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Implementation Strategy For The Waste Isolation Pilot Plant Land Withdrawal Act Of 1992

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INTRODUCTION

On October 30, 1992, the President signed into law the Waste Isolation Pilot Plant (WIPP) Land Withdrawal Act (Public Law 102-579). The Act provides an extensive role for the U.S. Environmental Protection Agency (EPA) in overseeing the U.S. Department of Energy's (DOE) activities at the WIPP and in ensuring that such activities comply with environmental laws and regulations. The WIPP is a potential long-term disposal facility for transuranic radioactive wastes[1] under development by DOE in southeastern New Mexico. Transuranic wastes are long-lived radioactive wastes generated as by-products from nuclear weapons production. The WIPP is designed to provide a site for the long-term disposal of these radioactive wastes.

The new Act gives EPA the responsibility of overseeing many of DOE's activities at the WIPP, beginning with a test phase and continuing throughout its operation and decommissioning, if EPA determines that those phases should be allowed. The Act requires EPA to issue final radioactive waste disposal standards and develop criteria for certifying DOE compliance with those standards. EPA must also review and approve DOE's plan for testing the WIPP's suitability as a permanent disposal facility and for removing the waste if necessary. In addition, EPA must determine on an ongoing basis whether DOE is complying with all environmental laws, regulations, and permit requirements that are applicable to the WIPP. One of the key environmental laws affecting the WIPP is the Resource Conservation and Recovery Act (RCRA). RCRA regulations require DOE to ensure the safe disposal of the hazardous wastes to be placed at WIPP.

Also under the WIPP Land Withdrawal Act, DOE is required to submit to EPA an application for certification of the WIPP within seven years of the initial receipt of waste at the facility for the test phase. EPA is required to certify the WIPP within one year of receipt of the application. If EPA does not certify the WIPP within ten years of the initial receipt of waste, DOE is required to implement the retrieval plan and remove all waste from the WIPP. EPA may extend the certification process for another two years.

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[1] The wastes may also include a very limited amount of fission products which result when transuranic waste is produced.

This Implementation Strategy describes EPA's plan for carrying out its responsibilities under the new Act but does not address the responsibilities of other federal or state agencies in overseeing the development of the WIPP and transporting wastes there. The introductory section provides background information on the Waste Isolation Pilot Plant. It also lays out the basic principles EPA will follow in its implementation of the new law. The "Management of WIPP Implementation" section discusses EPA's coordination of WIPP functions and the process for developing and issuing regulations. This is followed by a "Communications/Consultation" section which explains EPA's communications philosophy and the importance of public participation in the regulatory process. The "Implementation of EPA Oversight of the WIPP" section summarizes EPA's oversight responsibilities. It includes a discussion of major issues the Agency will need to address as well as a timetable, entitled "Implementation Schedule Highlights," that includes important regulatory activities and their dates.

Background

Scientists and engineers have spent many years investigating the use of deep, underground geologic repositories as a long-term solution for the disposal of radioactive wastes produced by defense and civilian nuclear activities. Because radioactive materials can remain hazardous for thousands of years, long-term disposal solutions are necessary. Currently, radioactive waste is temporarily stored using above-ground methods.

In the mid-1950's, the National Academy of Sciences recommended salt deposits in the earth as a promising medium for disposal of radioactive wastes. Salt deposits have several advantages: they are often found in stable geological areas with little or no earthquake activity, they are usually devoid of groundwater, they are relatively easily mined, and they will creep or move to fill any cracks or gaps in their surfaces that might develop. Because of these factors, bedded salt deposits became one of the leading candidates for the location of a disposal site. At the invitation of the Governor of New Mexico and local officials, the Energy Research and Development Administration (which managed the nuclear weapons program until DOE was created in 1977) began site investigations in the Carlsbad, New Mexico area in 1975. The WIPP site, near Carlsbad, contains thick salt beds that are 225 million years old and is in a geologically stable area.

In 1979, Congress mandated the construction and development of the Waste Isolation Pilot Plant (WIPP) under Public Law 96-164. The law directs the U.S. Department of Energy (DOE) to develop the WIPP for "...the express purpose of providing a research and development facility to demonstrate the safe disposal of radioactive wastes, resulting from the defense activities and programs of the United States...." As required by the law, DOE entered into a written agreement with the State of New Mexico to resolve any concerns the state may have regarding public health and safety. Construction of the WIPP facility began in 1981.

