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

From:	Russell Hardy
To:	Maestas, Ricardo, NMENV
Cc:	"rhardy@nmsu.edu"
Subject:	DOE Class 2 Permit Modification Public Comment
Date:	Monday, July 11, 2016 2:28:14 PM

Good afternoon Ricardo, I am submitting a public comment in support of the DOE's Class 2 Permit Modification to revise the RCRA Contingency Plan and to modify the airflow requirements and VOC contaminant modeling requirements necessary to resume waste emplacement while operating under a reduced airflow scenario.

Because of my position as the Director of the Carlsbad Environmental Monitoring and Research Center (CEMRC) and as a member of the Carlsbad Mayor's Nuclear Taskforce, I am included in many discussions regarding proposed changes to the WIPP hazardous waste permit. As a result, I have participated in several meetings with DOE/NWP staff to discuss the aforementioned proposed permit modifications and have attended both public information meetings in Santa Fe and Carlsbad where the information included in the permit modifications have been discussed. Therefore, based on these discussions with DOE/NWP staff and presentations to public stakeholders, I would like to provide my personal support to the DOE/NWP in their request to modify the existing hazardous waste permit.

Specifically, I believe that the approval of the requested modification to the RCRA contingency plan will help streamline and update the emergency response/emergency notification processes at the WIPP site and will ultimately improve the overall safety and incident reporting requirements needed when responding to a hazardous waste incident at the facility. Further, the proposed changes not only better align the RCRA contingency plan to NMED requirements but also better align the WIPP RCRA contingency plan with other similar plans within the State such as those at the Sandia National Laboratory and the Los Alamos National Laboratory. Secondly, I believe that the proposed modifications to the underground airflow requirements, the proposed implementation of VOC contaminant modeling requirements, and the proposed alternative waste emplacement remedial action plan all serve to provide adequate flexibility in terms of continuing waste emplacement activities under a reduced airflow scenario brought about by the February 14, 2014 underground radiation event without impacting worker safety.

Thank you for the opportunity to voice my support for these proposed changes, please let me know if you have any questions or need any additional information pertaining to this matter.

Russell Hardy, Ph.D.
Director
Carlsbad Environmental Monitoring & Research Center
1400 University Drive
Carlsbad, NM 88220
(575) 234-5555 phone
(575) 234-5573 fax

From: leroymoore1231@gmail.com on behalf of LeRoy Moore
To: Maestas, Ricardo, NMENV
Subject: WIPP Class 2 permit modification
Date: Sunday, July 17, 2016 4:53:20 PM

Dear Mr. Ricardo Maestas:

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 here was moved to WIPP. I 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 at the same time would serve as a monument to the human folly of creating this very dangerous waste. But the DOE plan to move it to WIPP prevailed, so that now the State of New Mexico must deal with the problem – not just now, but essentially forever because of the half-life of plutonium-239. I trust 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. Thank you for your consideration of this concern.

LeRoy Moore, PhD

Rocky Mountain Peace and Justice Center

Boulder, Colorado

July 8, 2016

To: Mr. Ricardo Maestas
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505
Ricardo.maestas@state.nm.us

Carbon Copy to: bobby.stjohn@wipp.ws

Dear Mr. Maestas:

The Carlsbad Mayor's Nuclear Task Force permitting subcommittee is submitting this letter in support of the Department of Energy's Class 2 permit modification submitted to the New Mexico Environment Department on June 3. Members of our subcommittee participated in pre-scoping activities related to this proposed modification package, reviewed the submitted material and asked follow-up questions. We appreciate the willingness of the Department of Energy and its contractor in allowing us to make sure we understand this issue.

Our subcommittee supports both Item 1 (Revise RCRA Contingency Plan and Associated Response Personnel Training) and Item 2 (Active Room Ventilation Flow Rate) and believes both items will improve upon the overall safety of the facility.

Significant improvements made by this proposal include:

- The proposed changes to the RCRA Contingency Plan will ensure immediate notification of the NMED when there is an event that could threaten human health or the environment.
- The proposed changes clarify the Emergency Coordinator's ability to make an immediate decision on whether to implement the Contingency Plan.
- The proposed changes will align the plan more closely with other contingency plans in the state.
- The proposed changes to the ventilation flow rate will provide the permittees with the ability to proceed with waste emplacement activities in situations where the active room ventilation flow rate of 35,000 cannot be met.
    - This will empower the DOE and the State to develop personalized action plans best suited to a situation.
    - Specific hand-held air quality monitoring devices will ensure workers that there are no toxic levels of contaminants in their work space.
    - For example, the permittees may be able to remediate a situation by requiring PPE to be worn and/or increase monitoring in the affected areas.

Overall, we believe these proposed changes more directly involve the NMED in the decision-making process. This is a service to the citizens of New Mexico and an improvement to the safety plan at WIPP.

Thank you for your consideration,

John Heaton, Carlsbad Mayor's Nuclear Task Force

Jaheaton1@gmail.com

Dave Sepich, Permit Subcommittee Chair

dsepich@springtimesupply.com

CARLSBAD NEW MEXICO
department of development

RESOLUTION 2017-01:
"Support for the U.S. Department of Energy, Carlsbad Field Office Class 2 Permit Modification"

WHEREAS, the United States' Department of Energy (DOE), Carlsbad Field Office, and Nuclear Waste Partnership LLC (Permittees) have submitted a Class 2 Permit Modification Request to the New Mexico Environment Department (NMED) as it pertains to the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (NM4890139088-TSDF) (Permit); and

WHEREAS, the NMED serves as the regulator of the WIPP facility in terms of approving the Class 2 modification to the Permit, thereby allowing for the permanent disposal of transuranic (TRU) waste mixed with Resource Conservation and Recovery Act (RCRA) hazardous waste (TRU mixed waste) within the DOE-owned WIPP repository; and

WHEREAS, a modification to the Permit is required in order to change technical and/or operating aspects of the Permit; and

WHEREAS, a modification to the Permit is imperative to allow waste disposal activities to resume at the WIPP facility under reduced airflow conditions as a result of the February 14, 2014, underground radiation event at the WIPP facility; and

WHEREAS, the Permittees' proposed modification to the Permit will provide the Permittees the ability to use alternative measures for underground waste disposal operations when the minimum active room ventilation rate of 35,000 standard cubic feet per minute cannot be met, thereby ensuring the continued safety of waste emplacement operations; and

WHEREAS, the Permittees' proposed modification to the Permit will provide the Permittees the ability to propose an alternative remedial action plan to the Secretary of the NMED in lieu of closing the active room if the action levels in the Permit (Part 4, Section 4.6.3.3) are exceeded; and

WHEREAS, the Permittees' proposed modification to the Permit removes the minimum air velocity value of 60 feet per minute as specified in attachment A2 of the Permit; and

WHEREAS, the Permittees' proposed modification to the Permit is needed for the resumption of waste disposal activities and provides updates and clarifications necessary to simplify the Resource Conservation and RCRA Contingency Plan, updates the language in the Permit and includes references to the new WIPP Fire Department, and revises emergency response personnel and job titles/descriptions and training requirements;

THEREFORE, BE IT RESOLVED that the Carlsbad Department of Development strongly supports the resumption of waste emplacement activities at the WIPP facility and believes that the Permittees' proposed modifications to the Permit are reasonable and necessary in order to provide a safer and more flexible operating environment at the WIPP facility in a reduced underground airflow environment resulting from the February 14, 2014, underground radiation event; and

FUTHERMORE, the Carlsbad Department of Development encourages the distribution of this Resolution to the New Mexico Legislature, the New Mexico Environment Department Secretary, the New Mexico Governor, and the U.S. DOE Secretary.

APPROVED AND ADOPTED this 4th day of August, 2016

Russell Hardy, Ph.D.,
President of the Board of Directors,
Carlsbad Department of Development

Attest:

Danny Cross,
Secretary/Treasurer of the Board of Directors,
Carlsbad Department of Development

From: Dan Cross
To: Maestas, Ricardo, NMENV
Subject: Fwd: SUPPORT PERMIT MODIFICATION
Date: Thursday, August 04, 2016 12:16:30 PM

Dear Mr. Maestas,

As a long time citizen of Carlsbad and Eddy County I would like to convey my support of the WIPP permit modification. I have reviewed the summary of the modifications and I encourage your support.

Thanks

Danny Cross

From: Chester, Tonk T - Carlsbad
To: Maestas, Ricardo, NMENV
Subject: I support revisions to the RCRA Contingency Plan at WIPP
Date: Thursday, August 04, 2016 12:20:50 PM

Dear Mr. Maestas,

I am writing you today to let you know that I am personally in full support of the revisions to the RCRA Contingency Plan at the WIPP facility here in Carlsbad, New Mexico.

Why do I support these changes? Here are a few key reasons from our community's standpoint:

1. The revisions to the RCRA Contingency Plan (Plan) will align it more closely with other similar plans, both at the WIPP facility and across the state, thereby eliminating potential confusion and simplifying implementation of the Plan.
2. The revision assigns specific duties and responsibilities to the newly formed WIPP Fire Department and increases the level of training for emergency response personnel, which improves on the effectiveness of the facility's ability to respond to emergencies.
3. The proposed changes to the Active Room Ventilation Flow Rate will allow the Permittees to continue with waste emplacement in cases where an active room ventilation flow rate of 35,000 standard cubic feet per minute can't be met. This change better allows the Permittees to make smart, common-sense decisions on a case-by-case basis that will protect workers from possible VOC emissions. For example, the Permittees may be able to remediate a situation by taking actions such as: evaluating VOC air monitoring information, increasing air monitoring in the affected areas, and, if necessary, requiring personal protective equipment such as air-filtering respirators to be worn.
4. The proposed changes to the actions required when hazardous levels of VOCs are approached in closed areas of the mine will allow the WIPP Permittees and the NMED to work closely together in developing an action plan that allows the WIPP facility to use valuable disposal space in the underground while protecting workers. The NMED will be directly involved in these safety discussions.

Overall, this permit modification increases the state's involvement in the decision-making process in certain circumstances within its scope of authority. We believe this is a benefit to the citizens of Eddy and Lea Counties and of New Mexico and an improvement to process at the WIPP facility.

Thank you,
Tonk

Mosaic
Tonk Chester, SPHR, SHRM-SCP | Human Resources Manager
The Mosaic Company | 1361 Potash Mines Road | Carlsbad, New Mexico, 88220
P: 575.628.6234 |C: 575.302.7179 | F: 575.628.6263 | E: tonk.chester@mosaicco.com |
W: www.mosaicco.com

From:	Bill Van
To:	Maestas, Ricardo, NMENV
Subject:	Fwd: WIPP CHANGES
Date:	Thursday, August 04, 2016 12:36:39 PM

I live in Lubbock, TX and I am in favor of making the WIPP site more efficient; I think these changes will accomplish that goal. Specifically, the changes to the Active Room Ventilation Flow Rate will allow WIPP to continue with waste emplacement in cases where an active room ventilation flow rate of 35,000 standard cubic feet per minute can't be met.

a. This change better allows WIPP to make smart, common-sense

decisions on a case-by- case basis that will protect workers from possible VOC

b. For example, WIPP may be able to control a situation by taking

actions such as: evaluating VOC air monitoring information, increasing air

monitoring in the affected areas, and, if necessary, requiring personal

protective equipment such as air-filtering respirators to be worn.

Thank you for your consideration

Bill Vandergriff

State of New Mexico
House of Representatives
Santa Fé

CATHRYNN N. BROWN
R - Eddy
District 55

1814 North Guadalupe Street
Carlsbad, NM 88220
Phone: (575) 706-4420
E-mail: cath@cathrynnbrown.com

COMMITTEES:
Chair: Transportation & Public Works
Vice Chair: Rules & Order of Business
Judiciary

INTERIM COMMITTEES:
Chair: Radioactive & Hazardous Materials Committee
Interim Legislative Ethics Committee
Transportation Infrastructure Revenue Subcommittee

Advisory Member:
Jobs Council
Military & Veterans' Affairs Committee
Water & Natural Resources

August 5, 2016

Mr. Ricardo Maestas
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

VIA E-MAIL TO
ricardo.maestas@state.nm.us
& ORIGINAL VIA U.S. MAIL

RE: U.S. Department of Energy's Request for Class 2 Permit Modification of the WIPP Hazardous Waste Facility Permit pertaining to, *inter alia*, alternative measures for room ventilation rates; room closure alternatives; simplification of RCRA contingency plan implementation criteria; and acknowledgement of new WIPP fire department

Dear Mr. Maestas,

I attended the public meeting held at the Skeen-Whitlock Building in Carlsbad on June 30, 2016 on the subject matter captioned above. The presenters outlined the substantive permit changes in detail, including the rationale behind them. In my opinion, all of the Class 2 permit changes are reasonable under extant circumstances and, if granted, are likely to facilitate recovery of the mine and enhance future WIPP operations without diminishing worker health and safety, the health and safety of the public, or adversely affecting the environment.

For the public record, I wish to express my support for each of the Class 2 permit modifications requested by the Department of Energy.

Sincerely,

Cathrynn Novich Brown

Cathrynn Novich Brown

From: John Waters
To: Maestas, Ricardo, NMENV
Subject: Support for WIPP Permit Modifications
Date: Monday, August 08, 2016 11:51:12 AM

Ricardo Maestas
NMED
Santa Fe, NM

Dear Mr. Maestas:

Please accept my comments of support for the pending WIPP permit modifications.

