

**New Mexico Environment Department
Response to Public Comments on the
June 3, 2016 WIPP Class 2 Permit Modification
September 2016**

On June 3, 2016, the Department of Energy (DOE) and Nuclear Waste Partnership (NWP, together referred to as the Permittees) submitted a Class 2 Permit Modification Request (Modification) 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 (Facility).

The areas of focus for this Request are:

- Item 1) Revision of the RCRA Contingency Plan and Associated Emergency Response Personnel Training; and
- Item 2) Modification of the Active Waste Disposal Room Ventilation Flow Rate.

Item 1 seeks to: facilitate the RCRA Emergency Coordinator's ability to make an immediate decision regarding implementation of the *RCRA Contingency Plan* by simplifying the implementation criteria; revise descriptions of notification and reporting procedures to ensure that NMED is immediately notified whenever there is an event that could potentially threaten human health or the environment; remove extraneous information that is redundant, found elsewhere in the Permit, or not specifically required by the regulations; revise Table D-6, *Emergency Equipment Maintained at the Waste Isolation Pilot Plant*, to include updated information, provide clarification, and ensure consistency with applicable standards; revise Attachment E, Table E-1, *Inspection Schedule, Process and Forms*, to include updated information, consistent with changes made to Table D-6; revise Attachments F, *Personnel Training*, F1, *Hazardous Waste Management Job Titles and Descriptions*, and F2, *Training Courses and Qualification Card Outlines*, to update and make consistent with revised emergency response job titles and descriptions; and to make editorial changes and other appropriate revisions to ensure accuracy of the Permit text and internal consistency within the revised *RCRA Contingency Plan*.

Item 2 seeks to provide the Permittees with the ability to implement measures in situations where the active room ventilation rate of 35,000 standard cubic feet per minute (scfm) cannot be met during waste disposal operations when workers are present. One proposed measure will provide look up tables when VOC concentrations based on 35,000 scfm, as found in the Permit Part 4, Table 4.4.1 cannot be met. The look up tables specify VOC concentrations at active room ventilation rates less than 35,000 scfm and maintain the same level of worker protection as currently described in the Permit. This is in lieu of suspending waste disposal operations. Implementing measures will be prescribed in standard operating procedures. These measures may include, but are not limited to the adjustment of the volatile organic compound (VOC) Immediately Dangerous to Life or Health (IDLH)-based action levels in the Permit, Section 4.6.3.2., in direct proportion to the actual flow rate that is less than 35,000 scfm, unless further restricted by the Lower Explosive Limit (LEL), or use of personal protective equipment (PPE) as described in the Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.134. Implementing measures taken at the Facility regarding the 35,000 scfm ventilation flow rate will be recorded in the Facility log and reported to NMED in the annual Mine Ventilation Rate Monitoring Report required by Permit Attachment O. Waste emplacement activities conducted below 35,000 scfm and associated implementing measures will also be reported to NMED within 15 days after each occurrence. Item 2 also seeks to provide the Permittees the ability

to propose an alternative remedial action plan to the Secretary in lieu of closing the active room if the requirements of Permit Part 4, Section 4.6.3.3 cannot be met.

The Permittees subsequently published a public notice on June 8, 2016 regarding submission of the Class 2 Request. This publication started a 60-day public comment period which ended on August 8, 2016. This document is the NMED response to public comment on this Class 2 Request, as required by 20.4.1.901.A(9) NMAC.

Table 1 of this document lists entities and persons who commented on the Class 2 Permit Modification Request.

Table 2 summarizes the comments received and contains the NMED’s responses thereto. The original comments and any attachments that were submitted to NMED can be found at the following link:

<https://www.env.nm.gov/wipp/documents/PublicCommentsonWIPPJune2016Class2.pdf>

Table 1: List of Public Commenters

Commenter ID	Date of Letter, E-mail or Comment	Commenter (and Association, if Applicable)
A	July 11, 2016	Carlsbad Environmental Monitoring and Research Center (CEMRC), submitted by Russell Hardy, Ph.D., Director
B	July 17, 2016	Rocky Mountain Peace and Justice Center, submitted by LeRoy Moore, Ph.D.
C	July 18, 2016	Carlsbad Mayor’s Nuclear Task Force, submitted on behalf of John Heaton and Dave Sepich
D	August 4, 2016	Carlsbad Department of Development (CDOD) Resolution submitted by Russell Hardy, Ph.D. and Danny Cross, CDOD
E	August 4, 2016	Danny Cross
F	August 4, 2016	Tonk Chester, SPHR, SHRM-SCP
G	August 4, 2016	Bill Vandergriff
H	August 5, 2016	New Mexico State Representative Cathrynn Brown
I	August 8, 2016	John Waters
J	August 8, 2016	The WIPP Permittees, on behalf of Todd Shrader, CBFO Manager and Philip Breidenbach, NWP Project Manager
K	August 8, 2016	Deborah Reade
L	August 8, 2016	Basia Miller, Ph.D.
M	August 8, 2016	Southwest Research and Information Center (SRIC), submitted by Don Hancock
N	August 8, 2016	Concerned Citizens for Nuclear Safety (CCNS), submitted by Joni Arends
O	August 8, 2016	New Mexico Interfaith Power and Light (NMIPL), submitted by Sr. Joan Brown, osf
P	August 8, 2016	Nuclear Watch New Mexico (NWNM), submitted by Scott Kovac
Q	August 8, 2016	Citizens for Alternatives to Radioactive Dumping (CARD), submitted by Janet Greenwald

Table 2: Summaries of Public Comments and NMED Responses

Commenter ID	Topic Area	Public Comment	NMED Response Number	NMED Response
	General Comments			
A, C, D, E, F, G, H, I, J,	Support for Both Item 1 and Item 2	The commenters state that the proposed modifications are adequate, will improve the facility, will provide for a safer and more flexible operating environment, and should be issued.	R1	Comments noted.
M, N, P	Appreciation of Draft for Review and Pre-submittal Meeting	The commenters appreciate that the permittees provided a draft of the proposed request and that the permittees as well as NMED met with stakeholders. The commenters continue to believe that such meetings are useful and supports continuing that “standard” practice in the future.	R2	Comment noted.
B	Rocky Flats	The commenter expressed that the opening of WIPP was supposedly a benefit for people living near Rocky Flats, because the huge quantity of TRU waste that was such a problem at the site was moved to WIPP. The commenter had advocated storing the waste on the Rocky Flats site in monitored retrievable storage, with the storage facility above ground in a strong, terrorist-resistant container that would also serve as a monument. The commenter states that the DOE plan to move the waste to WIPP prevailed. The commenter also stated that he trusts that the State of New Mexico will do the responsible thing of ensuring that those who work at WIPP are not subjected to reduced and substandard ventilation on the job.	R3	<p>This modification provides for administrative controls to be used when ventilation drops below 35,000 scfm in the active room during waste emplacement. The Permit already ensures that the surface environmental performance standards are continuously met. Compliance with the disposal room performance standards of the waste analysis plan is demonstrated by the monitoring of VOCs in the disposal room during waste emplacement, as required by Public Law 108-447 and the Permit. Such compliance ensures that the underground ventilation is sufficient and not substandard.</p> <p>The Permit establishes what constitutes an adequate amount of air in the event the VOC concentrations in the adjacent filled room exceed the limits identified in</p>

