



SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
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



DAVE MARTIN
Secretary

BUTCH TONGATE
Deputy Secretary

January 31, 2012

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

Dear Commenter:

On January 31, 2012, the New Mexico Environment Department (NMED) took final administrative action on a Class 2 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 Hazardous Waste Bureau on October 3, 2011 seeking to update ventilation language, to add the use of shielded containers, and revise the groundwater detection monitoring plan.

NMED approved the ventilation modifications and groundwater modifications of this PMR with changes and for the reasons specified in the attached response to comments. NMED denied the shielded container portion of the PMR. NMED was unable to approve the shielded container modification "with changes" as allowed under 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(6)(i)(A)) because none of the commenters, including the Permittees, proposed sufficiently detailed changes to rectify the technical inadequacies identified. Furthermore, NMED was unable to reclassify this modification request to follow the procedures for Class 3 modifications specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(6)(i)(C)) because the request was not approvable as submitted.

This Class 2 PMR was evaluated and processed in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)). It was subject to a 60-day public comment period running from October 7, 2011 through December 5, 2011, during which NMED received written specific comments from eighty individuals and organizations. You are receiving this mailing because you provided public comment on this modification. The enclosed attachment incorporates NMED's specific response to all comments. Further information on this administrative action may be found on the NMED WIPP Information Page at <http://www.nmenv.state.nm.us/wipp/>.

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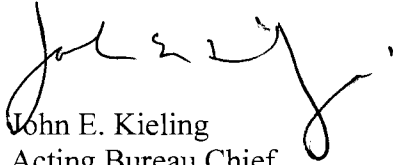


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NMED appreciates your participation by submitting comments on these permit modification requests. Please contact Trais Kliphuis at (505) 476-6051 or via e-mail at <trais.kliphuis@state.nm.us> if you have further questions or need additional information.

Sincerely,



John E. Kieling
Acting Bureau Chief
Hazardous Waste Bureau

Attachment

cc: Trais Kliphuis, HWB
Laurie King, EPA Region 6
Edward Ziemianski, DOE/CBFO
M. Farok Sharif, Washington TRU Solutions LLC

Response to Comments Received By NMED on the WIPP Class 2 Permit Modification Request

Comment Number	Topic Area	Comment Summary	Response	Δ
1-1	Class 2 PMR - Update Ventilation Language	SRIC's primary concern is that adequate ventilation always be maintained in the Underground Hazardous Waste Disposal Units (HWDUs). The concern is reinforced by the measured levels of volatile organic compounds (VOCs) in the Underground HWDUs during the past three years, which have exposed workers to higher levels of carbon tetrachloride than were contemplated when the permit was issued in 1999. SRIC's concerns about the request and the Temporary Authorization are that they could allow instances in which adequate ventilation is not maintained and that any such instances would not be reported to NMED. SRIC also believes that changes in permit language need to be carefully crafted so as not to be confusing or inconsistent with other provisions of the Permit. Further, based on the discussion at the pre-submittal meeting on August 30, 2011 and the information in the request, SRIC believes that there are few situations in which the existing permit language is not appropriate. Thus, any modifications to the Permit regarding ventilation should be minimal and necessary and not result in workers being allowed to emplace CH or RH waste in rooms when ventilation is less than 35,000 scfm.	See response to comment 7.	No
1-2	Class 2 PMR - Update Ventilation Language	Regarding the proposed new definition is Part 1.5.19 Filled Room, SRIC agrees with the language of the November 18 comments, not the proposed language in the request. The language in the comment is consistent with that of Part 1.5.16 Filled Panel. Thus, the Permit would state: 1.5.19. Filled Room "Filled Room" means a room in an Underground Hazardous Waste Disposal Unit as specified in Permit Part 4 that will no longer receive waste for emplacement.	Change incorporated.	Yes
1-3	Class 2 PMR - Update Ventilation Language	In the November 18 comments, the permittees also propose a new Part 1.5.20 Active Disposal Room that was not included in the request. SRIC believes that the practice of significantly revising a request with new language is undesirable for at least two reasons. First, it indicates that the request was not complete and accurate, which it must be. An incomplete request is grounds for denial by NMED, pursuant to 20.NMAC 4.1.900 (incorporating 40 CFR 270.42(b)(7)(i)). Second, the permittees' comments on requests are not widely disseminated by the permittees, so they are not available to the general public that could comment on the request. In this particular instance, SRIC asked for and received the permittees' comments from NMED, so we can comment on the proposed change. SRIC also recognizes that if public comment or other factors result in the permittees recognizing the need to revise the request, the permittees may comment on their own request. In the future, SRIC requests that the permittees post their comments on modification requests in the Information Repository on the WIPP Home Page http://www.wipp.energy.gov . Such public dissemination would allow interested persons to be aware of such comments.	Comments noted.	No
1-4	Class 2 PMR - Update Ventilation Language	SRIC does not agree with all of the language of proposed Part 1.5.20 Active Disposal Room. Specifically, the word "Disposal" is unnecessary and not consistent with other language in the Permit. For example, Permit Part 4.4.1. Room-Based Limits specifies that an "open room" is "active." The request proposes new language in Part 4.5.3.2. Ventilation with the language of "active room," which the permittees do not propose to change in their comments. Thus, the comment and the request are inconsistent. Moreover, SRIC is not convinced that a further definition of "active room" is necessary and urges that NMED not include such a new provision. If NMED decides to incorporate a new definition, SRIC would support: 1.5.20. Active Room "Active Room" means a room in an Underground Hazardous Waste Disposal Unit as specified in Permit Part 4 that contains emplaced TRU waste and is not a filled room.	Change incorporated. A definition for "Active Disposal Room" is warranted because it makes the Permit more clear and easy to interpret. NMED agrees that the term "Disposal" is not necessary or consistent with other sections of the Permit Modification Request (PMR) or the Permit. NMED also notes that other sections of the Permit use the phrases "open (active) room," "active disposal room," "active open room," and "active open disposal room." NMED interprets all of these to meet the definition of "Active Room" as incorporated into Permit Part 1, Section 1.5.20, and the Permittees should submit a Class 1 PMR to revise these sections to be consistent with this definition.	Yes

