

BILL RICHARDSON Governor

DIANE DENISH Lieutenant Governor

NEW MEXICO ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.nmenv.state.nm.us



RON CURRY Secretary

CINDY PADILLA Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 26, 2007

Dr. David Moody, Manager Carlsbad Field Office Department of Energy P.O. Box 3090 Carlsbad, New Mexico 88221-3090

Mr. Farok Sharif, President Washington TRU Solutions LLC P.O. Box 2078 Carlsbad, New Mexico 88221-5608

RE: NOTICE OF VIOLATION

WASTE ISOLATION PILOT PLANT EPA I.D. Number NM4890139088

Dear Dr. Moody and Mr. Sharif,

On February 21 and 22, 2007, the New Mexico Environment Department (**NMED**) conducted a hazardous waste Compliance Evaluation Inspection at the Waste Isolation Pilot Plant (**WIPP**), located near Carlsbad, New Mexico. At the time of the inspection, and as part of the inspection, NMED requested information (**the Request**) on 24 items. The list of these items was given to Mr. Jody Plum of DOE. The response to these items (**the Response**) was transmitted to NMED by the Permittees on May 7, 2007. Upon review of the Response, NMED has determined that the Department of Energy's Carlsbad Field Office and Washington TRU Solutions LLC, Permittees of the WIPP facility, have violated the New Mexico Hazardous Waste Management Regulations (20.4.1 NMAC) and specific conditions of the WIPP Hazardous Waste Facility Permit as specified below:

1. Permit Attachment L, Section L-4c(1) <u>Ground-water Surface Elevation Monitoring Methodology</u>, p. L-16, line 30 and following states: "To monitor the hydraulic gradients of the hydrologic flow systems at WIPP accurately, actual ground-water surface elevation measurements will be monitored at the frequencies specified in Table L-2, and the densities of the fluids in the well bores will be measure (sic) annually. When both of these parameters are known, equivalent freshwater heads will be calculated."

Item 19 of the Request stated: "For all WLMP [ground-water level monitoring program] wells for the calendar years 2000 through and including 2006, provide evidence demonstrating that fluid densities were measured annually and demonstrate that these data were used to calculate the monthly adjusted fresh water heads for this time period."

Table 1 of Item 19a in the Response, Pressure Density Survey Summary, 2000-2006, shows that densities in all wells were not measured annually. Tables 3 and 4 of Item 19b in the Response shows that even if a density measurement was taken in a specific year, the density measurement was not necessarily used in calculating the equivalent freshwater head.

2. Permit Attachment L, Section L-7a <u>Environmental Monitoring Manager</u>, p. L-32, line 1 and following states: "The EM Manager will establish minimum qualification criteria and training requirements for all DMP personnel."

Item 20 of the Request stated: "List of WIPP personnel filling each of the positions specified in Permit Attachment L, Section L-7. Include minimum qualification criteria, training requirements, and copies of current training records for these personnel."

NMED is unaware of any formal minimum qualification criteria requirements for the Environmental Manager, nor were any submitted in the Response to Item 20.

3. Permit Attachment L, Section L-7a <u>Environmental Monitoring Manager</u>, p. L-31, line 27 and following states: "The EM manager will develop and approve specific procedures [for] all DMP activities...."

Item 21 of the Request stated: "Provide evidence that adequate QA/QC protocols (i.e., implementing procedures, competent technical review, etc.) were used to determine groundwater flow rate and direction, as specified in Permit Condition V.H., for calendar years 2000 through and including 2006."

The text of Item 21 in the Response states: "There is no formal procedure for developing the potentiometric surface maps." NMED is also unaware of any formal written procedures for using potentiometric surface maps to obtain flow rates and directions. NMED's review of potentiometric maps provided in previous Annual Site Environmental Reports indicated use of suspect data, incomplete use of data, and inconsistent use of data, indicating a less than complete technical review. NMED found no evidence of technical review of the potentiometric surface maps or the resulting flow direction and rate calculations in the submission of the response to Item 21. The development of potentiometric surface maps is part of the detection monitoring program, and an integral part in determining groundwater flow rate and direction, which is required by 40 CFR §264.98 (e).

4. Permit Attachment L, Section L-8b <u>DQOs</u>, p. L-33, line 29 and following states: "DQOs will be established to ensure that the data collected will be of a sufficient and known quality for their intended uses."

NMED is unaware of any DQOs that the Permittees have established relating to the WLMP, and the text to Item 21 of the Response did not provide any. For example, density measurements used to adjust water level measurements to equivalent freshwater heads are taken by different methods, each with varying degrees of accuracy, and it is not clear that the methods should be considered comparable, or even adequate, for the intended use (correcting data measured to the hundredth of an inch).

In order to return to compliance, NMED requires the Permittees conduct a full QA/QC review of the detection monitoring program in order to identify and correct deficiencies in the program. The Permittees must develop procedures, DQOs, and personnel qualification criteria that address the full scope of DMP activities, not just a subset, in order to adequately conduct the detection monitoring program. In addition, this review of the QA program should determine why a full set of procedures, DQOs, and qualification criteria do not exist. NMED requests a plan to resolve the discrepancies found. As part of this QA/QC review, the Permittees may address other QA/QC problems which, while not necessarily resulting in a direct violation of the permit, are detrimental to producing "true, accurate, and complete" information, such as use of uncontrolled data, errors in submissions, not flagging suspect data, use of conflicting data, etc. Upon implementation of such a plan subsequently approved by NMED, the Permittees will be determined to have returned to compliance.

In accordance with 74-4-10 NMSA 1978, NMED may: (1) issue a Compliance Order requiring compliance immediately or within a specified time period, or assess a civil penalty for any past or current violations of up to \$10,000 per day of non-compliance with each violation, or both; or (2) commence a civil action in District Court for appropriate relief, including a temporary or permanent injunction. Any such order may include a suspension or revocation of any permit issued by NMED.

Due to the nature and extent of the violations listed above, NMED will propose a civil penalty for these violations in its settlement offer, which I am sending you by separate letter. NMED requests a meeting with appropriate representatives of the Permittees for the purposes of negotiating a settlement relating to this Notice of Violation.

NMED requires that the Permittees submit to NMED within fifteen (15) days of receipt of this letter a written description of the actions that the Permittees have taken to address the violations described above, and a schedule for implementation for actions not yet completed.

Any action taken in response to this letter does not relieve the Permittees of their obligation to comply with any other applicable laws and regulations.

Dr. Moody and Mr. Sharif November 26, 2007 Page 4

If you have any questions regarding this letter, please contact Art Vollmer of my staff at (505) 476-6004. Please address any written response to the attention of Art Vollmer at the address in the letterhead.

Sincerely,

James P. Bearzi

Chief

Hazardous Waste Bureau

JPB:soz

cc: Art Vollmer, Manager, Compliance & Technical Assistance Program, NMED

Chuck Noble, Office of General Counsel, NMED

Sandra Martin, Environmental Supervisor, NMED

Carlos Romero, General Manager, District IV, NMED

Steve Holmes, Hazardous Waste Bureau, NMED

Steve Zappe, Hazardous Waste Bureau, NMED

File: Red WIPP '07