				<p>Table 4.1.1. The ventilation rate necessary to sufficiently dilute VOCs during the roof fall scenario to safe levels was established as 35,000 scfm when the original Permit was issued in 1999. The Permit does not address dilution of combustion emissions from waste emplacement vehicles, as this is beyond the scope of RCRA. This permit modification points out that if the concentrations in the adjacent room are less than those in Table 4.1.1, an adequate amount of air will be proportionally less than 35,000 scfm. The method for determining what is adequate is incorporated into the modification request to assure an adequate volume of air is available when waste emplacement is underway.</p> <p>Please see Response R51.</p>
M, N, P, Q	No Discussions on What Permit Modifications are Necessary for WIPP to Re-open	<p>The commenters remain concerned that neither DOE nor NMED have held any pre-submittal type meetings during the past two years to discuss what permit modifications are necessary to protect human health and the environment in order for WIPP to re-open. As a result, the commenters believe that the WIPP permit is not adequate to protect human health and the environment, as required by the New Mexico Hazardous Waste Act (HWA) and RCRA.</p>	R4	<p>The commenters claim that the Permit is not adequate to protect human health and the environment is unsupported. Pre-submittal meetings are specific to the topic areas described in the modification request. A pre-submittal meeting was held for this modification before the official submittal to NMED. The regulations require that the Permittees hold public meetings for specific types of permit modifications and a public meeting was held for this modification. Additionally, since the February 2014 events, the Permittees have held regular town hall public meetings to discuss all aspects of the recovery status. These public meetings are simulcast over the internet and interested persons may view the meeting and pose questions that can be answered in real time. Interested persons can utilize these town hall meetings to discuss future recovery activities at WIPP.</p>
		<p>The commenters believe WIPP cannot be allowed to re-open until substantial revisions are made in</p>	R5	<p>It is incorrect that all modifications necessary for the re-opening of WIPP must be Class 3 modifications.</p>

		<p>The commenters are concerned that the Permittees have also confirmed 148 Uniform Waste Manifests that were inaccurate and had to be corrected.</p> <p>The commenters expressed concern related to the performance of NWP since the issuance of its contract on October 1, 2012. The commenters suggested that an operational rate of approximately 16 months out of the past 46 months represents poor performance, and the contract should be changed to another operator at the earliest possible time.</p> <p>The commenters expressed that NMED must consider the permittees' compliance history, including violations of the Hazardous Waste Act or any permit condition, and may deny any permit modification based on that history pursuant to NMSA 1978, Section 74-4-4.2.D(6). The commenters state that given NWP's inadequate safety performance and lack of compliance with permit provisions, NMED must assure that the permit is more stringent rather than reducing the stringency of the permit, which, in essence, rewards the permittees for violations.</p> <p>The commenters believe that the Permittees' poor compliance history, their inadequate safety performance, and the many proposed changes in the facility and waste analysis procedures must be described in the Permit in relation to how those and other changes will assure that WIPP operates</p>	<p>R8</p> <p>R9</p> <p>R10</p> <p>R11</p>	<p>Comment noted. NMED is aware, as this was a subject of the December 2014 ACO. The Permittees have submitted corrected manifests.</p> <p>NMED is obligated to consider the compliance history over the lifetime of the Facility prior to any regulatory action. The Facility's compliance history was taken into account when evaluating this modification request. NMED does not have regulatory authority over, nor is it involved, in any aspect of the contract between DOE and NWP.</p> <p>As noted by the commenters, NMED is obligated to consider the compliance history over the lifetime of the Facility prior to any regulatory action. Administrative Orders were issued by NMED to address Permit non-compliance due to the February 2014 events.</p> <p>If the Permit is appropriately stringent, it does not need to be more stringent.</p> <p>Please see Responses R5 and R9.</p> <p>NMED has determined that the Permit adequately describes waste analysis procedures that are associated with the RCRA WIPP Waste Analysis Plan (WIPP WAP) and the WIPP Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC) as found in Permit Part 2. These conditions are contained</p>
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		in a manner that is protective of public health and the environment.		in Sections 2.3.1 and 2.3.3 respectively. Please see Responses R5, R9 and R10.
M, N, P,	Design and Operation of the Facility	The commenters state that among many other requirements, the permittees do not meet the fundamental requirement of Permit Section 2.1: “The Permittees shall design, construct, maintain, and operate WIPP to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of transuranic (TRU) mixed waste or mixed waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.31).”	R12	NMED issued an Administrative Compliance Order (ACO) in December of 2014 to the Permittees that alleged the violation of Permit Section 2.1 in ACO paragraph 106; “the Respondents’ failure to maintain and operate WIPP to minimize the possibility of a fire which could threaten human health and the environment.” This requirement is found in 40 CFR 264.31. NMED and the Permittees signed a Settlement Agreement and Stipulated Final Order in January 2016 that addresses the violations in the ACO through a compliance schedule.
N	Government Accountability Office (GAO) Report	<p>Commenter requests that the recently issued Government Accountability Office (GAO) report entitled, “NUCLEAR WASTE: Waste Isolation Pilot Plant Recovery Demonstrates Cost and Schedule Requirements Needed for DOE Cleanup Operations,” GAO-16-608, August 2016, be added to the administrative record for this permit modification request. http://www.gao.gov/products/GAO-16-608</p> <p>The commenter submitted excerpts from the GAO Highlights as an example of NWP’s failure to meet the basic requirements of the HWA permit for WIPP. Further, the commenter states that NWP did not meet the basic requirements for best practices. As a result, the commenter stated</p>	<p>R13</p> <p>R14</p>	<p>Although cost and schedule are important considerations to the public, the cost and schedule of cleanup operations at the Facility are not relevant to this permit modification, and therefore do not properly belong in the administrative record.</p> <p>Please see Response R13.</p>

		<p>that the Permittees are asking for reduced ventilation rates in the contaminated underground. The commenter believes the modification must be denied on this basis.</p> <p>The commenter states that multiple facts demonstrate the Permittees' extremely poor compliance history and their gravely inadequate safety performance. The commenter believes that such facts and the many proposed changes in the facility and waste analysis procedures must be described in the Permit, which must be modified to describe how those and other changes will assure that WIPP operates in a manner that is protective of public health and the environment. The commenter also fully incorporates the comments of the Southwest Research and Information Center about the permittees' Two-Item Package into these comments.</p>	R15	Please see Responses R9 and R11.
M, N, P, Q	Inadequate Permit	<p>The commenters expressed concern that there are 683 containers with prohibited items and that there were 148 incorrect Uniform Waste Manifests and that these discrepancies demonstrate that there are many deficiencies in the Permit.</p> <p>The commenters state that Permit section 2.3 General Waste Analysis and the related Attachments are inadequate since there was a failure to correctly characterize hundreds of containers and identify the prohibited items before waste was shipped to, and emplaced, at WIPP. The commenters state that Permit section 2.7 General Inspection Requirements and related Attachments are inadequate in that inspections</p>	R16 R17	<p>Please see Responses R7 and R8.</p> <p>All Permit sections referenced by the commenters were identified as violations in the December 2014 ACO. NMED determined that the existing Permit language is not inadequate with the exception of the emergency response permit section, which is being addressed by this Class 2 modification.</p> <p>WIPP has also revised their Emergency Management and Response program, repaired or replaced</p>

