



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567

www.nmenv.state.nm.us



JOHN D'ANTONIO, Jr.
SECRETARY

December 5, 2002

**RE: GENERAL RESPONSE TO COMMENTS, CLASS 2 MODIFICATION REQUESTS
WIPP HAZARDOUS WASTE FACILITY PERMIT
EPA I.D. NUMBER NM4890139088**

Dear Citizen:

On November 25, 2002, the New Mexico Environment Department (NMED) took final administrative action on several Class 2 permit modification requests to the WIPP Hazardous Waste Facility Permit, as submitted to the Hazardous Waste Bureau in the following documents:

- Requests for Class 2 Permit Modifications, Letters Dated 6/27/02, Rec'd 6/28/02

The Department of Energy Carlsbad Field Office and Westinghouse TRU Solutions LLC (**the Permittees**) identified six (6) separate items in their modification submittals:

- Item 1 (Characterizing Repackaged Homogeneous Solids as Retrievably Stored Waste)
- Item 2 (Use of Radiography for Newly Generated Waste)
- Item 3 (Addition of HalfPACT Shipping Container)
- Item 4 (Addition of a New Hazardous Waste Number)
- Item 5 (Record Keeping and Auditing for Classified Information)
- Item 6 (Addition of New Waste Containers)

NMED has approved all six (6) Items with and without changes, based on public comment.

These modifications were processed by NMED in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)), and were subject to an initial sixty (60) day public comment period, which ran from July 3 through September 3, 2002. On August 8, 2002, NMED extended the public comment period by thirty (30) days until October 3, 2002. NMED received written comments from forty individuals and organizations during this time. NMED's general responses to the comments are summarized in the attachment to this letter.

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Further information on this administrative action may be found on the NMED WIPP Information Page on the World Wide Web at <<http://www.nmenv.state.nm.us/wipp/>>.

If you have any questions regarding this matter, please contact Steve Zappe at (505) 428-2517.

Sincerely,

John E. Kieling
Manager
Permits Management Program

Attachment

cc: James Bearzi, HWB
Steve Zappe, HWB
Inés Triay, DOE/CBFO
John Lee, Westinghouse

**NMED GENERAL RESPONSE TO COMMENTS ON CLASS 2 PERMIT MODIFICATIONS TO
WIPP HAZARDOUS WASTE FACILITY PERMIT
SUBMITTED JUNE 28, 2002**

Item 1. Characterizing Repackaged Homogeneous Solids as Retrievably Stored Waste

The existing permit establishes different waste characterization requirements for newly generated waste and retrievably stored waste that must be implemented by the generator/storage sites (**sites**). For newly generated and repackaged homogeneous waste (solid waste that is amenable to representative sampling), the permit specifies that sites must sample using control charts, which assume that the waste generation process was controlled (i.e., known chemical inputs and outputs). There are times when sites may want to conduct some characterization activities for repackaged waste in the same manner they would be conducted for retrievably stored waste, which assumes the process of generating the waste was not controlled and therefore requires statistical sampling. This permit modification request (**PMR**) proposed to remove the ambiguity regarding the use of control charts and the appropriate number of samples by allowing sites the option to characterize repackaged homogeneous solids as retrievably stored waste using a statistical determination. Implementing this PMR could reduce the minimum number of samples required to assure that a waste stream is representatively sampled.

Comments: Comments were generally concerned about the basis for documenting the decision as to whether the waste would be characterized as newly generated or retrievably stored waste and whether the Permittees might simply select the scheme for characterizing homogeneous wastes that required the least amount of sampling.

Response: NMED agrees that control charting cannot be used for some homogeneous waste generated under uncontrolled conditions. NMED approved this PMR with changes by requiring the Permittees to demonstrate the appropriateness of control charting for newly generated homogeneous waste.

Item 2. Use of Radiography for Newly Generated Waste

The existing permit establishes different waste characterization requirements for newly generated waste and retrievably stored waste that must be implemented by the sites. When newly generated waste is initially packaged or when retrievably stored waste must be repackaged, the permit requires sites to use the visual examination (**VE**) technique to identify the contents of the waste container. Sites have identified circumstances when confirmation of Acceptable Knowledge (**AK**) using radiography after packaging instead of verifying AK at the time of packaging is more efficient. An example of this would be when there are numerous locations where small quantities of transuranic (**TRU**) waste are being generated, requiring a large number of VE personnel. However, the language in the permit does not clearly allow this option. This modification would allow sites to perform either VE or radiography to confirm AK for newly generated or repackaged waste.