I believe that the proposed revisions to the RCRA Contingency Plan will align better with the other plans at the WIPP facility and across the state. The proposed revision simplifies the process and improves on WIPP's ability to respond to emergencies.

I believe that the proposed revisions to Active Room Ventilation Flow Rate will allow workers to continue emplacing waste even in cases where an active room ventilation flow rate of 35,000 standard cubic feet per minute can't be met, which will allow WIPP to utilize site conditions and common sense to make decisions that will protect workers from possible VOC emissions. It should also allow WIPP and your agency to work closely together in developing an action plan that protects workers and allows the use of valuable disposal space in the underground instead of having to vacate it.

Regards,

John Waters
1303 W. Riverside Drive
Carlsbad, NM 88220

From:	Deborah Reade
To:	Maestas, Ricardo, NMENV
Subject:	Re: Public Comment about June 2016 Class 2 Permit Modification Requests about Reducing Room Ventilation Rate and the Contingency Plan at the Waste Isolation Pilot Plant
Date:	Monday, August 08, 2016 2:01:14 PM

August 8, 2016
Mr. Ricardo Maestas
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

Dear Mr. Maestas:

These are my public comments about the Class 2 Permit Modification Requests to the Waste Isolation Pilot Plant (WIPP) hazardous waste permit issued by the New Mexico Environment Department (NMED).

1. **Reducing Room Ventilation Rate.** The request should be denied. 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. In fact, 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 original regulations for VOC concentrations and ventilation safety were put in for a reason.

Frankly, 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 you want to put people in complete safety suits with their own ventilation because you can't provide enough breathable air. Working in such suits, whether for radiation or for hazardous conditions is clearly an emergency condition. WIPP may plan to open in December, but 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

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.

If there is not adequate ventilation for waste emplacement, no such activity should be allowed. 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 conditions" shows that ***the culture of ignoring safety to meet arbitrary deadlines is continuing.*** DOE, NMED and LANL have clearly learned nothing from the explosion and total debacle that occurred in 2014 and are continuing with their "magical thinking." 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.

2. **Contingency Plan**. The Plan should be revised to reflect the significant existing

underground contamination from the February 2014 waste drum(s) explosion. This is especially true for the E-300 drift (tunnel), which cannot be used as a secondary evacuation route because respiratory protection equipment is and must be required to be used in more than 2,000 feet of that drift. The problems caused by the underground contamination must be addressed before WIPP can be re-opened.

Thank you for your careful consideration of my comments. I look forward to receiving the NMED's response.

Sincerely,
Deborah Reade
117 Duran Street
Santa Fe NM 87501

From:	Basia Miller
To:	Maestas, Ricardo, NMENV
Subject:	public comment
Date:	Monday, August 08, 2016 2:37:37 PM
Attachments:	page1image14616.png page1image14776.png

August 8, 2016

Mr. Ricardo Maestas
New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, NM 87505

Re: Public Comment about June 2016 Class 2 Permit Modification Requests about Reducing Room Ventilation Rate and the Contingency Plan at the
Waste Isolation Pilot Plant

Dear Mr. Maestas:

I read with alarm the proposal for modifications of the WIPP permit that diminish the accepted standards for assuring worker safety.

I provide the following public comments about the Class 2 Permit Modification Requests to the Waste Isolation Pilot Plant (WIPP) hazardous waste permit issued by the New Mexico Environment Department (NMED).

1. Reducing Room Ventilation Rate. The request should be denied. 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. If there is not adequate ventilation for waste emplacement, no such activity should be allowed.

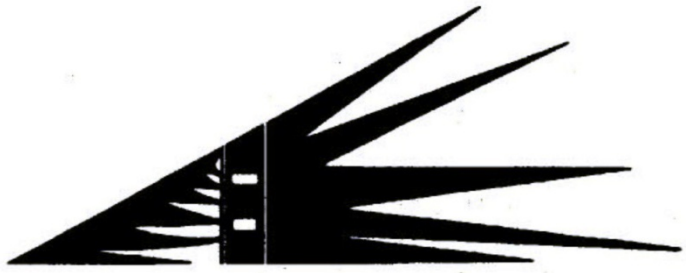
2. Contingency Plan. The Plan should be revised to reflect the significant existing underground contamination from the February 2014 waste drum(s) explosion. This is especially true for the E-300 drift (tunnel), which cannot be used as a secondary evacuation route because respiratory protection equipment is and must be required to be used in more than 2,000 feet of that drift. The problems caused by the underground contamination must be addressed before WIPP can be re-opened.

Thank you for your careful consideration of my comments. I look forward to receiving NMED's response.

Sincerely,

Basia Miller, Ph.D

Santa Fe resident



SOUTHWEST RESEARCH AND INFORMATION CENTER
P.O. Box 4524 Albuquerque, NM 87196 505-262-1862 FAX: 505-262-1864 www.sric.org

August 8, 2016

Ricardo Maestas
New Mexico Environment Department (NMED)
2905 Rodeo Park Drive, Building 1
Santa Fe, NM 87505

RE: WIPP Class 2 Permit Modification Request Two-Item package

Dear Ricardo,

Southwest Research and Information Center (SRIC) provides the following comments on the Class 2 permit modification request package that was submitted by the permittees on June 3, 2016, according to their public notice.

SRIC appreciates that the permittees provided a draft of the proposed request and that representatives of the permittees as well as NMED met with SRIC and other citizen group representatives on March 7, 2016. SRIC continues to believe that such pre-submittal meetings are useful and supports continuing that "standard" practice in the future.

Nevertheless, SRIC remains 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 WIPP permit is not adequate to protect human health and the environment, as required by the New Mexico Hazardous Waste Act (HWA) and the Resource Conservation and Recovery Act (RCRA). WIPP cannot be allowed to re-open until substantial revisions are made in the Permit, which can best be done through informal meetings and then class 3 permit modification procedures.

The WIPP underground is a significantly contaminated facility, including the Panel 7 hazardous waste disposal unit, that cannot meet the "start clean, stay clean" DOE operating philosophy and the WIPP Permit requirements. In addition, the permittees admit that there are 683 containers in the WIPP underground with Hazardous Waste Numbers D001 and D002 that are not allowed by the permit. Permittees' July 29, 2016 Written Notice to John Kieling and Kathryn Roberts - http://www.wipp.energy.gov/library/Information_Repository_A/Responses_to_Administrative_Order/Attachment_Final_Report_Regarding_Application_of_D001_and_D002_HWN_with_Attachments.pdf

That same Notice also states that there were 148 Uniform Waste Manifests that were inaccurate and had to be corrected.

Nuclear Waste Partnership (NWP)'s inadequate performance

NWP became the Management and Operating Contractor and a permittee on October 1, 2012. In the more than 46 months since then, the facility has operated for about 16 months. Because of the inadequate performance of NWP, the facility has not been receiving or disposing of waste for the past 30 months and will not do so for some months into the future. Based on that record, the ability of NWP to safely operate the facility is in serious doubt. For the large majority of its time as operating contractor, and perhaps for the entire timeframe, NWP has been in violation of multiple permit provisions. Thus, the capability of NWP to comply with permit requirements is seriously in question. 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. 74-4-4.2.D(6) NMSA. 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. Given that adequate ventilation is necessary for any underground mine, especially in the significantly contaminated WIPP underground, reducing ventilation requirements in active rooms would result in less protection of public health and the environment. Thus, that Item 2 request must be denied.

Those facts demonstrate the Permittees' extremely poor compliance history and their gravely inadequate safety performance. Those 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. 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).

The fact that there are 683 containers with prohibited items and that there were 148 incorrect Uniform Waste Manifests also demonstrates that there are many deficiencies in the Permit. Permit section 2.3 General Waste Analysis and the related Attachments are clearly 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. Permit section 2.7 General Inspection Requirements and related Attachments are clearly inadequate in that inspections did not identify malfunctioning and deteriorating equipment prior to the February 5, 2014 fire and February 14, 2014 radiation release. Permit section 2.8 Personnel Training and the related Attachments are clearly 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. Permit section 2.9 General Requirements for handling ignitable, corrosive, reactive, or incompatible wastes is clearly inadequate in that 683 containers with such items were allowed to be characterized, shipped to, and emplaced at WIPP.

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.

SRIC's conclusion is that until there is a revised permit to address those and other deficiencies, WIPP should not be allowed to re-open. 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.

Denial of permit modification request Item 2

Pursuant to 20 NMAC 4.1.900 (incorporating 40 CFR 270.42(b)(6)(i)(B)) and its historic practices, NMED may deny class 2 modification requests. SRIC strongly believes that Item 2 must be denied because reducing ventilation requirements in an active room would reduce protection of human health and the environment.

* Item 2 - Active Room Ventilation Flow Rate

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 ft^3/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)).

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)." Thus, they propose to modify the requirement to allow "other measures."

It is unsafe to allow waste handling in a significantly contaminated underground mine without adequate ventilation. Until there is adequate ventilation throughout the underground, including active rooms, waste handling should not be allowed.

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 hypothetical roof fall scenario is not a sufficient basis for the request. The February 14, 2014 event shows that a release **in an active room** from a chemical reaction is possible under the existing permit requirements. Thus, 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. 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.

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." That assertion has, in fact, not been demonstrated with actual analysis, including drums containing prohibited items or prohibited Hazardous Waste Numbers. Since 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. Moreover, 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.

The permittees also state: "[t]his modification also allows the Permittees to continue waste disposal operations during off-normal conditions, and maintenance activities." P. 6. Thus, the permittees seek to elevate waste emplacement to be an equivalent value as having adequate ventilation. 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 purpose and effect is to protect workers, as well as public health and the environment. Thus, waste handling is allowed when that ventilation rate (and other requirements) are met, but is otherwise prohibited until that ventilation flow is achieved. That priority for safety over waste handling is necessary and proper under the HWA and its regulations. The purpose of the modification request is to allow waste handling, despite not meeting the ventilation requirement, effectively saying that waste emplacement is an equivalent or higher value than safe ventilation levels. NMED must reject such equivalency. The permittees have provided no legal or regulatory rationale for such a waste handling value, nor should any such standard be allowed.

By the permittees own plans and policies, meeting the 35,000 scfm requirement is necessary and achievable. 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. With that level of ventilation, 35,000 scfm can be maintained in the active room. That Recovery Plan 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 modification request does not mention that 180,000 scfm requirement, nor explain why it should not and cannot be implemented. Thus, the request does not adequately explain why the request is needed.

20.4.1.900 NMAC (incorporating 40 CFR 270.42(b)(1)(iii)) requires that the request explain why the modification is needed. But since there is no need to not meet the ventilation flow requirement, the request must be denied. 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.

The permittees also 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."

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.

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 proposed additional language would allow the permittees to not increase the sampling frequency, for which no basis has been provided. Nor would less frequent sampling be protective of public health and the environment.

Permit section 4.6.3.3 then requires that if the concentrations reach the "95% Action Level" that a second sample must be taken. 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.

Permit section 4.6.3.3 then 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.

The proposed additional language would allow the permittees to continue to conduct waste handling in the open room, despite reaching the "95% Action Level." Such action is not protective of public health and the environment and again makes waste handling equivalent to worker and public health and safety. SRIC does 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 exposures. The effects of such cumulative exposures were not considered in establishing the limits in Tables 4.4.1 and 4.6.3.2. Thus, the Action Levels have not been shown to be protective in the existing circumstances.

Moreover, the permittees can and should take actions to prevent concentrations from ever reaching the "95% Action Level." If the permittees have ignored rising VOC concentrations in an open or closed room, they are not operating WIPP in a prudent, safe manner. Or 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.

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. 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 permittees can and must always exert control over employees and can require PPE or conduct additional monitoring. Thus, in addition to not being protective of public health and the environment, the request must be denied because no need has been shown.

Changes to permit modification request Item 1

The permittees propose many changes to the Contingency Plan. SRIC does not object to many of the proposed changes, but does support changes so that the Plan is consistent with the requirements of 20.4.1.500 NMAC (incorporating 40 CFR Subpart D) and so that it more adequately reflects the significant underground contamination at WIPP.

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. Radiological emergency response equipment is required at WIPP, and it must be included in the list of all emergency equipment. Thus, 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.

Proposed Figure D-4 (p. B-99) does not reflect the significant underground contamination and must be changed. Because of the nature of the contamination, NMED should reject the proposed figure and require the permittees to submit a new figure.

All of drift E-300 north of S-2180 to the exhaust shaft is a highly contaminated drift that is designated as an Airborne Radiation Area. See Attachment 1. People underground should not be in the drift without PPE and respirators. That drift should not be designated "secondary escapeway." Instead, it should be designated as "extreme emergency escapeway" that is designated for use only when drifts E-140, W-30, and W-170 cannot be used for evacuation.

Drift W-170 between S-2180 and S-1950 also is highly contaminated and is designated as an Airborne Radiation Area. See Attachment 1. People underground should not be in the drift without PPE and respirators. That drift should not be designated "secondary escapeway." Instead, it should be designated as "extreme emergency escapeway" that is designated for use only when drifts E-140 and W-30 cannot be used. SRIC also notes that drift W-170 could be the closest evacuation route for workers in Panel 7, which raises concerns about the safety of waste handling in that panel and whether all workers in that panel should always be in PPE and respirators.