In 1978, the Environmental Evaluation Group (EEG) was established to perform a continual, independent technical evaluation of the WIPP Project with respect to protecting the public and the environment from exposure to radiation. In 1988, the Congress directed DOE to fund the EEG.

The land area of the WIPP is owned by the federal government. With the enactment of the WIPP Land Withdrawal Act of 1992, Congress transferred jurisdiction over the land from the Department of the Interior to DOE. When the WIPP facility is completed, it will cover 100 acres and will have the capacity to store 850,000 drums of transuranic radioactive wastes. Most of such waste consists of ordinary laboratory items including: rags, rubber gloves, shoe covers, cloth lab coats, plastic bags, laboratory glass, tools, and machinery that have become radioactively contaminated during routine operations at national defense facilities. According to DOE, about 97 percent of the volume of transuranic wastes to be disposed at the WIPP will be contact-handled transuranic waste. This type of waste emits radioactive particles called alpha particles which, if released, can be dangerous if inhaled or ingested. It will be packaged in 55-gallon metal drums and placed in rooms carved out of the salt rock. A small percentage of the volume of wastes potentially destined for disposal at the WIPP, if it is approved as a disposal site, will be remote-handled transuranic waste which emits higher levels of penetrating radiation. This type of waste will be packaged in a carbon steel cylinder and placed in a pre-drilled hole in a disposal room wall that will be plugged. While the volume of remote-handled radioactive waste intended to be disposed of at the WIPP is very small, it is expected to account for approximately one-third of the total radioactivity of the disposed materials.

WIPP Land Withdrawal Act Requirements

Regulatory Actions

The WIPP Land Withdrawal Act requires EPA to take the following regulatory actions:

- Radioactive Waste Standards
  Develop environmental protection standards for the management and disposal of spent nuclear fuel and high-level and transuranic radioactive wastes, which will apply to all sites except those characterized under the Nuclear Waste Policy Act.

- Test and Retrieval Plan Rule
  Review DOE's test and retrieval plans and determine whether they meet the requirements of the WIPP Land Withdrawal Act.

- Compliance Criteria
  Establish criteria for determining whether the WIPP complies with environmental protection standards for the disposal of transuranic wastes.

- Compliance Certification
  Evaluate whether the WIPP complies with environmental protection standards for disposal of transuranic radioactive wastes.

Determinations of Compliance with Environmental Regulations

In addition to these regulatory actions, EPA will evaluate on a biannual basis DOE's performance assessments and determine if the WIPP is in compliance with all applicable environmental regulations.

Implementation Principles

The WIPP Land Withdrawal Act provides an extensive role for EPA in overseeing the WIPP and in ensuring that the facility complies with environmental laws and regulations. The following principles will guide EPA in its implementation of these new statutory responsibilities.

Protection

* EPA will strive 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 will base 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 the 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, consistent with its legal authority.

MANAGEMENT OF WIPP IMPLEMENTATION

EPA Management

EPA is committed to meeting the schedule of required oversight responsibilities. To this end, the Agency has established a senior management intra-agency committee to ensure that WIPP oversight responsibility is effectively coordinated within the Agency and to expedite the resolution of intra-agency policy issues.

The Office of Radiation and Indoor Air (ORIA) has the primary responsibility for implementing most of EPA's responsibilities under the WIPP Land Withdrawal Act. However, other EPA offices are responsible for determining whether the WIPP complies with their respective requirements as well. Within ORIA, the Criteria and Standards Division (CSD) has the lead on WIPP oversight responsibilities. ORIA/CSD will be working closely with the following EPA offices on WIPP oversight and communications activities: the Office of Solid Waste (OSW); the Office of General Counsel (OGC); the Office of Policy, Planning, and Evaluation (OPPE); the Office of Enforcement (OE); and EPA's Region 6 office.

EPA Headquarters' Office of Solid Waste and EPA's Region 6 office will ensure that the WIPP complies with RCRA. The Office of General Counsel will provide legal advice in the development of the regulations under the new Act. The Office of Policy, Planning, and Evaluation will provide policy advice and ensure coordination of Agency policy on the WIPP. The Office of Enforcement will assist the Agency's program offices in determining whether the WIPP complies with all appropriate laws and regulations. Region 6 will bring enforcement actions if appropriate.

