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GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous & Radioactive Materials Bureau
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ENTERED



PETER MAGGIORE
SECRETARY

November 13, 1998

Dear Concerned Citizen:

Enclosed is the public notice from the New Mexico Environment Department (NMED) announcing the availability of a revised draft Permit and a public hearing to consider public comment for issuance of a final Permit to the U.S. Department of Energy's and Westinghouse Waste Isolation Division's Waste Isolation Pilot Plant (WIPP), located 26 miles east of Carlsbad, New Mexico. The proposed draft Permit will authorize WIPP to store and dispose transuranic mixed waste.

All written public comment on the revised draft Permit must be received no later than 5:00 PM January 18, 1999. The public hearing will begin on February 22, 1999 in Santa Fe, will continue in Carlsbad on March 8, and will reconvene in Santa Fe on March 15, if necessary. Please refer to the public notice for procedures for submittal of written public comment and public participation at the public hearing.

NMED has also developed a fact sheet that sets forth the significant factual, legal, and policy questions considered in preparing the revised draft Permit. This fact sheet is available on the NMED WIPP Information Page at <<http://www.nmenv.state.nm.us/wipp/>>, or may be obtained by writing to the Hearing Clerk at the address listed on the last page of the public notice, or calling Ms. Idalee Sisneros at (505) 827-2842.

If you have any questions, or if there are any corrections necessary to your address, please contact Mr. Steve Zappe of my staff at (505) 827-1560, x1013.

Sincerely,

for Steve Zappe
Benito J. Garcia

Chief, Hazardous and Radioactive Materials Bureau

Enclosure

180914.370



LEGAL NOTICE NO. 98-05

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS AND RADIOACTIVE MATERIALS BUREAU
SANTA FE, NM 87502

NOVEMBER 13, 1998

NOTICE OF PUBLIC HEARING
AND OPPORTUNITY TO PROVIDE PUBLIC COMMENT
FOR ISSUANCE OF A FINAL PERMIT
FOR THE WASTE ISOLATION PILOT PLANT
USEPA NO. NM4890139088

The New Mexico Environment Department (**Department**) proposes to issue a final permit for the storage and disposal of transuranic mixed waste at the Waste Isolation Pilot Plant (**WIPP**) pursuant to the New Mexico Hazardous Waste Act, NMSA 1978 §§ 74-4-1 *et seq.* (Repl. Pamp. 1992). The permit applicants are the owner and co-operator of the WIPP, the U.S. Department of Energy (**DOE**), Carlsbad Area Office, P.O. Box 3090, Carlsbad, New Mexico 88221, and the co-operator of the WIPP, Westinghouse Electric Company Waste Isolation Division (**WID**), P.O. Box 2078, Carlsbad, New Mexico 88221.

The Department announces the availability of a revised draft Permit for public comment and a public hearing to consider public comment for issuance of a final permit. The Department previously issued a draft Permit for the WIPP facility on May 15, 1998. The revised draft Permit incorporates public comment received by August 14, 1998. The Department's revisions to the May 15, 1998 draft Permit are indicated in redline/strikeout. A revised fact sheet is also publicly available that sets forth the significant factual, legal and policy questions considered in preparing the revised draft Permit.

The revised draft Permit authorizes DOE and WID to store and dispose transuranic mixed waste at WIPP, a geologic repository located approximately 26 miles east of Carlsbad, New Mexico. The repository is designed to dispose approximately 6.2 million cubic feet of transuranic and transuranic mixed waste in a 1,800 foot thick bedded-salt formation located 2,150 feet below ground surface.

PUBLIC HEARING ON THE WIPP DRAFT PERMIT

The Department will hold a public hearing to accept public comment on the revised draft Permit. The public hearing will begin at 9:00 a.m. on February 22, 1999, at Apodaca Hall, PERA Building, Old Santa Fe Trail, Santa Fe, New Mexico. The hearing will continue at 9:00 a.m. on March 8, 1999, at the Pecos River Conference Center, Room 4, Carlsbad, New Mexico. The hearing will

reconvene, if necessary, in Santa Fe at Apodaca Hall, 9:00 a.m. on March 15, 1999. The hearing will continue daily with morning, afternoon, and evening sessions, as appropriate, until the Hearing Officer determines that all persons have been afforded an adequate opportunity to present public comment and cross-examine witnesses. The public hearing will be conducted in accordance with the Hazardous Waste Management Regulations, 20 NMAC 4.1.901.E., and the following sections of the Environment Department Permit Procedures, 20 NMAC 1.4:

100-116
201.A. and B.
202
203.C
204
301
302
402-403
501-503

PLEASE NOTE: The Department will accept technical and non-technical oral public comment at the Santa Fe portion of the public hearing. The Department will accept only non-technical oral public comment at the Carlsbad portion of the public hearing. Persons presenting oral public comment at the Santa Fe portion of the public hearing will not be available for cross-examination at the Carlsbad public hearing. The Hearing Officer will reserve time for non-technical oral public comment during each day of the public hearing.

The Secretary will appoint a Hearing Officer prior to the public hearing. All persons who wish to be notified of the appointment prior to the public hearing should request such notification from the Hearing Clerk at the address listed at the end of this Notice.