Further, drift S-2180 is highly contaminated and is designated as an Airborne Radiation Area. See Attachment 1. People underground should not be in the drift without PPE and respirators. That drift should not be designated "secondary escapeway." Instead, it should be designated as "extreme emergency escapeway" that is designated for use only when S-2520 cannot be used. SRIC does not support any waste emplacement in drift S-2180 because of the high contamination levels. The fact that workers in Panel 7 have no adequate secondary escapeway raises significant concerns as to whether Panel 7 should be used for further waste emplacement.

SRIC also does not understand why a "primary escapeway" is shown in Panel 6 and drift S-3650 and "secondary escapeway" is shown in drifts S-3080 and S-3110. All of those areas are contaminated and are designated as Contaminated Areas requiring PPE. See Attachment 1. 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. SRIC generally believes 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.

Proposed Figure D-4 (p. B-99) also indicates that the primary escapeways lead to the Waste Shaft and Salt Handling Shaft as the two required egress shafts. However, when the Supplemental Ventilation System 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 lack of a second adequate egress shaft is a serious problem that the permittees must resolve. The problem is further exacerbated by the upcoming major renovation of the Waste Shaft in 2017, meaning that it will not be operational as the primary egress for months. The lack of adequate egress is another indication of the lack of readiness of WIPP for waste handling.

In summary, Item 2 must be denied because of the permittees' compliance history, the lack of need, and incomplete and inadequate information. Thus, that request is not protective of public health and the environment. Approval of Item 1 requires changes to meet the requirements of 20.4.1.500 NMAC (incorporating 40 CFR Subpart D) and to more adequately reflect the existing reality of significant underground contamination at WIPP.

Thank you very much for your careful consideration of, and your response to, these and all other comments.

Sincerely,

Don Hancock

cc: John Kieling

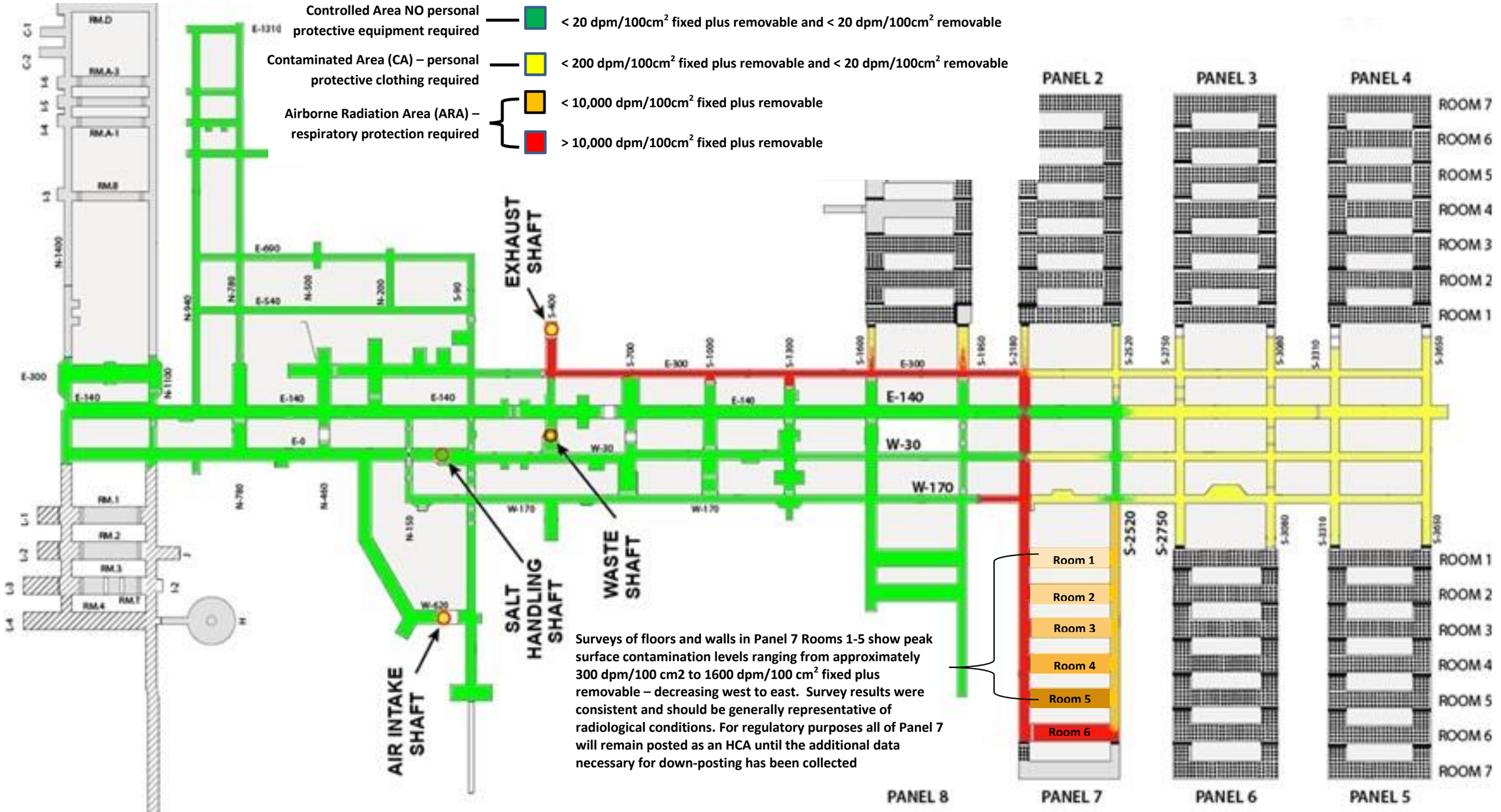
Contamination Levels in the Underground – March 2016

Controlled Area NO personal protective equipment required — **< 20 dpm/100cm^2 fixed plus removable and < 20 dpm/100cm^2 removable**

Contaminated Area (CA) – personal protective clothing required — **< 200 dpm/100cm^2 fixed plus removable and < 20 dpm/100cm^2 removable**

Airborne Radiation Area (ARA) – respiratory protection required

- **< 10,000 dpm/100cm^2 fixed plus removable**
- **> 10,000 dpm/100cm^2 fixed plus removable**



Surveys of floors and walls in Panel 7 Rooms 1-5 show peak surface contamination levels ranging from approximately 300 dpm/100 cm2 to 1600 dpm/100 cm^2 fixed plus removable – decreasing west to east. Survey results were consistent and should be generally representative of radiological conditions. For regulatory purposes all of Panel 7 will remain posted as an HCA until the additional data necessary for down-posting has been collected

From: Joni Arends
To: Maestas, Ricardo, NMENV
Subject: CCNS Comments-WIPP Two-Item Package
Date: Monday, August 08, 2016 3:39:44 PM

August 8, 2016

By email: ricardo.maestas@state.nm.us

Ricardo Maestas
New Mexico Environment Department (NMED)
2905 Rodeo Park Drive, Building 1
Santa Fe, NM 87505

RE: WIPP Class 2 Permit Modification Request Two-Item Package

Dear Ricardo,

Concerned Citizens for Nuclear Safety (CCNS) provides the following comments on the Class 2 permit modification request package that was submitted by the permittees on June 3, 2016, according to their public notice.

CCNS appreciates that the permittees provided a draft of the proposed request and that representatives of the permittees as well as NMED and citizen group representatives met on March 7, 2016. CCNS continues to believe that such pre-submittal meetings are useful and supports continuing that "standard" practice in the future.

Nevertheless, CCNS remains 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 WIPP permit is not adequate to protect human health and the environment, as required by the New Mexico Hazardous Waste Act (HWA) and the Resource Conservation and Recovery Act (RCRA). WIPP cannot be allowed to re-open until substantial revisions are made in the Permit, which can best be done through informal meetings and then class 3 permit modification procedures.

The WIPP underground is a significantly contaminated facility, including the Panel 7 hazardous waste disposal unit that cannot meet the "start clean, stay clean" DOE operating philosophy and the WIPP Permit requirements. In addition, the permittees admit that there are 683 containers in the WIPP underground with Hazardous Waste Numbers D001 and D002 that are not allowed by the permit. Permittees' July 29, 2016 Written Notice to John Kieling and Kathryn Roberts - http://www.wipp.energy.gov/library/Information_Repository_A/Responses_to_Administrative_Order/Attachment_Final_Report_Regarding_Application_of_D001_and_D002_HWN_with_Attachments.pdf The Notice also states that there were 148 Uniform Waste Manifests that were inaccurate and had to be corrected.

Nuclear Waste Partnership (NWP)'s inadequate performance

NWP became the Management and Operating Contractor and a permittee on October 1, 2012. In the more than 46 months since then, the facility has operated for about 16 months. Because of the inadequate performance of NWP, the facility has not been receiving or disposing of waste for the past 30 months and will not do so for some months into the future. Based on that record, the ability of NWP to safely operate the facility is in serious doubt. For the large majority of its time as operating contractor, and perhaps for the entire timeframe, NWP has been in violation of multiple permit provisions. Thus, the capability of NWP to comply with permit requirements is seriously in question since it has not demonstrated that it can do so. 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. 74-4-4.2.D(6) NMSA. 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. Given that adequate ventilation is necessary for any underground mine, especially in the significantly contaminated WIPP underground, reducing ventilation requirements in active rooms would result in less protection of public health and the environment. Thus, that request in Item 2 "Ventilation" must be denied.

CCNS 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 request. http://www.gao.gov/products/GAO-16-608

CCNS submits the following from the *GAO Highlights* as another example of NWP's incompetence to meet the basic requirements of the HWA permit for WIPP. Further, NWP did not meet the basic requirements for best practices. As a result, the permittees are asking for reduced ventilation rates in the contaminated underground, which must be denied.

"**The Department of Energy (DOE) did not meet its initial cost and schedule estimates for restarting nuclear waste disposal operations at the Waste Isolation Pilot Plant (WIPP), resulting in a cost increase of about $64 million and a delay of nearly 9 months.** DOE incurred this cost increase and delay partly because it did not follow all best practices in developing the cost and schedule estimates. In particular, DOE's schedule did not include extra time, or contingency, to account for known project risks. Instead, DOE estimated it would restart waste operations in March 2016 based on a schedule with no contingency that gave DOE less than a 1 percent chance of meeting its restart date. In January 2016, DOE approved new estimates that added 8.5 months to the schedule, extending the restart to December 2016; increased the estimated cost of recovery by $2 million; and resulted in an additional $61.6 million in costs for operating WIPP in fiscal year 2016. **DOE's WIPP operations activity manager said the revised schedule included contingency. However, according to DOE officials, they did not follow other best practices.** For example, DOE did not provide evidence of having an independent cost estimate to validate the revised estimate. DOE did not follow all best practices for cost and schedule estimates in part because DOE does not require that its cleanup operations, such as WIPP, follow these practices. Therefore, DOE cannot have confidence that its estimates are reliable. **In contrast, DOE established new requirements in June 2015 that its capital asset projects, such as the new ventilation system at WIPP, follow these best practices.** By also requiring cleanup operations to follow them, DOE would have more confidence in the estimates for cleanup operations and capital asset projects.

"DOE did not follow all best practices in analyzing and selecting an alternative for the new ventilation system at WIPP. As a result, DOE's analysis was not reliable and DOE cannot be confident that the alternative it selected in December 2015 will best provide the needed capabilities at WIPP. The analysis of alternatives (AOA) process entails identifying, analyzing, and selecting a preferred alternative to best meet the mission need. Of the four categories of best practices for AOAs, DOE's process fully met the category for identifying alternatives. For example, DOE identified a broad range of ventilation alternatives. **However, DOE only partially or minimally met the other three categories: general principles, analyzing alternatives, and selecting the preferred alternative. DOE did not follow the best practice to select the preferred alternative based on a cost- benefit analysis that assesses the difference between the life-cycle costs and benefits of each alternative.** In addition, an independent review that DOE commissioned consistent with best practices found that DOE's AOA did not adequately document a cost-benefit analysis and that, as a result, the selection of the preferred alternative was not supported by compelling information. The independent review recommended that DOE conduct a cost-benefit analysis consistent with best practices. However, DOE did not conduct the recommended analysis and document it before selecting the final alternative because there was no requirement to do so. In June 2015, the Secretary of Energy directed DOE to develop guidance for conducting AOAs consistent with AOA best practices. A DOE official said the department expected to issue the new guidance by December 2016." [Emphasis added.] http://www.gao.gov/assets/680/678859.pdf

Those facts demonstrate the Permittees' extremely poor compliance history and their gravely inadequate safety performance. Those 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. CCNS, therefore, fully incorporates the August 8, 2016 comments of the Southwest Research and Information Center about the permittees' Two-Item Package into these comments.

Thank you very much for your careful consideration of, and your response to, these and all other comments.

Sincerely,

Joni Arends, Executive Director

Concerned Citizens for Nuclear Safety

P. O. Box 31147

Santa Fe, NM 87594-1147

505 986-1973

www.nuclearactive.org

From: Joan Brown,osf
To: Maestas, Ricardo, NMENV
Cc: joan m brown
Subject: comments for WIPP Class 2 permit
Date: Monday, August 08, 2016 3:54:03 PM

August 7, 2016

Mr. Ricardo Maestas
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

Re: Public Comment about June 2016 Class 2 Permit Modification Requests about Reducing Room Ventilation Rate and the Contingency Plan at the Waste Isolation Pilot Plant

Dear Mr. Maestas:

I provide the following public comments about the Class 2 Permit Modification Requests to the Waste Isolation Pilot Plant (WIPP) hazardous waste permit issued by the New Mexico Environment Department (NMED).