The Regulatory Process

EPA will develop regulations for waste disposal; DOE's test and retrieval plans, the compliance criteria, and the determination of compliance with radioactive waste disposal standards. The process for developing federal regulations was established by the Administrative Procedures Act. In this process, the public is informed of a proposed Agency action through a notice of proposed rulemaking which is published in the Federal Register. Thereafter, the Agency accepts written public comments on the proposed rule. In addition, the Agency typically holds one or more public hearings for interested parties to provide oral testimony on EPA's proposal. The EPA takes the testimony and written comments into consideration in developing the final regulations. Although the WIPP Land Withdrawal Act authorizes EPA to conduct rulemakings without public hearings, EPA plans to hold public hearings on all of the proposed rulemaking actions under the law.

The Agency often publishes Advance Notices of Proposed Rulemaking (ANPRs) before developing a proposed rule. These notices inform the public of the Agency's general intentions and solicit input on the issues that will be raised in developing the rule. The Agency issued an ANPR in the Federal Register on February 11, 1993, for the Compliance Criteria regulation to obtain public comment on the major issues in that rulemaking.

Annual Status Report to Congress

Section 23(a)(2) of the WIPP Land Withdrawal Act requires the EPA to 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." The first report will be submitted by September 30, 1993.

Communications/Consultation

EPA is committed to maintaining open lines of communication with the public, interest groups, and other governmental organizations in carrying out its WIPP oversight mission. The Agency believes that a successful communications and consultation program can both expedite the regulatory/oversight process and ensure sound public policy decisions. Therefore, EPA has initiated efforts to educate and inform interested parties regarding EPA's oversight functions at the WIPP and to encourage participation in the regulatory process on both technical and non-technical matters. This document is part of that effort.

Communications Activities

EPA has already begun efforts to inform the public of its role with regard to the WIPP. At two public meetings conducted in New Mexico in December 1992, Agency representatives discussed implementation plans and answered questions about EPA's role and proposed plan. EPA has conducted several meetings and briefings with Congressional staff, public interest groups, and state and local government officials in New Mexico. The Agency will continue to hold these types of meetings to inform interested parties of its WIPP oversight activities.

EPA has established a rulemaking record or docket in Washington, DC at its headquarters. Informational dockets have also been set up in New Mexico at the Carlsbad Public Library in Carlsbad, the Zimmerman Library at the University of New Mexico in Albuquerque, and the Fogelson Library at the College of Santa Fe. The dockets contain proposed rules, background information, public comments, and other documents that are relevant to rulemaking decisions.

EPA will develop public information materials describing its role regarding the WIPP and specific regulatory program elements. To date, the Agency has produced fact sheets describing EPA's role in overseeing the WIPP and on EPA's proposed amendments to environmental protection standards for the disposal of transuranic waste. The Agency will produce additional fact sheets to explain EPA's final radioactive waste standards, the test and retrieval plan review, promulgation of compliance criteria for the disposal standards, and the radioactive waste disposal standards compliance determination. EPA is now considering other forms of public information and outreach, including booklets in both English and Spanish, videotapes, and newspaper and journal articles.

Consultation

EPA will consult frequently with the Department of Energy, the State of New Mexico, and affected local governments regarding the status of the WIPP Land Withdrawal Act implementation. The Agency will also consult with the Environmental Evaluation Group, the National Academy of Sciences, and other advisory and public interest groups. These consultations will not replace the standard notice and comment process for proposed rulemakings, but instead will supplement and enhance it.

EPA is also establishing a subcommittee under the National Advisory Council on Environmental Policy and Technology (NACEPT) to advise the Agency in its implementation of the Land Withdrawal Act. The subcommittee will be asked to evaluate the Agency's criteria for review of the DOE test and retrieval plans, options for compliance criteria, and the assessment of the WIPP's ability to comply with the radioactive waste disposal standards.

EPA also recognizes the need for open, ongoing communication between EPA and DOE staff with regard to technical issues on the test and retrieval plan. This communication is particularly important in light of the tight deadline for the approval or disapproval decision. EPA will arrange meetings with DOE and other interested groups whenever necessary and will open these meetings to the public.

