

**New Mexico Environment
Department
Response to Public Comments on the
November 29, 2017 WIPP Class 2 Permit Modification
March 23, 2018**

On November 29, 2017, the Department of Energy (DOE) and Nuclear Waste Partnership (NWP) (together referred to as the Permittees) submitted a Class 2 Permit Modification Request (Permit Modification Request or Request) to the New Mexico Environment Department (NMED) requesting to modify the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Facility Permit (Permit) for the Waste Isolation Pilot Plant (WIPP Facility or WIPP).

The areas of modification for this Request are:

- Training Program Revision; and
- Changes Due to Construction and Operation of a New Filter Building.

Item 1 seeks to:

- Improve the maintenance of the WIPP Facility training curriculum to ensure that it is current with applicable external regulations and standards (e.g., National Fire Protection Association (NFPA), Mine Safety and Health Administration (MSHA), DOE Orders);
- Eliminate training requirements within the Permit for job titles that are not directly related to Transuranic (TRU) mixed waste management and/or emergency response;
- Allow the Permittees to make administrative changes to job titles and descriptions, training curriculum, and qualification cards in a timely manner;
- Ensure consistency with the *Systematic Approach to Training* (SAT) described in the *WIPP Training Program*; and
- Relocate the *Waste Analysis Plan* (WAP) training requirements for non-facility personnel to the appropriate area of the Permit.

Item 2 seeks to:

- Upgrade the Underground Ventilation Filtration System so that it will have sufficient ventilation capacity to support simultaneous mine maintenance, mining, and waste emplacement operation, the design of which serves three functions:
 1. Provide sufficient airflow to the mine for personnel life-safety requirements;

2. Direct and filter potentially contaminated air to mitigate the release of airborne contaminants; and
 3. Incorporate sufficient redundancy to facilitate maintenance outages and filter changes with minimum impact on waste management activities; and
- Document the analysis of the impact of new stack location/height on Volatile Organic Compound (VOC) monitoring.

The Permittees published a public notice on December 3, 2017 regarding submission of the Request. The publication started a 60-day public comment period which ended on February 1, 2018. This document is the NMED response to public comments received on this Request, as required by 20.4.1.901.A(9) NMAC.

Table 1 of this document lists persons and entities who commented on the Request.
 Table 2 summarizes the comments received and contains NMED’s responses thereto.

Table 1: List of Public Commenters

Commenter ID	Date of Letter, Email or Comment	Commenter (and Association, if Applicable)
A	1/16/2018	Dale Janway, Mayor of City of Carlsbad
B	1/16/2018	John Heaton and Dave Sepich, Carlsbad Mayor's Nuclear Task Force
C	1/29/2018	Russell Hardy, Director Carlsbad Environmental Monitoring and Research Center
D	2/1/2018	Todd Shrader, Manager DOE Carlsbad Field Office and Bruce C. Covert, Manager Nuclear Waste Partnership, LLC
E	2/1/2018	Scott Kovak, Nuclear Watch New Mexico
F	2/1/2018	Don Hancock, Southwest Research and Information Center (SRIC)

Table 2: Summaries of Public Comments and NMED Responses

Commenter ID	Topic Area	Public Comment	NMED Response Number	NMED Response
General Comments				
A, B	In Support for both Item 1 and Item 2	The commenters state that the proposed changes will make improvements to the WIPP facility and encourage the safety of its employees and the public.	R1	Comments noted.
C	In Support for both Item 1 and Item 2	The commenter states that the majority of proposed changes do not affect the Permit (including the training program changes, the modification of the Property Protection Area, changes to fire-water distribution system, staging area and evacuation routes, and the list of emergency equipment) and should be approved by NMED.	R2	Comments noted.
E	Request Should Include Other Items	The commenter is proposing that this modification should be elevated to a Class 3. The commenter states there are several modifications either already submitted or proposed, and these issues should all be considered in conjunction with one another. The commenter states if these modifications were considered together, the waste capacity of WIPP would increase by more than 25% hence the need for an elevation to a Class 3. The commenter would like the following items to be considered together in one	R3	In accordance with the RCRA regulations, NMED can only review proposed modifications as they are submitted and received. NMED may approve, approve with changes, deny, or elevate a permit modification request. NMED does not determine which, and how, modifications are submitted by a Permittee.