<!--[if !supportLists]-->1. <!--[endif]-->Reducing Room Ventilation Rate. The request should be denied. This request puts workers at risk and is not aligned with the moral responsibility of the facility to provide adequate ventilation that protects worker and public health. If it is not possible to honor this commitment then the facility should not be reopened.

<!--[if !supportLists]-->2. <!--[endif]-->Contingency Plan. The Plan should be revised to include the new horizon at WIPP with the underground contamination since February 2014. The facility is not the same as before February 2014 and to deny this reality is to act in an irresponsible way moving into the future. Since the accident, the E-300 drift (tunnel), which cannot be used as a secondary evacuation route because respiratory protection equipment is and must be required to be used in more than 2,000 feet of that drift. The problems caused by the underground contamination cannot be denied and must be addressed before WIPP can be re-opened.

Finally, the public is quite concerned about the situation at WIPP because it has grave implications for the future generations. This facility is unlike any in the country and must be handled in an exemplary manner.

Please include my name on the WIPP facility mailing list.

Thank you for considering these concerns and I look forward to your response

Sincerely,

Sr. Joan Brown, osf

--

Joan Brown,osf

Executive Director
New Mexico Interfaith Power and Light (NMIPL)

New Mexico Interfaith Power and Light
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“There is no inner world without the outer world.” Thomas Berry, Author of The Great Work

nuclear watch new mexico

August 8, 2016

Ricardo Maestas
New Mexico Environment Department
2905 Rodeo Park Drive, Building 1
Santa Fe, NM 87505

Via email to ricardo.maestas@state.nm.us

RE: WIPP Class 2 Permit Modification Request

Dear Mr. Maestas,

Nuclear Watch New Mexico respectfully submits these comments on the Class 2 permit modification request package that was submitted on June 3, 2016, according to the public notice.

NukeWatch appreciates that a draft of the proposed request was provided and that representatives of the permittees as well as the New Mexico Environment Department (NMED) met with citizen groups on March 7, 2016. NukeWatch continues to believe that such pre-submittal meetings are useful and supports continuing that practice in the future.

However, NukeWatch remains 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 WIPP permit is not adequate to protect human health and the environment, as required by the New Mexico Hazardous Waste Act (HWA) and the Resource Conservation and Recovery Act (RCRA).

- WIPP cannot be allowed to re-open until substantial revisions are made in the Permit, which can best be done through informal meetings in advance and then formal class 3 permit modification procedures.

The WIPP underground is a significantly contaminated facility, including the Panel 7 hazardous waste disposal unit that cannot meet the "start clean, stay clean" DOE operating philosophy and the WIPP Permit requirements. In addition, the permittees admit that there are 683 containers in the WIPP underground with Hazardous Waste Numbers D001 and D002 that are not allowed by the permit. The

Notice also states that there were 148 Uniform Waste Manifests that were inaccurate and had to be corrected.

The fact that there are 683 containers with prohibited items and 148 incorrect Uniform Waste Manifests demonstrates that there are many deficiencies in the Permit.

- 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.
- Until there is a revised permit to address those and other deficiencies, WIPP should not be allowed to re-open. 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.

Denial of permit modification request Item 2

Pursuant to 20 NMAC 4.1.900 (incorporating 40 CFR 270.42(b)(6)(i)(B)) and its historic practices, NMED may deny class 2 modification requests.

- We strongly believe that Item 2 must be denied because reducing ventilation requirements in an active room would reduce protection of human health and the environment.

Item 2 - Active Room Ventilation Flow Rate

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)).

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)." Thus, they propose to modify the requirement to allow "other measures."

It is unsafe to allow waste handling in a significantly contaminated underground mine without adequate ventilation.

- Until there is adequate ventilation throughout the underground, including active rooms, waste handling should not be allowed.

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 hypothetical roof fall scenario is not a sufficient basis for the request. 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 permittees (and NMED) must evaluate the effects of a similar (or larger) incident in an active room and the adjacent room to determine what ventilation rates are required. 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.

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." That assertion has, in fact, not been demonstrated with actual analysis, including drums containing prohibited items or prohibited Hazardous Waste Numbers.

- The permittees (and NMED) must consider that additional containers could be emplaced at WIPP and analyze the effects of chemical reaction releases.
- Moreover, 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 shielded containers.

The permittees also state: "[t]his modification also allows the Permittees to continue waste disposal operations during offnormal conditions, and maintenance activities." P. 6. Thus, the permittees seek to elevate waste emplacement to be an equivalent value as having adequate ventilation. 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 purpose and effect is to protect workers, as well as public health and the environment. Thus, waste handling is allowed when that ventilation rate (and other requirements) are met, but is otherwise prohibited until that ventilation flow is achieved. That priority for safety over waste handling is necessary and proper under the HWA and its regulations. The purpose of the modification request is to allow waste handling, despite not meeting the ventilation requirement, effectively saying that waste emplacement is an equivalent or higher value than safe ventilation levels. NMED must reject such equivalency.

- The permittees have provided no legal or regulatory rationale for such a waste handling value, nor should any such standard be allowed.

Artificially tying allowed VOC levels to ventilation rates is a dangerous and faulty logic. It is unsafe to allow waste handling in a significantly contaminated underground mine without adequate ventilation. Less ventilation is never protective.

- Until there is adequate ventilation throughout the underground, including active rooms, waste handling should not be allowed.
- The ventilation rates must be tied to Oxygen, CO, CO2, and other atmospheric gas rates.
- There must be a short time limit that is allowed for operations under-35,000 scfm.

- There must be limited areas where less-than 35,000 scfm applies. For instance, the distance to escape to safety must be considered for operations under-35,000 scfm.

By the permittees own plans and policies, meeting the 35,000 scfm requirement is necessary and achievable. The WIPP Recovery Plan of September 30, 2014 states that at least 180,000 scfm is "required for commencement of waste emplacement operations." P. 19. With that level of ventilation, 35,000 scfm can be maintained in the active room. That Recovery Plan has not been revised and 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 modification request does not mention that 180,000 scfm requirement, nor explain why it should not and cannot be implemented. Thus, the request does not explain why the request is needed and must do so specifically.

20.4.1.900 NMAC (incorporating 40 CFR 270.42(b)(1)(iii)) requires that the request explain why the modification is needed. But since there is no need to not meet the ventilation flow requirement, the request must be denied. 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.

- If this PMR is needed for the convenience of the permittees, please so state.

The permittees also 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."

- Please give examples of alternative remedial actions and when they might be used.

The proposed additional language would allow the permittees to continue to conduct waste handling in the open room, despite reaching the "95% Action Level." Such action is not protective of public health and the environment and again makes waste handling equivalent to worker and public health and safety. There is not 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 exposures. The effects of such cumulative exposures were not considered in establishing the limits in Tables 4.4.1 and 4.6.3.2.

- The Action Levels must be shown to be protective in the existing circumstances.

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. 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 permittees can and must always exert control over employees and require PPE or conduct additional monitoring.

- The request must be denied because no need has been shown.

Request for a Class 3 PMR

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. This PMR is so important, and must be approved, so that the facility can continue to operate. As it stands now, there are only 2 choices – either approve this Class 2 PMR or shut down operations until 35,000 scfm can be reached.

- As such it should be considered a "major modification" and subject to Class 3 PMR requirements.

Changes to permit modification request Item 1

The permittees propose many changes to the Contingency Plan. We do not object to many of the proposed changes. We do support changes such that the Plan is consistent with the requirements of 20.4.1.500 NMAC (incorporating 40 CFR Subpart D) and more adequately reflects the significant underground contamination at WIPP.

The regulations at 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. Radiological emergency response equipment is required at WIPP and it must be included in the list.

- Radiation Monitoring Equipment, Decon Shower Equipment, HEPA vacuums, and Paint or Fixitive must remain listed, not eliminated in proposed Table D-2. Pages 24 and B-81.

Proposed Figure D-4 (p. B-99) does not reflect the significant underground contamination and must be changed.

- NMED should reject the proposed figure and require the permittees to submit a new figure.

All of E-300 north of S-2180 to the exhaust shaft is a highly contaminated drift that is designated as an Airborne Radiation Area. See Attachment 1. People underground should not be in the drift without PPE and respirators.

- That drift should not be designated "secondary escapeway." Instead, it should be designated as "extreme emergency escapeway" that is designated for use only when drifts E-140, W-30, and W-170 cannot be used.

Drift W-170 between S-2180 and S-1950 also is highly contaminated and is designated as an Airborne Radiation Area. See Attachment 1. People underground should not be in the drift without PPE and respirators.

- That drift should not be designated "secondary escapeway." Instead, it should be designated as "extreme emergency escapeway" that is designated for use only when drifts E-140 and W-30 cannot be used. Drift W-170 could be the closest evacuation route for workers in Panel 7, which raises concerns about waste handling in that panel and whether all workers in that panel should always be in PPE and respirators.

Further, drift S-2180 is highly contaminated and is designated as an Airborne Radiation Area. See Attachment 1. People underground should not be in the drift without PPE and respirators.

- That drift should not be designated "secondary escapeway." Instead, it should be designated as "extreme emergency escapeway" that is designated for use only when S-2520 cannot be used. Nukewatch does not support any waste emplacement in that drift because of the high contamination levels. The fact that workers in Panel 7 have no adequate secondary escapeway raises significant concerns as to whether Panel 7 should be used for further waste emplacement.

NukeWatch does not understand why a "primary escapeway" is shown in Panel 6 and S-3650 and "secondary escapeway" is shown in S-3080 and S-3110. All of those areas are contaminated and are designated as Contaminated Areas requiring PPE. See Attachment 1. While ground control and monitoring activity may be required in those areas, similar activities are required in panels 2, 3, and 4 where no escapeways are shown.

- 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.

Thank you very much for your careful consideration of these and all other comments. We look forward to your response.

Sincerely,

Scott Kovac
Operations and Research Director
Nuclear Watch New Mexico

August 8, 2016

Ricardo Maestas
New Mexico Environment Department (NMED)
2905 Rodeo Park Drive, Building 1
Santa Fe, NM 87505

RE: WIPP Class 2 Permit Modification Request Two-Item package

Dear Ricardo,

WIPP needs a new permit

The permittees admit that there are 683 containers in the WIPP underground with Hazardous Waste Numbers D001 and D002 that are not allowed by the permit. Permittees' July 29, 2016 Written Notice to John Kieling and Kathryn Roberts - http://www.wipp.energy.gov/library/Information_Repository_A/Responses_to_Administrative_Order/Attachment_Final_Report_Regarding_Application_of_D001_and_D002_HWN_with_Attachments.pdf

> The Permittees shall design, construct, maintain, and operate WIPP to minimize the possibility of afire, explosion, or any unplanned sudden or non-sudden release of transuranic (TRU) mixed wasteor mixed waste constituents to air, soil, groundwater, or surface water which could threaten humanhealth or the environment, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.31).

The fact that there are 683 containers with prohibited items and that there were 148 incorrect Uniform Waste Manifests also demonstrates that there are many deficiencies in the Permit.

CARD agrees with SRIC's conclusion that until there is a revised permit to address those and other deficiencies, WIPP should not be allowed to re-open. 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.

This current request to modify the permit should be denied (Item 2)

Reducing ventilation requirements in an active room would reduce protection of human health and the environment.

Item 2 - Active Room Ventilation Flow Rate
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 ft^3/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)).

In conclusion, the modification proposed, though of convenience to the permitees, is not protective of the WIPP worker and should be denied. The permittees are currently in violation of the Permit. The Permit should be revised in a wholesale rather than in a piecemeal manner.

Sincerely,
Janet Greenwald
Co-coordinator, Citizens for Alternatives to Radioactive Dumping (CARD)
215 Harvard SE
Alb NM 67106

Department of Energy
Carlsbad Field Office
P. O. Box 3090
Carlsbad, New Mexico 88221

AUG 0 8 2016

Mr. John E. Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Subject: Comments on the June 3, 2016, Class 2 Permit Modification Request: "Revise the *RCRA Contingency Plan* and Associated Emergency Response Personnel Training and Active Room Ventilation Flow Rate" for the Waste Isolation Pilot Plant Hazardous Waste Facility Permit Number NM4890139088-TSDF

Dear Mr. Kieling:

The purpose of this letter is to provide you with comments on the Class 2 Permit Modification Request: "Revise the *RCRA Contingency Plan* and Associated Emergency Response Personnel Training and Active Room Ventilation Flow Rate" submitted to the New Mexico Environment Department on June 3, 2016.

We certify under penalty of law that this document and all attachments were prepared under our direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Mr. George T. Basabilvazo at 575-234-7488.

