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FACT SHEET
NOVEMBER 26, 2003

**NOTICE OF INTENT TO APPROVE AN AGENCY-INITIATED 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, an agency-initiated permit modification to limit waste eligible for disposal at WIPP to the inventory identified when the permit was originally issued.

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 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. Since then, the Permittees have submitted over fifty separate permit modification notifications and requests to NMED pursuant to the applicable regulations governing permit modification at the request of the permittee found in 40 CFR §270.42. The regulations at §270.41 also allow NMED to modify the Permit if the agency determines there is cause for modification. In this instance, NMED

has determined, based on new information, that there is cause to modify the permit to limit the waste eligible for disposal to the inventory that was identified when the permit was originally issued.

ADMINISTRATIVE HISTORY

Events Prior to Permit Issuance

On October 30, 1992, Congress enacted Public Law 102-579, the "Waste Isolation Pilot Plant Land Withdrawal Act" (**LWA**). Among other things, the LWA specified 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**) governing management of hazardous waste. The law also established certain requirements for commencement of disposal operations at WIPP. One such requirement was completion by DOE "of a survey identifying all transuranic waste types at all sites from which wastes are to be shipped to WIPP" (Section 7(b)(6), subsequently repealed in the WIPP LWA Amendments of 1996).

Following passage of the WIPP LWA, DOE developed several iterations of this survey, referred to as the "Transuranic Waste Baseline Inventory Report" (**TWBIR**). NMED is aware of the following versions that DOE submitted to regulators, including NMED and the US Environmental Protection Agency (**EPA**):

- WIPP Transuranic Waste Baseline Inventory Report, Rev. 0 (June 1994)
- WIPP Transuranic Waste Baseline Inventory Report, Rev. 1 (February 1995)
- Transuranic Waste Baseline Inventory Report, Rev. 2 (December 1995)
- Transuranic Waste Baseline Inventory Report, Rev. 3 (June 1996 – minor revision)

The transmittal letter for Revision 2 of the TWBIR stated, "This revision of the TWBIR also supports the WIPP Land Withdrawal Act requirement for providing the total DOE TRU waste inventory."

During this same time, DOE was developing the RCRA permit application for disposal activities at WIPP. On May 26, 1995, DOE submitted a revised application (entitled Revision 5.0) to NMED that proposed to store and dispose of mixed (both hazardous and radioactive) TRU waste at WIPP. Following consideration of NMED comments, DOE submitted Revision 6.0 of the application to NMED on April 12, 1996. Although there were several more minor revisions to the permit application (up to Revision 6.5), NMED used this Revision 6 as the basis for developing the permit governing mixed waste storage and disposal activities at WIPP and waste characterization activities at

generator/storage sites that would send TRU mixed waste to WIPP.

The WIPP RCRA permit application extensively cited the TWBIR in an attempt to satisfy the regulatory requirement to submit chemical and physical analyses of the waste to be handled by the facility. At a minimum, these analyses must contain all the information that must be known to safely store and dispose of the waste properly at the facility. However, because DOE had not yet performed chemical and physical analyses on the majority of its TRU waste inventory, it instead provided waste stream descriptions from the TWBIR as estimates of anticipated hazardous constituents. The waste analysis plan (**WAP**) in the permit application (Chapter C) included a complete list of TRU mixed waste streams from the TWBIR in the form of a waste identifier cross-correlation table (Table C-1) and a table of contact-handled TRU mixed waste characterization information (Table C-2). DOE also performed an analysis to identify potential incompatibilities for all defense generated TRU mixed waste reported in the TWBIR to ensure that WIPP would manage only compatible waste (Appendix C1). Finally, DOE used the TWBIR to weight the data accumulated from preliminary headspace gas analyses to reflect the expected proportions of different waste types and to predict the emissions of volatile organic compounds from the emplaced inventory of waste at WIPP (Appendices C2, D9, D13).