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	(Continuation from Above)	modification: new shaft, new filter building, revised training, revised filled panel waste volume of record, updates and efficiencies, excluded waste prohibition, addition of concrete overpack aboveground storage, panel closure re-design, and additional waste disposal panels. The commenter states, "Clearly, all of these point to the need for an 'Expand WIPP' Permit Modification Request."		
F	Appreciation of Draft for Review and Pre-submittal Meeting	The commenter appreciates that the Permittees provided a draft of the proposed request and that the Permittees as well as NMED met with stakeholders. The commenter continues to believe that such meetings are useful and supports continuing that "standard" practice in the future.	R4	Comment noted.
	Comments specific to Item 1			
A, B	In Support	The commenters state that the proposed changes to the training permit will improve the efficiency of WIPP's curriculum and allow WIPP's operators to make changes to titles and descriptions in a timely manner.	R5	Comments noted.

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D	Deletion of Text for Consistency	The commenter (the Permittees) would like to ensure consistency with the changes proposed to the Permit Attachment E, Tables E-1 and E-1a, in the permit modification request. An additional revision to Section E-1, <i>Inspection Schedule</i> , is proposed by removal of the following text: "personnel making the inspection (by job title)".	R6	The recommended edit has been reviewed and incorporated.
F	In Support with Clarifications	The commenter does not object to the proposed changes in the training program but does object to some of the justification language in the request. The commenter would like NMED to approve these changes while making clear that the training requirements that have been in the Permit since its inception have always been appropriate and in compliance with regulatory requirements.	R7	Comments noted. The training requirements in the Permit have complied with and been consistent with RCRA regulations since the original Permit was issued in 1999. This modification will allow the Permittees to improve the efficiency of the training program and allow any changes to content to be made in a timely manner.
	Comments specific to Item 2			
A, B	In Support	The commenters state that the upgraded Underground Ventilation System will ensure that WIPP has sufficient ventilation capacity to support mining and waste emplacement operations at the same time. Furthermore, this system will direct and filter potentially contaminated air.	R8	Comments noted.

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C	In Support	<p>The commenter states that the proposed changes to the ventilation system, including the addition of a new filter building, are needed to restore the ventilation flow rate to support simultaneous mining and emplacement activities. This commenter also states that the current monitoring stations at Station A and Station B are several decades old and are nearing the end of their useful lives; therefore, this proposed modification would correct several issues currently faced at the facility such as the replacement of the pre-HEPA and post-HEPA monitoring stations as well as providing sufficient airflow in the underground by surpassing the previous 460,000 scfm ventilation flow rates and allowing the facility to operate at this higher level in a continuously filtered mode thereby adding additional protections for the workers and the environment while also allowing simultaneous activities to be conducted in the underground (i.e. mining and waste emplacement).</p>	R9	Comments noted.
D	An Edit to the Calculated Property Protection Area	<p>The commenter (the Permittees) would also like to provide a more accurate value for the increase in the Property Protection Area resulting from the construction of the New Filter Building. The Permittees propose a further revision to Permit Attachment A, Section A-3, <i>Property Description</i> to change this area from 40 acres to approximately 44 acres.</p>	R10	The recommended edit has been reviewed and incorporated.

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E	Questions on Future Radiological Releases	The commenter postulates whether another radioactive release would cause this new filter building to become inoperable. The commenter would like to be provided an exact description of what happens in the underground during a radiological release.	R11	According to the Request, the new filter building is designed to provide sufficient airflow to ensure worker safety during mining and emplacement operations, and provide sufficient filtration in the event of a future radiological release. The commenter is free to request further descriptive information from the Permittees.
E	Questions on Future Radiological Releases	The commenter would like Part 4, Attachment A2, and Attachment N, which addresses prevention of releases to the atmosphere, to be updated.	R12	The commenter does not provide technical evidence or specific detail when stating that these sections need to be updated. NMED notes that Permit Part 4 and Attachment N are proposed for revision in the draft Permit regarding Panel Closure currently available for public comment. Additionally, NMED notes that Permit Attachment A2 is being revised in this Class 2 modification and will be updated further once the NFB is operational. Please see NMED Response R18.

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E	Additional Information on the Salt Reduction Building	The commenter would like further information on the Salt Reduction Building including whether the removed salt is contaminated, whether the salt is tested for contamination, and what would be done with any contaminated salt?	R13	NMED has introduced descriptive language to the permit concerning the Salt Reduction Building. Please see NMED language in Attachment A2.
F	Concern for Adequate Ventilation	The commenter states that the existing lack of adequate ventilation is a definite worker health and safety problem, which should have been addressed before underground waste operations were re-started.	R14	Comment noted. Adequate ventilation in the underground is specified by the Mine Safety and Health Administration (MSHA). MSHA and the DOE WIPP Industrial Hygiene (IH) Program address worker health and safety in the underground. Adequate ventilation in the Permit is 35,000 standard cubic feet per minute (scfm) of air flow in an active room when waste emplacement is taking place and workers are present in the room. The Permittees have been able to achieve this ventilation flow rate as required.
F	Request is Incomplete	The commenter supports the construction of a new filter building but believes the request is incomplete, and should be re-submitted, or that NMED should approve the request with significant changes and parts of the submittal denied.	R15	NMED has reviewed the Request and has determined that it is complete. NMED has introduced specific descriptive language in Permit Attachment A2 regarding the Salt Reduction Building.

