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RON CURRY
SECRETARY

October 17, 2006

**RE: GENERAL RESPONSE TO COMMENTS, CLASS 3 MODIFICATION REQUEST
WIPP HAZARDOUS WASTE FACILITY PERMIT
EPA I.D. NUMBER NM4890139088**

Dear Member of the Public:

On October 16, 2006, New Mexico Environment Department (NMED) Secretary Ron Curry took final administrative action on a Class 3 permit modification request (PMR) to the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit. The Department of Energy Carlsbad Field Office and Washington TRU Solutions LLC (the Permittees) submitted this PMR to the NMED Hazardous Waste Bureau in the following documents:

- Consolidated Response to NOD, Class 3 Permit Modifications (Section 311, RH, etc.), Letter Dated 4/29/05, Rec'd 4/29/05
- Comments on Consolidated Response to NOD, Class 3 Permit Modifications (Section 311, RH, etc.), Letter Dated 6/9/05, Rec'd 6/10/05
- Response to September 1, 2005 NOD, Letter Dated 9/22/05, Rec'd 9/23/05

The Draft Permit proposed to allow the receipt, management, and disposal of remote-handled (RH) transuranic (TRU) mixed waste at WIPP; make significant changes to the TRU mixed waste characterization program; create a new TRU mixed waste confirmation program in response to Section 310 of Pub. L. 108-447; increase the storage capacities in the Waste Handling Building and Parking Area Container Storage Units; increase the disposal capacities in the underground HWDUs, or panels, for TRU mixed waste; and change the method for demonstrating that the underground disposal rooms comply with the environmental performance standards for volatile organic compounds in response to Section 310 of Pub. L. 108-447. NMED issued the Draft Permit on November 23, 2005 for a 60-day public comment period, which was subsequently extended an additional 30 days until February 22, 2006. During this initial public comment period, NMED received written specific comments from a total of 32 individuals and organizations.

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In response to public comments expressing opposition to the Draft Permit and requesting a public hearing, and in an effort to resolve issues giving rise to the hearing requests, NMED convened a series of meetings between March 9 and May 3, 2006 with the Permittees and those who both opposed the Draft Permit and requested a hearing. These meetings were held pursuant to 20.4.1.901A(4) NMAC. Participants at the meetings included NMED; the Permittees; Southwest Research and Information Center (**SRIC**); Concerned Citizens for Nuclear Safety (**CCNS**); Citizens for Alternatives to Radioactive Dumping (**CARD**); the New Mexico Attorney General's Office (**AGO**); and other individuals who participated by telephone. As a result of the negotiations during these meetings, NMED, the Permittees, the AGO, and SRIC agreed to changes to the Draft Permit related to waste characterization, the volume of waste stored and disposed of at WIPP, the acceptance of remote-handled waste, and expanded public notification of specific permit activities. This culminated in a modified document subsequently referred to as the "Draft Permit as Changed." CCNS and CARD agreed to some of these changes, but preserved their rights to challenge specific areas of disagreement at the public hearing.

A public hearing on the Draft Permit was held in two sessions: one in Carlsbad from May 31 through June 6, 2006, and the second in Santa Fe from June 7 through June 9, 2006. The hearing afforded interested members of the public multiple opportunities to present non-technical oral comment. Approximately 194 persons offered public comment during the hearing; 160 during the Carlsbad component of the hearing, and 34 in Santa Fe. Also, because the initial public comment period was automatically extended to the close of the public hearing, NMED received additional written specific comments from a total of 36 individuals and organizations.

This PMR was evaluated and processed by NMED in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(c)). NMED's general responses to the comments related to the Draft Permit and Draft Permit as Changed are summarized in the attachment to this letter.

Further information on this administrative action may be found on the NMED WIPP Information Page at <<http://www.nmenv.state.nm.us/wipp/>>. Please contact Steve Zappe at (505) 428-2517 or via e-mail at <steve.zappe@state.nm.us> if you have further questions or need additional information.

