New Mexico Environment Department Response to Public Comments on the October 15, 2021 WIPP Class 2 Permit Modification Request February 11, 2022

On October 15, 2021, the Department of Energy (DOE) and Nuclear Waste Partnership (NWP) (together referred to as the Permittees) submitted a Class 2 Permit Modification Request (PMR) to the New Mexico Environment Department (NMED) requesting to revise the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Facility Permit (Permit) for the Waste Isolation Pilot Plant (WIPP) entitled *"Update Panel 8 Volatile Organic Compound Room-Based Limits."* The Class 2 PMR requested to update volatile organic compound (VOC) room-based limits for Panel 8 due to a change in room height.

The Permittees published a public notice on October 19, 2021 that commenced a 60-day public comment period, which ended on December 20, 2021. This document is the NMED response to public comments received on this PMR, as required by 20.4.1.901.A.9 NMAC.

<u>Table 1</u> of this document lists entities and persons who commented on the PMR. <u>Table 2</u> summarizes the comments received and contains NMED's responses thereto.

The comments submitted to NMED and other documents related to the final action can be found on the NMED WIPP webpage at the following link: https://www.env.nm.gov/hazardous-waste/wipp/.

Note: The Commenter ID in Table 1 corresponds to the Administrative Record (AR) number that identifies the comment in the Hazardous Waste Bureau's WIPP Facility Administrative Record. An individual comment may be found by searching for its AR number in <u>Facility Records</u>.

Table 1: List of Public Commenters

Commenter ID/AR #	Commenter	Association, if applicable	Date of Letter
211210.01	Cynthia McNamara		11/24/2021
211210.02	Gregory Corning, veteran		11/25/2021
211210.03	Dale Janway, Mayor	City of Carlsbad	12/3/2021
211210.04	Geri M. Rhodes, PhD		12/6/2021
211210.05	Sara Keeney/Chadron Kidwell, Presiding Co-Clerks	The Albuquerque Monthly Meeting of the Society of Friends	12/7/2021
211210.06	67 Postcards Received:		12/14-16/2021
	Jeff Brown		

Commenter ID/AR #	Commenter	Association, if applicable	Date of Letter
	Micela Stegman		
	Kimberly Mull		
	Alisa Werst		
	Brandy Lee		
	S. Carr		
	Ken Nelson		
	Alberta Farmer		
	Walter Rodriquez		
	J.J. Foster		
	Deana Pearce		
	Sirge Darling		
	Jerry Foster		
	John Sanford		
	Sidney Vasquez		
	P.D. Hamel		
	Sting		
	Andy Parcham		
	Bonnie Barres		
	P. Medina		
	Angela Najeron		
	McKenna Brown		
	Curtis Chester		
	Hall		
	Sam Christensen		
	Steven Gordon		
	Williams		
	Maelene Soto		
	Kennedy		
	Sonia Garcia		
	LTR		

Commenter ID/AR #	Commenter	Association, if applicable	Date of Letter
	Albert Rodriquez		
	S. Britain		
	E. Boyd Daniels		
	Robert Garcia		
	Mencia Davidson		
	Matt Castro		
	D. Martin		
	John G. Helton		
	Gary Chisum		
	Steve Bartlett		
	E. Mockli		
	Brad Coracey		
	J. Callison		
	Rodriquez		
	Joseph M. Vottis		
	S. Gianti		
	Chris Jones		
	Mike Proctor		
	David E. Fredrick		
	Kevin S. Creech		
	Dowd Bright		
	Eric Chavez		
	J. Howard		
	Monte Aurty		
	M. Padilla		
	Amy Munoz		
	Bruce Jeffress		
	Derek Tweedy		
	Martha M. Mc Farland		
	Lisa Ciszek		1

