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NEW MEXICO ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

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RON CURRY Secretary

JON GOLDSTEIN Deputy Secretary

April 24, 2008

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

Dear Interested Person:

On March 25, 2008, the New Mexico Environment Department (NMED) took final administrative action on two Class 2 permit modification requests (PMRs) 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 these PMRs to the Hazardous Waste Bureau in the following documents:

- Request for Class 2 Permit Modification (Electronic Operating Record), Letter Dated 11/20/07, Rec'd 11/26/07
- Request for Class 2 Permit Modification (Hydrogen/Methane Monitoring), Letter Dated 11/20/07, Rec'd 11/26/07

The Permittees requested the following:

- 1. Allow the WIPP Operating Record to be maintained in an unalterable, searchable electronic format;
- 2. Monitor each full panel for hydrogen and methane until final panel closure;
- 3. Establish action levels for hydrogen and methane;
- 4. Install substantial barriers and steel bulkheads to isolate a full panel for monitoring purposes;
- 5. Evaluate the monitoring data to determine an appropriate final closure system;
- 6. revise the location and frequency of volatile organic compound (VOC) monitoring in full panels until final panel closure;

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- 7. Inspect and certify the explosion-isolation walls in Panels 1 and 2 and inspect the bulkheads in Panels 3 through 7 until final panel closure; and
- 8. Extend the final closure in Panels 1 through 7 to 2016.

NMED approved these PMRs with changes for the reasons specified in the attached response to comments. These Class 2 PMRs were evaluated and processed in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)). They were subject to a sixty (60) day public comment period running from November 21, 2007 through January 21, 2008, during which NMED received written specific comments from a total of five individuals and organizations. NMED's general responses to the comments related to the submitted PMR 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) 476-6051 or via e-mail at <steve.zappe@state.nm.us> if you have further questions or need additional information.

Sincerely,

John E. Kieling Manager

Permits Management Program

Attachment

cc: James Bearzi, HWB Steve Zappe, HWB David Moody, DOE/CBFO Farok Sharif, Washington TRU Solutions LLC

NMED GENERAL RESPONSE TO COMMENTS ON CLASS 2 PERMIT MODIFICATIONS TO WIPP HAZARDOUS WASTE FACILITY PERMIT (WIPP PERMIT) SUBMITTED NOVEMBER 26, 2007

Item 1. Allow for Unalterable Electronic Facility Operating Record

Background: The permit modification request (**PMR**) proposed to allow the WIPP Operating Record to be maintained in an unalterable electronic format. The hard copies of the Operating Record, which have been converted into an electronic format, would be maintained at the WIPP Records Archive facility. Paper copies of any electronic file would be made available to NMED upon request.

Comments: NMED received no specific comments regarding this item.

Response: NMED approved the modification without changes.

Item 2. Monitor for Hydrogen and Methane in Filled Panels

Background: The PMR proposed to allow the Permittees to monitor for hydrogen and methane gases in filled waste disposal panels, until such time that the panel is permanently closed. Although these gases are not directly regulated as hazardous constituents by NMED, the collection and evaluation of data associated with the buildup of potentially explosive gases could be useful in determining whether the currently approved panel closure system should be modified in a future PMR. Below is a summary of the proposed changes:

- Beginning with Panel 3, add a substantial barrier and a steel bulkhead in the intake and exhaust drifts of each full panel as part of the monitoring program.
- Monitor each full panel for hydrogen and methane gas until final panel closure.
- Establish action levels for hydrogen and methane gas that would trigger various activities that may include the installation of the explosion-isolation wall component of the existing panel closure system.
- Collect data to be used in determining a final closure for each panel.
- Initiate an inspection schedule and inspection criteria for the explosion-isolation walls currently installed in Panels 1 and 2, as well as the bulkheads in Panels 3 through 7, until final panel closure.
- Revise volatile organic compound (**VOC**) monitoring locations in full panels and revise the frequency of VOC monitoring in full panels to monthly until final panel closure.
- Extend the final closure dates for Panels 1 through 7 until the year 2016.

Comments: The Permittees concurred with a suggestion offered at one of the public information meetings that a condition be added to the previously submitted PMR, directing them to report the results of the hydrogen and methane monitoring program to NMED on a semi-annual basis. One commenter raised several concerns based upon review of language provided in the Permittees' fact sheet, dealing with delaying the date of final closure for any panel, reducing the frequency of VOC monitoring of full panels, and revising the VOC monitoring locations in full panels. Another commenter proposed language clarifying what constituted a "filled panel," and argued against also using the term "open panel." This commenter also recommended using the latest, best estimates for closure dates of panels specified in a table in Attachment I, Closure Plan, and proposed several other minor editorial comments.

Response: In response to public comment, NMED incorporated the Permittees' suggested language change regarding reporting of results, with minor edits to make it consistent with similar language elsewhere in the Permit.

NMED noted to the first commenter that the Permittees' fact sheet paraphrased but didn't necessarily capture the detailed language of the actual PMR, and thus some comments didn't reflect the proposed language changes. NMED made it clear that panels could be closed before the 2016 date if monitoring results triggered the requirement to install an explosion-isolation wall before that date. NMED supported the reduction of frequency of VOC monitoring in full panels, as well as limiting the monitoring location to Room 1 (the disposal room nearest to workers), noting that the repository VOC monitoring program would remain unchanged by this PMR. It is the repository VOC monitoring program that identifies any releases to the public that might exceed human health-based regulatory limits.

NMED incorporated slightly different language than proposed by the other commenter in the definition of "filled panel" to achieve the same goal. The PMR had proposed defining a filled panel as one that would "no longer receive TRU mixed waste," implying to the commenter that non-mixed TRU waste (not regulated by NMED) might still be emplaced in a panel considered "filled." Instead of incorporating the definition proposed by the commenter that a filled panel is one that would "no longer receive TRU waste" (a broader scope encompassing all waste), the final definition by NMED accomplished the same goal by defining a filled panel as one that would "no longer receive waste for emplacement." Regarding the comment on the use of the term "open panel," NMED noted that although not explicitly defined, this term was already used elsewhere in the Permit and is understood to be a panel in which waste emplacement has commenced but is not yet completed. NMED identified several situations in the Permit where it is important to distinguish that a panel is actively receiving waste, and chose to retain the term.

Acknowledging this commenter's long-standing concern related to the estimates of panel closure dates in the Closure Plan, NMED believes it was unnecessary to modify these estimates at this time.

NMED made additional editorial changes to some of the language proposed in the PMR, primarily to clarify the intent or to make the Permit more enforceable. For example, it was not clear in the PMR if hydrogen and methane monitoring (and therefore reporting requirements) began after the first room in a panel was filled or only after the entire panel was filled, so NMED included appropriate language in various locations to clarify that monitoring would begin only after a panel was full and the substantial barrier had been installed. Likewise, NMED also clarified that at least one compound (but not both hydrogen and methane) has to exceed the action level before remedial action must be taken, and clearly identified that disposal room-based VOC monitoring would continue in a filled panel unless the explosion-isolation wall was installed in that panel.