Sincerely,

Todd Shrader, Manager
Carlsbad Field Office

for Philip J. Breidenbach

Philip J. Breidenbach, Project Manager
Nuclear Waste Partnership LLC

Enclosure

cc: w/enclosure
R. Maestas, NMED * ED
C. Smith, NMED ED
CBFO M&RC
*ED denotes electronic distribution

CBFO:EPD:GTB:ELN:16-0552:UFC5486.00

Permittees' Comments on the Class 2 Permit Modification Request (PMR), "Revise the *RCRA Contingency Plan* and Associated Emergency Response Personnel Training and Active Room Ventilation Flow Rate," Submitted to the NMED on June 3, 2016

Item 1: Revise the *RCRA Contingency Plan* and Associated Emergency Response Personnel Training

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, Sections 2.10.1.1. and 2.10.1.2. are necessary. These additional revisions to the Permit are proposed as follows:

2.10.1.1. Internal Communications

The Permittees shall have an internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.32(a)). 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. The alarm system shall include local and facility-wide alarm systems.

2.10.1.2. External Communications

The Permittees shall have a communications device or system capable of summoning outside agencies for emergency assistance, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.32(b)). The external communication systems shall include ~~the commercial telephone system~~mobile phones and two-way radios.

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:

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~~6~~, as required by 20.4.1.500 NMAC (incorporating 40 CFR §§264.37(a) and 264.52(c)). If state or local authorities, other mining operations, contractors, or other governmental agencies decline to enter into preparedness and prevention arrangements with the Permittees, the Permittees shall document this refusal in the operating record, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.37(b)).

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-

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:

2.10.5.2. Coordination Agreements

As specified in Section D-76 of Permit Attachment D, these arrangements shall be agreements~~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)). Copies and descriptions of these MOUs and agreements shall be maintained at the facility in the operating record.

2.12.2 Copies of Plan

The Permittees shall maintain copies of the Contingency Plan and all revisions and amendments to the Contingency Plan as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.53). The Permittees shall provide copies of the current Contingency Plan to the Secretary and all entities with which the Permittees have agreements with local emergency response agencies~~emergency MOUs or MAAs~~, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.53(b)). The Permittees shall maintain at least one current paper copy of the Contingency Plan at the facility in a location readily accessible to the Emergency Coordinator specified in Permit Section 2.12.4.

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:

The EOC staff ~~will~~ assesses opportunities for coordination and the use of ~~mutual-aid~~ agreements with local ~~outside~~ agencies making additional emergency personnel and equipment available (Section D-67), as well as the use of specialized response teams available through various State and Federal agencies. ~~As~~Because the WIPP facility is a DOE-owned facility, the ~~WIPP facility~~Permittees may also use the resources available from the *National Response Framework*~~Federal Response Plan, signed by 27 Federal departments and agencies in April 1987, and developed under the authorities of the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.) and amended by the Stafford Disaster Relief Act of 1988. Most resources are available within 24 hours. The WIPP facility maintains its own emergency response capabilities on site. In addition to the supplemental emergency responders, radiological control technicians, environmental sampling technicians, wildlife biologists, and various other technical experts are available for use on an as-needed basis~~.

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.

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.

   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 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.

   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.

7. To ensure completeness with respect to the scope and applicability of the proposed revised *RCRA Contingency Plan,* 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:

   > The WIPP facility is a large quantity generator of hazardous waste pursuant to 20.4.1.300 NMAC (incorporating 40 CFR Part 262, "Standards for Generators of Hazardous Waste"). 20.4.1.300 NMAC (incorporating 40 CFR §262.34(a)(4), which references 40 CFR Part 265, Subpart D) requires that a contingency plan be in place that describes actions that facility personnel will take in response to any fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the

environment. The provisions of the *RCRA Contingency Plan* also apply to the Hazardous Waste Staging Areas for site-generated hazardous waste, which are located in Buildings 474A and 474B on the surface, as shown in Figure D-1, and in the underground at S550/E140 .

Likewise, changes to the locations of emergency equipment in Table D-6 are required to address those applicable to the underground Hazardous Waste Staging Area at S550/E140 and to designate the Hazardous Waste Staging Areas in Building 474 as "surface" locations. These proposed changes are highlighted in the revision to Table D-6 from the PMR provided in Attachment 1.

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.

   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.

   The Permittees also 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.

   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.

   Finally, 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:

   Head lamps are operated daily and are repaired or replaced upon failure

   Mobile Phones are operated daily and are repaired or replaced upon failure

Radios are operated daily and are repaired or replaced upon failure

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.

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 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.

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.

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.

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.

Attachment 1

Revised Tables D-6 and E-1

Table D-~~6~~2
Emergency Equipment Maintained at the Waste Isolation Pilot Plant

Equipment	Description and Capabilities	Location
Communications		
Building Fire Alarms	~~Manual pull stations and automatic~~ Fire alarm panels, fire alarm transmitter, and audible alarm devices (e.g., horns, bells, tones) that provide notification of fires; transmitted to the CMR~~(sprinkler system flow, and smoke and thermal detectors) trigger fire alarm; locally visible and audible; visual display and alarm in Central Monitoring Room (CMR)~~	Guard and Security Building (Building 458), Water Pumphouse (Building 456), Warehouse/Shops Building (Building 453), Exhaust Shaft Filter Building (Building 413), Support Building~~,~~ (Building 451, CMR/-Computer Room), Waste Handling Building (Building 411), TRUPACT Maintenance ~~Facility~~Building (Building 412), Salt Handling (**SH**) Shaft Hoisthouse (Building 384), ~~Maintenance Shops, Guard Shack*Entry Control Point~~Guardshack (Building 242), Auxiliary Warehouse Building (Building 455), ~~Core Storage Building,~~ Engineering Building (Building 486), Training ~~Facility~~ Building (Building 489), Safety and Emergency Services Facility~~Building~~ (Building 452), North Maintenance Shop (Building 247), and surface Hazardous Waste ~~Storage~~ Staging ~~(non-TRU)~~ Areas (~~Facility 474~~Buildings 474A and 474B) ~~*local alarms; not connected to the CMR~~
Underground Fire Alarms	Fire alarm panels, fire alarm transmitter, and audible/visual alarm devices (e.g., horns, bells, strobes) that provide notification of fires; transmitted to the CMR~~Automatic/Manual; have priority over other paging channel signals but not override intercom channels; alarms sound in the general area of the control panel and are connected to the underground evacuation alarms; they also interface with the CMR.~~	Fire detection and control panel locations: Waste Shaft Underground Station, SH Shaft Underground Station, Between E-140 and E-300 in S-2180 Drift, ~~E-0/N-1200,~~ Fuel Station (N150/W170)
~~Site-wide Evacuation Alarm~~ ~~Surface Evacuation Signals~~Site Notification System; Underground Evacuation ~~Warning~~Alarm System	For surface, ~~T~~alarms and notifications transmitted over paging channel of the public address system,~~ overriding its normal use;~~ manually initiated~~ according to procedures requiring evacuation~~; for underground, audible alarm ~~produced by tone generator at 10 decibels above ambient noise level (or at least 75 decibels); flashing strobe lights; radios and/or pagers are used to notify facility personnel outside alarm range. Monthly test are performed on the PA, site notification alarms, and plectrons.~~	Site-wide
~~Vehicle Siren~~	~~Manual; oscillating; emergency services/surface response vehicles, is mechanical and electronic.~~	~~WIPP surface emergency vehicles~~

Equipment	Description and Capabilities	Location
Public Address System	Includes intercom phones; handset stations and loudspeaker assemblies~~, each with own amplifiers; multichannel, one for public address and pages, and others for independent party lines.~~	~~Surface and underground~~Site-wide
~~Intraplant Phones~~	~~Private automatic branch exchange; direct dial; provide communication link between surface and underground operations~~	~~Throughout surface and underground~~
Mine Page~~r~~ Phones	Battery-operated paging system	~~CMR, Mine Rescue Room, EOC, lamproom,~~ ~~u~~Underground at S550/W30, S1000/W30, S1950/E140, SH Shaft Collar and Underground Station, Waste Shaft Collar and Underground Station~~,~~, surface at Support Building (Building 451, FSM desk, CMR, lamproom), ~~EST Station~~Safety and Emergency Services Facility (Building 452, Fire Department workstation area, Mine Rescue Room)
~~Emergency Pagers~~	~~Manual; , intermittent alarm signals~~	~~Issued to appropriate emergency personnel~~
~~Plectrons~~	~~Tone-alert radio receivers placed in areas not accessible by the public address system~~	~~Site-wide~~
Portable Radios	Two-way, portable; transmits and monitors information to/from other transmitters	Issued to individuals
Plant Base Radios	Two-way, stationary; transmits and monitors information to/from other transmitters~~, VHF-FM; linked to Eddy County Sheriff Department, NM State Police, and Otis Fire Department), and WIPP Channels 1-18 (Communication with the Lea County Sheriff's Department, the Hobbs Fire Department, Carlsbad Medical Center and Lea Regional Hospital is available via the Eddy County dispatcher) (Site Security, Site Operations and Site Emergency, maintenance, repeater to Carlsbad). Wireless communications such as cellular phones may be used to contact the Eddy County emergency responders.~~	~~Various site locations~~Safety and Emergency Services Facility (Building 452), Guard and Security Building (Building 458), Support Building ~~451~~ (Building 451, CMR, FSM desk)
Mobile Phones	Provide communications link between ~~WIPP Security and key~~emergency response personnel, as needed	Issued to individuals plus emergency vehicles~~,~~
Spill Response Equipment and Materials		
HAZMAT Equipment	Spill response equipment and supplies, PPE, and decontamination supplies stored and maintained in accordance with NFPA 1901 and as documented in WIPP facility files	Surface, in designated areas near Safety and Emergency Services Facility (Building 452)

Equipment	Description and Capabilities	Location
Absorbent Materials	Containment or cleanup of spills, including: Pressurized spill-response gun; Absorbent sheets and/or dikes for containment or cleanup of spills of oil, petroleum-based chemicals, and general liquids; Spill-control material for solvents and neutralizing absorbents and for acids/caustics	Surface, in designated areas near Safety and Emergency Services Facility (Building 452)
~~SPILL-X-S Guns and Recharge Powder~~	~~Containment;~~ ~~(1)SPILL-X model SC-30-C(Gun)~~ ~~(1)SPILL-X model XC-30-S(Gun)~~ ~~(1)SPILL-X model SC-30-A(Gun);~~ ~~(1) A-Acid, 5-gallon bucket (Recharge Powder)~~ ~~(1)S-Solvent, 5-gallon bucket (Recharge Powder)~~ ~~(1)C-Caustic, 5-gallon bucket (Recharge Powder)~~	~~HAZMAT trailer~~
~~Absorbent Sheets~~	~~Containment or cleanup;~~ ~~(1) 3' x 100' Sheet~~	~~HAZMAT trailer~~
~~Absorbents~~	~~Grab and Go container; spill control bucket;~~ ~~(1) for solvents and neutralizing absorbents; 5-gallon bucket~~ ~~(1) for acids/caustics; 5-gallon bucket~~	~~HAZMAT trailer~~
~~Absorbent Material~~	~~Containment or cleanup;~~ ~~(1) 100 ft. rolled or equivalent socks "Pig" for general liquid~~ ~~(1) 100 ft. rolled or equivalent socks "Pig" for oil~~	~~HAZMAT trailer~~
~~Air Bag System~~	~~Extrication, Stabilization, Cribbing~~ ~~(1) bag system with tank kit and the following bag sizes:~~ ~~(1)12-ton,~~ ~~(1) 21.8-ton,~~ ~~(1)17-ton~~	~~Surface rescue truck~~
~~Air Chisel~~	~~Extrication~~ ~~(1) Capable of cutting 3/16" steel~~	~~Surface rescue truck~~
~~Drum Transfer Pumps and Drum Opener~~	~~Containment or cleanup;~~ ~~(1) unit for chemical transfer~~ ~~(1) hand operated pump for petroleum transfer~~ ~~(1) drum opener~~	~~HAZMAT trailer~~
~~Floor Squeegee~~	~~Containment or cleanup;~~ ~~(1) straight rubber blade, nonwood handle~~	~~HAZMAT trailer~~
~~Foam Concentrate~~	~~AFFF 6%~~ ~~(4) 5-gallon pail~~	~~Fire truck # 1~~
~~Gas Cylinder Leak Control Kit~~	~~(1)Series A Hazardous Material Response Kit; contains nonsparking equipment to control and plug leaks~~	~~HAZMAT trailer~~
~~Portable Generator~~	~~(1)Backup power; 5,000 watt; 120 or 240 volt~~	~~Surface rescue truck~~