		<p>did not identify malfunctioning and deteriorating equipment prior to the February 5, 2014 fire and February 14, 2014 radiation release. The commenters state that Permit section 2.8 Personnel Training and the related Attachments are inadequate since multiple personnel failed to carry out their responsibilities, including in waste characterization, sampling and analysis, quality assurance, waste acceptance, and audit and surveillance. The commenters state that Permit section 2.9 General Requirements for handling ignitable, corrosive, reactive, or incompatible wastes is inadequate in that 683 containers with such items were allowed to be characterized, shipped to, and emplaced at WIPP.</p> <p>The commenters conclude with the statement, “If the Permittees or NMED believe that none of those Permit provisions are inadequate, they should so state and identify the basis for such determination. NMED should have made such a determination in its five-year review, required by Permit section 1.3.3.”</p>	<p>R18</p>	<p>malfunctioning and deteriorating equipment, and developed a WIPP Fire Department on-site that will respond to future emergencies. These changes can be found in Permit Attachment D (RCRA Contingency Plan), Attachment E (Inspections), and Attachment F (Personnel Training). Those that required RCRA changes are currently being addressed or have been addressed previously.</p> <p>Please see Responses R7 and R11.</p> <p>NMED has determined that the existing Permit language is not inadequate with the exception of the emergency response permit section, which is being addressed by this Class 2 modification. It was the Permittees compliance with the Permit that was inadequate.</p> <p>NMED has completed the 5-Year Review as required by the Permit and has determined that there have been no major changes in the RCRA regulations over the last five years that would affect the Permit. NMED has also determined that the Permittees have been actively submitting Modifications to the Permit over the last five years for changes needed to address new items, facility changes, or corrections and updates to current Permit language. NMED’s 5-Year Review can be found at: https://www.env.nm.gov/wipp/documents/151213.pdf</p> <p>Please see Response R17.</p>
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		The commenters' conclusion is that until there is a revised permit to address deficiencies, WIPP should not be allowed to re-open. The commenters also conclude that NMED should notice the permittees that they are not allowed to re-open the facility until a significantly revised permit is provided for public comment and is approved by NMED.	R19	The Permittees have submitted Class 1 modifications to the Permit to address operational needs for improvement. Continued necessary modifications to the Permit, if any, prior to re-opening will ensure adequate protection of human health and the environment. Please see Responses R4 and R5.
	Comments Specific to Item 1			
M, N, P, Q	Emergency Equipment	The commenters state that the regulations 20.4.1.500 NMAC (incorporating 40 FR 264.52(e)) require that the Contingency Plan "must include a list of all emergency equipment at the facility..." Contrary to that requirement, the request states that it "remove[s] certain emergency equipment that is ... only required for radiological emergency response..." P. 4. The commenters believe that Radiological emergency response equipment is required at WIPP, and it must be included in the list of all emergency equipment. Therefore, the commenters state that Radiation Monitoring Equipment, Decon Shower Equipment, HEPA vacuums, and Paint or Fixative must remain listed, not eliminated in proposed Table D-2. Pages 24 and B-81.	R20	40 CFR 264.51(a), Purpose and Implementation of Contingency Plan, limits the scope to hazardous waste or hazardous waste constituents. NMED does not regulate the management of radionuclides at the WIPP facility. Requiring the radiological emergency equipment in the list of emergency equipment constitutes a condition that the NMED does not have the authority to enforce. The radiological emergency equipment at the WIPP facility is listed, inspected and regulated under DOE regulations and programs such as 10 CFR 835 (Radiation Safety Program), Radiological Control Program (RADCON), and others. However, emergency equipment that is used for BOTH hazardous waste and radioactive waste must be included in the list. NMED is imposing new language in Permit Attachment D, Section D-1 to clarify the use of emergency equipment, including when the use of radiological equipment may be necessary.

<p>K, L, M, N, O, P, Q</p>	<p>Underground Escape Route Figure</p>	<p>The commenters are concerned that the proposed Figure D-4 (p. B-99) does not reflect the underground contamination and must be changed. The commenters believe that because of the nature of the contamination, NMED should reject the proposed figure and require the permittees to submit a new figure.</p>	<p>R21</p>	<p>NMED does not regulate the management of radionuclides at the WIPP facility. The RCRA regulations do not require facility maps to depict radiological contamination in the facility permit. New Figure D-4, <i>Underground Escapeways/Evacuation Routes</i>, is only for depicting the escape routes.</p> <p>The RCRA Contingency Plan contains evacuation routes that are considered to be available in the event of an underground emergency.</p>
		<p>The commenters state that all of drift E-300 north of S-2180 to the exhaust shaft is a contaminated drift that is designated as an Airborne Radiation Area. The commenters believe that people underground should not be in the drift without PPE and respirators and that the drift should not be designated as a “secondary escapeway.” Instead, the commenters say that it should be designated as an “extreme emergency escapeway” that is designated for use only when drifts E-140, W-30, and W-170 cannot be used for evacuation.</p>	<p>R22</p>	<p>W-30 and E-140 are designated primary escape routes with no airborne contamination. These two escape ways meet the RCRA requirements.</p> <p>Ensuring that contaminated areas are marked appropriately is the responsibility of the Permittees in accordance with DOE radiological control policies. New Section D-8d will indicate what takes precedence in the event the Permittees have to change underground evacuation routes in order to remain in compliance with the MSHA standards.</p> <p>The Permittees have stated that workers will be using the appropriate PPE while in Panel 7. Protection from airborne radiological contamination is not within the scope of RCRA.</p>
		<p>The commenters also state that drift W-170 between S-2180 and S-1950 is contaminated and is designated as an Airborne Radiation Area. Because of this the commenters believe that people underground should not be in the drift without PPE and respirators and that the drift</p>	<p>R23</p>	<p>Please see Response R22.</p>