A special toll-free number (effective on March 23, 1993) with a recorded message has been created to inform callers of upcoming public meetings and to highlight EPA's WIPP activities.

IMPLEMENTATION OF EPA OVERSIGHT OF THE WIPP

40 CFR Part 191:

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

Background

In 1976, EPA began developing environmental standards for the management and disposal of radioactive wastes. In the same year, the Agency announced that it would issue federal guidance to assure protection of the public health and the general environment from radioactive wastes. In 1977 and 1978, EPA conducted a series of public workshops to promote a better understanding of radioactive waste issues and to provide a forum for voicing public concern.

In 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), which was published in Volume 50 of the Federal Register on page 38066. The standards consisted of several types of requirements. The Containment Requirements (Section 191.13) prescribed that waste disposal systems be designed to provide a reasonable expectation that the total releases of radionuclides from a disposal facility to the accessible environment would not exceed specified levels for 10,000 years after disposal. A set of qualitative Assurance Requirements (Section 191.14) supported the Containment Requirements by helping to ensure that the wastes would be disposed of and maintained in a cautious manner that reduced the likelihood of radiation releases and infiltration of the disposal repository. For example, markers would be required to discourage people from disturbing the site. The Individual Protection Requirements (Section 191.15) limited radiation doses to individual members of the public. The Ground-Water Protection Requirements protected potable sources of ground-water by limiting radiation doses delivered through drinking water to members of the public. Compliance with these requirements was 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 the standards. On July 17, 1987, the standards were returned to the Agency for reconsideration. The court identified the following three problems with the standards:

(1) the inconsistency between Ground-Water Protection Requirements (Section 191.16) in 40 CFR Part 191 and EPA's requirements for protection of ground-water developed for underground injection programs under the Safe Drinking Water Act in terms of protection levels and the type of ground-water protected,

(2) the inadequacy of the rationale provided to support the 1,000-year time frame for the Individual and Ground-Water Protection Requirements, and

(3) the inadequacy of the notice and comment procedures followed in connection with the issuance of the Ground-Water Protection Requirements.

The WIPP Land Withdrawal Act reinstates all of the sections of the 40 CFR Part 191 disposal standards remanded by the court except those which the court found problematic (i.e., the Individual and Ground-Water Protection Requirements). Therefore, EPA is proceeding with the next step in the evolution of 40 CFR Part 191, development of individual and ground-water protection requirements, as amendments to the reinstated standards.

Implementation

EPA's proposed changes to the 40 CFR Part 191 disposal standards are aimed at minimizing the risks to individuals and potential sources of drinking water in the vicinity of radioactive waste disposal facilities. The Agency faces two major issues in developing these standards.

First: What is an appropriate level of protection? Deciding this issue requires an examination of the risks and benefits associated with radioactive waste disposal and the cost-effectiveness of reducing the risks through engineered controls.

Second: What is an appropriate length of time over which the protections should apply? Since compliance with the requirements is based on long-term modeling projections, a period of time for assessing the performance of the disposal system must be prescribed. In general, this involves balancing the costs, benefits, and the practicality of setting longer time frames and assessing the uncertainties created by these longer time-frames.

Timetable

The Act requires the Agency to finalize its disposal standards by April 30, 1993. The process for finalizing standards involves publishing a proposed set of standards in the Federal Register, receiving comments on the proposal, and then publishing a final set of standards in the Federal Register.

EPA published a proposal in the Federal Register in February 10, 1993. The Agency held hearings in New Mexico in February to receive comments on the proposal. After considering written and oral comments received on the proposal, EPA will develop a final version and publish it as an amendment to Part 191 of Title 40 of the Code of Federal Regulations (40 CFR Part 191). The statutory deadline for this is April 30, 1993.

Test and Retrieval Plans

Background

The Act requires EPA to review DOE's test and retrieval plans for radioactive waste and issue a rule that approves or disapproves these plans, in whole or in part, by August 30, 1993. No waste can be transported to the WIPP unless EPA approves at least part of the test plan and approves of the retrieval plan. The test plan will include a description of the tests and experiments DOE plans to conduct with waste placed in the WIPP to determine whether the facility can comply with radioactive and hazardous waste disposal standards. The retrieval plan must be designed to ensure that the waste can be removed from the WIPP safely during the test phase in the event that removal of the waste is required. DOE must submit modifications to the test or retrieval plans to EPA for review, and EPA must make its approval determination by rulemaking within 3 months of their submission.

