



# **Implementation of the Waste Isolation Pilot Plant Land Withdrawal Act**

## **FY 1995 Report to Congress**

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## **EXECUTIVE SUMMARY**

The Waste Isolation Pilot Plant (WIPP) Land Withdrawal Act (the Act), Pub. L. No. 102-579, was signed by the President on October 30, 1992. The Act gives the U.S. Environmental Protection Agency (EPA or the Agency) the authority to certify WIPP's compliance with EPA-developed standards for disposal of radioactive waste. This Act supplements EPA's authority under the Atomic Energy Act and Reorganization Plan No. 3 of 1970 to establish environmental standards which protect the public and the environment from radioactive materials. Previously, EPA had no authority to assure compliance with its radioactive waste standards, and the Act gave EPA that authority and prescribed the regulatory framework for implementing its responsibilities for the WIPP site.

EPA's responsibilities under the Act include: 1) reviewing and approving or disapproving of the Department of Energy's (DOE) Test Phase and Retrieval Plans, 2) issuing final radioactive waste disposal standards which will apply to all spent nuclear fuel, high-level radioactive waste, and transuranic waste disposal facilities not characterized under Section 113(a) of the Nuclear Waste Policy Act (notably the proposed repository at Yucca Mountain), 3) issuing criteria for the certification of compliance with the final disposal regulations, 4) certifying WIPP's compliance with the Agency's radioactive waste disposal standards initially, and, if certified, every five years thereafter, and 5) ensuring WIPP's compliance with all other applicable Federal environmental laws and regulations. An EPA review of DOE's test and retrieval plan is presently unnecessary due to DOE's October 1993 decision not to conduct tests using radioactive wastes at the WIPP.

In Fiscal Year 1995 the EPA WIPP program:

- o Proposed criteria for certifying compliance of the WIPP with the radioactive waste disposal standards. The proposed criteria were published in the *Federal Register* on January 30, 1995, for public comment;
- o Held two separate public comment periods for the proposed rule;
- o Sponsored an open technical workshop to discuss several key compliance issues;
- o Held three public hearings in New Mexico to receive testimony and comments on the proposed rule from the public;

- o Sponsored an open meeting in New Mexico of the National Advisory Council for Environmental Policy and Technology's (NACEPT) WIPP Review Committee to seek advice on key compliance issues in the proposed rule;
- o Held four technical exchange meetings with DOE. The meetings, which were open to the public, discussed technical issues of relevance (i.e., quality assurance programs and engineered barrier study; experimental program; scenario development and screening methodology used by DOE in its WIPP performance assessment; and geology and hydrology of the WIPP); and,
- o Promoted public outreach activities: published (in English and Spanish) booklets, fact sheets, and bulletins on the Agency's WIPP activities; maintained public dockets in NM and DC; organized media teleconferences; and managed a toll free information line and the WIPP TTN Electronic Bulletin Board.

In FY95, EPA funded 20 staff positions at EPA Headquarters, 1 position at EPA's Region 6 office in Dallas, TX, and 2 positions at EPA's Office of Radiation and Indoor Air (ORIA)/Las Vegas Lab in Las Vegas, Nevada, as well as \$1.1 million in contract support for WIPP.

In Fiscal Year 1996, the EPA WIPP program: 1) finalized criteria, through rulemaking, to certify compliance with EPA's radioactive waste disposal standards; and 2) finalized the Compliance Application Guidance for the certification criteria.

Also in FY96, EPA will continue to focus on: 1) ensuring compliance with the Resource Conservation and Recovery Act (RCRA), 2) interacting with DOE to clarify the final compliance criteria, 3) providing extensive comments to DOE on the Draft Compliance Certification Application, and 4) preparing to review DOE's Compliance Certification Application.

EPA continues to review and comment on DOE WIPP documents and prepare for evaluation of DOE's quality assurance program implementation and qualification of data and software developed prior to this implementation.