Equipment	Description and Capabilities	Location
~~Hand Tools~~	~~Containment and cleanup;~~ ~~Underground rescue truck:~~ ~~(1)12# Sledge Hammer~~ ~~(1)3/8" Drive Socket Set~~ ~~(1)½" Drive Socket Set~~ ~~(1)3/4" Drive Socket Set~~ ~~(1)25' ½" Chain~~ ~~(1)6' Wrecking Bar~~ ~~(1)Bottle Jack~~ ~~(1)4# Hammer~~ ~~(1)18" Crescent Wrench~~ ~~(1)5' Pry Bar~~ ~~(1)2' Pry Bar~~ ~~(1)100' Extension Cord~~ ~~(1)4' Nylon Sling~~ ~~(1)6' Nylon Sling~~ ~~(1)10' Nylon Sling~~ ~~These tools are located in the HAZMAT Trailer. They are non-sparking.~~ ~~(1)14"L adjustable pipe wrench~~ ~~(1)15" multi-opening bung wrench~~ ~~(1)hammer/crate opener~~ ~~(1)8" pipe pliers~~ ~~(1)8" blade Phillips~~ ~~(1)#2 screwdriver~~ ~~(1)6" blade standard screwdriver~~ ~~(1)Claw Hammer~~	~~Underground rescue truck, HAZMAT trailer~~
~~Come-a-longs~~	~~(1) 4-ton; cable-type Ratchet lever tool designed specifically for lifting, lowering and pulling applications including jobs requiring rigging, positioning, and stretching. Used in rescue for extrication.~~	~~Surface rescue truck and underground rescue truck~~
~~Porta-power~~	~~(1) 10-ton hydraulic, hand-powered jaws used for extrication during rescues.~~	~~Surface rescue truck~~
~~Jugs~~	~~Containment or cleanup;~~ ~~(4) 1-gallon plastic~~	~~HAZMAT trailer~~
~~Pails~~	~~Containment or cleanup;~~ ~~(3) 5-gallon plastic with lid~~	~~HAZMAT trailer~~
~~Portable Lighting~~	~~(1) Emergency lighting system; 120 volts; 500-watt bulbs, suitable for wet location~~	~~Underground rescue truck~~
~~Patching Kit~~	~~Series A Hazardous Response Kit; Class A; contains nonsparking equipment to control and plug leaks.~~	~~HAZMAT trailer~~
~~Scoops and Shovels~~	~~Cleanup; plastic; various sizes; nonsparking; nonwood handles~~ ~~(1) Scoop~~ ~~(3) Shovels~~	~~HAZMAT trailer~~

Equipment	Description and Capabilities	Location
Medical Resources		
Ambulance ~~#1~~	A minimum of one ambulance, maintained and equipped in accordance with the New Mexico Ambulance Standard, 18.3.14 NMAC, and as documented in WIPP facility files ~~Equipped as per Federal Specifications KKK-A-1822 and New Mexico Emergency Medical Services Act General Order 35; equipped with a radio to Carlsbad Medical Center, VHF radio, UHF medical frequency, cellular phone~~	Surface at Safety and Emergency Services Facility~~Surface~~ (~~Safety and Emergency Services Facility~~Building 452, Vehicle Bay)
~~Ambulance #2~~Medical Cart	A minimum of one medical cart,~~Diesel and/or electric ambulance~~ equipped to provide basic life support operations, as documented in WIPP facility files~~with first aid kit, 2 stretchers, and other associated medical supplies~~	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
~~Ambulance #3~~ [a]	~~Diesel and/or electric ambulance equipped with first aid kit, rescue basket, oxygen, cardiac monitor and other associated medical supplies~~	~~Underground~~
~~Rescue Truck #1~~	~~Special purpose vehicle; light and heavy duty rescue equipment; transports 1 litter patient, medical oxygen and supplies for mass casualties, fire suppression support equipment (rescue tool, air bag, K-12 Rescue Saw, 5,000-watt generator, self-contained breathing apparatus (SCBA), and much more equipment~~	~~Surface (Safety and Emergency Services Facility)~~
~~Miner's First Aid Station~~Miners First Aid Stations	Equipped per 30 CFR 57.15001	~~Various Underground Locations~~Underground (Salt Shaft Area, Waste Shaft Area, E300 Maintenance Shop, and at S1000/W30, S1300/W30, and S1950/E140)
Fire Detection and Fire Suppression Equipment		
Building Smoke, Thermal Detectors, or Manual Pull Stations	Devices that trigger an alarm and/or fire suppression system~~Ionization and photoelectric or fixed temperature/rate of rise detectors; visual display and alarm in CMR; manual pull stations. The underground has manual fire alarm pull stations located where personnel have access when evacuating. These are connected to the U/G evacuation alarm.~~	Guard and Security Building (Building 458), Warehouse/Shops Building (Building 453), Support Building~~,~~ (Building 451, CMR/Computer Room), Waste Handling Building (Building 411), TRUPACT Maintenance Building~~Facility~~ (Building 412), ~~Waste Shaft Collar,~~ Underground Fuel Station (N150/W170), SH Shaft Hoisthouse (Building 384), Engineering Building (Building 486), ~~Industrial~~ Safety and Emergency Services Facility~~Building~~ (Building 452), and Training Building~~Facility~~ (Building 489)
Fire Truck~~s #1~~	A minimum of two fire trucks to assist in fighting fires; firefighter equipped in accordance with NFPA 1901 and/or 1906 and as documented in WIPP facility files~~Equipped per Class "A" fire truck per NFPA; capacity 750 gallons, with pump capacity of 1200 gallons per minute~~	Surface at Safety and Emergency Services Facility~~Surface~~ (~~Safety and Emergency Services Facility~~Building 452, Vehicle Bay)

Equipment	Description and Capabilities	Location
~~Fire Truck #2~~	~~Equipped per Class "A" fire truck per NFPA; capacity 1500 gallons, with pump capacity rated for 1250 gallons per minute.~~	~~Surface (Safety and Emergency Services Facility)~~
~~Rescue Truck # 2 (U/G)~~	~~(1) 125-pound dry chemical extinguisher~~ ~~(1) 150-pound foam extinguisher~~	~~Underground~~
~~Rescue Truck #3~~ [a] ~~(U/G)~~	~~(1) 125-pound dry chemical extinguisher~~ ~~(1) 33-gallon foam extinguisher~~	~~Underground~~
Rescue Carts~~s~~/Trucks~~s~~	A minimum of two special-purpose vehicles, one on the surface and one in the underground; light rescue units, equipped in accordance with the NFPA 1901 and as documented in WIPP facility files	Surface at Safety and Emergency Services Facility~~Surface~~ (Building 452, Vehicle Bay) and Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
~~Underground~~ Fire~~-~~ [a] Suppression Cart~~Vehicles~~	A minimum of one special-purpose electric cart to assist in fighting fires; equipped with a minimum of one fire extinguisher~~(1) 125-pound dry chemical extinguisher~~ ~~(1) 33-gallon foam extinguisher~~	Underground (Emergency Vehicle Parking/Charging Area at S700/E140)
Fire Extinguishers	~~Individual~~ Hand-held fire extinguishers~~ stations~~; ~~various types~~ located throughout the facility~~, conforming to NFPA 10~~ in accordance with NFPA 10~~.~~	~~Buildings, underground, and underground vehicles~~Surface and underground locations used for hazardous waste management, as documented in WIPP facility files
Automatic Dry Chemical Extinguishing Systems	Automatic; ~~1,000-pound system (Dry Chemical);~~ actuated by thermal detectors or by manual pull stations	Underground fuel station (N150/W170)
Automatic Fire Suppression Systems on liquid fueled vehicles	~~Individual fire suppression systems are installed on liquid fueled vehicles~~Individual automatic fire suppression systems installed on applicable liquid-fueled vehicles, as determined by a fire risk assessment performed in accordance with NFPA 122	~~Underground and Surface~~Surface and underground locations used for hazardous waste management, as documented in WIPP facility files

Equipment	Description and Capabilities	Location
Sprinkler Systems	~~Fire alarms activated by water flow~~NFPA water-based fire suppression systems	Water Pumphouse (Building 456), Guard and Security Building (Building 458), ~~Support Building,~~ Waste Handling Building (Building 411, ~~Contact Handling~~CH Bay, ~~Remote Handling~~RH Bay, and Overpack and Repair Areas~~contact-transuranic waste area~~ only), ~~Warehouse/Shops Building, Auxiliary Warehouse Building,~~ TRUPACT Maintenance Building (Building 412)~~Facility~~, ~~Training Facility, SH Shaft Hoisthouse,~~ Exhaust Shaft Filter Building (Building 413), and surface Hazardous Waste Staging Areas (Buildings 474A and 474B)~~Engineering Building, and Safety Building~~
Water Tanks, Hydrants	Fire suppression water supply; one 180,000-gallon capacity tank, plus a second tank with 100,000 gallon reserve	Tanks are at southwestern edge of WIPP facility; pipelines and hydrants are throughout the surface
Fire Water Pumps	Fire suppression water supply; pumps are minimally rated at 125 pounds per square inch, 1,500 gallons per minute centrifugal pump, one with electric motor drive, the other with diesel engine; pressure maintenance jockey pump	Water Pumphouse (Building 456)
Personal Protection Equipment		
Head~~lamps~~ Lamps	Mounted on hard hat; battery operated	Each person underground
Underground Self-Rescuer Units	Short-term rebreathers per 30 CFR 57.15030~~; approximately 300~~	Each person underground
Self-Contained Self-Rescuer	Air supply; a minimum of 12 caches in the underground; self-contained rescue units shall be adequate to protect an individual for one hour or longer or, alternatively, sufficient to allow the employee time to reach an additional self-contained self-rescue device in the underground per NMSA 69-8-16~~At least 60 minutes of oxygen available. Approximately 400 units cached throughout the underground~~	Cached throughout the underground
Mine Rescue Self-Contained Breathing Apparatus (SCBA)	Oxygen supply; 4-hour closed-circuit units consistent with 30 CFR 49.6; a minimum of 12 units, one for each Mine Rescue Team member~~; approximately 14 Mine Rescue Team Draeger units~~	Safety and Emergency Services Facility (Building 452, Mine Rescue Training Room)
Fire Department Self-Contained Breathing Apparatus (SCBA)	Air supply; a minimum of 12 units; SCBAs shall meet the minimum requirements established per NFPA 1981	~~Surface (Building 452)~~Surface Fire Trucks and Rescue Truck; Underground Rescue Cart

Equipment	Description and Capabilities	Location
~~Chemical and Chemical-Supported Gloves~~	~~Body protection;~~ ~~(12 pair) inner-cloth,~~ ~~(12 pair) outer-pvc,~~ ~~(5 pair) outer-viton~~	~~HAZMAT trailer~~
~~Suit, Acid~~	~~Body protection;~~ ~~(4) acid~~	~~HAZMAT trailer~~
~~Suit, Fully Encapsulated~~	~~Body protection; used with SCBAs; full outerboot;~~ ~~(4) Level A;~~ ~~(4) Level B~~	~~HAZMAT trailer~~
~~Emergency Medical Equipment~~		
~~Antishock Trousers~~	~~Shock treatment;~~ ~~(2) inflatable, one on each ambulance~~	~~Ambulance # 1 and # 2~~
~~Heart Monitor and Defibrillator~~	~~Heart Monitor/defibrillator~~	~~Ambulance # 1 and # 2~~
~~Oxygen~~	~~Patient care;~~ ~~Size D:~~ ~~(2) Ambulance #1~~ ~~(1) Underground Ambulance~~ ~~(1) Health Services~~ ~~Size E:~~ ~~(1) Rescue Truck~~ ~~(2) Underground Ambulance~~ ~~Size M:~~ ~~(1) Ambulance #1~~	~~Ambulance # 1 and # 2, surface rescue truck~~
~~Resuscitators (Bag)~~	~~Disposable bag resuscitation~~ ~~Ambulance #1:~~ ~~(2) adult size~~ ~~(1) child size~~ ~~Underground Ambulance:~~ ~~(2) adult size~~	~~Ambulance # 1,~~ ~~Ambulance # 2~~
~~Splints~~	~~Immobilize limbs;~~ ~~(1) Adult traction splint, lower extremity, with limb-supporting slings, padded ankle hitch and traction device per ambulance.~~ ~~(2) Rigid splinting devices or equivalents, suitable for immobilization of upper extremities per ambulance.~~ ~~(2) Rigid splinting devices or equivalents, suitable for the immobilization of lower extremities.~~ ~~(1) Set of Airsplints:~~ ~~6 assorted splints; hand/wrist, half arm, full arm, foot/ankle, half leg, and full leg per miner's aid stations.~~	~~Ambulance # 1 and # 2,~~ ~~Miner's Aid Stations~~

Equipment	Description and Capabilities	Location
~~Stretchers~~	~~Patient transport;~~ ~~(2) Spine Boards, one short and one long, with nylon straps per ambulance. (also used to perform cardiopulmonary resuscitation)~~ ~~(2) Emergency Stretchers or scoops, or combination per ambulance~~ ~~(1) All-purpose multi-level ambulance stretch (gurney), with 3 safety straps and locking mechanism per ambulance.~~ ~~(1) Stretcher in each miner's aid station.~~	~~Various combinations in Ambulance # 1 and # 2, Miner's Aid Station~~
~~Suctions~~	~~For medical emergencies:~~ ~~Portable~~ ~~(1) Suction unit, capable of delivering at least 300 mm. HG on each ambulance.~~	~~Ambulances #1 and #2~~
~~Trauma Kits~~	~~(1) adult blood pressure cuff and stethoscope~~ ~~(4) soft-roller bandages~~ ~~(3) triangular bandages~~ ~~(1) pkg. band-aids~~ ~~(2) trauma dressings~~ ~~(25) 4X4 sponges~~ ~~(1) roll adhesive tape~~ ~~(1) bite stick~~ ~~(1) penlight~~ ~~(1) sterile burn sheet~~ ~~(1) oropharyngeal airway~~ ~~(1) glucose substance~~ ~~(2) sterile gauze dressings~~	~~(1) kit in each:~~ ~~Ambulances #1 and #2, surface rescue truck~~
~~Miner's Aid Station~~	~~For First Aid Stations in the Underground~~ ~~(1) Stretcher - as referenced above per station~~ ~~(1) Set of airsplints - as referenced above per station~~ ~~(1) Blanket per station~~ ~~(1) Box of latex gloves (50) per station~~ ~~(5) Pathogen Wipes per station~~ ~~(1) First Aid Kit (24) per station; includes,~~ ~~(3) Band-Aid Combo Paks~~ ~~(2) Swabs, PVP~~ ~~(1) Antibiotic Ointment~~ ~~(1) Sting-Kill Swab~~ ~~(2) Dressing, compresses~~ ~~(2) Roller Bandages~~ ~~(2) Tape~~ ~~(2) Triangle Bandage~~ ~~(1) Eyedressing Pak~~ ~~(1) Burn Dressing~~ ~~(1) Ammonia Inhalants~~ ~~(1) User Log Sheet~~	~~Miner's Aid Stations - Various Underground Locations~~