Commenter ID/AR #	Commenter	Association, if applicable	Date of Letter	
	Joseph Randazzo			
	R W Bailey			
	Nicholas Hanni			
	Roy Neese			
	C. Suggs			
	Paul J. Paneral			
211210.07	Basia Miller	Concerned Citizens for Nuclear Safety (CCNS)	12/19/2021	
211210.08	Laura Watchempino		12/20/2021	
211210.09	Group Letter from 18 Commenters:		12/20/2021	
	Joni Arends	CCNS		
	Scott Kovac	Nuclear Watch New Mexico (NWNM)		
	Don Hancock	Southwest Research and Information Center (SRIC)		
	Dave McCoy	Citizen Action New Mexico		
	Marian Naranjo	Honor Our Pueblo Existence		
	Robert Anderson, PhD	Stop the War Machine		
	Susan Gordon	Multicultural Alliance for a Safe Environment		
	Joan Brown, osf	The Partnership for Earth Spirituality		
	Rose Gardner	Alliance for Environmental Strategies		
	Alejandria Lyons, MCRP	Southwest Organizing Project		
	John Wilks	Chapter #63 Veterans for Peace		
	Mary Sharp-Davis	Manos de la Tierra		
	Demis Foster, Executive Director	Conservation Voters New Mexico		
	Leona Morgan	Nuclear Issues Study Group		
	Janet Greenwald	Citizens for Alternatives to Radioactive Dumping (CARD)		
	Susan Martin, Chair	Rio Grande Chapter, Sierra Club		
	Dr. Virginia Necochea, Executive Director	New Mexico Environmental Law Center		
	Sandra McCardell, President	Current-C Energy Systems, Inc		
211210.10	Don Hancock	SRIC	12/20/2021	

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R1 In Support/ Postcards	211210.03 211210.06	Commenter Janway supports the PMR stating the request is straight-forward and intended to provide the same level of worker protection from VOCs for Panel 8 as has been established for previous panels. 67 postcards were received from commenters in support of the PMR. The identical postcards stated: <i>"The change is needed to address the larger dimensions of Panel 8 and the resulting additional air volume in each roomLowering the VOC limits provides an equivalent level of worker protection in Panel 8 as was required for Panels 1 through 7."</i>	Comments received.
R2 General Opposition	211210.01 211210.02 211210.04 211210.05 211210.07 211210.08 211210.09 211210.10	Two different form letters in opposition to the PMR were received by NMED and have been designated as Form Letters A and B. The main content of these form letters is evident across letters received from different commenters while some additions and/or style changes were noted. Both form letters expressed general opposition to the Class 2 changes, among other issues. Form Letter A requests the PMR be denied or elevated <i>"to a Class 3, which subjects the request to a public hearing if significant public concern is shown."</i> Form Letter B was written as a group letter signed by 18 individuals representing their associated organizations. It opposes the PMR and requests the PMR be either denied or elevated to a Class 3 based on significant public concern.	NMED has determined this PMR to not be of a "complex nature" which would warrant its elevation to a Class 3 per 40 CFR 270.42.b.6.i.C.2. NMED has determined, based on the public comments received, that "significant public concern" over this PMR is not supported, which would warrant its elevation to a Class 3 per 40 CFR 270.42.b.6.i.C.1.