## INTRODUCTION

This report fulfills the requirements stated in Section 23(a)(2) of the Act, whereby EPA must submit an annual report to the Congress "on the status of, and resources required for the fulfillment of the Administrator's responsibilities under this Act." This report summarizes the activities and progress EPA has made in FY95 in fulfilling its responsibilities under the Act, and outlines the resources required for the Agency to meet its commitments. Because this report focuses on FY95, FY96 activities generally are referred to in the future tense. Therefore, some major milestones that were accomplished in FY96 are described in advance of the FY96 report.

The Act gives EPA the authority to oversee many of DOE's activities at the WIPP, beginning with a test phase and continuing throughout the facility's operational and decommissioning phases, if those phases, in fact, proceed under the Act. The WIPP, which is under development by DOE, is a potential long-term geologic disposal facility for transuranic radioactive wastes in southeastern New Mexico. Transuranic wastes are long-lived radioactive wastes generated as by-products from nuclear weapons production.

The Act requires EPA to take the following regulatory actions:

- Issue Radioactive Waste Disposal Standards  
Develop environmental protection standards for the disposal of spent nuclear fuel, high-level waste and transuranic radioactive wastes, which will apply to all potential disposal sites except those characterized under the Nuclear Waste Policy Act, as amended.
- Promulgate a Test Phase and Retrieval Plan Rule  
Determine whether DOE's test phase and retrieval plans meet the requirements of the Act. (DOE withdrew its test and retrieval plans so a rulemaking will not be required.)
- Develop Compliance Criteria  
Establish criteria to determine whether the WIPP will comply with the Agency's radioactive waste disposal standards (40 CFR Part 191).
- Conduct a Compliance Certification  
Certify by rule whether or not the WIPP complies with the Agency's radioactive waste disposal standards.
- Periodic Recertification  
Determine every five years whether or not the WIPP facility continues to be in compliance with the Agency's radioactive waste disposal standards.

In addition to these regulatory actions, EPA must assure that the facility complies with all applicable federal environmental laws, regulations, and permit requirements pertaining to public health and safety. The Act calls for DOE to submit documentation of continued compliance with these requirements. This demonstration must be submitted biennially by DOE to EPA (beginning in 1994) for EPA to determine whether DOE is in compliance.

### **Organization of the Report**

This report contains four separate sections, including:

- (1) Implementation Principles -- the basis for all EPA WIPP activities
- (2) Management of the implementation of the Act and utilization of resources
- (3) Communications and Consultation Activities
- (4) EPA WIPP Regulatory Responsibilities

A schedule of important regulatory dates through Fiscal Year 1995 and into Fiscal Year 1996 is provided at the end of the report.

## **Implementation Principles**

The Act provides EPA with extensive responsibility for overseeing the WIPP to ensure the facility complies with all applicable Federal environmental laws and regulations. The following principles guide EPA's activities:

### *Protection*

- EPA strives to develop a regulatory program designed to protect present and future generations from the risks posed by potential disposal of waste at the WIPP.

### *Good Science*

- EPA bases its decisions on the best available scientific and technical data, while recognizing that uncertainties about the performance of the WIPP will always exist.

### *Consultation*

- EPA recognizes the important roles played by State and local governments, citizen and environmental groups, industry, and other Federal agencies, and the Agency commits to conducting an open public process that includes interaction with these groups and other interested parties.

### *Commitment*

- EPA will establish and meet commitments to implement the WIPP legislation effectively and consistently within its legal authority.



## **MANAGEMENT OF THE IMPLEMENTATION OF THE ACT**

### **EPA Management**

To ensure that EPA's oversight responsibilities are performed in a timely and scientifically credible manner, the Agency established an intra-agency committee of senior management to expedite the resolution of intra-agency policy issues.