Equipment	Description and Capabilities	Location
~~First Aid Supplies~~	~~According to General Order #35~~ ~~(12) bandages, soft roller, self-adhering type--4" or 6" x 5 yards.~~ ~~(6) triangular bandages, 40"~~ ~~(1) box band-aids~~ ~~(1) 1 pair bandage shears~~ ~~(6) Trauma dressings, 30" x 10"~~ ~~(6) Trauma dressings, 5" x 7"~~ ~~(50) 4" x 4" sponges, individually wrapped and sterile~~ ~~(2) rolls adhesive tape~~ ~~(1) penlight~~ ~~(2) sterile burn sheets~~ ~~(2) oropharyngeal airways -- adult~~ ~~(2) oropharyngeal airways -- child (Ambulance #1 only)~~ ~~(2) oropharyngeal airways -- infant (Ambulance #1 only)~~ ~~(1) Glucose substance~~ ~~(3) Occlusive dressings~~ ~~(1) Roll aluminum foil~~ ~~(6) Rigid cervical collars--2 each small, medium and large sizes~~ ~~(4) Cold packs~~ ~~(4) Heat packs~~ ~~(2) Bite sticks~~	~~Ambulance #1~~
~~First Aid Supplies~~	~~(2) Transfer sheets~~ ~~(2) Blankets~~	~~Ambulances #1 and #2~~
~~First Aid Supplies~~	~~(2) #16g angiosets~~ ~~(2) #18g angiosets~~ ~~(2) #20g angiosets~~ ~~(1) 1000cc LR IV fluid~~ ~~(1) 500cc NS IV fluid~~	~~Ambulances #1 and #2, surface rescue truck~~
General Plant Emergency Equipment		
Emergency Lighting	For employee ~~rescue and~~ evacuation, and fire/spill containment; linked to main power supply, and selectively linked to back up diesel power supply and/or battery-backed power supply	~~Surface and underground~~Waste Handling Building (Building 411); TRUPACT Maintenance Building (Building 412); and Exhaust Shaft Filter Building (Building 413)
Backup Power Sources	~~Two~~ A minimum of two diesel generators, and battery-powered uninterruptible power supply (UPS); ~~use limited to essential loads; manual or remote starting1,100 kilowatt diesel generators with on-site fuel for 62% load for 3 days for selected loads; 30-minute battery capacity for essential loads~~	Generators are east of ~~Safety and Emergency Services Building~~Safety and Emergency Services Facility (Building 452); UPS is located at the essential loads
Emergency Hoist~~s~~	Hoist~~s~~ in ~~Waste Shaft,~~ Air Intake Shaft~~, and SH Shaft~~	~~Waste Shaft,~~ Air Intake Shaft (Building 361)~~, SH Shaft~~

Equipment	Description and Capabilities	Location
~~Radiation Monitoring Equipment~~	~~(5) Portable alpha and beta survey meters, portable air samplers, and portable continuous air monitors~~	~~Building 412~~
Emergency Showers	For emergency flushing of chemical contact or injury	~~Surface~~ Waste Handling Building (Building 411) and surface Hazardous Waste Staging Areas (Building 474A)
Emergency Eyewash Equipment~~Eye Wash Fountains~~	For emergency flushing of affected eyes	~~Various locations on surface and in the underground~~Waste Handling Building (Building 411, RH Bay, Site Derived Waste Area, Waste Shaft Collar, and Room 108 TRUPACT III only), TRUPACT Maintenance Building (Building 412), Exhaust Shaft Filter Building (Building 413), surface Hazardous Waste Staging Areas (Building 474A, Waste Oil Retainer Area), and the underground Hazardous Waste Staging Area (S550/E140)~~locations~~
~~Decon Shower Equipment~~	~~Self-contained decon shower trailer, portable decon shower unit~~	~~Surface~~
Overpack containers for TRU Mixed Waste	~~14~~ 85 Gallon drums ~~4~~ SWBs ~~1~~ TDOP	Warehouse Annex (Building 481) ~~Building 481~~ ~~Building 481~~
~~HEPA Vacuums~~	~~2 HEPA Vacuums to be utilized for removal of contamination.~~	~~Building 481~~
Aquaset or Cement	~~100 lbs. of aquaset or cement m~~Material for solidification of liquid waste generated as a result of fire fighting water or decontamination solutions~~.~~	~~Building 481~~Surface Connex A, located south of Waste Handling Building (Building 411)
~~Paint or Fixative~~	~~1 - 5 gallon bucket of approved fixative to be used during recovery.~~	~~Building 481~~
TDOP Upender	Upender facilitates overpacking standard waste boxes	~~Building 481~~Waste Handling Building (Building 411)
Non hazardous Decontaminating Agents	~~4 1 Gallon bottles f~~For decontamination of surfaces, equipment, and personnel	~~Building 481~~Waste Handling Building (Building 411); Surface Connex A, located south of Building 411

[a] ~~The NMED will be notified when new equipment is brought on line in calendar year 2015.~~

Table E-1
Inspection Schedule/Procedures

System/Equipment Name	Responsible Organization	Inspection [a] Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria[h]
Air Intake Shaft Hoist	Underground Operations	Preoperational [c] See Lists 1b and c	WP 04-HO1004 Inspecting for Deterioration[b], Safety Equipment, Communication Systems, and Mechanical Operability[m] in accordance with Mine Safety and Health Administration (MSHA) requirements
Ambulances ~~(Surface and Underground) and related emergency supplies and equipment~~ (Surface) and Medical Cart (Underground)	~~Emergency Services~~Fire Department	Weekly See List 11	12-FP0030 Inspecting for Mechanical Operability[m], Deterioration[b], and Required Equipment[n]
Adjustable Center of Gravity Lift Fixture	Waste Handling	Preoperational See List 8	WP 05-WH1410 Inspecting for Mechanical Operability[m] and Deterioration[b]
Backup Power Supply Diesel Generators	Facility Operations	Monthly See List 3	WP 04-ED1301 Inspecting for Mechanical Operability[m] and Leaks/Spills by starting and operating both generators. Results of this inspection are logged in accordance with WP 04-AD3008.
Facility Inspections (Water Diversion Berms)	Facility Engineering	Annually See List 4	WP 10-WC3008 Inspecting for Damage, Impediments to water flow, and Deterioration[b]
Central Monitoring Systems (CMS)	Facility Operations	Continuous See List 3	Automatic Self-Checking
Contact-Handled (CH) TRU Underground Transporter	Waste Handling	Preoperational See List 8	WP 05-WH1603 Inspecting for Leaks/Spills, Mechanical Operability[m], Deterioration[b], and area around transporter clear of obstacles
Conveyance Loading Car	Waste Handling	Preoperational See List 8	WP 05-WH1406 Inspecting for Mechanical Operability[m], Deterioration[b], path clear of obstacles, and guards in the proper place

System/Equipment Name	Responsible Organization	Inspection [a] Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria[h]
Facility Transfer Vehicle	Waste Handling	Preoperational See List 8	WP 05-WH1204 Inspecting for Mechanical Operability[m], Deterioration[b], path clear of obstacles, and guards in the proper place
Exhaust Shaft	Underground Operations	Quarterly See List 1a	PM041099 Inspecting for Deterioration[b] and Leaks/Spills
Eye Wash and Shower Equipment	Equipment Custodian	Weekly See List 5	WP 12-IS1832 Inspecting for Deterioration[b]
		Semi-annually See List 2a	WP 12-IS1832 Inspecting for Deterioration[b] and Fluid Levels–Replace as Required
Fire Detection and Alarm System	Fire Protection Engineering ~~Emergency Services~~	Monthly/quarterly/~~S~~semi-annually/annually See List 12~~11~~	12-FP0027 Inspecting for Deterioration[b] and Operability of underground fuel station fire suppression system in accordance with NFPA 17; 12-FP0028 Inspecting for Deterioration[b], Operability of fire alarm panel and transmitter, audible/visual alarm devices, detectors, and pull stations in accordance with NFPA 72, 101, and 801 ~~of indicator lights and, underground fuel station dry chemical suppression system. Inspection is per NFPA 17~~
Fire Extinguishers[j]	~~Emergency Services~~Fire Department	Monthly See List 11	12-FP0036 Inspecting for Deterioration[b], Leaks/Spills, Expiration, seals, fullness, and pressure
Fire Hoses	~~Emergency Services~~Fire Department	Annually (minimum) See List 11	12-FP0031 Inspecting for Deterioration[b] and Leaks/Spills
Fire Hydrants	~~Emergency Services~~Fire Protection Engineering	Semi-annual~~/annually~~/annually See List 12~~11~~	12-FP0034 Inspecting for Deterioration[b] and Leaks/Spills
Fire Pumps	~~Emergency Services~~Fire Protection Engineering	Weekly~~/annually~~/annually See List 12~~11~~	WP 12-FP0026 Inspecting for Deterioration[b], Leaks/Spills, valves, and panel lights

System/Equipment Name	Responsible Organization	Inspection [a] Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria[h]
Fire Sprinkler Systems	~~Emergency Services~~Fire Protection Engineering	Monthly/ quarterly/~~semi-annually/~~annually See List 12~~11~~	WP 12-FP0025 Inspecting for Deterioration[b], Leaks/Spills, ~~static~~ water pressures, and main drain test~~and removable strainers~~
Fire and Emergency Response ~~Trucks~~Vehicles (Fire Trucks, ~~Underground~~ Fire Suppression Cart~~Vehicles~~ and ~~Underground~~ Rescue Carts/Trucks)	~~Emergency Services~~Fire Department	Weekly See List 11	12-FP0033 Inspecting for Mechanical Operability[m], Deterioration[b], Leaks/Spills, and Required Equipment[n]
Forklifts Used for Waste Handling (Electric and Diesel forklifts, Push-Pull Attachment)	Waste Handling	Preoperational See List 8	WP 05-WH1201, WP 05-WH1207, WP 05-WH1401, WP 05-WH1402, WP 05-WH1403, and WP 05-WH1412 Inspecting for Leaks/Spills, Mechanical Operability[m], Deterioration[b], and On board fire suppression system
Automatic on-board fire suppression systems	~~Emergency Services~~Fire Protection Engineering	Semi-a~~A~~nnually See List 12~~11~~	WP 12-FP0060 Inspecting for Mechanical Operability[m] and Deterioration[b]
Hazardous Material Response Equipment	~~Emergency Services~~Fire Department	~~Weekly~~Quarterly See List 11	12-FP0033 Inspecting for ~~Mechanical Operability[m],~~ Deterioration[b], and Required Equipment[n]
Head Lamps	Facility Personnel	Daily[i]	Head lamps are operated daily and are repaired or replaced upon failure
Miners First Aid Station	~~Emergency Services~~Fire Department	Quarterly See List 11	12-FP0035 Inspecting for Required Equipment[n]
Mobile Phones	Facility Personnel	Daily[i]	Mobile Phones are operated daily and are repaired or replaced upon failure
Mine Pager Phones (between surface and underground)	Facility Operations	Monthly[o] See List 3	WP 04-PC3017 Testing of ~~PA and Underground Alarms and~~ Mine Pager Phones at essential locations
MSHA Air Quality Monitor	Maintenance/ Underground Operations	Daily[l] See Lists 1 and 10	WP 12-IH1828 Inspecting for Air Quality Monitoring Equipment Functional Check

System/Equipment Name	Responsible Organization	Inspection [a] Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria[h]
Perimeter Fence, Gates, Signs	Security	Daily See List 6	PFO-008 Inspecting for Deterioration[b] and Posted Warnings
Mine Rescue Self-Contained Breathing Apparatus (**SCBA**)	Mine Rescue Team	30 days See List 5	Inspection for Deterioration[b] and Pressure[g]
~~Personal Protective Equipment (not otherwise contained in emergency vehicles or issued to individuals):~~ —Fire Department SCBA~~Self-Contained Breathing Apparatus~~	~~Emergency Services~~Fire Department	Weekly/monthly See List 11	12-FP0029 Inspecting for Deterioration[b] and Pressure
~~Public Address (and Intercom System)~~Surface ~~Evacuation Signals~~Site Notification System; Underground Evacuation ~~Warning~~Alarm System	Facility Operations	Monthly See List 3	WP 04-PC3017 Testing of PA and Underground Alarms ~~and Mine Page Phones~~ at ~~essential locations Systems operated in test mode~~
Radio Equipment	Facility ~~Operations~~Personnel	Daily[i] ~~See List 3~~	Radios are operated daily and are repaired or replaced upon failure
~~Rescue Trucks (Surface and Underground)~~	~~Emergency Services~~	~~Weekly~~ ~~See List 11~~	~~12-FP0030 and 12-FP0033~~ ~~Inspecting for Mechanical Operability[m], Deterioration[b], Leaks/Spills, and Required Equipment[n]~~
Salt Handling Shaft Hoist	Underground Operations	Preoperational See List 1b and c	WP 04-HO1002 Inspecting for Deterioration[b], Safety Equipment, Communication Systems, and Mechanical Operability[m] in accordance with MSHA requirements
Self-Rescuers	Underground Operations	Quarterly See List 1c	WP 04-AU1026 Inspecting for Deterioration[b] and Functionality in accordance with MSHA requirements
Surface TRU Mixed Waste Handling Area [k]	Waste Handling	Preoperational or Weekly [e] See List 8	WP 05-WH1101 Inspecting for Deterioration[b], Leaks/Spills, Required Aisle Space, Posted Warnings, Communication Systems, Container Condition, and Floor coating integrity