Comments: Concerns were raised regarding the basis for documenting the decision as to whether and/or when the site would use radiography or the VE technique for newly generated waste. There were also concerns that the site would not be gathering sufficient AK information when generating or packaging the waste.

Response: NMED approved this PMR with changes. NMED has specified that the Permittees will require sites to document the decision making process used when determining whether to use the VE technique or radiography, including any decision to use a "mix" of VE technique and radiography. NMED has revised the permit to mandate inclusion of visual inspection information in the AK record so that the radiography/AK comparison will consider the information obtained during visual inspection.

Item 3. Addition of HalfPACT Shipping Container

This PMR would allow WIPP to receive contact-handled TRU waste in the HalfPACT shipping container, potentially reducing the total number of shipments to the facility. The HalfPACT is similar to the currently approved TRUPACT-II shipping container but is somewhat shorter. In November 2000, the Nuclear Regulatory Commission approved the HalfPACT as a Type B container for shipping contact-handled TRU waste.

Comments: Some commentors were confused by the proposed nomenclature (replacing occurrences of "TRUPACT-II" with the phrase "Contact Handled Packages") and wondered what the new requirements were. Others were confused by the apparent overlap between this modification and another one (Item 6 below) to add new waste containers. Finally, some expressed concern about potential decontamination problems if a HalfPACT was involved in a vehicle accident and sustained significant damage.

Response: NMED approved this PMR. NMED concurs that the waste containers approved for disposal should be clearly distinguished from packages approved for shipping; however, NMED believes the change to Module I of the permit that defines "Contact Handled Packages" already provides this specificity. The HalfPACT, like the TRUPACT-II, is designed for the transportation of contact-handled TRU waste containers and is not intended for disposal. Thus, HalfPACTs will only be on site for the time it takes to unload the drums from them and prepare them for return to generator sites, in the same manner as is currently done for TRUPACT-IIs. The permit modification for additional containers (see Item 6) does not directly impact this proposed permit modification. Although the HalfPACT will facilitate shipment of some waste container types, the two issues (Items 3 and 6) are not linked in terms of the conditions imposed by the permit. The structural integrity and performance of the HalfPACT shipping container involved in a vehicle accident is outside the authority of this permit and is therefore not regulated by the NMED.

Item 4. Addition of New Hazardous Waste Number

This PMR proposes to include a new hazardous waste number (U134) that would allow WIPP to handle, store, and dispose of certain transuranic debris waste contaminated with hydrofluoric acid (HF). The permit currently prohibits corrosive wastes such as HF.

Comments: Many of the comments related to the corrosivity of HF, specifically, how the Permittees could guarantee that HF-contaminated waste is no longer corrosive prior to disposal at WIPP and whether the treatment processes to neutralize the corrosivity was effective. Others were concerned that documentation regarding the presence of HF relies solely on AK and does not require chemical confirmation. Others wanted to know where the HF waste would be coming from and how much would be shipped to WIPP for disposal. There were also concerns about the toxicity of HF and how that would be regulated.

Response: NMED approved this PMR with changes. NMED is satisfied that the treatment as proposed by the Permittees to neutralize the HF acid is acceptable. The permit has been modified to require that no liquid be allowed for waste containing HF, unlike other wastes that may contain up to 1% liquid. Treatment process effectiveness will be evaluated during audits for AK compliance, but basically the prohibition on liquids precludes corrosivity. NMED believes there is no need for knowing the future quantity of HF waste and where it will come from, because the Permittees must still submit Waste Stream Profiles for each waste stream prior to acceptance of such waste for disposal, and this information would be subject to review and approval by NMED during site waste characterization audits. Finally, neutralizing the acid and removing all liquids eliminate the toxicity of HF.

Item 5. Record Keeping and Auditing for Classified Information

This modification covered record keeping and auditing for classified information. It proposed that records that are required at WIPP (i.e., 1% of all radiography video tapes) but are deemed classified for national security reasons would instead be maintained at a secure DOE facility. As a result, waste that included associated classified information (such as item shape, size, etc.) could be accepted for disposal at WIPP while the classified information would be stored at a secure DOE facility.

Comments: A major concern from the commentors was that DOE might use the PMR, if approved, as an excuse to hide information from NMED and/or the public, leading some to question whether the PMR was even legal. Others wondered why the classified waste couldn't just be treated (e.g., crushed) to eliminate security concerns. Some commentors questioned whether WIPP would need to implement other modifications to appropriately manage waste with classified information. Finally, some commentors focused on where the records would be kept and how and when they would be made available.