Response to Comments Received By NMED on the WIPP Class 2 Permit Modification Request

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1-5	Class 2 PMR - Update Ventilation Language	Regarding the specific proposed change to Part 4.5.3.2 in the request, SRIC could support the following language: 4.5.3.2. Ventilation The Permittees shall maintain a minimum running annual average mine ventilation exhaust rate of 260,000 standard ft ³ /min and a minimum ventilation rate of 35,000 standard ft ³ /min when workers are present in an active room adjacent to a filled room or in Room 7 of any panel, as specified in Permit Attachment A2, Section A2-2a(3), "Subsurface Structures (Underground Ventilation System Description)" and as required by 20.4.1.500 NMAC (incorporating 40 CFR 264.601(c)).	Comment noted. NMED used the following language so as not to remove the ventilation requirement for the active RH rooms when workers are present but make language consistent throughout permit. "4.5.3.2. Ventilation -The Permittees shall maintain a minimum running annual average mine ventilation exhaust rate of 260,000 standard ft ³ /min and a minimum active room ventilation rate of 35,000 standard ft ³ /min in each active room where waste disposal is taking place and when workers are present in the room, as specified in Permit Attachment A2, Section A2-2a(3) "Subsurface Structures (Underground Ventilation System Description)" and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.601(c))."	Yes
1-6	Class 2 PMR - Update Ventilation Language	The Permittees wish to include a definition for a Filled Room. 1.5.19 Filled Room "Filled Room" means a room in an Underground Hazardous Waste Disposal Unit as specified in Permit Part 4 that will no longer receive waste for emplacement.	Change incorporated.	Yes
1-7	Class 2 PMR - Update Ventilation Language	The Permittees seek to clarify that the language proposed in this modification establishes minimum ventilation rates for any active disposal room that is receiving CH TRU waste and any active disposal room that is adjacent to a filled room only. Ventilation rates for other rooms (active RH TRU waste disposal rooms not adjacent to a filled room) are not subject to the same minimum ventilation rates. However, such rooms are subject to the general requirements in the Permit that invoke the ventilation standards of the Mine Health and Safety Administration (MSHA). This is protective of human health because the MSHA requirements are based on the amount of air needed to accommodate the types and quantity of equipment that is operating in an area of a mine. Furthermore, RH TRU active disposal rooms are only subject to negligible quantities of hazardous emissions from containers of emplaced waste. An analysis demonstrating that these emissions are negligible was included as Supplement 3 to the 2002 RH TRU Waste Permit Modification Request.	NMED did not incorporate the changes that would allow workers to emplace waste in RH TRU active rooms with less than 35,000 scfm. NMED determined that removal of the ventilation requirement did not meet the Class 2 PMR category specifically, Item A.4.b of Appendix 1 of 40 CFR 270.42 (incorporated by 20.4.1.900 NMAC). In order to qualify under this category, the changes must relate to monitoring, reporting, sampling or maintenance. Also, see response to comment 5.	No
1-8	Class 2 PMR - Update Ventilation Language	The Permittees wish to include a definition for an Active Disposal Room. 1.5.20 Active Disposal Room "Active Disposal Room" means a room in an Underground Hazardous Waste Disposal Unit as specified in Permit Part 4 that contains emplaced TRU waste and is not a filled room.	See response to comment 4.	No
3-1	Class 2 PMR - Groundwater Detection Monitoring Program	Revised Table L-5 Page B-68 to correct table values so they match the values in the figures. Some editorial changes, such as rounding of numbers, were also made.	Change incorporated.	Yes
3-2	Class 2 PMR - Groundwater Detection Monitoring Program	Editorial correction to delete the word "Suggested" from the title of Table L-6 in the Table of Contents, PMR page B-12, as it is not in the title of the associated table.	Change incorporated.	Yes
3-3	Class 2 PMR - Groundwater Detection Monitoring Program	Editorial change to Figure L-4, Generalized Stratigraphic Cross Section Above Bell Canyon Formation at WIPP Site, to apply the correct color of sand and sandstone to the surficial deposits on the illustration.	Change incorporated.	Yes
3-4	Class 2 PMR - Groundwater Detection Monitoring Program	Editorial change to Figure L-5, Culebra Freshwater-Head Potentiometric Surface, to add a legend item to identify the green dots on the potentiometric map as observation wells.	NMED has decided to incorporate the original Figure L-5 that was included in the September Class 2 PMR submittal. The contour lines in the revised figure that was submitted with the November public comment from the Permittees were not as clear as in the original. The dots in the incorporated figure are labeled with the name of the observation well that they are referring to.	No