Table 2: Summaries of Public Comments and NMED Responses

NMED Response Number/ Topic Area	Commenter ID/AR #	Public Comment	NMED Response
		Commenter Rhodes opposes the PMR and requests for it to be either denied or elevated to a Class 3 PMR. Commenter Hancock opposes the PMR and asks NMED to either deny it or consider it under Class 3 procedures. The commenter believes the 2021 example of the NMED Groundwater Quality Bureau allowing a hearing on Discharge Permit DP-831 based on a handful of requests from organizations should serve as precedent here.	
R3 Height Change	211210.05 211210.08 211210.09 211210.10	Form Letter B states that a violation of the Permit has occurred because Panel 8 was mined to a height of 16 feet rather than the 13-foot height of previous panels, citing Permit Attachment A, Section A-4: <i>"The WIPP underground area is designated as Panels 1 through 10, although only Panels 1 through 8 will be used under the terms of this permit. Each of the seven rooms is approximately 300 feet long, 33 feet wide and 13 feet high."</i> Commenter Hancock states, <i>"the Permittees have mined Panel 8 rooms to 16-feet high, contrary to the provisions of the Permit, which constitutes clear and continuing violations of various Permit provisions."</i>	The Permit describes disposal room dimensions using imprecise terms. Permit Attachment A3, Figure A-3 and Permit Attachment G, Figure G-5 depict a typical disposal panel. The 13-foot room height dimensions shown are referred to as "nominal" dimensions. Similarly, in Permit Attachment A2, Section A2-2a(3), disposal rooms are described as having "nominal" dimensions. Permit Attachment N, Section N-1a uses the qualifier "approximately" to describe disposal room dimensions. Permit Part 4, Section 4.5.1 requires the disposal room excavations to be consistent with Permit Attachment A2 and Attachment A3. Permit Attachment A3 contains Figure A-3, displaying the disposal horizon stratigraphy. The disposal rooms must exist within the disposal horizon envelope which extends above Clay G. Item 3 of the PMR describes how Panel 8 was mined within this disposal horizon envelope.

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			Permit Attachment A2, Section A2-2b <i>Geologic</i> <i>Repository Process Description</i> describes how the disposal rooms must be mined to room heights designed to accommodate the design basis requirements for a minimum of 16 inches of ventilation space above the waste stacks and a 12- foot minimum height for the use of storage equipment as detailed in the Final Design Validation Report (Appendix D1, Chapter 12 of the WIPP RCRA Part B Permit Application (DOE, 1997)). Rooms may need to be excavated to differing heights depending on geological conditions which was the case with Panel 8. As long as the disposal rooms fall within the "Disposal Horizon Envelope," greater heights still maintain the required 16 inches of ventilation space above the waste stacks. The Permit does contain specific requirements for disposal rooms that include the following: disposal volumes in Part 1, Part 4, and Attachment A2; VOC limits in Part 4 and Attachment N; and ventilation in Part 4, Attachment A2, and Attachment O. The Permit does not contain descriptions of disposal room dimensions in precise terms. The Permit describes the 13' high x 30' wide x 300' long dimensions using the general terms "nominal" or "approximate" because the Permit anticipated disposal rooms could not be held to those exact specifications due to the nature of the geology.

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			Per Permit Part 1, Section 1.7.11.2.i and Section 1.7.11.2.ii, Panel 8 will be inspected for certification by the Permittees and a New Mexico registered professional engineer to determine Panel 8 has been excavated in compliance with Permit requirements. NMED is anticipating an inspection of Panel 8 in the May-June 2022 timeframe. NMED will inspect Panel 8 before the Panel will be certified to receive TRU mixed waste.
R4 Explanation of Need	211210.01 211210.02 211210.07 211210.10	Form Letter A states that DOE has violated Permit conditions by not providing an adequate explanation of the reason for the room height change in Panel 8. Commenter Hancock believes the provisions at 20.4.1.900 NMAC, which require a PMR to provide an explanation for the reason for why the modification is needed, have not been met. The commenter believes DOE has violated Permit conditions by not providing an explanation for why certain violations of the Permit were committed by the Permittees, as summarized for the commenter in R5 and R6.	The need for this PMR exists because new calculations were needed to ensure the same level of worker protection in regard to room-based VOC limits. The Permittees provided a thorough explanation of the need for the Class 2 changes under item 3 in the PMR, per 20.4.1.900 NMAC (incorporating 40 CFR §270.42.b.1.iii).
R5 Notification	211210.01 211210.02 211210.05 211210.07 211210.08 211210.09 211210.10	Form Letter A states that DOE has violated Permit conditions by not providing notice to NMED about the room height change. Form Letter B, as well as commenter Hancock, state that the Permittees did not notify NMED of the height change and believe this violates the planned change notice condition at Permit Part 1, Section 1.7.11.1 and the notice of noncompliance condition at Permit Part 1, Section 1.7.11.2.	Per Permit Part 4, Section 4.5.2.2, NMED received written notification of the projected start date of excavation for Panel 8 on June 17, 2013. Since that time, the Permittees have provided NMED with oral updates on the progress of Panel 8 excavation.