The Office of Radiation and Indoor Air (ORIA), which is in the Office of Air and Radiation (OAR), is charged with the primary responsibility for implementing the Act. Other offices with significant roles include: the Office of Solid Waste (OSW), the Office of General Counsel (OGC), and EPA Region 6. OSW and Region 6 are working together to ensure that WIPP complies with the Resource Conservation and Recovery Act (RCRA). Region 6 is facilitating efforts to ensure that WIPP complies with all other Federal environmental laws and regulations. ORIA, OSW, and Region 6 enlist support from many other offices within EPA, including the Office of Policy, Planning, and Evaluation (OPPE), the Office of Enforcement and Compliance Assurance (OECA), and the Office of Water (OW).

Within ORIA, the Radiation Protection Division (RPD), Center for WIPP, leads the WIPP oversight responsibilities, and executes the bulk of ORIA's responsibilities under the Act. RPD's Outreach Team leads ORIA's WIPP public outreach efforts. Staff-level implementation of the Act is coordinated through intra-agency work groups established by RPD.

### **Resources Required**

The Act authorizes DOE to transfer funds appropriated for environmental restoration and waste management to the EPA effort (up to \$14 million in fiscal year 1994) through the year 2001. In FY93, an Interagency Agreement between DOE and EPA funded 33 positions and \$6.5 million for EPA WIPP activities.

In FY94, DOE funded 25 HQ positions and four positions in the Region, and \$4 million in contract support for WIPP. EPA funded an additional three positions at Headquarters. This level of funding is produced by an interagency agreement between EPA and DOE covering both the WIPP and development of radioactive waste cleanup standards.

For the FY95 budget, EPA retained the FY94 level of resources for WIPP. After Congressional reductions, ORIA received \$3.4 million from the EPA appropriation to devote to WIPP activities. DOE has not provided any additional funding to EPA.

## **Communications/Consultation**

EPA believes that a successful communication and consultation program expedites the regulatory/oversight process and ensures sound public policy decisions. EPA continues to inform interested parties about its WIPP oversight functions and encourages public participation in the regulatory process.

### **Communications Activities**

In response to suggestions made by New Mexico citizens, EPA created a toll-free WIPP Information Line in 1993 that contains up-to-date recorded information about public hearings and meetings, publications, and other WIPP activities. During FY94, EPA expanded the capabilities of this line to allow callers to hear messages in either English or Spanish; add their name to the WIPP mailing list; request a WIPP publication; or leave a question for EPA staff. The WIPP Line receives over 100 calls per month.

In an ongoing effort to keep the public well informed, pertinent information is placed in EPA's WIPP-related rulemaking dockets located in Carlsbad, Albuquerque, and Santa Fe, NM, and at EPA Headquarters in Washington, DC.

EPA developed and distributed public information materials to describe the Agency's regulatory program role. During FY95, EPA produced a fact sheet—in English and Spanish—describing the final WIPP compliance criteria, which implement EPA's radioactive waste disposal standards. EPA WIPP Updates are additional publications that inform the public about EPA's activities associated with implementing the Act, as important issues or events arise. Another public outreach tool, the EPA WIPP Bulletin, keeps the public informed of EPA's WIPP oversight program activities. First published in the Spring of 1994, it contains program updates, results of NACEPT-WIPP Committee meetings, and articles on the activities of EPA's Office of Radiation and Indoor Air, Office of Solid Waste, Region 6, and Las Vegas Laboratory. EPA continues to expand its mailing list of individuals and organizations interested in receiving information on the Agency's WIPP activities. Fact sheets, meeting notices, NACEPT reports, publications, etc., are distributed via the mailing list.

WIPP documents are also available to the public through the Technology Transfer Network (TTN), an electronic bulletin board managed by EPA's Office of Air Quality Planning and Standards (OAQPS). The bulletin board contains useful documents related to EPA's activities under the Act. The network may be accessed for the cost of a long-distance call, or via the Internet.

EPA will continue to develop and disseminate WIPP program information to the public. In FY96 the Agency will publish its WIPP Communications Plan, which describes current and planned outreach efforts, and Public Participation: EPA and the WIPP, a booklet describing opportunities for public involvement in EPA's development of WIPP regulations. Both documents will be printed in English and Spanish and distributed to members of the WIPP mailing list when complete.