		<p>that while ground control and monitoring activities may be required in those areas, similar measures are required in panels 2, 3, and 4 where no escapeways are shown. The commenters generally believe that no one should be in the contaminated areas except with proper training, monitoring equipment, and PPE. Thus, all of those contaminated areas should be designated in ways that recognize the significant contamination.</p> <p>In conclusion the commenters state that proposed Figure D-4 (p. B-99) indicates that the primary escapeways lead to the Waste Shaft and Salt Handling Shaft as the two required egress shafts. The commenters expressed concern that when the Supplemental Ventilation System (SVS) is operational, the Salt Handling Shaft cannot be used for egress. Thus, the proposed figure does not adequately represent the permittees' proposed operations and cannot be approved. The commenters also expressed concern that the lack of a second adequate egress shaft is a serious problem that the permittees must resolve. The commenters also state that the problem is further exacerbated by the upcoming major renovation of the Waste Shaft in 2017, which the commenters believe will cause the waste hoist to not be operational as the primary egress for months. The commenters also expressed concern that the lack of adequate egress is another indication of the lack of readiness of WIPP for waste handling.</p>	R26	<p>Currently, the facility is in compliance with egress route requirements. Any future changes to the use of the Salt Shaft and other egress routes will need to be addressed through a Permit modification request at the time the respective projects are proposed.</p>
J	Editorials to Attachment D	<p>1. To ensure consistency with the changes proposed to the Permit Attachment D, Table D-6, in the PMR, revisions to the descriptions of communications equipment in the Permit, Part 2,</p>	R27	<p>The recommended edits have been reviewed and incorporated where appropriate.</p>

<p>J</p>		<p>Sections 2.10.1.1. and 2.10.1.2. are necessary. These additional revisions to the Permit are proposed as follows:</p> <p>2.10.1.1. Internal Communications ... The internal communication systems shall include two-way communication by the public address (PA) system and its intercom phones and paging channels, mobile phones an internal telephone system, mine phones, plant base radios pagers and plectrons, and portable two-way radios...</p> <p>2.10.1.2. External Communications ...The external communication systems shall include the commercial telephone system <u>mobile phones</u> and two-way radios.</p> <p>2. In order to create consistency between the Permit Part 2, Section 2.10.5.1., and the changes proposed to Attachment D, Section D-6, in the PMR, editorial corrections are needed to replace the reference to “Section D-6” with “Section D-7” as follows:</p> <p>2.10.5.1. Parties to Arrangements The Permittees shall maintain preparedness and prevention arrangements with state and local authorities, other mining operations, contractors, and other governmental agencies specified in Permit Attachment D, Section D-7<u>6</u>, as required by 20.4.1.500 NMAC (incorporating 40 CFR §§264.37(a) and 264.52(c)).</p>	<p>R28</p>	<p>The recommended edits have been reviewed and incorporated where appropriate.</p>
<p>J</p>		<p>3. In order to create consistency between the Permit Part 2, Section 2.10.5.2., and the changes proposed to Attachment D, Section D-6, in the PMR, editorial corrections are needed to replace the reference to “Section D-6” with “Section D-</p>	<p>R29</p>	<p>The recommended edits have been reviewed and incorporated where appropriate.</p>

<p>J</p>		<p>7.” Revisions to the Permit are also needed to remove references to Memoranda of Understanding (MOU) and Mutual Aid Agreements (MAA) in Part 2, Sections 2.10.5.2. and 2.12.2., thereby ensuring consistency with the changes proposed to Attachment D, Section D-6, in the PMR. These revisions are proposed as follows:</p> <p>2.10.5.2. Coordination Agreements As specified in Section D-76 of Permit Attachment D, these arrangements shall be <u>agreements</u> either Memoranda of Understanding (MOU) or Mutual Aid Agreements (MAA) between the Permittees and the off-site cooperating agencies, and shall include the elements required by 20.4.1.500 NMAC (incorporating 40 CFR §264.37(a))...</p> <p>2.12.2 Copies of Plan ...The Permittees shall provide copies of the current Contingency Plan to the Secretary and all entities with which the Permittees have <u>agreements with local emergency response agencies</u> emergency MOUs or MAAs, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.53(b))...</p> <p>4. To ensure further consistency with the changes proposed to Attachment D, Section D-6, in the PMR, the Permittees propose to remove the reference to “mutual-aid agreements” in the last paragraph of the proposed revision to Attachment D, Section D-4a(1), in the PMR as follows:</p> <p>The EOC staff will <u>assesses</u> opportunities for coordination and the use of mutual aid agreements with local outside agencies making additional emergency personnel and equipment available (Section D-67), ...</p>	<p>R30</p>	<p>The recommended edits have been reviewed and incorporated where appropriate.</p>
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J		<p>5. In an effort to achieve thoroughness and consistency with WP 04-PC3017, the standard operating procedure that implements the inspection requirements for the Attachment D, Table D-6 line item, “Site-wide Evacuation and Alarm,” which is addressed in the Permit, Attachment E, Table E-1, as the “Public Address (and Intercom System),” the Permittees propose to revise the “Surface Evacuation Signals; Underground Evacuation Warning System” line items in both Table D-6 and Table E-1 by renaming them “Site Notification System; Underground Evacuation Alarm System.” These revisions are highlighted in the revisions to Table D-6 and Table E-1 of the PMR, as shown in Attachment 1.</p>	R31	The recommended edits have been reviewed and incorporated where appropriate.
J		<p>6. The Permittees propose to clarify specific equipment locations for “Emergency Lighting” on the surface and “Building Fire Alarms” and “Building Smoke, Thermal Detectors, or Manual Pull Stations” in the Support Building (Building 451) through additional changes to the “Location” column of Table D-6. Changes to Table D-6 are also needed to add specificity to equipment locations that are generally designated as “Surface” and/or “Underground” and to ensure consistency when referring to building names/numbers. These additional proposed changes are highlighted in the revision to Table D-6 of the PMR, as shown in Attachment 1.</p> <p>There are no underground locations for “Emergency Lighting.” In general, lighting in the underground is provided per Mine Safety and Health Administration (MSHA) standards and DOE requirements for day-to-day work. Personnel working in the underground are required to wear head lamps, which are</p>	R32	The recommended edits have been reviewed and incorporated where appropriate.