**PROCEDURES FOR SUBMITTAL OF WRITTEN
PUBLIC COMMENT AND PUBLIC PARTICIPATION AT
THE PUBLIC HEARING**

Any person, including the applicants, who wishes to submit written public comment or present oral public comment at the public hearing on the revised draft Permit for the Department's consideration shall do so according to the procedures set forth below.

A. WRITTEN PUBLIC COMMENT

All written public comment shall be submitted on or before January 18, 1999. Written public comments shall be based upon all reasonably available information and include, to the extent practicable, all factual materials relied upon. Previously submitted documents in the administrative record, including public comments on the May 15, 1998 draft Permit, need not be re-submitted if expressly referenced by the commentor. Written public comment shall be filed at the address listed at the end of this Notice.

B. ORAL PUBLIC COMMENT

The public comment period provided above shall extend to the close of the public hearing to provide interested persons a reasonable opportunity to present data, views, arguments and to examine witnesses. The public hearing will be conducted so that all relevant views, arguments, and testimony are amply and fairly received without undue repetition. The Hearing Officer may set reasonable limits upon the time allowed for oral public comment. Oral public comment on the revised draft Permit shall be accepted at the public hearing as set forth below:

1. Any person may present non-technical oral public comment at the Santa Fe or Carlsbad portion of the public hearing, and, may file non-technical written public comment in lieu of oral comment.
2. Any person may present technical oral public comment as technical testimony at the Santa Fe portion of the public hearing. Technical testimony is defined as scientific, engineering, economic or other specialized testimony, whether oral or written, but does not include legal argument, general comments, or statements of policy concerning matters at issue in the hearing. To promote efficiency, fairness and avoid prejudice and surprise, technical oral public comment will be restricted to points and factual information raised in written public comment with the exception of rebuttal, as appropriate. All persons, including the applicants, who wish to present technical oral public comment shall file a *Notice of Intent to Present Technical Testimony* containing the following information on or before February 1, 1999:

- A. Person/Entity: Identify the person or entity filing the notice;
- B. Position: State whether the person or entity filing the notice supports or opposes the revised draft Permit;
- C. Witnesses: Identify each witness, including name, address, affiliation(s), and educational and work background;
- D. Length of Testimony: Estimate the length of the direct testimony of each witness;
- E. Exhibits: Identify all exhibits; for all exhibits which are not part of the Record Proper, attach a copy;
- F. Technical Materials: Identify all technical materials relied upon by each witness in making a statement of technical fact or opinion contained in the direct testimony; Attach a copy of such technical materials for the Record Proper; submit a copy of such technical materials to the Hearing Clerk concurrently with the filing of the notice;
- G. Direct Testimony: Attach a summary of direct testimony of each witness, stating any facts or opinion(s) to be offered by such witness and explaining the basis for such facts or opinion(s); summaries of testimony shall be comprehensive, substantive and provide sufficient detail to avoid surprise, prejudice and allow for effective cross-examination. Any summary which does not meet this requirement shall be excluded. Oral public comment shall be limited to written public comment as provided above.

3. The failure to file a timely *Notice of Intent to Present Technical Testimony* meeting the requirements above shall preclude a person from presenting technical oral public comment, but shall not preclude a person from presenting non-technical oral public comment.
4. The requirements for presenting oral public comment shall not apply to the Department. The Department will not present written public comment on the revised draft Permit, but reserves the right to file a *Notice of Intent to Present Technical Testimony* to respond to public comment at the public hearing.

C. PARTY STATUS

1. Any person, including the applicants, who wishes to be a party for purposes of public participation at the Santa Fe portion of the hearing shall file

either a timely *Notice of Intent to Present Technical Testimony* or a timely *Entry of Appearance* on or before February 1, 1999. The *Entry of Appearance* shall include the following:

- A. The person or entity filing the entry and current address for written notification;
 - B. States whether the person or entity supports or opposes the revised draft Permit; and
 - C. Provides an estimate of the amount of time for oral comment, if any.
2. The failure to file a timely *Entry of Appearance* shall preclude a person from being a party in the proceeding, but shall not preclude a person from presenting non-technical oral public comment at the hearing.
 3. The Department may file an *Entry of Appearance* to participate at the public hearing.

As soon as practicable, but in no event later than two weeks prior to the Santa Fe hearing, the Hearing Officer shall make a hearing schedule available for public participants and mail it to each person who files an *Entry of Appearance* or *Notice of Intent to Present Technical Testimony*.

PROCEDURE OF ISSUANCE OF FINAL PERMIT DECISION

The Department will respond in writing to public comments prior to proposing a final decision to the Secretary. The Secretary will issue a final permit decision and response to comments. This response shall:

- (a) specify which provisions, if any, of the revised draft Permit have been changed in the final permit decision, and the reasons for the change; and
- (b) briefly describe and respond to all public comments on the revised draft Permit or the permit application raised during the public comment period or public hearing.

The Secretary will make the final permit decision publicly available and shall notify the applicants by certified mail; all persons presenting written public comment, who filed an *Entry of Appearance* or requested notification in writing shall be notified of the decision by first-class regular mail. The Secretary's decision shall constitute a final agency decision and may be appealed as provided by the Hazardous Waste Act.