Agency officials participated in national, international, state, and industry-sponsored conferences and meetings that focus on radioactive waste management and disposal issues, including meetings sponsored by the League of Women Voters, the National Academy of Sciences, the American Nuclear Society, the American Society of Civil Engineers, and the States of New Mexico and Nevada. They also conducted briefings on an ongoing basis for interested members of Congress.

Since enactment of the Act, EPA has issued numerous press releases or advisories concerning its WIPP-related actions to national and New Mexican media outlets.

### **Consultation Activities**

In 1993, EPA established a WIPP Review Committee under the National Advisory Council for Environmental Policy and Technology (NACEPT) to provide independent advice and counsel to the Agency on complex technical issues related to EPA's implementation of the Act .

On September 6-7, 1995, EPA held a public meeting of the NACEPT WIPP Review Committee to discuss issues concerning EPA's issuance of the final compliance criteria for the WIPP. Committee members offered advice on three important compliance issues: passive institutional controls, peer review, and release limits. Final Committee reports are available for review at all docket locations. All meetings of the Committee are held in New Mexico and are open to the public.

In March 1995, EPA held three public hearings in New Mexico (Albuquerque, Carlsbad, Santa Fe) to receive comments on the proposed rule on compliance criteria. Approximately 150 people testified at these hearings.

EPA and DOE meet periodically to conduct open technical exchange meetings either in New Mexico or Washington, DC. The public is invited to attend and observe these meetings. The technical exchange meetings are announced on EPA's toll-free WIPP Information Line. Summaries of technical exchange meetings and notes summarizing significant phone conversations between EPA and DOE technical staff are placed in the dockets.

## **EPA'S WIPP REGULATORY RESPONSIBILITIES**

### **40 CFR Part 191:**

#### **Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes**

The Act required that EPA promulgate final standards for the disposal of spent nuclear fuel, high-level and transuranic radioactive wastes. The final standards were published in the *Federal Register* on December 20, 1993. Background information on the standards and a summary of their development and content is presented here.

#### **Background**

On September 19, 1985, EPA issued final Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes in Part 191 of Chapter 40 of the Code of Federal Regulations (40 CFR Part 191). They appear in Volume 50 of the *Federal Register* beginning on page 38066. The standards for disposal consist of several types of requirements. According to the Containment Requirements (Section 191.13), waste disposal systems must be designed with the reasonable expectation that the total release of radionuclides—from a disposal facility to the accessible environment—does not exceed specified levels for 10,000 years. The Assurance Requirements (Section 191.14) help to provide additional confidence in reducing the likelihood of radiation releases from or intrusion into the disposal repository. The Individual Protection Requirements (Section 191.15) limit radiation doses to individual members of the public. The Ground Water Protection Requirements (Section 191.16) protect potable sources of ground water by limiting radiation levels in underground sources. Compliance with these requirements is to be determined through long-term modeling projections of disposal system performance.

Shortly after the standards were issued, several states and environmental groups mounted legal challenges to them. On July 17, 1987, a Federal court returned the standards to the Agency for reconsideration. The WIPP Land Withdrawal Act reinstates all of the sections of the 40 CFR Part 191 disposal standards returned by the court except those that the court found problematic, i.e., aspects of the Individual and Ground Water Protection Requirements, which EPA then revised.

## **The Revised Standards**

EPA published proposed amendments to the Individual and the Ground Water Protection Requirements in the *Federal Register* on February 10, 1993. The Agency held hearings in New Mexico that same month to receive comments on the proposal. Following consideration of all written and oral comments received, EPA developed the final disposal standards, which the Administrator signed on December 3, 1993, as an amendment to 40 CFR Part 191. The standards were published in the *Federal Register* on December 20, 1993.

