Project's approach in addressing public concerns has revolved around the same principles since Congress' act. These principles are: 1) design and operate the plant safely and in compliance with all applicable regulations; 2) educate the public about the safeguards taken to assure safe transportation and disposal of the waste; 3) verify the WIPP site's commitment to safety with external reviews by knowledgeable experts; and 4) respond to public concerns.

Public education efforts began first in the southeastern part of New Mexico, the residents of this area apparently have the most questions about transuranic waste, the facility itself, and transportation. A WIPP Speakers Bureau was

formed in which technical employees were trained to speak to groups requesting information. After site facilities were constructed, tours were available for those people who were interested. During these interactions with the public, information was provided on technical issues, i.e., the scientific assessment of the suitability of the salt bed to isolate the waste from the biosphere and scientific differences of opinion in areas such as siting the storage area or transportation container design. Speakers and tour guides also communicated the site's status, focusing on the opening date of October 1988.

Project officials learned in its interactions that public confidence depended on their ability to understand the scientific issues and to hold project officials accountable for meeting key dates. The project was successful in earning public support in southeastern New Mexico because of constant two-way communication. As questions or issues arose, they were addressed. However, because of a lack of communication in other parts of the state, this level of public confidence was not as evident. As the project progressed to a 700 million dollar facility with four shafts reaching a half-mile underground, the original opening date was not met. The scientific issues related to the WIPP multiplied in number and complexity. And the audiences to which these issues had to be explained increased due to national media coverage. No longer was the "public" those directly on the transportation routes or in southeastern New Mexico. Suddenly, the WIPP was cast into the national spotlight.

As a result, the WIPP needed to better explain the scientific issues to an expanded public while also dealing with the uncertainty of an opening date. To accomplish this, the project's communication program implemented new

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outreach activities. The public wanted answers to specific WIPP issues such as:

1. When will the site open?
2. Will transportation be safe?
3. Was brine (naturally existing saturated salt water) in the underground an impediment to long-term isolation of the waste?
4. Could the hazardous chemicals in the waste be isolated?
5. Could the repository meet environmental regulations for long-term isolation of the radionuclides?

### TECHNICAL ISSUES

Many of these technical issues were addressed by several key events. First, newly appointed DOE Secretary James Watkins decided not to schedule a new opening date until he had a thorough understanding of all aspects of the project. This understanding would be developed, in part, through the reports of a "Blue Ribbon Panel" established to study aspects of the WIPP.

Additionally, WIPP developed a plan (Draft Decision Plan for WIPP) outlining all of the key items that must be completed before the WIPP opens and submitted the plan for review by numerous state and national interested parties.

Second, the Nuclear Regulatory Commission certified the waste transportation container, TRUPACT, after its completion of multiple drop, puncture, and burn tests. Assessments by the NAS, the premier scientific group in the United States, concluded that WIPP's transportation program was exemplary. Specifically the Academy said:

"The system proposed for transportation of TRU waste to WIPP is safer than that employed for any other hazardous material in the United States today and will reduce risk to very low levels . . . In the Panel's view, the Department is being exemplary and responsible in giving a high level of attention to TRU waste transport. Such attention is appropriate for shipment of all hazardous materials, almost all of which pose greater risk than the TRU shipments."

Richard J. Guimond, Director of the EPA's Office of Radiation Programs, and Sylvia Lowrance, Director of EPA's Office of Solid Waste, stated in a letter to the DOE that the project's experimental plan "offers an excellent opportunity to reduce the uncertainties surrounding this project." Further, they stated emplacing approximately 12,000 barrels of waste "would allow the department to collect some realistic, integrated data about waste/back-

fill/repository interactions, as well as gaining valuable experience with backfill materials and procedures."

Third, the Blue Ribbon Panel, the NAS, and the EPA concluded that waste should be emplaced immediately at the WIPP for experimental purposes to determine the repository's suitability for long-term disposal.

Fourth, a Supplement to the Environmental Impact Statement (SEIS) was issued for public review. The purposes of the SEIS was: to provide new information (data and analyses that have become available since the Final Environmental Impact Statement (FEIS) of 1980); to address proposed changes to the actions described in the 1981 Record of Decision; and to provide an opportunity for public comment. To assure an adequate comment process, hearings were held in nine cities across the United States resulting in the receipt of more than 20,100 comments.

Fifth, scientific studies determined the permeability of the salt beds to be less than previously believed, thus inhibiting the movement of brine. Oversight groups (Environmental Evaluation Group and NAS) now have concluded brine is not a technical problem for the WIPP.

### COMMUNICATION

To communicate these key events to an expanded public, outreach efforts focused on four audiences: employees, media, emergency responders on the transportation routes, and residents on those routes.

It was important to reach employees because of the disappointment expressed when the project was not ready to open after years of intensive work. Employees were proud of their contributions to this one-of-a-kind facility. All-employees meetings were initiated on a regular basis to keep the employees up to date on project decisions and to better coordinate efforts to complete remaining work items.

The media continued to be apprised of the WIPP's status by the standard process of press releases, but more importantly through the continuing commitment that questions would be answered as soon as possible. Another effort with the media was to better explain the technical issues. And inaccuracies printed in the media were also addressed.

Emergency responders were offered six different courses. They are First Responder, First Responder Refresher, Command and Control, Mitigation, Train-the-Trainer, and Emergency Medical Management. These courses provide information to those people who might respond to a WIPP transportation accident. Class information includes radiation protection principles; emergency response actions at the accident scene; how to establish an accident command system; coordinated local, state, and federal resources; instructor training; and hospital treatment of radiation-induced injuries. To date, more than 5,900 responders have received the training. Refresher training

will be offered annually on all active transportation corridors.

For those people on the transportation corridors, numerous outreach efforts have taken place. Speakers Bureau presentations by WIPP technical employees have continued with more than 359 talks given to 16,073 people in the past two years. Surface and underground tours of the WIPP site have also continued with more than 6,568 individuals (489 tours) visiting in two years. These tours included three Saturday Community Days with more than 700 people touring each day.

A special public awareness program for those on the transportation routes was also initiated. This program entailed visiting 35 communities on the routes and inviting the public to tour a multifaceted display. Additionally, a full-scale model of the transportation container, TRUPACT, accompanied the display. More than 3,000 individuals visited the display and/or listened to presentations that were coordinated with the program.

As a follow-up to this program, these community leaders are informed regularly of project events. In southeastern New Mexico, Chamber of Commerce organizations host bimonthly updates by WIPP officials, which is supplemented by a quarterly newsletter.

These expanded communication efforts relaying key WIPP events have been instrumental in regaining public

confidence. In retrospect, public confidence could have been maintained had communication efforts expanded earlier. But the project is demonstrating a responsiveness now to provide information and respond to public concerns.

#### CONCLUSION

In summary, there will be more technical issues to be addressed before waste is received at the WIPP. And, there will be differences of opinion in the scientific community about the best way to resolve those issues. But the confidence of the public is being attained because of the WIPP's commitment to operate safely while complying with all applicable regulations to: 1) educate the public about transportation and disposal safeguards; 2) to verify the WIPP site's suitability as a permanent nuclear waste repository through external reviews conducted by knowledgeable experts, and 3) to respond to public concerns.