Sincerely,

Original signed by

James P. Bearzi

Chief

Hazardous Waste Bureau

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Attachment

cc: Cindy Padilla, NMED
Chuck Noble, NMED OGC
John Kieling, HWB
Steve Zappe, HWB
David Moody, DOE/CBFO
Richard Raaz, Washington TRU Solutions LLC

NMED GENERAL RESPONSE TO COMMENTS ON DRAFT PERMIT BASED UPON CLASS 3 MODIFICATIONS TO WIPP HAZARDOUS WASTE FACILITY PERMIT

Background

To provide a context for the New Mexico Environment Department's (NMED's) general response to the comments submitted on the Waste Isolation Pilot Plant (WIPP) Draft Permit and the underlying Permit Modification Request (PMR), NMED summarizes below the significant agreements reached during negotiations on the Draft Permit. These agreements addressed many of the comments on the Draft Permit submitted through February 22, 2006:

- Use of a single waste analysis plan for both contact-handled (CH) and remote-handled (RH) transuranic (TRU) waste:
 - Detailed criteria for characterizing TRU waste using acceptable knowledge (AK) of the waste generation processes alone, or in conjunction with sampling and analysis.
 - NMED review of all relevant documentation if characterization is done using AK alone.
 - Reduced frequency for chemical sampling and analysis.
 - Requirement to perform visual examination or radiography on 100% of RH waste containers.
- New waste confirmation activities (in addition to RCRA-required characterization activities) to be performed by the Permittees prior to shipment of waste containers to WIPP.
- Acceptance of RH waste for storage and disposal at WIPP.
- Increased storage capacities in the Waste Handling Building and Parking Area Container Storage Units, with options for additional temporary increases due to factors beyond the Permittees' control.
- Increased capacities for CH and RH waste disposal in the underground.
- A dispute resolution provision related to NMED review of AK information and audit reports.
- Expanded public notification of specific Permittee actions via e-mail:
 - Submittal of AK information for NMED review.
 - Submittal of audit reports.
 - Dispute resolution activities.
 - Notification of temporary increases in storage capacity.

As a result of the negotiations during these meetings, NMED, the Permittees, the Attorney General's Office (AGO), and Southwest Research and Information Center (SRIC) agreed to changes to the Draft Permit related to waste characterization, the volume of waste stored and disposed of at WIPP, the acceptance of RH waste, and expanded public notification of specific permit activities. This culminated in a modified document subsequently referred to as the "Draft Permit as Changed." Two participants in the negotiations, Concerned Citizens for Nuclear Safety (CCNS) and Citizens for Alternatives to Radioactive Dumping (CARD) agreed to some of these changes, but preserved their rights to challenge specific areas of disagreement at the public hearing.

Item 1 – General Comments

Comments: Many commenters expressed general statements of opposition to the issuance of the Draft Permit. Among the more common sentiments expressed were the belief that the Permit

would promote nuclear material production elsewhere in the U.S; general opposition to nuclear material generation, transport, and disposal; the belief that such actions would make New Mexico a “National Nuclear Sacrifice Zone”; the belief that the proposal to accept RH TRU waste is a ploy by DOE to allow high-level waste into the repository by reducing characterization requirements; a perceived lack of public support for WIPP in general or the modification request specifically; and distrust of the permit modification or public hearing process.

Many other commenters expressed general statements of support for the issuance of the Draft Permit. Among the more common sentiments expressed were the need to increase nuclear waste disposal capacity to further alternative energy development; the revised permit would facilitate cleanup at other DOE sites; WIPP’s safety and effectiveness has been demonstrated and is better than other potential sites; the modification would allow removal of RH waste from sites such as Oak Ridge National Laboratory and reduce risk to nearby residents; and the opinion that the WIPP mined salt formation is stable.

Response: NMED appreciates the time and effort reflected in the many public comments that were submitted, and continues to encourage public participation in the ongoing WIPP permit modification process. NMED considers all public comment, and the Department gives due consideration and weight deemed appropriate to each public comment. NMED has not incorporated some public comments in the final Permit because they do not deal with the specific issues under consideration in the Permittees’ request or the Draft Permit as Changed, or because they are outside NMED’s regulatory scope.

Item 2 – Specific Comments

Comment 2.1 – Confirmation Activities at WIPP: Several commenters supported the Permittees’ request to perform confirmation activities at WIPP, waiting until waste had been shipped from the generator/storage site and was received at WIPP. Supporting arguments suggested that any prohibited items discovered during confirmation could be returned to the generator/storage site and wouldn’t be stranded at WIPP. Other commenters opposed confirmation activities at WIPP, for two primary reasons: the potential that waste with prohibited items (and therefore unacceptable for storage or disposal at WIPP) would not be identified until after the waste had already arrived at WIPP, and no clear plan for returning the waste to the generator/storage site (because transporting waste with prohibited items would likely violate the TRUPACT-II certificate of compliance).