Implementation

For the test phase plan proposal, DOE will provide EPA with two types of information. First, DOE will describe the proposed test phase for the WIPP site, specifying the proposed quantities and types of transuranic wastes that will be involved in test activities. Second, DOE will explain in detail how the information to be provided by the tests is directly relevant to the EPA's compliance determination, i.e., how the information will enable the EPA to determine whether WIPP operations meet 40 CFR Part 191's radioactive waste disposal standards and regulations issued under the Resource Conservation and Recovery Act (RCRA). EPA will approve DOE's test plan only if the experiments provide data directly relevant for determining compliance with these regulations. EPA will develop appropriate criteria to evaluate the test plan. The criteria will consider how the data will ultimately be used in compliance demonstrations and whether the design of the experiment will yield reliable data. When EPA proposes its decision on the test plan, the evaluation criteria used will be identified.

DOE's retrieval plan will be approved by EPA only if it provides for satisfactory recovery of transuranic waste emplaced at the WIPP in the event retrieval of waste is required. In evaluating whether waste emplaced during the test phase can be satisfactorily retrieved, EPA must consider the different types of tests that will be conducted and the types of emplacement used. If it is determined at any time during the test or disposal phase that the WIPP is no longer in compliance with the disposal standards, the waste needs modification or repackaging, or the public health and safety and the environment are no longer protected, the waste will be retrieved from the WIPP.

EPA technical staff will meet with DOE technical staff on a regular basis to allow DOE to answer EPA's technical questions quickly. These meetings will be open to the public. EPA will provide notice of these meetings through its WIPP information phone line.

Timetable

DOE must submit its test and retrieval plans to EPA no later than May 30, 1993. After receiving and evaluating the plans, EPA will propose its approval or disapproval decision. Shortly thereafter, a public hearing on the proposed rule will be held in New Mexico. According to the Act, the final approval or disapproval determination must be published by August 30, 1993. However, EPA will require ten months from the time it receives the test and retrieval plan from DOE to publish a final approval or disapproval decision. Therefore, assuming the test and retrieval plan is submitted to the Agency in early March 1993, EPA plans to publish a final decision on the plan in December 1993. If EPA approves the test and retrieval plans, DOE may emplace the initial shipment of transuranic waste at WIPP. One year after the initial emplacement of transuranic waste and every year after that during the test phase, DOE, in consultation with EPA, must determine if the waste at the WIPP remains and will remain retrievable. The following provision of the Act (Sec. 10(a)(4)) prescribes EPA's responsibilities if DOE determines that the waste will not remain retrievable:

> "(4) FAILURE TO MAINTAIN RETRIEVABILITY
>
> Upon a determination by the Secretary under paragraph (2) that transuranic waste cannot remain retrievable, and that corrective action is not possible, the Administrator and the State may, pursuant to the authorities provided in the Solid Waste Disposal Act (42 U.S.C. 6901 et seq.) or any other applicable hazardous waste law, take action to ensure the retrieval or removal of all transuranic waste in WIPP."

DOE is required to submit an application to EPA for certification of the WIPP within seven years of the initial receipt of waste at the facility for the test phase. EPA is required to certify the WIPP within one year after receipt of DOE's application. If EPA does not certify the WIPP within ten years of the initial receipt, DOE must implement the retrieval plan and remove all waste from the WIPP. EPA may extend the certification process for another two years.

Criteria for the Certification of Compliance with 40 CFR Part 191

Background

The WIPP Land Withdrawal Act requires EPA to certify whether or not the WIPP facility complies with the final disposal regulations of 40 CFR Part 191. EPA must certify that the WIPP facility complies with 40 CFR Part 191 before DOE may emplace radioactive wastes in the WIPP for permanent disposal.

Under the new law, EPA is required to develop criteria for the Administrator's certification of compliance with 40 CFR Part 191. (Prior to the enactment of the WIPP Land Withdrawal Act, DOE alone was responsible for implementing the 40 CFR Part 191 disposal standards at the WIPP and for developing compliance criteria as appropriate.)