The time frame for assessment of the Individual and the Ground Water Protection Requirements was changed from 1,000 to 10,000 years. The amended Individual Protection Requirements require radioactive waste disposal systems to be designed to provide a reasonable expectation that the annual radiation exposure to any individual in the accessible environment does not exceed 15 millirem committed effective dose. The amended Ground Water Protection Requirements provide that release of radioactive materials from disposal systems must not cause the levels of radioactivity in underground sources of drinking water in the accessible environment to exceed the maximum radionuclide contaminant levels specified by the Safe Drinking Water Act.

## **Criteria for the Certification of Compliance with 40 CFR Part 191 Disposal Standards**

EPA must certify that WIPP complies with the Agency's final disposal regulations (Subparts B and C of 40 CFR Part 191) before DOE will be allowed to dispose of transuranic radioactive waste at the WIPP. Under the Act, EPA is required to issue criteria upon which the Agency will base its determination of the WIPP's compliance with the disposal standards.

The proposed rule on compliance criteria was signed by the Administrator on January 11, 1995, and was published in the *Federal Register* (60 FR 5766) on January 30, 1995. The proposed rule contained instructions regarding: 1) the procedures to be used to certify compliance with the 40 CFR Part 191 disposal standards; 2) the methods to be employed to ensure the adequacy and quality of data and technical analyses; 3) the assumptions on which compliance assessments are to be based; and 4) opportunities for public participation in the certification process.

A 90-day public comment period for the proposed rule was opened on January 30, 1995, and closed on May 1, 1995. In February 1995, EPA sponsored a technical workshop in Washington, DC to discuss several key compliance issues. The workshop was open to the public and involved the participation of stakeholder representatives. Additionally, in March 1995, EPA held three public hearings in New Mexico (Albuquerque, Carlsbad and Santa Fe) to hear testimony and comments on the proposed rule from the public.

EPA re-opened the comment period for the proposed rule in July 1995, after DOE submitted a draft certification application to EPA for the purpose of affording stakeholders an additional opportunity to voice concerns about the proposal. During the additional comment period, EPA called a meeting of the WIPP Review Committee of the National Advisory Council for Environmental Policy and Technology (NACEPT). This meeting was held in Albuquerque, New Mexico in September 1995 and was open to the public. NACEPT Committee members provided the Agency with recommendations regarding three important compliance issues in the proposed rule: passive institutional controls, peer review, and release limits.

In preparing the final compliance criteria, the Agency considered the comments it received during the public comment period, the technical workshop, and the NACEPT meeting. The Agency's rationale for substantive changes to the proposed rule is described in detail in the preamble of the final rule and the Response to Comments document. The final rule was approved for transmittal to the Office of Management and Budget in December 1995. The final compliance criteria were published in the *Federal Register* in February 1996.

## **Certification of Compliance with 40 CFR Part 191 Disposal Standards**

EPA must certify that the WIPP facility will comply with the final 40 CFR Part 191 disposal standards before DOE may place radioactive transuranic wastes in the WIPP for disposal. EPA must conduct continued recertifications of compliance with the 40 CFR Part 191 disposal regulations every five years after disposal operations begin. This section discusses the Act's requirements in more detail and describes EPA's progress in reviewing DOE's performance assessments, which are designed to support the compliance demonstration.

In the spring of 1993, DOE provided its 1992 performance assessment report to EPA, which in turn furnished comments on the first three volumes in January 1994. Both EPA and its contractor staff contributed to the review of the WIPP performance assessments.

EPA will utilize the compliance criteria issued pursuant to the Act to assess the adequacy or inadequacy of DOE's application for the WIPP's compliance with 40 CFR Part 191 standards. EPA's evaluation will include, but will not be limited to: DOE's use of models, the potential for disruptive events that could affect the WIPP's performance, uncertainty and sensitivity analyses, consequence analyses, field data, use of expert judgment, and quality assurance procedures. EPA will also evaluate the assumptions underlying the DOE performance assessments.

The Act requires EPA's certification of compliance to be conducted under the rulemaking process prescribed by 5 U.S.C. Section 553 of the Administrative Procedures Act. After public hearings and consideration of comments, and in accordance with the Act's requirements, EPA will make a final determination about whether or not the WIPP complies with the disposal standards. If the determination is that the WIPP facility complies, then EPA must conduct recertification of compliance every five years after disposal operations begin until the end of the decommissioning phase.