Response to Comments Received By NMED on the WIPP Class 2 Permit Modification Request

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3-5	Class 2 PMR - Groundwater Detection Monitoring Program	Editorial change to delete the acronym "WQSP" from the title of Figure L-6, Detection Monitoring Well Locations.	Change incorporated.	Yes
3-6a	Class 2 PMR - Groundwater Detection Monitoring Program	There is controversy over direction of groundwater flow at WIPP; detection wells to the west and southwest of the site should not be abandoned.	Comment noted. There are six Detection Monitoring Wells in the WIPP Groundwater Monitoring Program, WQSP 1 through WQSP 6. WQSP 1, 2, and 3 are located directly up gradient or north of the WIPP shaft and WQSP 4, 5, and 6 are located down gradient or south of the WIPP shaft. Wells WQSP 4, 5, and 6 are situated to detect a release of waste constituents. There are no plans to abandon any of the six Detection Monitoring Wells and the Permittees will continue to maintain them as required in Permit section 5.3.1 and 5.3.2. The Permittees are only reporting on down gradient wells because they are the only ones that can trigger actions leading to compliance monitoring. The compliance point is defined in 20.4.1.500 NMAC (incorporating 40 CFR 246.95) as the vertical plane immediately down gradient of the hazardous waste management unit areas. Conceptual models and the Annual Culebra Groundwater Report will demonstrate groundwater flow rate and direction. Evaluations will be made to check if groundwater flow continues to be in the direction of these down gradient wells. Data will also be evaluated to determine if the detection wells continue to be located in the proper areas.	No
3-6b	Class 2 PMR - Groundwater Detection Monitoring Program	The 'Annual Culebra Groundwater Report' should be available to the public and should include information concerning individual wells.	The Annual Culebra Groundwater Report will be available to the public. The Permittees will be required to submit this annual report by November 30 of each year. The report will include information concerning individual Culebra monitoring wells. Monitoring data for the other water-bearing units will continue to be available to the public in the Department of Energy's Annual Site Environmental Report.	No
3-6c	Class 2 PMR - Groundwater Detection Monitoring Program	Magenta wells should not be abandoned; Dr. David T. Snow and Dr. Richard Phillips claim a connection between the Magenta and the Culebra.	Comment noted. The Culebra Member is currently used to determine compliance with groundwater monitoring in the WIPP Permit. Published studies have shown a connection between the Magenta and Culebra approximately 6 miles west of the WIPP Site near Nash Draw. Groundwater monitoring has demonstrated a general north to south in groundwater flow at the WIPP Site therefore there is no pathway for water to travel to the area to the west where there is a Magenta/Culebra connection. The Culebra formation has the lowest head making it the most likely hydrologic pathway and should continue to be the focus for the RCRA groundwater monitoring program.	No
3-6d	Class 2 PMR - Groundwater Detection Monitoring Program	Changing Analytical methods merits a permit modification. Without methods approved of by NMED and the public, results will not be easily accepted by the public.	The Permittees have submitted this Class 2 PMR to make changes that they seek to the WIPP Permit. The Class 2 PMR process includes a 60-day public comment period and requires NMED to consider public comments prior to approving the modifications. The Permittees have included language in section L-4c(3) in regards to laboratory analysis, "The Permittees will establish the criteria for laboratory selection, including the stipulation that the laboratory follow the procedures specified SW 846 and that the laboratory follow EPA protocols unless alternate methods or protocols are approved by the NMED."	No
3-6e	Class 2 PMR - Groundwater Detection Monitoring Program	Page 12, pa 1 states that there has been 'no significant change in the nature of the Culebra water' even though the inexplicable rise and fall of Culebra well heads was a major issue, debated by hydrologists and extensively commented upon by the public during the last EPA re-certification.	Comment noted. This PMR seeks to include enhanced interpretation of the Culebra water levels in the form of annotated hydrographs and trend analysis in the semi-annual groundwater report. This enhanced interpretation will include identification and discussion of rises and falls of well head levels and thereby provide greater understanding of unique phenomena.	No