LOCATIONS TO REVIEW THE DRAFT PERMIT, FACT SHEET AND APPLICATION

The revised draft Permit and permit application may be reviewed at the following locations:

SANTA FE

New Mexico Environment Department
Hazardous and Radioactive Materials Bureau
2044-A Galisteo Street
P.O. Box 26110
Santa Fe, New Mexico 87502-6110
(505) 827-1560 x1013
Attn: Mr. Steve Zappe

New Mexico Environment Department
NMED Library
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, New Mexico 87502-6110
(505) 827-2633
Attn: Ann Baumgard

Santa Fe Community College Library
6401 Richards Avenue
P.O. Box 4187
Santa Fe, New Mexico 87502
(505) 438-1352
Attn: Ms. Monica Villaire-Garcia

New Mexico State Library
1209 Camino Carlos Rey
Santa Fe, New Mexico 87505
(505) 476-9790
Attn: Ms. Norma McCallum

CARLSBAD

Carlsbad Public Library
101 S. Halaguero St.
Carlsbad, New Mexico 88220
(505) 885-6776
Attn: Ms. Lori Mitchell

HOBBS

Pannell Library, Gov't Documents
New Mexico Junior College
5317 Lovington Highway
Hobbs, New Mexico 88240
Attn: Mr. Earl Dye

ALBUQUERQUE

New Mexico Environment Department
District I Office
4131 Montgomery Blvd., NE
Albuquerque, New Mexico 87109
(505)841-9450
Attn: Mr. Bill Bartels

Zimmerman Library
Government Publications Dept.
University of New Mexico
Albuquerque, New Mexico
(505) 277-8960
Attn: Mr. Robert Wiberg

LAS CRUCES

New Mexico Environment Department
District III Office
P.O. Box 965
1001 North Solano Drive
Las Cruces, New Mexico 88001
(505) 524-6300
Attn: Mr. Ken Smith

ROSWELL

New Mexico Environment Department
District IV Office
1914 West Second
Roswell, New Mexico 88201
(505) 624-6046
Attn: Mr. Gary McCaslin

**LOCATIONS TO RECEIVE FURTHER INFORMATION,
TO FILE PUBLIC COMMENT AND OTHER
DOCUMENTS REQUIRED HEREIN**

*A. Location of Further Information Regarding the Draft
Permit and Copies:*

Any person who seeks additional information or would like to arrange for copies of the revised draft Permit, at 35 cents a page, may contact Mr. Steve Zappe at the Hazardous and Radioactive Materials Bureau, 2044-A Galisteo Street, P.O. Box 26110, Santa Fe, New Mexico 87502-6110 ((505) 827-1560 x1013).

*B. Location to File Public Comment, Requests For
Hearing Clerk or Hearing Officer and Other
Documents:*

Written Public Comment, *Entries of Appearance* and *Notices of Intent to Present Technical Testimony* and any other requests for the Hearing Clerk or Hearing Officer shall be filed at the following address:

Hearing Clerk
WIPP DRAFT PERMIT
New Mexico Environment Department
Room N-4071
P.O. Box 26110
1190 St. Francis Drive
Santa Fe, New Mexico 87502-6110

C. Location for Persons With Disability:

Any person with a disability requiring assistance or auxiliary aid to participate in this process should contact Cliff Hawley by January 22, 1999, at the following address:

New Mexico Environment Department
Room N-4071
P.O. Box 26110
1190 St. Francis Drive
Santa Fe, New Mexico 87502-6110
(505) 827-2850

TDD or TDY users please access Mr. Hawley's number via the New Mexico Relay Network. Albuquerque TDD users may access Mr. Hawley's number at (505) 275-7333 or 800-659-1779.

A copy of the revised draft Permit, fact sheet and this public notice may be reviewed at the Department's web page at <<http://www.nmenv.state.nm.us/wipp/>>

FACT SHEET

Intent to Issue a Permit for the Operation of A Hazardous Waste Storage and Disposal Facility under the New Mexico Hazardous Waste Act

Waste Isolation Pilot Plant
Carlsbad, New Mexico

Facility Name: Waste Isolation Pilot Plant (**WIPP**)

EPA ID Number: NM4890139088

Location: The facility is located north of Jal Highway (State Highway 128) in Eddy County, New Mexico. The facility consists of 16 sections of Federal land in Township 22 South, Range 31 East. The WIPP site is located approximately 20 miles east of Loving, and 26 miles east of Carlsbad.

Owner: U.S. Department of Energy

Operators: U.S. Department of Energy
Westinghouse Electric Company, Waste Isolation Division

Introduction of Facility and Purpose of Permit:

Permit Application

The U.S. Department of Energy (DOE) and the Waste Isolation Division (WID) of Westinghouse Electric Company (Permittees) requested a Permit from the New Mexico Environment Department (NMED) to manage, store and dispose transuranic (TRU) waste at the Waste Isolation Pilot Plant (WIPP) in an application submitted between May 26, 1995 and November 20, 1997. NMED deemed the application finally complete on January 5, 1998. The Permittees requested approval by NMED to operate two TRU waste container storage units on the surface, and to operate three TRU waste disposal units in the underground, within a portion of the subsurface excavated areas.

The Permittees requested approval for the management, storage, and disposal of TRU waste (non-mixed and mixed), explicitly stating that "all TRU waste" would be "managed as though it were mixed [waste]" (Page A-5, Line 20+). TRU waste is defined as waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years. "Transuranic" means radioisotopes heavier than uranium, such as plutonium and americium. TRU waste is not low-level radioactive waste. The Permittees are required to obtain an amendment from Congress to the WIPP Land Withdrawal Act (LWA), Public Law 102-579,

before emplacing or disposing high-level radioactive waste or spent nuclear fuel at WIPP.