Implementation

In issuing compliance criteria pursuant to the Act, EPA will specify requirements for implementing the 40 CFR Part 191 disposal standards in order to clarify any compliance-related ambiguities. EPA will address the main compliance-related issues, including: the procedures necessary to certify compliance with the standards, the methods to be employed to assure the adequacy and quality of data, and the assumptions used in compliance assessment.

Timetable

The Act requires EPA to issue proposed compliance criteria in the Federal Register by October 30, 1993. EPA will hold hearings in New Mexico shortly thereafter to receive comments on the proposal. After the Agency considers oral and written comments received on the proposal, it will develop a final set of compliance criteria and publish it in the Federal Register by October 30, 1994.

One of the first steps EPA took to develop the compliance criteria was to issue an Advance Notice of Proposed Rulemaking (ANPR) in February 1993. EPA's purpose in issuing this notice is to provide an early opportunity for interested parties to participate in the development of the proposed criteria, because the public will have the opportunity to comment on the ANPR. The ANPR should also be helpful in identifying compliance-related issues that should be addressed in the compliance criteria. The ANPR was issued in the Federal Register on February 11, 1993.

Certification of Compliance with 40 CFR Part 191

Background

Under the WIPP Land Withdrawal Act, EPA must certify that the WIPP facility complies with the final 40 CFR Part 191 disposal regulations before DOE may emplace radioactive wastes in the WIPP for disposal. In preparation for EPA's compliance certification, DOE must submit biennial performance assessment reports throughout the test phase of activities at the WIPP. EPA will evaluate these assessments and provide comments to DOE. The Act also requires EPA to conduct recertifications of continued compliance with 40 CFR Part 191 disposal regulations every five years after disposal operations begin.

Implementation

In determining and certifying the WIPP's ability to comply with 40 CFR Part 191, EPA will review materials developed and submitted by DOE. EPA will utilize the compliance criteria issued pursuant to the Act in certifying the adequacy of DOE's submissions. EPA's evaluation will include, but 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 analyses. Throughout this review, EPA will consult regularly with state and local New Mexico officials, environmental groups, and other interested parties.

Timetable

The Act requires DOE to submit an application for certification of compliance to EPA within seven years of the date of the first receipt of radioactive wastes at the WIPP for the test phase. EPA must certify whether the WIPP facility will comply with 40 CFR Part 191 within one year after receipt of DOE's application.

If, upon the expiration of a ten-year period beginning on the date of the first receipt of radioactive wastes at the WIPP for testing, EPA has not certified that the WIPP facility will comply with the disposal standards, the Act requires DOE to retrieve any wastes emplaced in the WIPP for testing purposes and proceed with the closure or "decommissioning" of the facility. The Act allows the Agency to extend the period of its review by two years if the Agency determines that additional time is necessary to complete the certification of compliance or for the certification to become effective.

EPA plans to review and comment on DOE's preliminary performance assessments which will be issued throughout the test phase of activities at the WIPP. The Agency will make any comments on these preliminary assessments available to the public.

The Act requires EPA's certification of compliance to be conducted by rule pursuant to the Administrative Procedures Act. Within six months of receipt of DOE's application for certification of compliance, EPA will issue a proposed finding in the Federal Register for written comment. After public hearings and in accordance with the Act's requirements, EPA plans to issue a final determination within one year after receipt of DOE's application.

EPA also plans to conduct ongoing recertification reviews of the WIPP's ability to comply with the disposal standards. As required under the law, recertification will occur no later than five years after the initial receipt of radioactive wastes for disposal at the WIPP, and every five years thereafter, until all the shafts at the WIPP repository have been backfilled and sealed.

Compliance with the Resource Conservation and Recovery Act

Background

Substantial portions of the wastes proposed for disposal at the WIPP are designated as mixed wastes under the Resource Conservation and Recovery Act (RCRA). Mixed wastes are defined as wastes that contain both hazardous wastes (subject to RCRA regulation) and radioactive wastes subject to the Atomic Energy Act. Regulation under RCRA imposes certain requirements on DOE to ensure the safe disposition of the hazardous portion of the wastes to be placed at WIPP.

Implementation

One of the major requirements of RCRA for the WIPP is compliance with the land disposal restrictions. The Hazardous and Solid Waste Amendments of 1984 (HSWA), which amended RCRA, imposed substantial 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 either (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." EPA's Office of Solid Waste is responsible for the review and processing of "no-migration" petitions.

