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FACT SHEET
SEPTEMBER 17, 2004

**NOTICE OF INTENT TO APPROVE CLASS 3 PERMIT MODIFICATION
TO THE
HAZARDOUS WASTE FACILITY PERMIT
FOR THE
WASTE ISOLATION PILOT PLANT
CARLSBAD, NEW MEXICO
EPA ID NO. NM4890139088**

ACTION: The New Mexico Environment Department (**NMED**) intends to approve, subject to public review and comment, a Class 3 permit modification request to allow the construction and use of additional underground Hazardous Waste Disposal Units for transuranic and mixed transuranic waste.

FACILITY: Waste Isolation Pilot Plant (**WIPP**)
Carlsbad, New Mexico

PERMITTEES: United States Department of Energy (**DOE**), owner and co-operator
Washington TRU Solutions LLC (**WTS**), co-operator

PERMIT NO.: NM4890139088-TSDF

BACKGROUND

NMED issued the Hazardous Waste Facility Permit (**permit**) for storage and disposal of mixed transuranic (**TRU**) waste at WIPP on October 27, 1999, following an extensive public involvement process that included multiple public comment periods and a public hearing. The permit established, among other things, limitations on the disposal capacity of the WIPP repository during the ten-year term of the permit. This draft permit proposes to more than double the disposal capacity to reflect projected shipping and disposal rates.

ADMINISTRATIVE HISTORY

On October 30, 1992, Congress enacted Public Law 102-579, the "Waste Isolation Pilot Plant Land Withdrawal Act" (**LWA**). Among other things, the LWA specifies that WIPP must comply with all regulations promulgated, and all permit requirements, under such laws as the Solid Waste Disposal Act, including the Resource Conservation and Recovery Act (**RCRA**) that governs the management of hazardous waste. The LWA also established a limitation on the capacity of WIPP in Section 7(a)(3), where it states "The total capacity of WIPP by volume is 6.2 million cubic feet of transuranic waste."

In the original permit application, the Permittees acknowledged that the total volume of TRU and TRU mixed waste that may be received for emplacement during the disposal phase is limited under the LWA to 6.2 million ft³ (175,600 m³) (e.g., Permit Application Chapter D, Sections D-9b(2), D-10a(1), D-10a(2)(f), etc.). The Permittees stated that they would not be seeking to dispose of this total capacity during the initial ten-year term of the permit, but instead sought only to dispose of waste in Panels 1 through 3, which reflected a maximum capacity under the permit of 54,064 m³ of TRU waste. NMED agreed to this limit and, upon issuance of the final permit on October 27, 1999, stated that the maximum disposal capacity of WIPP was 1.9 million ft³, or 54,000 m³, (Permit Condition IV.A.1.b and Table IV.A.1) for the initial term of the permit. The permit also allowed for the construction of Panel 4 and disposal area access drifts referred to as Panels 9 and 10, but limited disposal of waste to Panels 1 through 3.

The original estimates used by the Permittees to establish this maximum limit included certain assumptions regarding the availability of waste for disposal, the capabilities of the transportations infrastructure, and the rate of cleanup efforts around the DOE complex. For example, Chapter D, Section D-10a(3)(b) of the permit application assumed that it would take approximately 2.5 years to fill a panel once a sustained throughput of 784 contact-handled TRU waste drums per week was achieved (i.e., a shipment rate of 56 TRUPACT-IIs, or between 19 to 28 shipments, per week).

PERMITTEES' MODIFICATION REQUEST AND PRIOR PUBLIC COMMENT

On May 13, 2003, the Permittees submitted a Class 3 permit modification request (**PMR**) to NMED to allow for the construction and use of additional panels, generally referred to in the permit as underground Hazardous Waste Disposal Units (**HWDUs**). NMED received this PMR on May 14, 2003.