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F	Atmospheric Modeling	<p>The commenter believes the modeling is inadequate and would like the Permittees to use the five-year data set (2012-2016) for their technical analysis rather than the data set from 2009-2013, as climate change and changing weather patterns may alter the modeling. The Permittees should be required to either use the most recent data set in their modeling or to demonstrate (not simply assert) that the most current data is actually “equivalent” with the data set used in the modeling. Without using either the current data or demonstrating the equivalence, the request is inadequate, because protection of worker and public health is not assured. Thus, adequate technical basis is not provided, and the request should be rejected.</p>	R16	<p>The five years of meteorological data (2009-2013) were modeled using on-site data provided by the Permittees. The Permittees made the decision to use this data set to allow for a comparison by WIPP personnel of the results of modeling of the New Filter Building stack to that of current Station B. The Permittees preferred to use the same five-year meteorological file that was used for this evaluation in 2014. See Appendix C of the Request.</p> <p>The Environmental Protection Agency’s (EPA’s) preference for site-specific meteorological data is documented in EPA’s <i>Guideline on Air Quality Models</i> 40 CFR Part 51. Section 8.3.1.2 (b) states: “The use of 5 years of NWS [National Weather Service] meteorological data or at least 1 year of site specific data is required. If one year or more (including partial years), up to five years, of site specific data is available, these data are preferred for use in air quality analyses.” Although EPA’s preference is to use the most recent five-year weather dataset (Section 8.3.1.2a), it is not a requirement based on Section 8.3.1.2b.</p>

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	(Continuation from Above)			NMED has independently verified the modeling performed by the Permittees in their request.
F	Ventilation Monitoring	<p>The commenter objects to removing provisions in Permit Attachment O, WIPP Mine Ventilation Rate Monitoring Plan, and believes there is insufficient monitoring of ventilation flow. Further, the commenter believes that there is no reason to remove the ventilation rate monitoring plan, which provides a level of safety for workers and the public by ensuring that adequate ventilation is maintained. Monitoring of ventilation flow also is required for safe operation of the facility, as is Central Monitoring Room Operator’s Log, so it is appropriate to maintain those requirements. The Permittees apparently are trying to take the opportunity of this request for a NFB to remove unrelated provisions of the Permit, for which adequate justification has not been required. If the removal of the provisions was required or necessary, it should have been included in the Class 2 modification request package of September 8, 2015. The removal was not necessary or required then, and it is should not be necessary or required now, so those proposed changes should be denied. The commenter also believes the Central Monitoring Room Operator’s Log should be maintained. The commenter would like</p>	R17	<p>The proposed removal of the Total Mine Air Flow from Permit Attachment O is related to the calculation of the Running Annual Average (RAA), that was proposed for removal in a 2015 Class 2 Permit modification request which was subsequently approved, with changes, in January 2016. The WIPP Mine Ventilation Rate Monitoring Plan (Permit Attachment O) is not being removed, only revised. NMED has reviewed the proposed changes in Permit Attachment O and has determined that such changes are appropriate.</p> <p>Regarding the Central Monitoring Room Operator’s (CMRO) Log, the active room ventilation rate and associated details (i.e., date, start time, end time, and reason) will continue to be recorded in the Log and reported to the NMED as required by Permit Attachment O, Section O-5a. The commenter may request details of actual</p>

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	(Continuation from Above)	details about the actual cubic feet per minute of airflow to be provided by the new filter building.		airflow associated with the new filter building from the Permittees. The Permit does not require this information to be submitted to NMED, as there are no Permit requirements associated with this information. Please see NMED Responses R14 and R18.
F	Ventilation Monitoring	The commenter states, "Similarly, the proposed deletions and changes in Permit Attachment A2-2a(3) are inappropriate and should not be approved. For example, "sufficient airflow" and "sufficient ventilation airflow" are insufficiently detailed as compared with actual air flow standards that have always been in the Permit. SRIC would not object to adding details about the 540,000 actual cubic feet per minute (acfm) that the permittees state will be installed with the NFB.	R18	To clarify, the air flow standard associated with the Permit is listed in Permit Part 4, Section 4.5.3.2 and states, "The Permittees shall maintain a minimum active room ventilation rate of 35,000 standard ft ³ /min (scfm) in each active room when waste disposal is taking place and workers are present in the room." Other air flow standards once in the Permit were proposed for removal in a 2015 Class 2 modification request that was approved, with changes, by NMED in January 2016. NMED has reviewed the current Request and has determined that there is not enough information to support the incorporation of all the proposed changes to Permit Attachment A2, Section A2-2a(3). NMED has incorporated the proposed language regarding the description of the New Filter Building