J		<p>considered personal protective equipment by the Permit and are listed in Table D-6. Lighting for emergency egress is provided passively via reflectors on the ribs, as described in Attachment D, Section D-7d (proposed revised Permit per the PMR, Attachment D, Section D-8d). Underground workers are also trained to use lamps to signal in areas where direct communication is not possible. Additionally, the only areas on the surface that are equipped with emergency lighting and are also used for the management of hazardous waste are in the Waste Handling Building (Building 411), TRUPACT Maintenance Building (Building 412), and Exhaust Shaft Filter Building (Building 413); therefore, the Permittees propose to make the editorial corrections highlighted in Attachment 1 in order to provide these clarifications.</p> <p>With respect to the locations of “Building Fire Alarms” and “Building Smoke, Thermal Detectors, or Manual Pull Stations,” the only area in the Support Building (Building 451) that is important to the management of hazardous waste is the CMR/Computer Room. The Permittees, therefore, propose to make the editorial correction highlighted in Attachment 1 in order to provide this clarification.</p> <p>7. To ensure completeness with respect to the scope and applicability of the proposed revised <i>RCRA Contingency Plan</i>, the Permittees propose to add a reference to the underground Hazardous Waste Staging Area at S550/E140 in the third paragraph of the revised Attachment D, Section D-1, of the PMR as follows: <u>...The provisions of the <i>RCRA Contingency Plan</i> also apply to the Hazardous Waste Staging Areas for site-generated hazardous waste, which are located in Buildings 474A and 474B on the</u></p>	R33	The recommended edits have been reviewed and incorporated where appropriate.
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J		<p><u>surface, as shown in Figure D-1, and in the underground at S550/E140.</u></p> <p>13. The Permittees propose to add the Waste Handling Building number (411) to Figure D-1 and the revision to Figure D-6 from the PMR. These revised Figures are provided in Attachment 2.</p>	R34	The recommended edits have been reviewed and incorporated where appropriate.
J	Editorials to Attachment E	<p>8. The procedure listed in Table E-1 for the inspection of the “Fire Detection and Alarm System,” 12-FP0027, only pertains to the inspection of the underground fuel station dry chemical fire suppression system. It was, therefore, necessary to add 12-FP0028 to Table E-1 via the PMR to address other site-wide fire alarm systems and ensure completeness.</p> <p>The Permittees propose to make additional revisions to Table E-1 to clarify the inspection frequencies and criteria addressed by both 12-FP0027 and 12-FP0028, which are consistent with National Fire Protection Association (NFPA) standards. The proposed additions are highlighted in the revision to Table E-1 from the PMR provided in Attachment 1.</p> <p>The Permittees propose to reverse changes that were proposed in the PMR pertaining to the “Fire Hydrants” and “Fire Pumps” line items in Table E-1. In accordance with the applicable NFPA standards, the inspection frequencies should be “Semi-annual/annually” instead of “Semi-annual” for “Fire Hydrants” and “Weekly/annually” instead of “Weekly” for “Fire Pumps.” These proposed changes are also highlighted in the revision to Table E-1 from the PMR provided in Attachment 1.</p>	R35	The recommended edits have been reviewed and incorporated where appropriate.

		<p>Additionally, in order to ensure the correct inspection frequencies associated with “Fire Sprinkler Systems,” “Monthly/quarterly/semi-annually/annually,” as proposed in the PMR, should be changed to “Monthly/quarterly/annually.” The inspection criteria for “Fire Sprinkler Systems” should also be changed to “Inspecting for Deterioration, Leaks/Spills, water pressures, and main drain test.” These proposed changes to the inspection frequency and criteria are in accordance with the NFPA standards for fire sprinkler system testing, and they are highlighted in the revision to Table E-1 from the PMR provided in Attachment 1.</p> <p>The Permittees propose to clarify the “Procedure Number and Inspection Criteria” field for the “Head Lamps,” “Mobile Phones,” and “Radio Equipment” line items by revising the text in Table E-1 from the PMR, as shown in the highlighted revision in Attachment 1, as follows: <u>-Head lamps are operated daily and are repaired or replaced upon failure</u> <u>-Mobile Phones are operated daily and are repaired or replaced upon failure</u> -Radios are operated daily and are repaired <u>or replaced</u> upon failure</p> <p>9. The Permittees propose to expand the revision to Table E-1, Footnote “h” proposed in the PMR in order to clarify inspection requirements for equipment that is out of service. This clarification is highlighted in the revision to Table E-1 from the PMR provided in Attachment 1.</p> <p>10. In order to avoid confusion between the Fire Protection Technician and the individual within Fire Protection Engineering responsible for performing inspections of fire suppression equipment, a revision to the proposed List 12 in</p>	<p>R36</p> <p>R37</p>	<p>The recommended edits have been reviewed and incorporated where appropriate.</p> <p>The recommended edits have been reviewed and incorporated where appropriate.</p>
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<p>J</p> <p>J</p>	<p>Editorials to Attachment F1</p>	<p>the Table E-1 Inspection Schedule/Procedure Lists is necessary. The Permittees propose to change “Fire Protection Technician” to “Fire Protection Specialist,” as highlighted in the revision to Table E-1 from the PMR provided in Attachment 1.</p> <p>11. The Permittees propose to make minor editorial corrections to the revised Table D-6 and Table E-1 from the PMR, as highlighted in Attachment 1.</p> <p>12. The Permittees propose to clarify that the subheader for each job description in Attachment F1 should be, “RCRA Hazardous Waste Management and Emergency Response Job Descriptions,” regardless of whether the job description is proposed for revision in the PMR.</p>	<p>R38</p> <p>R39</p>	<p>The recommended edits have been reviewed and incorporated where appropriate.</p> <p>The recommended edits have been reviewed and incorporated where appropriate.</p>
	<p>Comments Specific to Item 2</p>			
<p>K, M, N, O, P, Q</p>	<p>Denial of Item 2</p>	<p>The commenters state that pursuant to 20 NMAC 4.1.900 (incorporating 40 CFR 270.42(b)(6)(i)(B)) and NMED historic practices, NMED may deny class 2 modification requests. The commenters believe that Item 2 must be denied because reducing ventilation requirements in an active room would result in less protection of public health and the environment.</p>	<p>R40</p>	<p>The Permittees have followed the requirements of the RCRA regulations for modifying the Permit. Any relevant technical comments to indicate that the modification is not adequate or decreases the protection of human health or the environment are considered by the NMED in determining if a modification should be approved.</p> <p>The underground ventilation flow rate was adequate before the 2014 event, and remains adequate as described in this modification, allowing the regulatory exposure limits to be met.</p> <p>NMED regulates the Permittees to ensure compliance with the Permit requirements that address public exposure to hazardous waste or hazardous waste constituents. The Permit requires the Permittees to</p>

<p>K, M, N, O, P, Q</p>		<p>The commenters believe that to allow workers in active rooms with waste handling occurring with less than 35,000 standard cubic feet per minute (scfm) of ventilation is not protective of worker and public health and the environment. The commenters also believe that if there is not adequate ventilation for waste emplacement, no such activity should be allowed.</p>	<p>R41</p>	<p>implement the controls necessary to maintain worker exposure below the required limits. These controls are administrative, but could also be engineering, safety significant, or safety class controls. NMED ensures the controls implemented by the Permittees are effective.</p> <p>Adequate ventilation is specified by MSHA and is dependent on the number of diesel powered vehicles and their horsepower rating that are used during waste emplacement.</p> <p>Adequate ventilation in the Permit is 35,000 scfm for an acute exposure to VOCs. The purpose of the 35,000 scfm is to dilute a release from an adjacent room that has a roof-fall and contains a room headspace concentration that approaches the limits in Part 4, Table 4.4.1. The 35,000 scfm was the amount of air identified based on the equipment that was to be used for waste operations. If the amount of air is lower than 35,000 scfm, then an appropriate lower action level is specified in order to maintain the same level of protectiveness.</p> <p>Please see Responses R40 and R41.</p>
<p>K</p>		<p>The commenters believe that the request should be denied. The commenters state that WIPP is trying to pretend that everything is okay underground now and that it isn't a major problem to allow workers underground with only 25% of previous airflow. The commenters believe that, considering the history of incompetent work at WIPP and inadequate supervision by NMED over the years, more caution needs to be followed for all work there. The commenters also believe that</p>	<p>R42</p>	<p>The comment assumes that PPE is only used during emergency situations. This is not the case. The DOE WIPP Industrial Hygiene (IH) Program determines when and where PPE is required for workers. Workers in some areas may need to wear PPE for extended periods. Such use is within the scope of the IH Program. The WIPP IH Program and its determinations for radiological working conditions are not within the scope of RCRA, and therefore not regulated by NMED.</p>