Response: This provision in the Draft Permit was rendered moot when the Permittees withdrew their request to allow shipment of waste containers to WIPP prior to performing waste confirmation, so no further response is required. As described in the Draft Permit as Changed, all waste will be subject to confirmation prior to shipment to WIPP.

Comment 2.2 – Dispute Resolution: Several commenters believed that the dispute resolution process proposed in the Draft Permit, which had not been requested by the Permittees in their PMR, was either a dangerous practice that would tend to segregate NMED staff from the politically appointed Secretary in the decision making process or was unnecessary.

Response: NMED included dispute resolution as part of its efforts to continue expanded public participation as mandated under its program authority delegated from EPA. About half of the

RCRA permits and most of the consent orders issued by NMED include some form of dispute resolution. The dispute resolution process also ensures that any decision by the Department that was disputed by the Permittees would be clearly documented in the administrative record. As a result of negotiations, NMED included a revised dispute resolution process in the Draft Permit as Changed that included an e-mail notification component to ensure full public disclosure of all aspects of any dispute arising from NMED decisions regarding audit reports and AK sufficiency determinations.

Comment 2.3 – Reduction of Waste Characterization Requirements: Many commenters opposed reduction in characterization requirements for each container, and endorsed maintenance of the current permit's requirement of 100% sampling and analysis of volatile organic compounds (VOCs) in headspace gas because the PMR did not demonstrate that the current permit is deficient. These commenters generally believed retention of the current program is necessary to protect human health and the environment. Some commenters stated that elimination of headspace gas sampling would undermine the ability to accurately assign hazardous waste numbers. Some believed that if sampling and analysis of each drum was reduced, a more robust VOC sampling and monitoring program should be initiated in the repository to compensate for this reduction.

Response: The only significant reduction in waste characterization in the Draft Permit as Changed is the headspace gas sampling requirement, which is based upon the RCRA standard philosophy of representative sampling. NMED believes the Permittees will still be able to assign hazardous waste numbers to waste streams based upon AK and representative sampling of either headspace gas (for debris waste streams) or solids (for homogeneous and soil/gravel waste streams). The other prior function of headspace gas sampling was to provide a measure of redundancy in ensuring that hazardous VOC emissions from the repository were protective of human health and the environment. The existing permit has always required monitoring of VOC emissions from the repository as a whole. The Draft Permit as Changed includes a new disposal room-based VOC monitoring program that provides additional detail regarding these emissions from individual disposal rooms that adequately compensate for eliminating the requirement to perform headspace gas sampling on all waste containers prior to disposal.

Comment 2.4 – Reliance Upon Acceptable Knowledge to Characterize Waste: One commenter believed that the proposed waste characterization method in the draft permit did not meet the regulatory requirements in 40 CFR §264.13. Several other commenters believed that an adequate technical basis for the "AK Sufficiency Determination" process has not been presented. Several commenters believed that knowledge of the waste generation process for many waste streams and containers was insufficient to adequately characterize the waste, particularly for older waste streams and containers.

Response: The Draft Permit as Changed allows the use of AK and/or representative sampling and analysis to characterize waste. RCRA regulations (40 CFR §264.13) do not mandate characterization of each container so long as the characterization process obtains sufficient information (either through acceptable knowledge, sampling and analysis, or a combination of both) to safely manage and dispose of waste. The Draft Permit as Changed includes an extensive list of required AK information that must be compiled to support any request to perform waste characterization that does not include chemical and/or physical sampling and analysis. The Draft Permit as Changed includes an AK sufficiency determination process that is more stringent than the minimum required under RCRA because the process includes a review and concurrence by

NMED and a public notification provision. NMED will not concur with any AK Sufficiency Determination request for which AK information is inadequate.

Comment 2.5 – General Opposition to Remote Handled TRU Waste: Many commenters opposed allowing WIPP to receive RH TRU waste, or they endorsed maintaining the current RH waste prohibition in the Permit. Many commenters challenged the ability of WIPP to safely transport, receive, store, manage, and dispose of RH TRU waste. These comments generally expressed concerns related to the risks associated with higher surface dose rates of RH TRU waste or with radiation exposure in the event of an accident involving an RH TRU waste container. Some of these commenters stated that if RH waste were to be allowed, it should be characterized using the methods used for CH waste in the current permit and that all containers of RH TRU waste should undergo visual examination to confirm their contents.