The PMR seeks to allow the construction of Panels 5, 6, 7, and 8, and to allow the use of Panels 4, 5, 6, and 7 for disposal of TRU waste during the remainder of the current term of the permit, which expires on November 26, 2009. The PMR would increase the maximum disposal capacity to approximately 4.5 million ft³ (126,000 m³), more than double the current permit limit,

but still below the LWA total capacity of 6.2 million ft³. The Permittees justify the need for increased disposal capacity in their PMR by stating that the original waste receipt estimates are outdated, and that initiatives to accelerate cleanup and shipment of TRU waste from around the DOE complex to WIPP (that were developed after the permit application was written) motivate the need to use additional panels for disposal of TRU and TRU mixed waste. The Permittees state that "implementing many of these initiatives will require future modifications" to the permit, and that they would be sought when sufficient information became available. These "accelerated cleanup initiatives" include, but are not limited to, such things as increased processing as the Advance Mixed Waste Treatment Project in Idaho, emphasis on mobile characterization systems at various generator/storage sites, approval and deployment of new waste shipping containers, and shipment by rail. The Permittees state that shipment forecasts for both the near and long term "show that WIPP will use its design capacity at a faster rate than originally estimated...", and that it is important to address the changes presented in the PMR now instead of later.

The public comment period on the PMR began on May 16, 2003 and concluded on July 14, 2003. During this time, NMED received comments from 6 individuals and organizations, including the Permittees, totaling 22 pages. Public comment raised the following major points:

- The PMR is inadequate, incomplete, and should be denied.
- NMED should not accept the Permittees' overly optimistic projections of future shipments as the basis for approval.
- Many of the "accelerated cleanup" initiatives are not reflected by proposed changes to the permit (e.g., none of the additional container types, increased storage requirements, etc., are sought).
- The Permittees should state the extent to which the attainment of projected shipment rates depends upon factors beyond their control (i.e., approval of various current and future PMRs by NMED).
- There is no requirement to ensure the Permittees don't prematurely excavate a panel based on faulty assumptions and

then have it sit empty and deteriorate, as was the case with the initial excavation of Panel 1 in the 1980's before WIPP was permitted to receive waste.

- There may be a more efficient sequence for filling panels than currently proposed by the Permittees.

In response to public comments, the Permittees proposed two minor modifications to the PMR prior to the close of the original comment period on July 14, 2003.

Nearly 3,000 shipments and 7,500 TRUPACT-II shipping containers filled with waste have been received, unloaded, and emplaced at WIPP since the initial shipment arrived on March 26, 1999. This calculates to an average shipment rate throughout the operational time period (4.5 years) of approximately 13 shipments and 32 TRUPACT-IIs per week, less than the estimated sustained shipment rate used in the original permit application. However, in the past twelve months, approximately 960 shipments and 2,700 TRUPACT-II shipping containers have been received and unloaded at WIPP, averaging slightly more than 18 shipments and nearly 52 TRUPACT-IIs per week, approximately equal to the estimated sustained shipment rate. The Permittees are currently emplacing waste in Room 3 of Panel 2, and they estimate that Panel 2 will be filled by February 2005.

PROPOSED ACTION

NMED is issuing a draft permit for public comment based upon the original PMR and consideration of all comments received during the comment period that ended on July 14, 2003. NMED is proposing in the draft permit to approve the PMR as submitted, with some minor changes. Changes to the existing language in the permit are indicated in the draft permit in redline/ strikeout markings, while additional NMED changes are indicated in yellow highlight.

One item in the PMR that NMED does not intend to approve is the Permittees' proposed removal of the total maximum capacity and container equivalent calculations from Module IV of the permit. NMED does not agree with the explanation for their removal provided in the PMR, which stated that this was "necessary to clarify that the repository is designed for and limited by the Part A Permit Application and the Land Withdrawal Act for 175,600 m³ of TRU

waste." Despite the upper limits imposed by the LWA, the referenced table in Module IV is the location that NMED uses to establish the specific permit waste capacity limits for disposal.

Based on review of the PMR, evaluation of public comments, and comparison with the regulatory requirements of 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(1)), NMED believes there is insufficient justification to deny the PMR. The Permittees addressed the applicable requirements cited above in the PMR, and NMED issued an administratively completeness determination on August 14, 2003. Although some commenters believe that the Permittees did not meet the regulatory standard in §270.42(b)(1)(iii) to explain why the modification is needed, their disagreement with the explanation constitutes an insufficient basis for denial.