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R6 VOC Statements in Other Submittals	211210.05 211210.08 211210.09 211210.10	Form Letter B, and commenter Hancock, reference the March 30, 2020 WIPP Ten-Year Renewal Application and the July 30, 2021 Class 3 PMR for Panels 11 and 12 (which is being consolidated into the Renewal process) to point to instances where the Permittees state no changes to VOC room-based limits will occur. Commenters believe these statements to be inaccurate since mining of Panel 8, with new room heights, began ahead of the two referenced submittals.	Through discussions with the Permittees, NMED understood that the Permittees had not evaluated the need for VOC calculation changes nor run the model for the VOC calculations with the new room height when the Renewal Application was submitted ahead of schedule per NMED request. Once the model was run, the Permittees became aware of the need to submit a Class 2 PMR to update the Permit based on the calculations for Panel 8. Appendix C of the PMR describes the basis for this update. The language referenced in the Class 3 PMR for Panels 11 and 12 regarding VOC room-based limits will be corrected with submittal of the updated redline-strikeout requested by NMED for consolidation of this PMR with the Renewal Application.
R7 VOC Limits	211210.07	Commenter Miller asks, "Why are the parts per million [by volume] (PPMV) for Panel 8 VOCs only 1/3 or ½ of the PPMV for Panels 1-7?"	The Permittees are modifying the action levels for VOCs in Panel 8 because the disposal room dimensions will be increased due to an increase in nominal room height from 13 feet to 16 feet. The VOC action levels for Panel 8 will provide at least the same level of hazard protection to the worker as the action levels for Panels 1-7. The proposed room- based action levels for Panel 8 are generally lower than the levels for Panels 1-7 (the PPMV referred to by the commenter), resulting in greater hazard protection because the measured concentration of VOCs cannot exceed this lower limit. Appendix C of the PMR describes the basis for this update.

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R8 Issues for Renewal	211210.04 211210.10	Commenter Rhodes states concern over the closure date for the WIPP facility, as well as transportation concerns. Commenter Rhodes states opposition "to any move that would result in New Mexico's taking on the burden of the nation's and possibly other countries' nuclear waste which needs to be stored safely on site where it is now located." Commenter Hancock discusses the Ten-Year Permit Renewal and the need to prioritize this action.	Closure date and transportation concerns, as well as opinions on which waste should be eligible for WIPP disposal, would be better expressed when commenting on the WIPP Ten-Year Renewal Draft Permit which will be issued by NMED sometime this year. These issues are outside the scope of this PMR. NMED concurs that the Permit Renewal is a priority and is actively working on this action at present.
R9 Change in Attachment A	211210.10	Commenter Hancock notes that Permit Attachment A, Section A-4 would also need to be modified to accurately describe the room height difference between panels 1 through 7 and panel 8.	NMED Change: The Permit requirement for repository design in Permit Part 4, Section 4.5.1 does not reference Attachment A, Section A-4, which serves as a broad overview of the facility. However, NMED has updated language in Permit Attachment A, Section A-4 for consistency.
R10 Pre-Submittal Meetings	211210.10	Commenter Hancock expresses disappointment that a townhall was held rather than a pre-submittal meeting ahead of the submittal of this PMR.	 While there is no regulatory requirement for a pre- submittal meeting in regard to Class 2 PMR submittals, NMED does note this is a change from over ten years of pre-submittal meetings that the Permittees have held. The Permittees held a public townhall meeting on October 12, 2021 as a courtesy, as well as the regulatorily- required public meeting on November 9, 2021. NMED continues to encourage public participation.