EPA developed guidance to be used in the implementation of the 40 CFR Part 194 compliance criteria. This guidance will form the basis for the Agency's review of DOE's certification and recertification applications for completeness (i.e., submission of all required information and supporting documentation). The Compliance Application Guidance (CAG), will assist DOE with the preparation of the Compliance Certification Application (CCA) and, in turn, assist EPA's review of the CCA for completeness and generally enhance the readability and accessibility of the CCA for EPA and public scrutiny. A draft Compliance Application Guidance Document was available for preliminary review on March 21, 1995. The availability of a revised draft was announced to the public through a Notice of Availability published in the *Federal*



***Register*** on October 18, 1995. The Agency released the final CAG in March 1996, shortly after the promulgation of the final compliance criteria.

## **Current Review Activities**

EPA is actively involved in the review of technical documents prepared and submitted by DOE to prepare for the Agency's certification decision on DOE's compliance application. To this end, staff are familiarizing themselves with DOE's compliance approach and developing expertise in key areas related to the performance of the WIPP facility through several activities discussed below.

To understand DOE's approach to compliance and develop expertise in key areas related to the performance of the WIPP facility, EPA is devoting resources to reviewing and commenting on important reports that contain DOE's technical bases for achieving compliance with both the Resource Conservation and Recovery Act (RCRA) and the 40 CFR Part 191 Disposal Standards. EPA provided comments to DOE in an effort to identify the areas that the Agency believes are in need of further work or clarification. Comments have been submitted on the following documents: 1992 Preliminary Performance Assessment of the WIPP (Volumes 1-5); Compliance Status Report; Quality Assurance Program Plan; and the Experimental Program Plan. DOE will continue to submit technical documents for the Agency's input. DOE submitted Part 1 of a draft compliance certification application in March 1995. Part 2 was submitted in July 1995. EPA will provide general comments on the drafts by October 31, 1995. Future review activities include the planned submission of specific comments on DOE's draft compliance application in early 1996. All comments on DOE documents are placed promptly in the public dockets.

In order to gather information and interact effectively with DOE, EPA conducts technical exchange meetings with DOE to discuss relevant technical issues to the evaluation of DOE's submissions. For example, during FY95, discussion topics at some of the technical exchange meetings included: 1) DOE's quality assurance programs and engineered barrier study; 2) experimental program; 3) scenario development and screening methodology used by DOE in its WIPP performance assessment; and 4) geology and hydrology of the WIPP. Information obtained at these meetings supplement and enhance our knowledge of the WIPP facility.

EPA staff are presently studying the 1995 Performance Assessment computer codes, which will be used to update the EPA Users' Manual. These codes are a critical component of the application because they are used to project the behavior of the facility throughout the 10,000-year regulatory time frame. This process of access and independent learning is allowing the staff to gain a detailed understanding of DOE's Performance Assessment computer codes and how to use them. Identifying potential concerns with the computer models now helps EPA expedite its review.

**Finally, EPA continues its efforts as observers during DOE's program audits and data qualification activities. EPA continues to review and comment on DOE's WIPP quality assurance documents and prepare for evaluation of its QA programs.**

## **Test Phase and Retrieval Plans: Follow-up**

According to the Land Withdrawal Act, EPA is required to review DOE's test phase and retrieval plans for tests using radioactive waste at the WIPP and, through rulemaking, approve or disapprove these plans. The Act states that no test phase activities may proceed unless EPA approves at least part of the test phase plan and approves the entire retrieval plan. On October 21, 1993, DOE announced that radioactive waste tests would not be conducted at the WIPP. Instead, the tests would be replaced with an expanded laboratory program using radioactive and hazardous wastes. EPA agreed that DOE's laboratory tests are a more effective and expeditious approach to a final certification decision. EPA considers its obligation to review DOE's test phase plan and retrieval plan terminated by DOE's announcement that it will not conduct tests at the WIPP.

