

THE INSTITUTIONAL ASPECTS OF WIPP - A MAJOR
FEDERAL/STATE CHALLENGE IN WASTE MANAGEMENT

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ABSTRACT

The Waste Isolation Pilot Plant Project is the nation's first facility designed for the permanent deep geological storage of nuclear waste. As such, it is the trailblazer in establishing workable methods and procedures for a satisfactory state/federal interaction on nuclear waste management. Through the mutual development of a Consultation and Cooperation Agreement between the Department of Energy and the State of New Mexico, supported by the establishment of cognizant groups within the State government and mutual agreement to a court ordered Stipulated Agreement, this interaction is being implemented in a manner acceptable to both the State and Federal governments.

Background

The Waste Isolation Pilot Plant (WIPP) is the first Federal facility for the deep geologic storage of nuclear waste material actually under construction. As such, this project, which is located in southeastern New Mexico, is a precedent setting program for present and future state/federal interaction on nuclear waste repositories. Construction is proceeding in two phases, with the present Site and Preliminary Design Validation (SPDV) program to be followed by start of full facility construction, presently scheduled for the summer of 1983. The SPDV program is a confirmatory in-situ test and evaluation program which includes construction of two shafts, approximately two miles of underground drifting and surface support facilities. Most of this construction will later become part of the full WIPP facility.

As authorized by the U.S. Congress in Public Law 96-164, WIPP is "...to provide a research and development facility to demonstrate the safe disposal of radioactive wastes resulting from the defense activities and programs of the United States exempted from regulation by the Nuclear Regulatory Commission." This same law also directed the Department of Energy (DOE) to seek to enter into a Consultation and Cooperation Agreement with the State of New Mexico in order to provide a State/Federal interaction throughout the conduct of the program. This definitive law was necessary in order to clarify the intent of Congress and to correct many misinterpretations, and more importantly, many misstatements concerning the State's rights which had been made during the initial period of the project. In essence, Congress made it very clear that the State of New Mexico had a significant role to play on the WIPP Project, but this role did not include a veto right or the requirement for State concurrence or approval. Instead, the State has a right to receive all necessary information to perform an independent evaluation of the impact of the project on the public health and safety, a right to demand answers to the State's concerns, and a right to escalate these concerns through a conflict resolution process if the State is not satisfied with the initial answer provided by the Department of Energy.

State Organizations

The State of New Mexico was also active during the early period of the WIPP project and passed legislation which established an Interim Legislative Radioactive Waste Consultation Committee (RWCC) and a Radioactive Waste Consultation Task Force (RWCTF).

The RWCC is made up of eight members of the New Mexico Legislature and is charged with maintaining an overview of the WIPP Project. The responsibilities of this committee have been expanded over the years, but they retain their WIPP overview role. The DOE has continually interacted with this committee through frequent testimony on the project status at the committee's quarterly hearings and with periodic field trips.

The RWCTF is an executive task force made up of the Secretaries of the Health and Environment and the Energy and Minerals Departments and the Chief Highway Administrator. They have a prime responsibility for interfacing and negotiating with the DOE on the WIPP project on behalf of the State. To date these negotiations have concentrated primarily on the Consultation and Cooperation agreement between the State and DOE and the court ordered Stipulated Agreement resulting from the State lawsuit.

In addition, the Health and Environment Department entered into a contract with DOE wherein DOE provided funding for the State to establish a technical organization with responsibility to connect independent analyses to evaluate the impact of WIPP on the health and safety of the citizens of New Mexico. Similar provisions for participation and financing are included in the "Nuclear Waste Policy Act of 1982". The New Mexico Environmental Evaluation Group (EEG) was established and is functioning to fulfill this responsibility. There is at least weekly contact between project personnel and EEG on the technical aspects of WIPP, and EEG is the principal state reviewer for documentation submitted in accordance with the Consultation and Cooperation and Stipulated Agreements.