K		<p>the original regulations for VOC concentrations and ventilation safety were put in for a reason.</p> <p>The commenters believe that WIPP is unsafe and should be shut down. Ventilation is reduced because air has to be filtered because there is still excess radiation underground. Workers in some areas still have to wear radiation suits. Now it is possible that complete safety suits with ventilation will be used because enough breathable air can't be provided. Working in such suits, whether for radiation or for hazardous conditions is clearly an emergency condition. Unless people can work underground without emergency protective gear of any kind, WIPP is still in emergency conditions and cannot be opened for normal operations. This modification anticipates working in protective gear or using other emergency measures indefinitely. This should not be allowed.</p>	R43	Please see Responses R40 and R41.
K		<p>The commenters believe that the request should also be denied because the modification is open ended on what emergency measures could be taken to allow people to work underground when there are high concentrations of VOCs.</p>	R44	As stated above in Response R43, the DOE IH Program will evaluate VOC concentrations prior to commencement of underground work and will specify the appropriate PPE if necessary.
K		<p>The commenters also believe that if there is not adequate ventilation for waste emplacement, no such activity should be allowed. The commenters also believe that by trying to cobble together ways to continue to work underground under unsafe, emergency conditions and pretend that this can be turned into "normal working</p>	R45	<p>Planned work during abnormal conditions is not an emergency situation. Many additional safety-related improvements have been made at the Facility and are sufficient to maintain a safe underground working environment.</p> <p>The commenter does not provide technical evidence</p>

Q		<p>conditions" shows that the culture of ignoring safety to meet arbitrary deadlines is continuing. The commenters furthermore believe that DOE, NMED and LANL have learned nothing from the explosion and subsequent events that occurred in 2014 and are continuing with their "magical thinking." The commenters conclude that though WIPP should be permanently closed, any work there should only take place using extra safety precautions, not while trying to ignore the situation as it exists in reality.</p> <p>The commenters believe that the modification proposed is for the convenience to the Permittees, is not protective of the WIPP workers and should be denied. The commenters also believe that the Permittees are currently in violation of the Permit. The commenters furthermore believe that the Permit should be revised in a wholesale rather than in a piecemeal manner.</p>	R46	<p>that the proposal is unsafe. Adequate ventilation is defined by applicable standards that are in effect for the facility. For example, the adequate amount of air needed for waste emplacement is a function of the numbers and types of diesel equipment being used. The Permit establishes what constitutes an adequate amount of air in the event the VOC concentrations in the adjacent filled room exceed the limits identified in Table 4.1.1. The ventilation rate necessary to sufficiently dilute VOCs during the roof fall scenario to safe levels was established as 35,000 scfm when the original Permit was issued in 1999. The Permit does not address dilution of combustion emissions from waste emplacement vehicles, as this is beyond the scope of RCRA. This permit modification points out that if the concentrations in the adjacent room are less than those in Table 4.1.1, an adequate amount of air will be proportionally less than 35,000 scfm. The method for determining what is adequate is incorporated into the modification request to assure an adequate volume of air is available when waste emplacement is underway.</p> <p>Please see Responses R5, R11, R17, R44 and R 51.</p> <p>Please see Responses R5, R12, R40, R41, R51, and R53.</p>
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<p>K, M, N, O, P, Q</p>	<p>Ventilation</p>	<p>The commenters state that the request would effectively eliminate the requirement of Permit Section 4.5.3.2: “The Permittees shall maintain a minimum active room ventilation rate of 35,000 standard ft³/min (scfm) in each active room when waste disposal is taking place and 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)).” The commenters furthermore state that on page 6 of the request, the Permittees state: “It has been determined that it is not possible to achieve 35,000 scfm (42,000 acfm) in an active waste disposal room while operating in filtration mode with 60,000 scfm (72,000 acfm).” The commenters conclude that the Permittees propose to modify the requirement to allow “other measures.”</p>	<p>R47</p>	<p>The modification is not proposing to eliminate the requirement. The requirement is still enforceable. The Permit refers to waste emplacement under normal operating conditions, which is implicit unless otherwise stated. The modification does address waste emplacement under abnormal conditions, which was not proposed in the original 1999 Permit. This modification does not propose to conduct waste emplacement with 60,000 scfm ventilation. Rather the proposal is to use both the Interim Ventilation System (IVS) and the existing filtration ventilation during waste emplacement which will provide an estimated 106,000 scfm. NMED has determined that instances of waste emplacement under abnormal conditions will be limited.</p> <p>NMED has included language in Permit Attachment O requiring the Permittees to notify NMED of any waste emplacement, and associated details, conducted under abnormal conditions.</p>
		<p>The commenters believe that artificially tying allowed VOC levels to ventilation rates is a dangerous and faulty logic. The commenters furthermore believe that it is unsafe to allow waste handling in a significantly contaminated underground mine without adequate ventilation. The commenters believe that less ventilation is never protective. The commenters believe that until there is adequate ventilation throughout the underground, including active rooms, waste handling should not be allowed. The commenters believe that the ventilation rates must be tied to Oxygen, CO, CO₂, and other atmospheric gas rates. The commenters also believe that there must be a short time limit that is allowed for</p>	<p>R48</p>	<p>The limits found in Permit Table 4.4.1 represent either the IDLH or LEL (whichever is lower) concentrations for VOCs in the adjacent room expressed as VOCs in Parts Per Million by Volume (PPMV). Note also that these concentrations are pre-dilution in the roof fall scenario and are actually IDLH x48 (dilution factor), but LEL still represents a maximum.</p> <p>Worker exposure is regulated by MSHA and OSHA and not by RCRA. Federal regulations promulgated under MSHA or OSHA are enforced through those programs.</p> <p>Limitations on diesel vehicle particulate emissions are regulated by MSHA at 30 CFR 57.5060. Limitations</p>