TRU mixed waste is transuranic waste which contains both radioactive and hazardous components. Under federal and state law, the management, storage and disposal of "mixed waste" is not self-regulated by DOE, but is regulated by the State of New Mexico under the New Mexico Hazardous Waste Act (HWA) pursuant to State authorization from the United States Environmental Protection Agency (EPA) under the Resource Conservation and Recovery Act (RCRA).

The Permittees requested authority to store and dispose both contact-handled (CH) and remote-handled (RH) TRU waste. CH-TRU waste is TRU waste with a surface dose rate not greater than 200 millirem/hour. RH-TRU waste is TRU waste with a surface dose rate of 200 millirem/hour or greater and, as the name implies, must be handled remotely and shielded heavily to reduce the risk of exposure to workers and the public.

Facility Description

WIPP is located in southeastern New Mexico, approximately 26 miles east of the city of Carlsbad. The WIPP facility consists of surface buildings and structures, an underground network of subsurface excavated openings, and vertical shafts which connect the surface and subsurface areas. In 1980, Congress authorized WIPP for the express purpose of providing a research and develop-

ment facility to demonstrate the safe disposal of radioactive waste resulting from the defense activities and programs of the United States. In 1996, Congress amended the WIPP LWA to allow DOE to dispose TRU waste at WIPP without a requirement for a "test phase."

Proposed Permit

On May 15, 1998, NMED issued a Draft Permit for public review and comment for ninety (90) days until August 14, 1998. During the public comment, NMED received approximately 3300 pages of written comments from 30 commentors. Based upon the comments received, NMED issued a revised Draft Permit and is now seeking additional written public comment on the revised Draft Permit. NMED also determined to hold a public hearing on the revised Draft Permit to receive oral public comment as set forth in the public notice. NMED's revisions to the Draft Permit are reflected in redline/strikeout form to allow the public to provide additional comment, as appropriate, on those portions of the Draft Permit which were revised.

The revised Draft Permit and permit conditions are based upon the RCRA Part B permit application received from the Permittees on May 26, 1995, including all revisions and other clarifying information submitted by the Permittees before issuance of the previous Draft Permit on May 15, 1998. NMED also considered all comments received by August 14, 1998 when revising the Draft Permit.

The Permittees are prohibited from managing, storing, or disposing TRU mixed waste which does not comply with the terms and conditions of the Permit. The Permittees will be required to obtain a permit modification from NMED to vary from any requirements of the Permit. All permit modifications are subject to the public notice requirements as provided for by law.

In addition to the HWA and the New Mexico Hazardous Waste Regulations (20 NMAC 4.1), the Permittees must meet additional requirements of a number of other agencies and statues which have jurisdiction or regulatory authority over operations at the WIPP facility. There are a number of operational and waste handling activity issues concerning WIPP which are not within the purview of the Permit or that NMED does not have statutory or regulatory authority under the HWA or 20 NMAC 4.1. Examples of these issues include: transportation of waste to WIPP; disposal of non-mixed TRU waste under 40 CFR §191 and §194; and compliance with regulations enforced by other agencies, such as the Mine Safety and Health Administration.

Organization of the Permit:

The WIPP Permit follows the format specified by NMED used for other New Mexico hazardous waste facility

permits. The Permit also generally incorporates the format specified in the EPA guidance entitled the "Model RCRA Permit for Hazardous Waste Management Facilities," Office of Solid Waste, U.S. Environmental Protection Agency, September, 1988. However, since WIPP is proposed to be the first permitted geologic repository for disposal in the United States, there was no "model" guidance or format to follow for the development of permit conditions for the underground hazardous waste disposal units (**Underground HWDUs**).

General Description

The WIPP Permit is divided into seven modules, each of which will be briefly described in this fact sheet. The waste management portion of the Permit, found in Permit Modules I through VI, implements the requirements imposed by the HWA, as codified in 20 NMAC 4.1. This portion of the Permit describes the structures, equipment, and procedures the Permittees are required to comply with in order to manage, store, and dispose TRU mixed waste. TRU mixed waste will be stored in a variety of containers at two locations above ground, and disposed in up to three locations underground. These locations are further described in the remainder of the fact sheet.

The corrective action portion of the Permit, found in Permit Module VII, implements the requirements imposed by the HWA, such as waste minimization, land disposal restrictions, and corrective action to investigate possible releases from Solid Waste Management Units (**SWMUs**).

Specific Description

The first two modules, Modules I and II, are entitled "General Permit Conditions" and "General Facility Conditions," respectively, and are generally applicable to all RCRA permits. Module I addresses such issues as permit expiration date, and the NMED's authorization to inspect and obtain samples. Module II establishes permit conditions for such issues as waste sources, waste analysis, security, inspections, and training. Module II also addresses preparedness and prevention, emergency procedures (contingency plan), general closure requirements, and cost estimates and financial assurance for closure and post-closure activities.

Module III addresses the design and operations of the above ground TRU mixed waste container storage areas referred to as the Waste Handling Building Unit (**WHB Unit**) and the Parking Area Unit. For example, this module describes the design requirements for the building, the secondary containment system, and the containers used to manage waste. The module also specifies the maximum volume of waste which can be managed in the units and how the waste containers will be managed, stored and inspected to minimize the potential for release of hazardous constituents to the environment. Module IV specifies the requirements for

disposal in the Underground HWDUs. Module V addresses the groundwater monitoring program requirements for the WIPP facility. Module VI contains requirements which become effective after WIPP operations cease and the facility enters what is referred to as the "post-closure care" period. Module VII contains permit conditions pertaining to corrective action at SWMUs required by the HWA.