Response: NMED approved this PMR. NMED acknowledges that the public will not have access to classified information associated with certain wastes accepted at WIPP

after this PMR is approved. NMED has no regulatory control over the manner in which DOE determines whether information should be classified for national security reasons. However, NMED will be able to examine this information because NMED employees have obtained appropriate security clearances and will continue to participate in audits to observe whether waste characterization activities associated with classified waste comply with the permit. NMED believes the WIPP Land Withdrawal Act is not violated by the approval of this PMR because the State of New Mexico, through NMED employees with appropriate clearances, will still have access to the classified data. NMED recognizes that DOE could treat the waste to eliminate its classified nature, but such treatment is not required to meet WIPP waste acceptance criteria. Regarding any further facility modifications that might be required to manage classified wastes, NMED believes a permit modification request would have to be submitted for public comment and approval prior to waste management. Records of classified information will be stored at secure facilities such as the originating generator site or temporarily at a local facility like Sandia National Laboratories in Albuquerque. The Permittees are still obligated to provide relevant information upon request and access to any required records in order for NMED to determine compliance with the permit.

Item 6. Addition of New Waste Containers

This PMR would allow the use of direct-loaded Ten-Drum Overpacks (TDOPs) and direct-loaded 85-gallon drums and 100-gallon drums for the management of larger waste items that exceed the capacity of the currently permitted 55-gallon drums and Standard Waste Boxes. The Permittees indicated the additional waste containers would aid sites in packaging waste for shipment to WIPP and would not require any changes to waste handling practices currently employed at WIPP.

Comments: Some commentors expressed concern about the potential for poor container conditions that might require overpacking and/or transferring the contents to other containers. They pointed out that in some cases there didn't appear to be a suitable overpack container (such as for the TDOPs) and that transferring waste from one container to another was risky. Other commentors were concerned with a site's ability to characterize waste in these larger containers and suggested that new requirements might be necessary, and there might also be a need for revised procedures for the managing these containers once they arrive at WIPP. Others pointed out that the PMR did not describe how an appropriate Drum Age Criteria (DAC) would be selected for these containers because the existing DAC appears to be only applicable to 55-gallon drums.

Response: NMED approved this PMR with changes. The Permittees indicated in their comments that this PMR did not propose overpacking TDOPs, so NMED will not expect that as an option for those containers. In response to comments, NMED cited specific federal regulations governing the repair or patching of containers that are not in good condition. Because WIPP currently has no facilities capable of safely transferring waste from one container to another, NMED eliminated the option of repackaging waste. Regarding characterization concerns, the permit currently has performance-based

radiography standards that apply to all types of waste containers; therefore, detailed radiography procedures for each of the waste container types is not warranted. In addition, radiography of the new container types will be examined during audits, and the results must be presented in audit reports that are reviewed and approved by NMED. NMED believes the PMR language adequately described general requirements for the management of all containers types upon removal from the shipping container through disposal. As to the DAC concern, NMED will not allow receipt of these additional waste containers until appropriate drum age criteria are established through a future permit modification.

Item 7. General Comments

There were several recurring comments that appeared in many of the different commentor submittals to the six PMRs listed above and are addressed together.

Comments: Commentors suggested that more quantitative information should have been provided (e.g., anticipated reductions in cost, manpower, or paperwork; how many drums of waste in the proposed new plan, etc.). Statements about the potential risks and anticipated rewards of the proposed changes should also be provided. A number of comments identified changes in the PMR that also need to be made in additional locations in the permit. Several comments believed that all of the six PMRs should be classified as Class 3 modifications or denied outright because they were overly complex, adversely affected human health and the environment, and/or violated the WIPP Land Withdrawal Act, federal regulations, or state law.

Response: While NMED agrees that more information could always be provided to support permit modification requests, NMED believes that sufficient information was provided in these submittals to adequately assess the proposed modifications. More specific explanation is needed before NMED can respond to the general statement about changes to additional locations. However, NMED assessed all proposed changes and made additional edits where obvious conflicts were noted or to address specific public comments. Finally, NMED does not concur with the comment concerning classification of all the PMRs as Class 3 modifications. Despite the large number of edits required for some modifications that affected many parts of the permit (e.g., Item 3, Addition of HalfPACT Shipping Container), NMED believes none of the PMRs were complex enough to warrant reclassifying them as Class 3 modifications. The Permittees met the requirements of Class 2 PMRs.