In February 1989, DOE submitted a petition to EPA for a no-migration determination covering the WIPP test phase. After a careful review of DOE's petition and public comments on a proposed decision, EPA concluded that DOE had demonstrated, to a reasonable degree of certainty, that hazardous constituents will not migrate from the WIPP disposal unit under the testing conditions proposed by DOE. The approved petition expires after ten years.

The no-migration determination includes the following terms and conditions:

* DOE must remove the hazardous wastes from the underground repository if it cannot demonstrate the long-term acceptability of the disposal site by the end of the test period;

* DOE may place wastes in the WIPP only for testing purposes;

* DOE must not place more than a certain amount of wastes in the repository for testing purposes;

* air monitoring and waste analysis must be performed; and

* annual reports on the status of DOE's WIPP performance assessment must be submitted to EPA during the test phase.

As a result of the WIPP Land Withdrawal Act, EPA (OSW and EPA Region 6) must determine that DOE has complied with the terms and conditions of the RCRA no-migration determination before the WIPP test phase can begin. EPA will make this determination based upon its review of DOE's annual RCRA compliance report (submitted most recently in November 1992), other relevant materials, and site inspections. EPA's regional office in Dallas, Texas has the responsibility for enforcing the terms and conditions of this determination.

RCRA also requires that the State of New Mexico issue a RCRA hazardous waste permit. This permit sets forth the specific standards that DOE must follow to effectively manage the hazardous wastes at the WIPP facility. EPA's regional office is responsible for providing oversight and technical assistance to the State in the processing of the permit. The State is responsible for enforcing the conditions of the permit.

Compliance With Other Environmental Laws

The Act requires the Department of Energy to submit documentation to the Agency every two years demonstrating WIPP's compliance with all applicable environmental statutes and regulations including the radioactive waste storage standards, 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 and regulations within six months of receiving DOE's submission. The EPA offices that are responsible for implementing each of the applicable laws and regulations will make their respective recommendations to the Administrator. Under the Act, DOE must submit its first documentation package to the Agency by October 30, 1994.

If EPA determines that DOE has not complied with an applicable law or regulation, the Agency must require DOE to develop a remedial plan within six months of the determination of noncompliance. If the Agency determines that the remedial plan is inadequate to bring the WIPP facility into compliance, it must issue a rulemaking to make this determination formal. If this occurs during the test phase, the Act requires DOE to implement the retrieval plan and decommissioning and post-decommissioning plans required by the law. If a determination of noncompliance is made by rule during the disposal or decommissioning phase, DOE must retrieve wastes to the extent possible and implement the decommissioning and post-decommissioning plans.

Oil and Gas Lease Provision of the WIPP Land Withdrawal Act

The presence of gas and oil leases on the WIPP site has raised concerns about the possibility for human intrusion at the site and the ability of the repository to contain the waste. As a result, EPA must determine whether federal government acquisition of existing oil and gas leases at the WIPP site is required for the WIPP to comply with the disposal standards or the Resource Conservation and Recovery Act. There is no specific deadline for this determination, but DOE cannot begin disposal operations until either DOE acquires the relevant oil and gas leases or EPA determines that such acquisition is not required.

WASTE ISOLATION PILOT PLANT LAND WITHDRAWAL ACT OF 1992

IMPLEMENTATION SCHEDULE HIGHLIGHTS

Date	Regulatory Activities
12/92	EPA representatives visit the WIPP site and brief state and local officials on EPA's role in overseeing the WIPP.
2/93	Radioactive Waste Standards proposed in Federal Register.
	Hearings on Radioactive Waste Standards in New Mexico.
	Advance Notice of Proposed Rulemaking for Compliance Criteria published in Federal Register.
3/93	Expected receipt of Test and Retrieval Plans from DOE.
	Compliance Criteria ANPR comment period closes.
4/93	National Advisory Council on Environmental Policy and Technology (NACEPT) Meeting.
	Radioactive Waste Standards comment period closes.
4/30/93*	Final Radioactive Waste Standards published in Federal Register.
6/93	NACEPT Meeting.
8/93	Proposed Test and Retrieval Plan Rule published in Federal Register.**
	Hearings on Proposed Test and Retrieval Plan Determination in New Mexico.**
9/93	Test and Retrieval Plan Determination comment period closes.**
	Submit first annual report to Congress on the status of and resources required for the fulfillment of EPA's responsibilities under the Act.
	NACEPT Meeting.