Description of the Permit:

NMED reviewed the Permittees' application and determined that the application, as modified by the conditions of the revised Draft Permit, adequately addresses the requirements of the HWA and 20 NMAC 4.1. A Permit is required for any area at WIPP where TRU mixed waste will be managed, stored or disposed. The following sections describe the type of waste to be managed and units to be permitted.

Waste to be Managed

Two classes of TRU mixed waste exist: "retrievably stored" refers to waste generated after 1970 and before NMED notifies the Permittees that the characterization requirements of the WAP have been implemented at a generator/storage site, whereas "newly generated" refers to waste generated after NMED notification. For both waste classes, the waste may be further categorized into three broad groups related to the final physical form of the waste: homogenous solids, soils/gravels, and heterogeneous debris. Every retrievably stored waste container will undergo either radiography or visual examination to identify the physical form of the waste, and headspace gas analysis to determine the presence of volatile organic compounds (VOCs). In addition, some homogenous solids and soil/gravel wastes will undergo coring/sampling and analysis to establish the concentrations of VOCs, semi-VOCs, and metals for hazardous waste characterizations.

1. TRU and TRU mixed waste

In its comments, the Permittees requested that the Draft Permit be revised to reflect the regulation of only TRU mixed waste on the ground that the State has no authority to regulate "non-mixed" TRU waste. As previously outlined above, the Permittees expressly stated that *all TRU waste* (mixed and non-mixed) would be managed, stored and disposed as if it were "mixed waste." The Draft Permit has been revised to allow Permittees to manage, store, and dispose "TRU mixed waste." The Draft Permit has also been revised to prohibit the Permittees from disposing non-mixed TRU waste in Underground HWDUs unless such waste has been characterized in compliance with applicable provisions of the Permit. This permit condition is authorized by law, and is necessary to assure compliance with the Permit and to protect human health and the environment.

2. Types of TRU mixed waste

The types of mixed waste to be managed under the Permit will be limited to contact handled (CH) TRU mixed waste. A more complete description of the waste may be found in Permit Attachment B, the Waste Analysis Plan (WAP). The Permit also allows the storage and disposal of derived wastes, which are mixed wastes that may be generated from on-site management of TRU mixed waste.

3. Prohibited wastes

This Permit prohibits the management, storage, or disposal of the following: (1) RH-TRU mixed waste; and (2) waste which does not meet the waste acceptance criteria (WAC) for WIPP. NMED determined that the Permittees did not adequately demonstrate that CH-TRU mixed waste characterization procedures could be used to characterize RH-TRU mixed waste, and thus were inadequate to meet the waste analysis requirements under 20 NMAC 4.1.500 (incorporating 40 CFR §264.13). Further, WIPP is not authorized to receive wastes which do not meet the WAC as specified in the Permit, such as liquids, non-mixed hazardous wastes, ignitable, corrosive or reactive wastes.

Units to be Permitted

The Permittees requested to operate five hazardous waste management units at the WIPP site. The first unit is a TRU mixed waste container storage area which will be located above ground within a portion of the Waste Handling Building (**WHB Unit**). The second unit is also a TRU mixed waste container storage area located in the parking area south of the Waste Handling Building (**Parking Area Unit**). The third, fourth, and fifth units are the Underground HWDUs, which consist of Panels 1 through 3 of the underground excavated openings.

1. WHB Unit

The Permit will allow the Permittees to store TRU mixed waste within designated portions of the Waste Handling Building (**WHB**) and the parking area south of the WHB, under specific conditions cited within the Permit. The WHB consists of a totally enclosed area of approximately 84,000 square feet. The permitted WHB Unit comprises approximately 33,000 square feet within the WHB CH Bay, which is further divided into four distinct areas where the Permittees may manage and store TRU mixed waste. The areas are: (1) the TRUDOCK Storage Area, approximately 4,700 square feet; (2) the NE Storage Area, approximately 2,900 square feet; (3) the SE (Shielded) Storage Area, approximately 300 square feet; and (4) the Derived Waste Storage Area, approximately 50 square feet. The Permittees will use these areas to temporarily store TRU mixed waste received from off-site generator/storage sites, and "derived" wastes which may

be generated during disposal activities and during closure. The maximum TRU mixed waste capacity of the WHB Unit is 2718 cubic feet at any time, which is equivalent to 41 Standard Waste Boxes (SWBs), 287 55-gallon drums, or any other combination of approved containers of TRU mixed waste which does not exceed 2718 cubic feet.

2. Parking Area Unit

The Parking Area Unit is an asphalt and concrete surface of approximately 115,000 square feet extending from the fence north of the rail siding to the WHB, within the designated Radiological Control Area, and is totally enclosed by a chain-link fence. The Permittees may store and manage TRU mixed waste containers anywhere within the Parking Area Unit, as long as the containers remain within sealed TRUPACT-II shipping containers. The maximum capacity of the Parking Area Unit is 1591 cubic feet, which is equivalent to the volume of waste contained within 12 TRUPACT-II shipping containers.