Consultation and Cooperation

Following the enactment of Public Law 96-164 in December 1979, representatives of the State and the

DOE began drafting and negotiating a Consultation and Cooperation Agreement. Although not finally approved by either party, a draft agreement was implemented by the DOE in September 1980. This agreement established formal means of interaction between the State and the DOE and identified specific documentation which must be transmitted and received prior to initiation of major activities. It defined the process for review and comment resolution and also defined a procedure for final resolution of any conflicts which might arise between the State and DOE.

Stipulated Agreement

As the DOE began mobilizing contractors in the Spring of 1981 to begin construction of SPDV, lawsuits were filed by Citizens for Alternatives to Radioactive Dumping (CARD), Southwest Research and Information Center and the State of New Mexico, all petitioning for injunctions to stop construction. Hearings were held on the first two suits and the petitions for injunction denied. In lieu of a hearing on the State suit, the DOE in negotiation with the RWCTF and the state attorney general's office developed a Stipulated Agreement which addressed the concerns of both parties. This agreement, which was signed on July 1, 1981 and is formally identified as the "Stipulated Order in Lieu of Preliminary Injunction," was subsequently ordered by the court and now forms the basis for formal State and Federal interactions on the WIPP project. The Stipulated Agreement contains the following key elements.

First and foremost, it required that the Governor of the State of New Mexico and the Secretary, Department of Energy sign a Consultation and Cooperation agreement which explicitly defines a continuing role for State involvement and participation in WIPP construction and operation. The agreement signed is essentially the one which was informally implemented in 1980, with the addition of language which recognizes the State's right to judicial appeal of decisions made by the Secretary of Energy as the final authority in the conflict resolution process. The project has continued to implement the Consultation and Cooperation procedure and as of the end of 1982 had transmitted approximately 500 documents to the State. This documentation covers essentially all aspects of the WIPP Project. The major events which DOE has completed as a result of documentation submittal, review, and resolution of comments are Draft Environmental Evaluation, Preliminary Engineering-Title I, Final Environmental Evaluation, initiation of Site and Preliminary Design Validation construction, and initiation of Detailed Design-Title II. The next major event will be Full Facility Construction which is divided into several phases. Initiation of this event requires submittal and review of multiple documents under Consultation and Cooperation, in addition to documentation required by other elements of the Stipulated Agreement. This documentation, which is being submitted in a timely manner, consists primarily of design information, analyses evaluating the impact on public health and safety in the form of amendments to the Safety Analysis Report, site characterization data, notifications, and peripheral data which are necessary to complete technical analyses and evaluations.

Another element of the Stipulated Agreement was for DOE to provide six geotechnical topical reports summarizing site characterization data, four reports describing the plans and results of the site and

design validation programs and two reports on simulated waste experiments. Essentially all reports will have been submitted by March of 1983 with the exception of the results of the simulated waste experiments which won't be conducted until 1985.

The keystone to proceeding with full WIPP construction is completion of a summary report on site suitability and a declaration of validation by the DOE. This is presently scheduled for March 30, 1983. The Stipulated Agreement requires that the State and the public be allowed 60 days to comment on this report and that DOE respond to all comments prior to proceeding with full facility construction. Since many of the topical reports will bear on site suitability, they are being submitted on a staggered basis to obtain early review. The entire program is geared to starting full facility construction in July 1983.

The Stipulated Agreement also required that DOE conduct additional geotechnical studies in the vicinity of the WIPP site to address State concerns. Several of these studies proved to have limited technical validity when examined in detail, especially those which relied on long horizontal coreholes for additional information. It is important to note that alternate proposals were made by DOE to obtain the desired data, and that these proposals were approved after evaluation by the EEG who provided their recommendations to the RWCTF and the State of New Mexico Attorney General. The resulting compromises were much more sound technically and benefited both the State and DOE. In the same vein, the EEG and RWCTF recommended modifications to DOE which were evaluated from both technical and cost viewpoints and compromises made. The most notable of these was the recommendation to characterize further the southern area of the WIPP site. This led to the sinking of an additional borehole (DOE-1) and an ultimate decision to reorient the TRU storage area of the WIPP facility from North of the shafts to the South.