In developing the draft permit, NMED referred to and included in the administrative record, among many other documents, the RCRA permit application and the TWBIR. In enumerating the Findings of Fact associated with recommending that NMED issue the permit, the independent hearing officer cited the importance of DOE conducting a waste compatibility study demonstrating that wastes are compatible with each other, the waste containers, the transportation containers, and backfill material (Hearing Officer's Report, September 9, 1999, Findings #167 – 169). NMED issuance of the final permit on October 27, 1999 was based on the assumption that all information contained in the permit application and the administrative record was accurate, including the representation that the TWBIR reflected the total DOE TRU waste inventory.

Events Contemporaneous With or After Permit Issuance

In September 1988, DOE issued Order 5820.2A, "Radioactive Waste Management", establishing the policies, guidelines, and minimum requirements by which DOE manages its radioactive and mixed waste and contaminated facilities. This was the version of the Order that was in effect when the WIPP LWA became law in 1992 as well as during the WIPP permit public hearing. In July 1999, DOE superseded Order 5820.2A by issuing Order 435.1, which set forth revised procedures for the management of its radioactive wastes, including high-level waste (HLW), TRU waste, and low-level waste. Under this order, DOE formalized a process for determining which wastes previously managed as HLW are incidental to reprocessing ("incidental waste") and therefore exempt from disposal at the proposed high-level waste geological repository at Yucca Mountain. This reclassification process provided DOE with a mechanism to manage, treat, and dispose of some portion of its waste previously managed as HLW as either low-level or TRU wastes.

An example of reclassifying waste previously managed as HLW was contained in the "Idaho High Level Waste and Facilities Disposition Environmental Impact Statement" (DOE/EIS-0287), issued by DOE as a draft document in December 1999 and as a final document in September 2002. In this document, DOE maintained that certain wastes that do not result from the "first reprocessing cycle" (referred to as "sodium-bearing waste") were not HLW, even though they had been historically managed in HLW tanks at the Idaho National Engineering and Environmental Laboratory (INEEL). Instead, DOE asserted these sodium-bearing wastes are TRU mixed wastes eligible for disposal at WIPP. The State of Idaho maintained that DOE should manage the sodium-bearing waste in tanks at INEEL as HLW unless and until DOE reclassifies the waste as another waste type (e.g., as TRU waste) consistent with regulations. To date, DOE has not yet issued a Record of Decision regarding this document and the disposition of this sodium-bearing waste.

Another example of reclassifying waste previously managed as HLW is documented in meeting summaries and a formal advice letter issued by the Hanford Advisory Board (HAB), a site-specific citizen advisory board associated with the Hanford Site in Washington and funded by DOE. At the May 22, 2003 meeting of the HAB Tank Waste Committee, DOE sought the board's endorsement of a project to determine if some of the HLW tanks contain only TRU waste, even though they had been historically managed as HLW. At the August 12, 2003 meeting, the HAB Tank Waste Committee discussed a draft advice that would endorse the project, and on September 5, 2003, the HAB issued a formal advice letter to DOE expressing general support of performing the necessary characterization, noting that "some of Hanford's tank wastes could be placed in deep geologic disposal [i.e., WIPP] earlier than planned, and not be stored at the Hanford site." The advice letter recommended involving WIPP and New Mexico in the process, consulting with and obtaining concurrence from the Nuclear Regulatory Commission (NRC), and evaluating what National Environmental Policy Act analyses are needed to support this effort.

On February 28, 2002, the Natural Resources Defense Council (NRDC) and others filed a lawsuit in the US District Court in Idaho challenging DOE's authority to manage its wastes through its incidental waste process specified in Order 435.1. On July 2, 2003, the federal district court in Idaho ruled in favor of NRDC, declaring Order 435.1 invalid. Besides appealing the ruling, DOE Secretary Spencer Abraham also wrote a letter dated August 1, 2003 to Speaker of the House Dennis Hastert seeking support for legislation that would amend the Nuclear Waste Policy Act and other federal laws to clarify that DOE, in consultation with the NRC, retains its authority to separate and dispose of HLW according to the risk it presents, effectively overturning the court's decision.