3. Underground HWDUs

The Permit will also allow the Permittees to dispose TRU mixed waste in Underground HWDUs designated as Panel 1, Panel 2, and Panel 3. To date, only Panel 1 has been excavated, while Panels 2 and 3 will be excavated during the term of the Permit. The Underground HWDUs are classified as miscellaneous hazardous waste management units under 20 NMAC 4.1.500 (incorporating 40 CFR §264 Subpart X), since geologic repositories such as WIPP do not have specific technical standards prescribed by regulation. The Underground HWDUs are located within the bedded salt of the Salado Formation, approximately 2150 feet below the surface. An Underground HWDU is a single excavated panel, consisting of seven rooms and two access drifts, designated for disposal of TRU mixed waste. Each room has nominal dimensions of 13 feet high, 33 feet wide and 300 feet long, and the entire panel has an approximate floor area of 124,150 square feet. The Permittees will dispose of TRU mixed waste in approved containers within the Underground HWDUs. The maximum capacity of an Underground HWDU is 636,000 cubic feet, which is equivalent to approximately 86,500 55-gallon drums of TRU mixed waste.

The Permit requires the Permittees to limit releases to the air of VOCs to levels which are protective of human health and the environment. VOC concentrations are specified in the Permit as room-based concentration limits. The Permit imposes no container-specific limits. That is, individual containers may exceed these VOC concentration limits as long as the average measured concentration of VOCs in the headspace gas of all containers within a room remain below the room-based limits. These limits are verified by performing VOC monitoring in the underground and by using VOC

headspace gas sampling data as reported in the WIPP Waste Information System (WWIS) database.

Issues and Major Permit Conditions:

This section of the fact sheet addresses issues and major permit conditions which may be of widespread public interest. In order to facilitate public review, the following is a summary of issues and major permit conditions discussed by permit module.

Module I

Module I of the Permit contains standard language similar to all other hazardous waste facility permits. The term for the Permit is ten (10) years, but because WIPP is a disposal facility, the regulations require NMED to review the Permit every five (5) years to ensure incorporation of any newly promulgated regulations. Other standard conditions provide NMED with inspection and entry rights to ensure the Permittees continue to comply with all requirements and conditions of the Permit, and requirements for the Permittees to orally report any noncompliance with the Permit which may endanger human health or the environment to NMED within twenty four hours of discovery, and follow up with a written notification within five (5) calendar days.

Module II

Module II addresses waste sources and waste analysis plan requirements, as well as facility security, general inspection requirements, personnel training, preparedness and prevention, the facility contingency plan, general closure and financial assurance requirements

1. Modification for approval of the WAP

The previous Draft Permit provided that the Permittees may only receive TRU mixed waste from DOE facilities within the United States which were approved by NMED through a subsequent modification to the Permit. In other words, the previous Draft Permit initially allowed no off-site TRU mixed waste to be accepted at WIPP until NMED approved a Permit modification. The revised Draft Permit has eliminated this condition. NMED has determined that a permit modification is unnecessary because the WAP approves a process which, if implemented, is adequate to meet the requirements of 20 NMAC 4.1.500 (incorporating 40 CFR §264.13). The Permit provides that the Permittees may only receive TRU mixed waste from those generator/storage sites which the Permittees demonstrate comply with, and fully implement, the requirements of the Permit and applicable provisions of the approved WAP.

2. Conditions for approval of the WAP

The WAP is approved subject to numerous conditions specified in the Permit. The Permittees will require generator/storage sites to implement the WAP, use certain approved waste characterization sampling methods and analytical techniques, as well as use statistical methods for selecting containers for representative sampling. Sites shall also comply with quality assurance objectives (QAOS) for waste characterization.

The Permittees will use acceptable knowledge as an overall waste characterization process that is confirmed through radiography, visual examination, headspace gas, and solids/soils sampling and analysis. Acceptable knowledge uses documentation of the waste generating process and the results of sampling and analysis of the waste to delineate waste streams, identify wastes which may exhibit a toxicity characteristic, and identify "listed" wastes. Although all waste streams are required to have acceptable knowledge documentation, it is essential for heterogeneous debris waste because no sampling and analysis of this debris waste will be performed.

3. Requirement to summarize WAP non-conformances

NMED requires the Permittees to submit monthly summaries of certain non-conformances to applicable WAP requirements identified at the generator/storage site Project Manager level. NMED imposed this requirement to ensure that the Permittees are notified of significant issues that arise at generator/storage sites affecting data quality objectives and accuracy of waste analyses, and to ensure that no waste is managed, stored, or disposed at WIPP which fails to meet data quality objectives.

4. Requirement to provide NMED access to WWIS database

NMED has imposed a requirement to allow NMED direct access to the WWIS, which contains extensive, detailed waste characterization data supplied by the generator/storage sites to the WIPP facility. This access is necessary to allow NMED to verify compliance with the applicable characterization requirements of the WAP and the VOC limits in Underground HWDUs specified in Module IV.

5. Requirement to audit and obtain NMED approval

NMED is requiring the Permittees to fulfill the following conditions prior to management, storage, or disposal of TRU mixed waste at WIPP: (a) the Permittees conduct audits of generator/storage sites, using an audit checklist specified by NMED, to demonstrate implementation of and compliance with applicable provisions of the WAP as required under 20 NMAC 4.1.500 (incorporating 40 CFR §264.13); and (b) NMED approves a final audit report as

necessary to verify implementation of the WAP. NMED may observe audits as necessary to validate implementation of and compliance with the WAP.