		operations under-35,000 scfm.		<p>on combustion emissions are regulated by MSHA at 30 CFR 36.45.</p> <p>Please see Responses R40, R41, R51, R52, and R53.</p>
M, N, P	Hazard Analysis of Roof Fall	<p>The commenters state that the Permittees’ further justification is that “[t]his modification is providing an equivalent level of protection for VOCs that result from a roof fall event in an adjacent filled room.” P. 4. The commenters believe that the hypothetical roof fall scenario is not a sufficient basis for the request. The commenters furthermore believe that the February 14, 2014 event shows that a release in an active room from a chemical reaction is possible under the existing permit requirements. The commenters conclude that the permittees (and NMED) must evaluate the effects of a similar (or larger) incident in an active room as well as in the adjacent room to determine what ventilation rates are required. The commenters state that such an analysis has not been included in the modification request, so the permittees have not provided an adequate basis to support the proposed change, and the request must be denied.</p> <p>The commenters state that the Permittees’ assert: “The roof collapse scenario that was analyzed by Sandia National Laboratories assumed 21 drums could be breached; therefore, this assessment bounds the one drum thermal runaway event.” The commenters believe that the assertion has, in fact, not been demonstrated with actual analysis, including drums containing prohibited items or prohibited Hazardous Waste Numbers. The commenters furthermore believe that since</p>	R49	<p>NMED is aware that a comprehensive hazard analysis has been performed during the preparation of the WIPP DOE Documented Safety Analysis (DSA) Revision 5b, issued in April 2016.</p> <p>However, submittal of these hazard analyses are not a RCRA requirement, and therefore not part of this modification request. Hazard analyses performed for the DSA are not part of the Permit.</p> <p>Please see Response R48.</p>
			R50	<p>NMED concurs with DOE that a 21 drum breach scenario is bounding when compared to a single drum breach thermal event. The event of February 14, 2014 is not relevant to this permit modification because it did not involve a room where the worker would be subject to an acute dose of a hazardous waste constituent. The permit already provides protection for fires in adjacent rooms by imposing lower explosive limit action levels for those adjacent rooms where flammable VOCs are accumulating.</p>

		<p>hundreds of prohibited containers are emplaced, the Permittees (and NMED) must consider that additional containers could be emplaced at WIPP and analyze the effects of chemical reaction releases. The commenters conclude that the Sandia analysis cannot be relied upon because it is from 1980 and has not been revised to reflect actual conditions in the WIPP underground or with the range of wastes that are emplaced at WIPP, including in shielded containers.</p>		<p>Please see Responses R11 and R49.</p>
<p>M, N, P,</p>	<p>No Adequate Explanation of Need</p>	<p>The commenters state the following concerning the submitted modification: “The: Permittees state: “[t]his modification also allows the Permittees to continue waste disposal operations during off-normal conditions, and maintenance activities.” P. 6. The commenters believe that the permittees seek to elevate waste emplacement to be an equivalent value as having adequate ventilation. The commenters believe that the purpose of the existing Permit requirement for 35,000 scfm is to prevent waste handling operations when that level of ventilation is not present. The commenters furthermore believe that the purpose and effect is to protect workers, as well as public health and the environment. The commenters go on to state that waste handling is allowed when that ventilation rate (and other requirements) are met, but is otherwise prohibited until that ventilation flow is achieved. The commenters believe that priority for safety over waste handling is necessary and proper under the HWA and its regulations. The commenters believe that the purpose of the modification request is to allow waste handling, despite not meeting the ventilation requirement. The commenters believe that this will result in waste emplacement becoming of higher importance than safe ventilation levels. The commenters</p>	<p>R51</p>	<p>The commenters are incorrect in stating that the purpose of the 35,000 scfm is to prevent waste handling operations when that level of ventilation is not present. The purpose of the 35,000 scfm is to dilute a release from an adjacent room that has a roof-fall and contains a room headspace concentration that approaches the limits in Part 4, Table 4.4.1. The 35,000 scfm was the amount of air identified based on the equipment that was to be used for waste operations. This concept is reflected in the modification. If the amount of air is lower, then an appropriate lower action level is specified in order to maintain the same level of protectiveness. Waste emplacement cannot take place without a minimum of two diesel vehicles. Minimum ventilation on this basis is far less than 35,000 scfm.</p> <p>Additionally, sufficient ventilation is required through MSHA 30 CFR 36.45 “Quantity of Ventilating” and requires that sufficient ventilation be supplied in the underground to provide dilution such that breathable air is less than or equal to (\leq) 0.25% CO₂, \leq 0.005% CO, \leq 0.00125% NO_x, and greater than or equal to (\geq) 20% O₂. Similarly, VOCs must be diluted with ventilation air such that Threshold Limit Values in accordance with the American Conference of Governmental Industrial Hygienists (ACGIH) or OSHA Permissible Exposure Limits (PELs) are met for normal operating conditions. See 10 CFR 851.</p>

		<p>believe that NMED must reject such a comparison. The commenters further state that the Permittees have provided no legal or regulatory rationale for such a waste handling value, nor should any such standard be allowed.</p> <p>The commenters believe that by the Permittees own plans and policies, meeting the 35,000 scfm requirement is necessary and achievable. The commenters state that the WIPP Recovery Plan of September 30, 2014: (http://wipp.energy.gov/Special/WIPP%20Recovery%20Plan.pdf) states that at least 180,000 scfm is “required for commencement of waste emplacement operations.” P. 19. The commenters further state that with that level of ventilation, 35,000 scfm can be maintained in the active room. The commenters note that the Recovery Plan, REV. 0 has not been revised, is still posted as the recovery plan in effect for WIPP, so NMED and the public should be able to rely on that Plan. The commenters state that the modification request does not mention that 180,000 scfm requirement, nor explain why it should not and cannot be implemented. The commenters conclude that the request does not adequately explain why the request is needed.</p>	<p>R52</p>	<p>The 180,000 scfm ventilation rate referenced in the September 2014 WIPP Recovery Plan is included in the discussion of the combined air flow for the existing filtration system, IVS, and the Supplemental Ventilation System (SVS). The implementation of IVS was delayed for over a year from the schedule provided in the September 2014 WIPP Recovery Plan. The SVS has been delayed indefinitely and is not the topic of this modification.</p> <p>Currently the Permittees plan to begin waste emplacement with the existing filtration system combined with the IVS for a total air flow estimated at 106,000 scfm, according to the modification.</p> <p>NMED acknowledges that the currently posted WIPP Recovery Plan is now two years old and out of date. The plan should be updated to provide current information and expectations.</p> <p>Appendix D to the modification was a report that discussed that achieving 35,000 scfm in the active disposal room would not be achievable with the current ventilation of 60,000 scfm through HEPA filtration. With the IVS, the Permittees propose that the estimated combined total air flow will be sufficient to achieve 35,000 scfm in the active disposal room. The Modification seeks to allow waste to be emplaced under 35,000 scfm during abnormal operations only.</p> <p>Please see Response R53.</p>
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		<p>The commenters state that 20.4.1.900 NMAC (incorporating 40 CFR 270.42(b)(1)(iii)) requires that the request explain why the modification is needed. The commenters believe that since there is no need to not meet the ventilation flow requirement, the request must be denied. The commenters believe that the purported need is actually one of convenience for the Permittees – so that they can conduct waste handling when they consider it proper, rather than having to meet specific, enforceable permit requirements.</p>	<p>R53</p>	<p>The need for the modification as discussed in Section 3 of Item 2 is that “This modification is needed to prevent disruption of waste emplacement activities and to ensure protection of underground workers in situations where 35,000 scfm is not available in the active disposal room during waste disposal operations and during abnormal conditions such as, but not limited to, barometric pressure changes, maintenance activities, and equipment malfunctions, or at times when more appropriate alternative remedial actions can be used to mitigate hazardous situations in an adjacent room. This option is a preparedness measure in the event the flow rate cannot be met.” NMED has determined that the Permittees have adequately explained the modification and have explained the need for the modification.</p> <p>The enforceable permit requirements regarding waste emplacement under abnormal conditions can be found in the following Permit conditions: Part 4, Section 4.5.3.2.; Attachment A2, Section A2-2a(3); and in Attachment O, in the following Sections, O-2, O-3, O-3c(1), O-3c(2), O-5a, O-5b, and O-5c.</p>
		<p>The commenters state that the Permittees describe two factors as to why the change is needed – exert control over employees and remediation by requiring personal protective equipment (PPE) or additional monitoring. P. 7. The commenters believe that those factors do not explain why the modification is needed; instead they describe the convenience of the permittees – not protection of public health and the environment. The commenters furthermore believe that the permittees can and must always exert control over employees and can require PPE or conduct</p>	<p>R54</p>	<p>The factors represent administrative controls necessary to conduct waste emplacement under expected mine conditions. The administrative controls are appropriate and necessary in order to conduct waste emplacement.</p> <p>Please see Responses R40, R41, R51, and R53.</p>