10/30/93*	Proposed Compliance Criteria published in Federal Register.
11/93	Hearings on Proposed Compliance Criteria in New Mexico.
12/93	Publish Final Test and Retrieval Plan Rule Notice in Federal Register.
	Compliance Criteria comment period closes.
5/94	NACEPT Meeting.
10/28/94*	Issue Final Compliance Criteria in Federal Register.
	DOE must submit to EPA its first documentation package demonstrating WIPP's compliance with all applicable environmental statutes and regulations.

* These dates are statutory deadlines.
** These dates are contingent upon receiving the test and retrieval plan in early March. EPA will require ten months from receipt of the plan to publish a final decision. The 12/93 date for publishing the final test and retrieval plan decision is four months past the statutory deadline.

Note: NACEPT Meeting dates are subject to change.

Compliance Certification Schedule

Date	Activities
Date Unknown	Receipt of transuranic waste at the WIPP for the test phase.
Once/yr every year after initial emplacement of wastes	DOE, in consultation with EPA, must determine every year during test phase that waste in the WIPP is and will remain retrievable.
Once/yr every two years after initial emplacement of wastes	DOE is required, every two years during test phase, to submit performance assessment reports analyzing long-term performance of WIPP. EPA to review/comment within 120 days.
Once/yr every 2 years after initial emplacement of wastes	DOE is required, during the test phase, to submit documentation of its compliance with all applicable environmental laws and regulations. EPA to determine within six months of each submission whether DOE has complied.
Within 7 years after initial emplacement of waste (Frame of Reference Date "FRD")	DOE submits to EPA an application for certification of compliance.
3 months after FRD	NACEPT Meeting.
6 months after FRD	Publish Proposed Certification Determination in Federal Register.
7 months after FRD	Hearings in New Mexico.
9 months after FRD	NACEPT Meeting.
12 months after FRD	Publish Final Certification Determination in Federal Register.

CONCLUSION

The WIPP Land Withdrawal Act of 1992 assigns EPA a prominent role in overseeing the WIPP. EPA must finalize radioactive waste disposal standards, review and approve or disapprove DOE's test and retrieval plans, develop criteria for the certification of compliance with waste disposal standards, and determine whether the WIPP can comply with the disposal standards and other environmental laws. Decisions will be made based on the best available scientific and technical data. Throughout this process, EPA will maintain open lines of communication with DOE, the public, interest groups, and other government organizations to ensure sound public policy decisions. By minimizing the risks from radioactive waste disposal, EPA will advance its mission to protect the environment and the health and welfare of American citizens for generations to come.

FOR MORE INFORMATION

For more information about EPA's role under the WIPP Land Withdrawal Act, contact:

U.S. Environmental Protection Agency
Attn. Cheryl Malina
Policy and Public Information Section
Office of Radiation and Indoor Air
401 M St., SW (6602J)
Washington, DC 20460
(202) 233-9360

For information about defense transuranic waste, waste transportation, WIPP worker safety, and related topics, write to one of the appropriate offices listed below:

U.S. Department of Energy (DOE)

Attn. Tracey Loughead
Public Relations Intergovernmental Affairs Office
WIPP Project Integration Office
U.S. Dept. of Energy
Albuquerque Field Office
PO Box 5400
Albuquerque, NM 87185-5400
(505) 845-5977

U.S. Nuclear Regulatory Commission (NRC)

Charles E. MacDonald, Chief
Transportation Branch
NRC
Washington, D.C. 20555
(301) 504-2489

U.S. Department of Labor/Occupational Safety & Health Administration (DOL/OSHA)

Joanne Goodell
Directorate of Policy
Room N3647
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200 Constitution Ave., N.W.
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U.S. Department of Labor/Mine Safety and Health Administration (DOL/MSHA)

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U.S. Department of the Interior (DOI)

Lillian K. Stone, Chief
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U.S. Department of Health and Human Services/National Institute of Occupational Safety and Health (DHHS/NIOSH)

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