NMED is aware of the current status and waste volume of shipments to date, and believes that increasing the disposal capacity to the amount sought in the PMR will allow the Permittees to continue shipping and disposing of waste in a manner compliant with all other permit requirements, while still operating within the total volume limitations imposed by the LWA. NMED believes the standard cited above for demonstrating the need for permit modification to increase disposal capacity has been met by use of reasonable assumptions of future activities, even if these assumptions are later determined to have been optimistic. Historical shipment and disposal rates sustained over the past twelve months strongly suggest that existing capacity will be reached before the expiration of the permit. NMED believes an increase in waste disposal capacity is warranted before the permit expires.

Many commenters expressed concern over the implied linkage between this request for additional disposal capacity and many of the "accelerated cleanup" initiatives described above, some of which may require modifications to the permit before they can be implemented. For example, NMED recognizes concerns by all parties over the current limited storage capacity at the WIPP facility, particularly in light of these assumed future shipment rates. However, NMED will deal with these initiatives and concerns separately at a later time rather than delay action on this PMR. NMED will address many of these concerns when considering the Class 3 PMR

submitted by the Permittees on January 7, 2004, seeking a variety of "container management improvements", such as additional container types and increased storage capacity.

NMED believes the Permittees do not need to respond to the comment seeking speculation about the impact of circumstances beyond their control on their ability to attain the projected shipment rates. If the Permittees are able to effectively use much of the additional disposal capacity provided in the draft permit, it will likely be due to their ability to implement some or all of their "accelerated cleanup" initiatives. Conversely, if few of these initiatives are successfully implemented and the additional disposal capacity remains unused during the term of this permit, the remaining unused capacity can be requested for authorization during the permit renewal process. There will have been no negative impact to human health or the environment simply by failing to achieve projected shipping and disposal rates.

Some commenters sought assurances or additional requirements to ensure that the Permittees would not prematurely excavate newly authorized disposal panels. In response, the Permittees proposed new permit language that requires submittal of a map of mining status in the annual geomechanical monitoring report submitted to NMED. With the exception of the premature excavation of Panel 1 before the facility was permitted and the arguably early excavation of Panel 2 shortly after permit issuance, the Permittees have since demonstrated a preference for excavating new panels following a "just-in-time" principle. NMED has no reason to expect that the Permittees will excavate new panels any earlier than necessary, and therefore imposed no additional criteria or requirements regarding excavation of new panels beyond those already implemented in the current permit.

Although one commenter suggested that there might be a more efficient sequence for filling panels, NMED will leave that as a recommendation for the Permittees to consider in the future. NMED believes this concern is premature and may not arise in the term of the current permit, because this concern only becomes relevant when Panel 7 is ready for excavation.

AVAILABILITY OF ADDITIONAL INFORMATION

The administrative record for this proposed action consists of this fact sheet, the public notice, the proposed PMR described above, the draft permit, and other relevant correspondence and documents. The administrative record may be reviewed Monday through Friday, 8:00 AM to 5:00 PM, at the following location:

New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone: 505-428-2517
Attn: Mr. Steve Zappe
E-mail:
steve_zappe@nmenv.state.nm.us

To obtain a copy of the administrative record or any part thereof, please contact Mr. Steve Zappe of the New Mexico Environment Department at the above address. The draft permit, public notice, and this fact sheet are also available on the NMED web site at
(www.nmenv.state.nm.us/wipp).

PUBLIC COMMENT AND REQUEST FOR HEARING

Any person who wishes to comment on this permit modification or to request a public hearing should submit written comments/requests, along with the commenter's/requester's name and address, to Mr. Steve Zappe at the above address. All requests for public hearing must provide: (1) a clear and concise factual statement of the nature and scope of the interest of the person requesting the hearing; (2) the name and address of all persons whom the requester represents; (3) a statement of any objections to the permit modification, including specific references; and (4) a statement of the issues which such persons propose to raise for consideration at the hearing. Written comment and requests for public hearing must be filed with Mr. Steve Zappe **on or before November 1, 2004** at the above address.

FINAL DECISION

All written comments received during the public notice period and issues raised at a public hearing, if held, will become part of the administrative record and will be considered in

formulating the final decision. NMED may approve, modify and approve, or deny the draft permit based on the comments received by the November 1, 2004 deadline. NMED will notify the Permittees and each person who submitted a written comment during the public comment period or testimony at a public hearing of the final decision, including any approved change to the draft permit, and a detailed statement of reasons for any such change. The final decision will be made according to applicable State and Federal laws.