		additional monitoring. The commenters conclude that in addition to not being protective of public health and the environment, the request must be denied because no need has been shown.		
M, N, P	Modification is not Protective of Human Health and the Environment	<p>The commenters state that the Permittees propose to modify Permit section 4.6.3.3 Remedial Action by adding an additional sentence: “Alternatively, prior to reaching these action levels, the Permittees may propose an alternative remedial action plan to the Secretary. The Permittees may implement such plans in lieu of closing and abandoning the active room only after approval by the Secretary.”</p> <p>The commenters then state that the remedial action section relates to requirements regarding room concentration limits for ten volatile organic compounds (VOC) in closed and active rooms in an open panel, as provided in Table 4.4.1 and the corresponding 50% and 95% action levels for those VOCs specified in Table 4.6.3.2.</p> <p>The commenters go on to state that Permit section 4.6.3.3 first provides that when the “50% action level” is reached in a closed room, sampling frequency increases to once a week until the concentration falls below those levels or until the closure of room 1 of the panel. The commenters believe that the proposed additional language would allow the permittees to not increase the sampling frequency, for which no basis has been provided. The commenters also believe that less frequent sampling would not be protective of public health and the environment.</p>	<p>R55</p> <p>R56</p> <p>R57</p>	<p>Comment noted.</p> <p>Comment noted.</p> <p>Permit Table 4.4.1 as well as Tables 4.6.2.3 and 4.6.3.2 are included in the lookup tables provided in the modification request for ventilation flow rates below 35 scfm. The 50% and 95% action levels are reduced by the same proportion as the limits in Table 4.4.1. Therefore, additional sampling at the 50% action level under reduced ventilation flow conditions will be performed at the same level of worker exposure as required at 35,000 scfm.</p>

		<p>The commenters state that Permit section 4.6.3.3 requires that if the concentrations reach the “95% action level,” that a second sample must be taken. The commenters believe that the proposed additional language would allow the permittees to not take a second sample, for which no basis has been provided and which is not protective of public health and the environment.</p>	R58	<p>The lookup tables have proportionally-reduced 95% action levels for each reduced flow rate. Therefore a second sample would be taken at the 95% action level under reduced flow conditions.</p>
		<p>The commenters state that Permit section 4.6.3.3 specifies that if the second sample confirms the concentrations: “the active open room will be abandoned, ventilation barriers will be installed as specified in Permit Section 4.5.3.3, waste emplacement will proceed in the next open room, and monitoring of the subject closed room will continue at a frequency of once per week until commencement of panel closure.”</p>	R59	<p>Comment noted.</p>
		<p>The commenters believe that the proposed additional language would allow the permittees to continue to conduct waste handling in the open room, despite reaching the “95% action level.” The commenters furthermore state that such action is not protective of public health and the environment and again makes waste handling equivalent to worker and public health and safety. The commenters do not believe that there is any adequate basis for allowing continued waste handling in a room with such concentrations, particularly since workers in active rooms in panel 7 are now exposed to chronic exposures of americium-241 and plutonium-239 in the contaminated rooms in addition to the VOC</p>	R60	<p>The conclusion that the modification would allow waste handling when VOC concentrations are above the 95% action level is incorrect. If the 95% action level is exceeded for one or more VOCs, the Permittees will cease waste handling and implement remedial actions deemed sufficient by NMED to reduce concentrations below the 95% action level before waste emplacement resumes.</p> <p>NMED is unable to respond to the reference to “chronic exposures of americium-241 and plutonium-239”. NMED, through EPA’s delegation of authority, regulates the Facility under RCRA and the HWA. NMED does not regulate radionuclides at the Facility.</p>

		<p>exposures. The commenters believe that the effects of such cumulative exposures were not considered in establishing the limits in Tables 4.4.1 and 4.6.3.2. The commenters conclude that the action Levels have not been shown to be protective in the existing circumstances.</p> <p>The commenters state that Item 2 must be denied because of the permittees' compliance history, the lack of need, and incomplete and inadequate information. The commenters conclude that the request is not protective of public health and the environment.</p> <p>The commenters believe that the permittees can and should take actions to prevent concentrations from ever reaching the "95% action Level." The commenters also believe that if the permittees have ignored rising VOC concentrations in an open or closed room, they are not operating WIPP in a prudent, safe manner. Furthermore, the commenters believe that if the Permittees have made attempts to reduce the concentration levels and have failed, then they are demonstrating that their "alternative" measures are ineffective, so the ventilation barriers are the required action, as specified in the Permit.</p>	<p>R61</p> <p>R62</p>	<p>Please see Responses R40, R41, R51, and R53.</p> <p>Once the 50% action level has been exceeded and monitoring has increased, the Permittees must seek to find the cause the increased concentrations and mitigate that cause to the extent possible. There may be circumstances beyond the control of DOE that will cause VOC concentrations in an adjacent room to rise continuously. In such a case, concentrations may rise to the 95% action level before waste emplacement cannot be performed.</p> <p>Please see Response R57.</p>
P	Elevate to Class 3	<p>The commenter remarked that it appears that this Class 2 PMR is a required change to operate WIPP due to the inability to achieve 35,000 scfm in active waste disposal rooms. The commenter noted further that this PMR is important, and must be approved, so that the facility can continue to operate. The commenter believes that</p>	R63	<p>The Interim Ventilation System, once operating, will provide some relief to the ventilation restrictions.</p> <p>Instances of waste emplacement will be limited and in other circumstances the 35,000 scfm will be met and is a confirmed result of the ventilation model which has proven accurate over the years of waste emplacement</p>

		as it stands now, there are only two choices – either approve this Class 2 PMR or shut down operations until 35,000 scfm can be reached. The commenter also believes that as such it should be considered a “major modification” and subject to Class 3 PMR requirements.		operations. NMED has determined that the modifications do not substantially alter the facility or its operations and are therefore properly identified as a Class 2 Modification. Please see Responses R41, R48, R51 and R52.
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