Response: Congress clearly intended WIPP to receive and dispose of RH TRU waste as specified in the 199 WIPP Land Withdrawal Act (Public Law 102-579), which stipulates characterization requirements and volume limitations for RH TRU waste. The Draft Permit as Changed incorporates these requirements and limitations. The Draft Permit as Changed also makes RH and CH TRU wastes subject to the same characterization requirements, with the added requirement that 100% of RH TRU waste containers must undergo visual examination or radiography.

NMED has jurisdiction over the hazardous component of TRU mixed wastes that are managed and disposed of at WIPP, and is obligated to ensure that WIPP meets the requirements of 40 CFR Part 264. The Draft Permit as Changed meets all necessary RCRA preparedness and prevention and contingency plan requirements for the management of the hazardous component of TRU mixed waste at WIPP. NMED has no regulatory authority over the radiological component of these wastes. DOE, not NMED, is responsible for regulating emergency response and personnel exposure to radiation.

Some commenters may confuse RH TRU with “high-level” waste. Congress specifically prohibited high-level waste and spent nuclear fuel at WIPP in the Land Withdrawal Act. The disposal at WIPP of TRU waste that was ever managed as high level waste or waste from specific tanks identified in the Permit is prohibited. Changing this prohibition would require a Class 3 permit modification request that would include extensive public comment and hearing opportunities. The State of New Mexico remains committed to prohibiting the disposal of high level wastes at WIPP.

Comment 2.6 – Storage and/or Disposal Capacities: Several commenters opposed any increase in surface waste storage and subsurface waste disposal capacity, questioning whether such increase was necessary based upon WIPP’s past experience or whether the increased storage or disposal volume could be safely managed by WIPP.

Response: The final storage and disposal capacities specified in the Draft Permit as Changed resulted from agreement reached by all participants in the negotiations and reflect the compromises made between the Permittees and the other participants. The Draft Permit as Changed implements the concept of “surge storage” for the Parking Area Unit and the Waste Handling Building Unit that establishes a baseline capacity for storage that can be exceeded if certain criteria (generally beyond the Permittees’ control) are met, and includes notification to an e-mail list of interested persons if surge storage is invoked. Once the criteria are no longer met,

storage capacities revert to baseline capacities. NMED believes the Draft Permit as Changed ensures safe management and storage of both CH and RH TRU mixed waste.

The Draft Permit as Changed also imposes limits on disposal capacities for both CH and RH TRU mixed waste. It provides for limited increases to those disposal capacities as minor modifications requiring NMED approval and Permittee notification to the e-mail list of interested persons. It also allows the Permittees to seek a larger increase in disposal capacity through the usual permit modification process that includes opportunity for public comment prior to NMED action on the request. Again, NMED believes the Draft Permit as Changed ensures safe management and disposal of both CH and RH TRU mixed waste.

Comment 2.7 – Environmental Justice Issues: NMED received a significant number of written comments on environmental justice concerns on the Draft Permit as Changed. These concerns included the belief that the transport of RH waste would have a disparate impact on those living along the WIPP transportation route. Many commenters believed that the population along these transportation routes was primarily comprised of minority, low-income, elderly, or otherwise disadvantaged individuals. Many of these commenters also believed there was a need for a disparate impact study to be completed by either NMED or the Permittees and subsequently fully assessed by NMED before RH waste could be approved for shipment, storage, or disposal at WIPP.

Response: NMED met the requirements under the Governor’s Executive Environmental Justice Order during the development of the Draft Permit as Changed to use available environmental and public health data to evaluate any potential incremental adverse impacts to low-income communities and communities of color from the management of mixed RH TRU wastes at WIPP. NMED used these data and other information to establish the environmental performance standards in the original permit decision in 1999, and the Draft Permit as Changed was reviewed to ensure that there would be no new unacceptable risks from the management of the hazardous components of the mixed RH TRU wastes that would be stored at or disposed of at WIPP. Because there are no adverse human health or environmental impacts at the WIPP facility boundary, there can be no disparate impacts to any particular segment of the public beyond the facility boundary and a disparate impact study is unwarranted.

With the exception of RCRA manifesting requirements, NMED has no regulatory authority over the transportation of mixed TRU wastes from the generator/storage sites to WIPP. Therefore, it is outside of NMED’s regulatory purview in issuing the Draft Permit as Changed to evaluate potential disparate impacts from transportation of RH TRU waste to WIPP.