## **Compliance with the Resource Conservation and Recovery Act**

Substantial portions of the wastes proposed for disposal at the WIPP are called mixed waste, containing both hazardous waste subject to the Resource Conservation and Recovery Act (RCRA) and radioactive wastes subject to the Atomic Energy Act. Thus, WIPP must also comply with RCRA regulations. This section describes EPA's implementation of RCRA requirements.

### **Background**

A major requirement for WIPP's compliance concerns RCRA's land disposal restrictions. An amendment to RCRA—the Hazardous and Solid Waste Amendments of 1984 (HSWA)—imposes a substantial number of new requirements on the land disposal of hazardous waste. The amendments prohibit the continued land disposal of hazardous waste—of which mixed waste is a subset—unless: 1) the wastes meet treatment standards specified by EPA, or 2) EPA determines that prohibition is not required in order to protect human health and the environment. This latter determination must be based on a demonstration by the owner/operator of the facility receiving the waste that "there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous." (42 USC, Sec. 6924(d)(1)) EPA's Office of Solid Waste is responsible for the review and processing of "no-migration" petitions.

EPA authorized the State of New Mexico to carry out the State's base RCRA program and the State's mixed waste program in lieu of the respective Federal programs. Therefore, the State will make determinations regarding those portions of the RCRA permit for the WIPP. EPA retains authority for those portions of the permit for which New Mexico is not authorized and the authority to make no-migration determinations. EPA's Region 6 office provides oversight and technical assistance to the State in processing this permit. The State and EPA will share responsibility for enforcing the conditions of the permit.

### **Implementation**

In February 1989, DOE submitted a petition to EPA for a "no-migration determination" covering the WIPP test phase. After careful review of DOE's petition and public comments on a proposed decision, EPA approved the petition on November 14, 1990. This action was based on a determination that DOE demonstrated—to a reasonable degree of certainty—that hazardous constituents will not migrate from the WIPP disposal facility for the duration of the test phase. The petition was approved for ten years. DOE also submitted a RCRA permit application to the State of New Mexico for the test phase in 1990. However, due to DOE's October 1993 decision not to conduct waste tests at WIPP—the RCRA permit and the no-

migration determination for the test phase are no longer necessary. DOE submitted a draft No-Migration Variance Petition to EPA in May 1995. The petition is incomplete, in that it only covers the operational period of the life of the facility (the first thirty years). EPA is reviewing this draft petition and plans to provide comments on it to DOE in November 1995.

The State of New Mexico received a RCRA permit application from DOE in May 1995. The New Mexico Environment Department has begun review of the application and is expected to issue a draft determination in 1996.

EPA's Office of Solid Waste (OSW) coordinates its activities with the Office of Radiation and Indoor Air (ORIA), Region 6, and the State of New Mexico. Such efforts include OSW's attendance at NACEPT meetings, National Academy of Sciences WIPP Panel meetings, and EPA/DOE technical exchanges.

## **Compliance With Other Federal Environmental Laws**

The Act requires DOE to submit documentation to EPA every two years to demonstrate WIPP's compliance with all applicable Federal environmental laws, regulations and permit requirements including: the radioactive waste storage standards (40 CFR Part 191, Subpart A); the Clean Air Act (CAA); the Toxic Substances Control Act (TSCA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Solid Waste Disposal Act (SWDA), and the Safe Drinking Water Act (SDWA). This documentation must be submitted throughout the test, disposal, and decommissioning phases of the WIPP. The Agency must make a determination of compliance with these statutes, regulations and permit requirements within six months of receiving DOE's submission.

DOE submitted its first biennial report to EPA in October 1994. After evaluation, EPA determined that the documentation did not give EPA sufficient information to verify DOE's compliance with applicable environmental laws, regulations and permit requirements. In February of 1995, EPA provided written guidance to DOE outlining the information that should be included in the biennial report. EPA is currently awaiting DOE's revised report, after which EPA will make a WIPP compliance determination.