6. Prohibition on RH-TRU mixed waste

NMED is imposing a condition prohibiting RH-TRU mixed waste. NMED has determined that, based upon consideration of the environment under which sampling and analysis are likely to occur, RH-TRU mixed waste characterization using CH-TRU mixed waste characterization methods is not possible without modification to the information presented in the Permittees' application. As such, the Permittees' description of RH-TRU mixed waste analysis procedures are inadequate to meet waste analysis requirements under 20 NMAC 4.1.500 (incorporating 40 CFR §264.13).

7. Financial assurance

Finally, Module II of the Permit requires WID to demonstrate financial assurance for facility closure and post-closure. While DOE is exempt from financial assurance requirements due to its status as a Federal agency, WID as an operator and a private contractor is not exempt under State law. The Permit includes WID's estimate of costs to close the facility and provide for required post-closure care.

Module III

Module III of the Permit provides conditions for the design and operation of the WHB Unit and the Parking Area Unit. Several of the permit conditions may be of particular interest to the public. Storage time limits are imposed for both units. Sealed TRUPACT-II shipping containers are prohibited from storage for longer than fifty-nine (59) days after the inner containment vessel of the TRUPACT-II was sealed at the generator/storage site, due to Nuclear Regulatory Commission restrictions. Sealed TRUPACT-II shipping containers provide secondary containment for storage in the Parking Area Unit, while placement of waste containers on facility pallets and an impermeable coating on the floor of the WHB provide secondary containment in the WHB Unit.

Module IV

Module IV provides permit conditions for the design and operation of the Underground HWDUs (panels) within the subsurface. The Permittees are prohibited from disposing non-mixed TRU waste in any Underground HWDU unless such waste is characterized in compliance with applicable provisions of the Permit. The purpose for this permit condition is briefly summarized above.

Numerous comments requested that NMED either prohibit or condition the use of Panel 1 for disposal due to concerns about the panel's stability. While mine

stability and safety issues are regulated by the Mine Safety and Health Administration, NMED's concern is focused on the impact of a potential roof collapse to the release of hazardous constituents (primarily to the air) which may adversely impact human health. NMED established permit limits for average concentration of VOCs in any single room to ensure protection of human health in the event of acute exposure during a roof fall as well as to chronic (long-term) exposure to VOC emissions from the Underground HWDUs. NMED used standard risk assessment methodology to establish limits which meet EPA standards for environmental exposure and OSHA standards for occupational exposure. During this assessment, NMED also determined that the Permittees' proposed limits failed to adequately protect human health. NMED's methodology is available for public review in the administrative record.

The Permittees compliance with these limits will be determined by VOC confirmatory monitoring and data contained in the WWIS. Besides imposing notification requirements for VOC exceedances, the Permit requires the Permittees to cease disposal operations in a room and install ventilation barriers if the annual average concentration for a VOC exceeds the specified limit. Likewise, if the annual average concentration for a VOC exceed the specified limit for six consecutive months, the Permittees will close the affected Underground HWDU. NMED is requiring that VOC confirmatory monitoring continue after closure of Panel 1 because the risk assessment assumes there are measurable releases from closed panels, and the absence of data to the contrary did not justify discontinuing monitoring six months after closure of Panel 1.

The Permit also specifies operational requirements, such as minimum mine exhaust and active room ventilation rates and a geomechanical monitoring program to observe the creep and failure properties of the Salado in the Underground HWDUs. Finally, Module IV of the Permit specifies the standards for panel closure, repository closure, and repository post-closure care.

Module V

NMED is requiring the Permittees to implement a detection monitoring program (**DMP**) for ground water during the term of the Permit. Although the Permittees submitted information in their application supporting their belief that there will be no migration of hazardous wastes from the Underground HWDUs, NMED is imposing this permit condition to ensure compliance with the environmental performance standards specified in 20 NMAC 4.1.500 (incorporating 40 CFR §264.601(a)).

In its comments, the Permittees stated that the "point of compliance" for ground-water monitoring should encompass the waste management area, which includes any barriers (such as the Salado formation) within the

WIPP withdrawal area. NMED disagrees with the Permittees' interpretation of the "point of compliance", and will retain the location specified in the revised Draft Permit ("... the vertical surface located at the hydraulically downgradient limit of the Underground HWDUs that extends to the Culebra Member of the Rustler Formation"). This condition is necessary to ensure consistency with the definition in 20 NMAC 4.1.500 (incorporating 40 CFR §264.95).

Seven (7) detection monitoring wells (**DMWs**) will be sampled semiannually for selected parameters and constituents to detect statistically significant evidence of contamination in the Culebra Member of the Rustler Formation overlying the Underground HWDUs. In a typical landfill, the uppermost aquifer below the landfill is the closest groundwater release pathway and is therefore monitored. At WIPP, however, the closest aquifer to the repository, and to which contaminants are likely to migrate, is above (i.e., the Culebra) rather than below the disposal unit. If contamination is detected in the Culebra, the Permittees must notify NMED, immediately determine the concentrations of all constituents specified in 40 CFR §264 Appendix IX, and may be required to submit an application for a Permit modification to establish a compliance monitoring program. NMED has added several hazardous constituents to the list of required monitoring constituents due to the Permittee's identification of them as being present in the TRU mixed waste streams proposed for disposal at WIPP.