Response to Comments Received By NMED on the WIPP Class 2 Permit Modification Request

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3-7	Class 2 PMR - Groundwater Detection Monitoring Program	<p>SRIC recognizes that the Groundwater Detection Monitoring Program Plan must be revised to address concerns about the program and that NMED approved the Groundwater Permit Modification Work Plan on August 5, 2011.</p> <p>SRIC requests that the typographical error in the caption of Figure L-2 be corrected, as follows:</p> <p>Figure L-2 – WIPP Facility Boundaries Showing 16-square-Mile Land Withdrawal Boundary</p> <p>Table 1 on page 16 of the request correctly states that the Land Withdrawal Area (LWA) is 16 square miles. The List of Figures on page B-12 has the correct title. Section L-1 of the request, page B-16, correctly states that the LWA is 16 square miles. Existing Permit Figure L-2 caption is 16-square-miles, so the proposed caption in the request is clearly an erroneous typographical error that NMED should correct.</p>	Comment noted and change incorporated.	Yes
3-8	Class 2 PMR - Groundwater Detection Monitoring	Editorial correction, PMR Item 3, Revise the WIPP Groundwater Detection Monitoring Program Plan, Table L-5, Details of Construction for the Six Culebra Detection Monitoring Wells, to provide consistency in unit conversions and rounding and to correct one value for WQSP-6 drilling depth with error.	Change incorporated.	Yes
3-9	Class 2 PMR - Groundwater Detection Monitoring Program	Editorial correction, PMR Item 3, Revise the WIPP Groundwater Detection Monitoring Program Plan, Page B-31, Line 34. Insert, "or three well bore volumes, whichever occurs first," after "... parameters stabilize..." Either stabilization of field parameters or collection of three well bore volumes attains the sample quality required for laboratory analysis. This change makes this language consistent with the proposed text in Section L-4c(2)(ii).	Change incorporated.	Yes
3-10	Class 2 PMR - Groundwater Detection Monitoring Program	Editorial correction, PMR Item 3, Revise the WIPP Groundwater Detection Monitoring Program Plan, Page B-53, Lines 14 and 17. In line 14 move the "and" to be in front of "temperature" and delete the comma immediately after temperature. In Line 17 delete the text "and SC to 10 millivolts (mV)." The correct SC units are included earlier in the sentence and not needed here.	Change incorporated.	Yes