On October 25, 2003, DOE Assistant Secretary for Environmental Management Jessie Roberson wrote an editorial in the Albuquerque Journal stating, "I would like to assure you that [DOE] does not plan to dispose of [HLW] at the Waste Isolation Pilot Plant." Ms. Roberson defended the DOE's "...core principle of waste classification,

which is that waste should be classified and disposed of according to the risk to human health and safety that it presents." She expressed the opinion that certain waste in Idaho's HLW tank farms is TRU and should be eligible for disposal at WIPP, thereby reasserting DOE's prerogative to reclassify waste in HLW tanks.

DOE is currently developing a revised inventory for submittal to EPA in support of the recertification required by the WIPP LWA in Section 8(f). Although this revised inventory has not been made publicly available, NMED has reason to believe that the inventory of waste may be expanded to include waste streams that were not considered eligible for disposal at WIPP at the time the WIPP permit application was submitted, such as waste from HLW tanks at the Hanford, INEEL, and the Savannah River Site that DOE may declare as waste incidental to reprocessing.

This information makes clear that DOE intends to dispose of waste at WIPP that was not contemplated by the inventory review ordered by Congress and was not contemplated, analyzed, or reviewed by NMED when the original permit was issued. This waste has not been evaluated by the state for compatibility with TRU mixed waste or for other characteristics that may make disposal at WIPP a danger to public health or the environment. It is on this basis that NMED proposes to modify the permit to prohibit wastes that are not directly traceable to the TWBIR.

PROPOSED ACTION

The New Mexico Hazardous Waste Regulations, 20.4.1.900 NMAC (incorporating 40 CFR §270.41) provides a mechanism for NMED to modify an existing RCRA permit for cause upon the receipt of information that was not available at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance. Based upon the foregoing background and administrative history, NMED believes there is sufficient basis to develop an agency-initiated modification that limits WIPP to receiving only TRU wastes that were identified in the TWBIR Revision 2 and in Revision 6.5 of the WIPP RCRA permit application. Had NMED been aware at the time

of the original permit issuance that DOE's inventory did not identify "all transuranic waste types at all sites from which wastes are to be shipped to WIPP" as required by the WIPP LWA, a prohibition against additional waste would have been justified.

NMED is issuing a draft permit that reflects this intent for public comment. NMED proposes to insert the following language into Module II of the permit under the heading entitled "II.C.3. Treatment, Storage, and Disposal Waste Acceptance Criteria (TSDF-WAC)":

II.C.3.i. Documented waste inventory – wastes that are not directly traceable to waste streams in the "*Transuranic Waste Baseline Inventory Report (Revision 2)*", DOE/CAO-95-1121, December 1995, are not acceptable at WIPP unless specifically approved and listed in Table II.C.3.i below.

Similar language will also be inserted into Attachment B (Waste Analysis Plan) under the heading entitled "B-1c Waste Prohibited at the WIPP Facility".

NMED also proposes to insert a table in Module II that would clearly identify those waste streams that are not directly traceable to the TWBIR Revision 2 that have been approved for acceptance at WIPP, in the event of future permit modifications allowing the disposal of these wastes. These approvals will be based upon completion and approval of a Waste Stream Profile Form (**WSPF**) by the Permittees, NMED review of the WSPF, and modification of the permit to list the approved WSPF.

AVAILABILITY OF ADDITIONAL INFORMATION

The Administrative Record for this proposed action consists of this Fact Sheet, the Public Notice, the proposed permit modification described above, the original permit application (Revision 6.5), the TWBIR (Revision 2), and other relevant correspondence and documents. The administrative record may be reviewed from 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

final decision, including any approved change to the proposed modification, and a detailed statement of reasons for any such change. The final decision will be made according to applicable State and Federal laws.

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 is also available on the NMED web site (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 commentor'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 proposes to raise for consideration at the hearing. Written comment and requests for Public Hearing must be filed with Mr. Steve Zappe on or before January 30, 2004 at NMED Hazardous Waste Bureau, 2905 Rodeo Park Drive East, Building 1, Santa Fe, New Mexico, 87505-6303.

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 requested permit modification based on the comments received. 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