As can be seen, the interface with the State since the beginning of this project has required the preparation of extensive formal documentation covering all aspects of site characterization, design and construction. This formal documentation is not necessary for the project participants to proceed with the program as long as they have the necessary information, but it is recognized that it is necessary for the State in order that they can complete an independent review. The State interface on WIPP includes this formal project documentation and also the review and comment on formal reports prepared by the State. In addition, both formal and informal meetings between the parties are conducted on almost a weekly basis. This interface requires a significant effort by both parties, but is accepted as a necessary part of a project of this type and has been conducted in a satisfactory and business like manner.

Off-Site Concerns

A final state concern addressed by the Stipulated Agreement related to off-site activities, such as Price-Anderson coverage and emergency response in the event of accidents, highway maintenance during transportation of nuclear waste and environmental and radiological monitoring. These concerns primarily took the form of requests for assistance from DOE. The Stipulated Agreement required that a State/Federal Task Force be established to resolve these concerns. In the

resulting negotiations between the RWCTF and DOE Management, both sides have had extensive technical and legal support including input from other cognizant federal agencies. Although the negotiations continued for many months, the issues were unique and not easily resolved. Final resolution was documented in a "Supplemental Stipulated Agreement Resolving Certain State Off-Site Concerns Over WIPP" which was signed by officials from the State of New Mexico and the Departments of Energy and Justice on December 27, 1982, and filed with the court.

This Supplemental Stipulated Agreement resolves the State's major concerns as follows:

- o clarifies and defines the State's indemnification from liability for radiological accidents related to WIPP,
- o defines both State and DOE responsibilities and actions in the area of emergency response to accidents,
- o defines the State's rights for independent monitoring of WIPP extending from waste generator sites to WIPP including packaging, transportation, operations and decommissioning, and
- o defines the responsibilities of both parties in cooperating to obtain funding for State highway improvements through a special U. S. Congressional appropriation.

In addition to allowing SPDV construction to continue, the Stipulated Agreement also severely limits the areas of complaint for which the State can petition the court in any future action. Although implementation of this agreement is both costly and time consuming, I believe both the State and the DOE would agree it has helped in achieving the necessary compromises to effect a feasible State/Federal interaction on WIPP. It is quite evident that the WIPP project established the precedent for Congress in preparing portions of the "Nuclear Waste Policy Act of 1982" which requires the Secretary of Energy to seek to enter into a binding, written Consultation and Cooperation Agreement with affected States and Indian Tribes. The procedures to be covered by this agreement as specified in the law include the items covered in the WIPP Consultation and Cooperation and the Supplemental Stipulated Agreements.

Additional Interfaces

Two other areas of State/Federal interaction on WIPP should be mentioned. In the State permitting area, the project decided to approach the State regulatory agencies as any other applicant independent of, but coordinated with, the special State WIPP groups. This approach has worked satisfactorily and the project has not been delayed due to a lack of permits or approvals. Applications have been phased to cover SPDV construction, Full Facility construction, and finally Operations. Only permits for SPDV construction have been necessary and obtained to date. We have found in obtaining these approvals that a nuclear waste facility is not treated as just any applicant and extensive documentation and commitments by DOE were required to obtain final permit approvals. We are now in the process of applying for permits to allow Full Facility Construction and believe the experience gained to date by both DOE and the State will facilitate future applications and approvals.

Construction of the WIPP facility is entirely on Federal land administered by the Bureau of Land Management and has only required the appropriate administrative land withdrawals approved by the Secretary of the Interior. Facility Operations with the permanent storage of radioactive waste will require a legislative land withdrawal to transfer the subsurface rights to DOE in perpetuity. This is further complicated by two sections of the required buffer zone being State land. This will require a State/Federal land exchange at some time in the future which will be another challenge.

Summary

The WIPP project is learning how to implement the necessary State/Federal interactions as this unique project progresses. A definite fact is that many of the lessons learned can only be learned on a real, active project. However, many of the procedures and agreements established on WIPP can and have served as models for other waste management programs. This is evidenced by the "Nuclear Waste Policy Act of 1982" and WIPP will continue to be the forerunner in implementing State/Federal cooperation.