Module VI

Module VI addresses requirements for post-closure care. The post-closure care plan is implemented upon closure of the first Underground HWDU and continues until thirty (30) years after certification of final repository closure. Post-closure care includes requirements for routine inspection and maintenance of panel closure systems, and underground air monitoring. Active institutional controls implemented after final repository closure include fencing and warning signs, inspections, maintenance, continued monitoring of ground water, and control and cleanup of any releases.

Module VII

Module VII implements the corrective action requirements imposed by the HWA for releases of hazardous wastes and constituents from SWMUs. Conditions include requirements for waste minimization, land disposal restrictions, and corrective action to investigate possible releases from SWMUs.

SWMUs are waste units that contain hazardous waste constituents, such as barium, chromium, lead, thallium, etc. The facility must determine the full nature, rate, and extent of contamination for each SWMU identified in Module VII, Table 2 of the Permit. Some SWMUs may

require cleanup and/or remediation. In addition, the Permit requires the Permittees to notify NMED of newly identified SWMUs and newly identified releases from SWMUs at WIPP.

NMED revised its approach to evaluating the Permittees' requests for No Further Action (NFA) at SWMUs where the Permittees had conducted a voluntary release assessment. Further information regarding NMED's approach to evaluating NFA requests and decisions to include or exclude specific SWMUs from Module VII are in the Technical Support Document which accompanies the revised Draft Permit.

Availability of the Revised Draft Permit and Other Documents:

The administrative record for this proposed action consists of this fact sheet, a legal notice, the permit application, a Technical Support Document for Corrective Action, and related correspondence and documents. The revised Draft Permit and other documents may be reviewed during normal business hours at:

NMED Hazardous and Radioactive Materials Bureau
P.O. Box 26110
2044-A Galisteo Street
Santa Fe, NM 87502
Ph (505) 827-1560, x1013
Attn: Mr. Steve Zappe

The fact sheet, revised Draft Permit, and Technical Support Document may also be reviewed at the locations listed below:

Santa Fe

Ms. Ann Baumgarn
NMED Library, Harold Runnels Building
1190 St. Francis Drive
Santa Fe, NM 87502
(505) 827-2633

Ms. Jeannie Robinson
Santa Fe Community College Library
6401 Richards Avenue
Santa Fe, NM 87505
(505) 428-1352

Ms. Norma McCallum
New Mexico State Library
1209 Camino Carlos Rey
Santa Fe, New Mexico 87505
(505) 476-9790

Albuquerque

Mr. Bill Bartels
NMED District I Office
4131 Montgomery Blvd, NE
Albuquerque, NM 87109
(505) 841-9450

Mr. Robert Wiberg
Zimmerman Library
Government Publications Dept.
University of New Mexico
Albuquerque, NM 87138
(505) 277-8960

Carlsbad

Ms. Lorie Mitchell
Carlsbad Public Library
101 S. Halaguero Street
Carlsbad, New Mexico 88220
(505) 885-6776

Hobbs

Mr. Earl Dye
Pannell Library, Gov't Documents
New Mexico Junior College
5317 Lovington Highway
Hobbs, New Mexico 88240
(505) 392-5473

Roswell

Mr. Gary McCaslin
NMED District IV Office
1914 West Second
Roswell, NM 88201
(505) 624-6046

Las Cruces

Mr. Ken Smith
NMED District III Office
1001 North Solano Drive
Las Cruces, NM 88001
(505) 524-6300

Please contact the location of your choice listed above for hours when these documents are available for public review.

The text of the revised Draft Permit and the Technical Support Document are also available for downloading on the NMED Web Page at <http://www.nmenv.state.nm.us/wipp/>. An electronic version in WordPerfect 5.2 format for viewing on a personal computer is also available from NMED (specify Macintosh or PC format). Send two (2) HD floppy disks and a return mailer with sufficient postage to:

Mr. Steve Zappe
Hazardous and Radioactive Materials Bureau
2044-A Galisteo Street
Santa Fe, New Mexico 87505

Public Hearing:

The NMED Secretary has determined to hold a public hearing to accept oral public comment as specified in the public notice. All persons who seek to participate in the public hearing should refer to the public notice for specific details regarding participation and requirements for submittal of oral technical comment and general, non-technical public comment.

Comment Period and Regulatory Contact:

All persons who wish to provide written public comment on the revised Draft Permit are required to file such comment on or before January 18, 1999 as set forth in the public notice. Written public comment and any other requests should be in writing and filed below:

Hearing Clerk
WIPP Draft Permit
New Mexico Environment Department
Room N-4071
P.O. Box 26110
1190 St. Francis Drive
Santa Fe, N.M. 87502-6110

Permit Decision:

The Department will respond in writing to public comments prior to proposing a final decision to the Secretary. The Secretary will issue a final permit decision and response to comments which shall (a) specify which provisions, if any, of the revised Draft Permit have been changed in the final permit decision, and the reasons for the change; and (b) briefly describe and respond to all public comments on the revised Draft Permit or the permit application raised during the public comment period and public hearing. The Secretary will make the final permit decision publicly available and shall notify the Permittees by certified mail; all persons presenting written public comment, who filed an Entry of Appearance or requested notification in writing shall be notified of the decision by first class regular mail. The Secretary's decision shall constitute a final agency decision and may be appealed as provided by the HWA.