If EPA determines that the WIPP does not comply with any applicable Federal law or regulation or permit requirement, the Agency will require DOE to develop a remedial plan within six months of this determination. If the remedial plan is not received, or the Agency determines through rulemaking that the remedial plan is inadequate to bring the WIPP facility into compliance, DOE will be required to retrieve wastes, and any material contaminated by such waste, to the extent practicable and implement decommissioning and post-decommissioning plans. DOE must develop and submit to Congress its decommissioning and post-decommissioning plans by October 30, 1997.

## **Oil and Gas Lease Provisions of the WIPP Land Withdrawal Act**

The presence of oil and gas leases near and below the WIPP site has raised concerns about the possibility for human intrusion to affect the ability of the repository to contain the waste.

EPA must determine, after consultation with DOE and the Department of the Interior, whether acquisition of existing oil and gas leases No. NMNM 0253 and No. NMNM 02953C by the DOE is required for the WIPP to comply with the disposal standards or with the Resource Conservation and Recovery Act. Under the WIPP Land Withdrawal Act, DOE may not commence emplacement of transuranic waste underground for disposal at WIPP until either DOE acquires the oil and gas leases or EPA determines their acquisition is not required.

EPA's Region 6 office is working with EPA Headquarters to evaluate the potential effect of oil and gas drilling on the WIPP. This evaluation examines relevant technical information.

In January 1995, the lessees for one of the oil and gas leases filed a "taking" claim against the United States.



## **WASTE ISOLATION PILOT PLANT LAND WITHDRAWAL ACT OF 1992**

### **IMPLEMENTATION SCHEDULE HIGHLIGHTS THROUGH FISCAL YEAR 1995**

<b><u>Date</u></b>	<b><u>Regulatory Activities</u></b>
2/93	Radioactive Waste Disposal Standards proposed in the <i>Federal Register</i> .  Hearings on Radioactive Waste Disposal Standards held in New Mexico.  Advance Notice of Proposed Rulemaking for Compliance Criteria published in the <i>Federal Register</i> .
3/93	Draft Test Phase and Retrieval Plans received from DOE.  Compliance Criteria ANPR comment period closed.
4/93	Radioactive Waste Disposal Standards comment period closed.
5/93	WIPP Review Committee of the National Advisory Council for Environmental Policy and Technology (NACEPT) Meeting on test phase and retrieval plans held in New Mexico.
9/93	NACEPT WIPP Review Committee meeting on Compliance Criteria held in New Mexico.
11/93	Comments submitted to DOE on December 1992 Preliminary Performance Assessment for the WIPP.
12/93	Final Radioactive Waste Disposal Standards promulgated.
7/94	Proposed Compliance Criteria submitted to OMB for interagency review.
1/95	Proposed Compliance Criteria published in the <i>Federal Register</i> (60 FR 5766).  First public comment period on Proposed Compliance Criteria opened.

- 2/95 EPA determined that DOE had not fully demonstrated compliance with all Federal environmental laws, regulations, and permit requirements.
- 3/95 Hearings held on Proposed Compliance Criteria in New Mexico.
- 5/95 First comment period on Proposed Compliance Criteria closed.
- 5/95 EPA received Draft No-Migration Variance Petition from DOE.
- 7/95 Second comment period on Proposed Compliance Criteria opened.
- 9/95 NACEPT WIPP Review Committee meeting on Compliance Criteria issues held in New Mexico.
- 9/95 Second comment period on Proposed Compliance Criteria closed.

#### **MAJOR MILESTONES FOR FISCAL YEAR 1996**

- 10/95 Notice of Availability of Draft Compliance Application Guidance Document announced in the *Federal Register*.
- 2/96 Final Compliance Criteria promulgated in the *Federal Register*.
- 3/96 Final Compliance Application Guidance released.
- 3/96-9/96 Review of Draft Chapters of DOE Compliance Certification Application.