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	(Continuation from Above)			(NFB) and has introduced further description of the Salt Reduction Building. NMED notes that Permit Attachment A2 will be further updated once the NFB is operational.
F	Ventilation Monitoring	The commenter believes the proposed deletion in Attachment E, Table E-1 is not appropriate, and should not be approved and that ventilation exhaust inspections must be done for the safe operation of the facility, and such inspections should continue to be required by the Permit.	R19	The Permit-required inspections for verifying minimum ventilation airflow through an active disposal room will continue to take place and recorded per Permit Part 4, Section 4.5.3.2 and Permit Attachment O. When the Running Annual Average (RAA) mine ventilation rate monitoring was removed from the Permit through a 2015 Class 2 modification that was approved in January 2016, the Permit no longer required ventilation rate monitoring and ventilation exhaust equipment inspections. This item in Table E-1 should have been included for removal in the 2015 permit modification request. NMED has reviewed the current Permit modification request and has determined that the ventilation exhaust inspections that were associated with the RAA are no longer applicable in the Permit. Please see NMED Response R18 above.

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F	Closure Plan Concerns	<p>The commenter objects to using the NFB as the basis for a significant change to the closure plan related to decontamination and decommissioning (D&D) of some of the structures and equipment, including those totally unrelated to the proposed D&D activities regarding the NFB. As the request admits on page 8, such early D&D was not supposed to occur until final facility closure. If NMED approves the modification request, it should also require a future request specific to all changes in the closure plan that are needed as a result of the 2014 fire and radiation release, including those mentioned in this request, or require that a more comprehensive request be included as part of the forthcoming permit renewal. Piecemeal changes in the closure plan are not appropriate so many years before the closure plan is implemented. The impacts of the 2014 events on the closure plan should be looked at comprehensively so that the Permittees, NMED, and public resources are focused on determining what changes are required in the Permit.</p>	R20	<p>NMED does not categorize the requested modification as a significant change to the Closure Plan. The Permit specifies that the "Closure Plan will be amended prior to the initiation of closure activities to specify the methods to be used." The intent of the Closure Plan has always been to dispose of equipment and materials that cannot be decontaminated but that meet the treatment, storage, and disposal facility waste acceptance criteria (TSDF-WAC). See Permit Attachment G, Section G-1e(2).</p>
F	Closure Plan Concerns	<p>The commenter believes the proposed new language in G-1e(2)(c)(2) must be denied. The commenter believes the language is not specific enough, the need has not been established, and it does not fully include the changes that the Permittees want.</p>	R21	<p>The level of detail in the proposed language in Permit Attachment G, Closure Plan, Section G-1e(2)(c) is consistent with the current Permit language in this section. NMED recognizes that partial closure was not anticipated by the Permit when it was</p>

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	(Continuation from Above)			originally issued, and therefore the Closure Plan needs to be updated.
F	Closure Plan Concerns	The commenter states both the Land Withdrawal Act (LWA) and the Permit place limits on the volume of waste that can be emplaced in WIPP. The Permit also requires waste to be characterized and prohibits certain materials and chemicals in Permit Section 2.3.3. The commenter believes that "[w]hat the permittees apparently want is a blank check to emplace whatever contaminated material, structures, and equipment in whatever volumes and in any uncontainerized fashion."	R22	This Request is not associated with volumes referenced in the Permit.
F	Closure Plan Concerns	The commenter does not feel this modification is the appropriate place to address changes to the closure plan. The commenter would like the 2014 radiological event to be addressed, as well as any debris waste to be characterized before emplacement, when the closure plan is updated. The commenter feels the appropriate place for such an update would be the Permit Renewal or a new modification request specifically addressing the closure plan. The commenter believes proposed language contains no provisions for characterization, no means to determine whether the waste meets those TSDF-WAC requirements, no determination that it meets the	R23	Comment noted. NMED processes Permit Modification Requests as submitted by permittees, and does not mandate when and how permittees can submit such requests.

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	(Continuation from Above)	container requirements of the Permit. NMED must deny this part of the request and instead inform the Permittees that they must submit a new modification request regarding all the proposed changes in the closure plan.		