System/Equipment Name	Responsible Organization	Inspection [a] Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria[h]
TRU Mixed Waste Decontamination Equipment	Waste Handling	Annually See List 8	WP 05-WH1101 Inspecting for Required Equipment[n]
Underground Openings—Roof Bolts and Travelways	Underground Operations	Weekly See List 1a	WP 04-AU1007 Inspecting for Deterioration[b]
Underground—Geomechanical Instrumentation System (GIS)	Geotechnical Engineering	Monthly See List 9	WP 07-EU1301 Inspecting for Deterioration[b]
Underground TRU Mixed Waste Disposal Area	Waste Handling	Preoperational See List 8	WP 05-WH1810 Inspecting for Deterioration[b], Leaks/Spills, mine pager phones, equipment, unobstructed access, signs, debris, and ventilation
Uninterruptible Power Supply (Central UPS)	Facility Operations	Daily See List 3	WP 04-ED1542 Inspecting for Mechanical Operability[m] and Deterioration[b] with no malfunction alarms. Results of this inspection are logged in accordance with WP 04-AD3008.
TDOP Upender	Waste Handling	Preoperational See List 8	WP 05-WH1010 Inspecting for Mechanical Operability[m] and Deterioration[b]
~~Vehicle Siren~~	~~Emergency Services~~	~~Weekly~~ ~~See List 11~~	~~Functional Test included with inspection of the Ambulances, Fire Trucks, and Rescue Trucks~~
Ventilation Exhaust	Maintenance Operations	Quarterly See List 10	IC041098 Check for Deterioration[b] and Calibration of Mine Ventilation Rate Monitoring Equipment
Waste Handling Cranes	Waste Handling	Preoperational See List 8	WP 05-WH1407 Inspecting for Mechanical Operability[m], Deterioration[b], and Leaks/Spills
Waste Hoist	Underground Operations	Preoperational See List 1b and c	WP 04-HO1003 Inspecting for Deterioration[b], Safety Equipment, Communication Systems, and Mechanical Operability[m], Leaks/Spills, in accordance with MSHA requirements

System/Equipment Name	Responsible Organization	Inspection [a] Frequency and Job Title of Personnel Normally Making Inspection	Procedure Number and Inspection Criteria[h]
Water Tanks ~~Level~~	Facility Operations	Daily See List 3	SDD-WD00 Inspecting for Deterioration[b], and water levels. Results of this inspection are logged in accordance with WP 04-AD3008.
Push-Pull Attachment	Waste Handling	Preoperational See List 8	WP 05-WH1401 Inspecting for Damage and Deterioration[b]
Trailer Jockey	Waste Handling	Preoperational See List 8	WP 05-WH1405 Inspecting for Leaks/Spills Mechanical Operability[m] and Deterioration[b]
Explosion-Isolation Walls	Underground Operations	Quarterly See List 1	PM 000032 Integrity and Deterioration[b] of Accessible Areas
Bulkhead in Filled Panels	Underground Operations	Monthly See List 1	PM 000011 Integrity and Deterioration[b] of Accessible Areas
Bolting Robot	Waste Handling	Preoperational See List 8	WP 05-WH1203 Mechanical Operability[m]
Yard Transfer Vehicle	Waste Handling	Preoperational See List 8	WP 05-WH1205 Mechanical Operability[m], Deterioration[b], Path clear of obstacles and Guards in proper place
Payload Transfer Station	Waste Handling	Preoperational See List 8	WP 05-WH1208 Mechanical Operability[m], Deterioration[b], and Guards in proper place
Monorail Hoist	Waste Handling	Preoperational See List 8	WP 05-WH1202 Mechanical Operability[m], Deterioration[b], and Leaks/Spills
Bolting Station	Waste Handling	Preoperational See List 8	WP 05-WH1203 Mechanical Operability[m], Deterioration[b], and Guards in proper place

Table E-1 (Continued)
Inspection Schedule/Procedures Lists

List 1: Underground Operations

a. Mining Technician *
   Senior Mining Technician *
   Continuous Mining Specialist *
   Senior Mining Specialist *
   Mine OPS Supervisor *
b. Waste Hoist Operator
   Waste Hoist Shaft Tender
c. U/G Facility Operations* - Self Rescuers
   Shaft Technician *
d. Operations Engineer
   Supervisor U/G Services*
   Senior Operations Engineer*

List 2: Industrial Safety

a. Safety Technician *
   Senior Safety Technician *
   Safety Specialist *
   Safety Engineer *
   Industrial Hygienist *
b. Fire Protection Engineering *

List 3: Facility Operations

Facilities Technician *
Senior Facilities Technician *
Facility Operations Specialist *
Central Monitoring Room Operator *
Central Monitoring Room Specialist *
Operations Engineer
Senior Operations Engineer *
Facility Shift Manager
Operations Technical Coordinator *

List 4: Facility Engineering

Senior Engineer *

List 5: General

Equipment Custodian*

List 6: Security

Security Protective *
Security Protective Supervisor *

List 8: Waste Handling

Manager, Waste Operations
TRU-Waste Handler

List 9: Geotechnical Engineering

Engineer Technician *
Associate Engineer *
Engineer *
Senior Engineer *
Principal Engineer*

List 10: Maintenance Operations

Maintenance Technician *
Maintenance Specialist *
Senior Maintenance Specialist *
Contractor *

List 11: ~~Emergency Services~~Fire Department

Qualified ~~Emergency Services~~Fire Department Personnel

List 12: Fire Protection Engineering

Fire Protection Specialist~~Technician~~*

Table E-1 (Continued)
Inspection Schedule/Procedures Notes

a Inspection may be accomplished as part of or in addition to regularly scheduled preventive maintenance inspections for each item or system. Certain structural systems of the WHB, Waste Hoist and Station A are also subject to inspection following severe natural events including earthquakes, tornados, and severe storms. Structural systems include columns, beams, girders, anchor bolts and concrete walls.

b Deterioration includes: obvious visible cracks, erosion, salt build-up, damage, corrosion, loose or missing parts, malfunctions, and structural deterioration.

c "Preoperational" signifies that inspections are required prior to the first use during a calendar day. For calendar days in which the equipment is not in use, no inspections are required. For an area this includes: area is clean and free of obstructions (for emergency equipment); adequate aisle space; emergency and communications equipment is readily available, properly located and sign-posted, visible, and operational. For equipment, this includes: checking fluid levels, pressures, valve and switch positions, battery charge levels, pressures, general cleanliness, and that all functional components and emergency equipment is present and operational.

e These weekly inspections apply to container storage areas when containers of waste are present for a week or more.

g ~~In addition, the water tank levels are maintained by the CMR and level readouts are available at any time.~~Inspections are performed per manufacturer's maintenance instructions.

h ~~This organization is responsible for obtaining licenses for radios and frequency assignments. They do periodic checks of frequencies and handle repairs which are performed by a vendor.~~ Inspections and PM's are not required for equipment that is out of service. However, if compensatory measures have been established to ensure an equivalent level of protection during the period that the equipment is out of service (e.g., required equipment/supplies from an out-of-service emergency vehicle have been temporarily relocated), appropriate inspections will be scheduled, conducted, and documented in the Operating Record, in accordance with Attachment E, Section E-1.

i Head Lamps, Mobile Phones, and Radios are not routinely "inspected." They are ~~operated daily and many are~~typically used in day-to-day operations. They are used until they fail, at which time they are replaced and repaired. ~~Radios are used routinely by Emergency Services, Security, Environmental Monitoring, and Facility Operations.~~

j Fire extinguisher inspections are performed in accordance with NFPA 10. ~~is paperless. Information is recorded into a database using barcodes. The database is then printed out.~~

k Surface CH TRU mixed waste handling areas include the Parking Area Unit, the WHB unit, and unloading areas.

l No log forms are used for daily readings. However, readings that are out of tolerance are reported to the CMR and logged by CMR operator. Inspection includes daily functional checks of portable equipment.

m Mechanical Operability means that the equipment has been checked and is operating in accordance with site safety requirements (e.g., proper fluid levels and tire pressure; functioning lights, alarms, sirens, and power/battery units; and belts, cables, nuts/bolts, and gears in good condition), as appropriate.

n Required Equipment means that the equipment identified in Table D-6 is available and usable (i.e., not expired/depleted and works as designed).

o~~p~~ Mine pager phones in non-essential locations are not routinely "inspected." Many are used in day-to-day operations. They are used until they fail, at which time they are repaired. Mine pager phones are used routinely by Underground Operations.

* Positions are not considered RCRA positions (i.e., personnel do not manage or respond to emergencies involving TRU mixed waste).

Attachment 2
Revised Figures D-1 and D-6

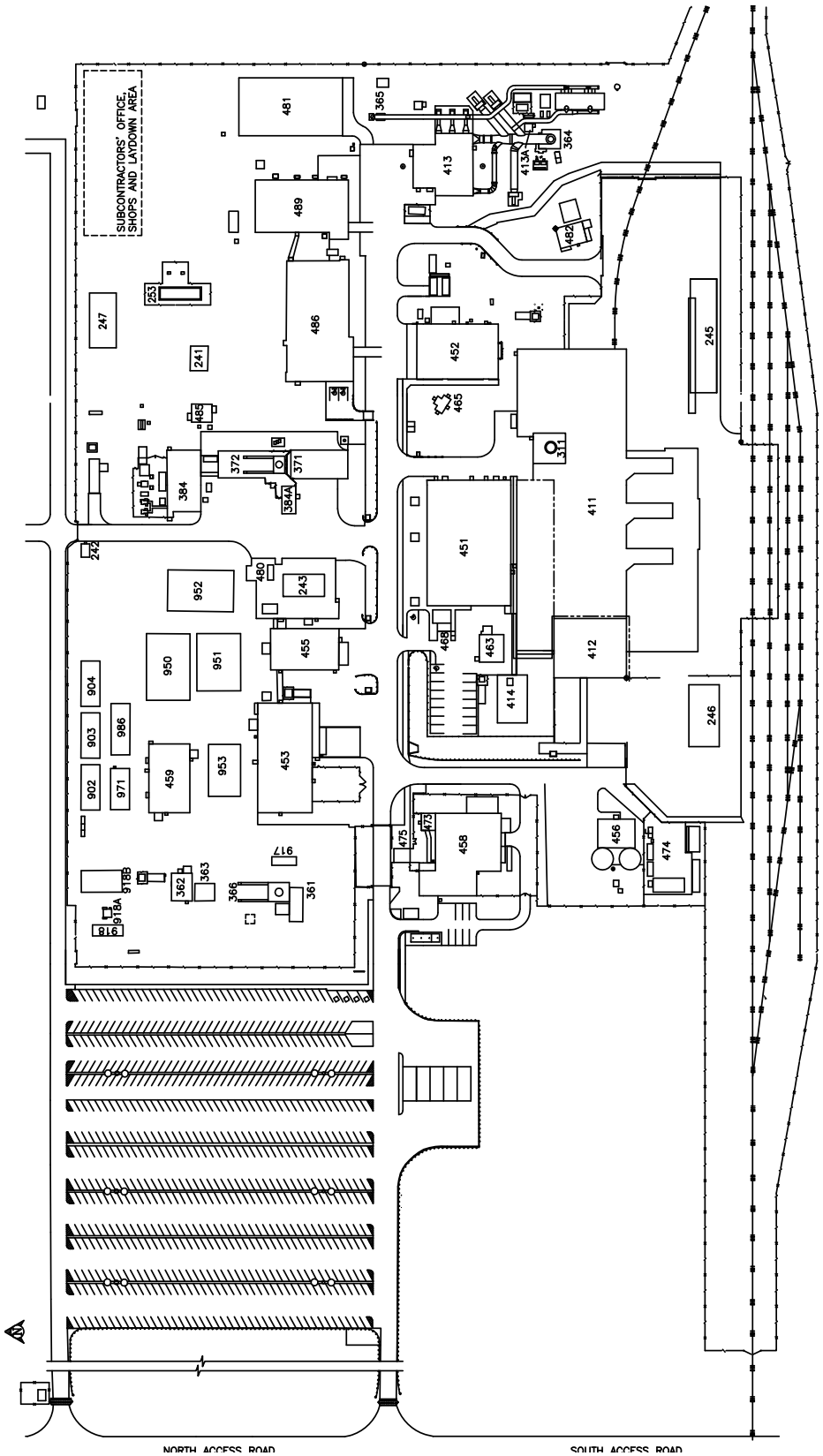

Figure D-1
WIPP Surface Structures

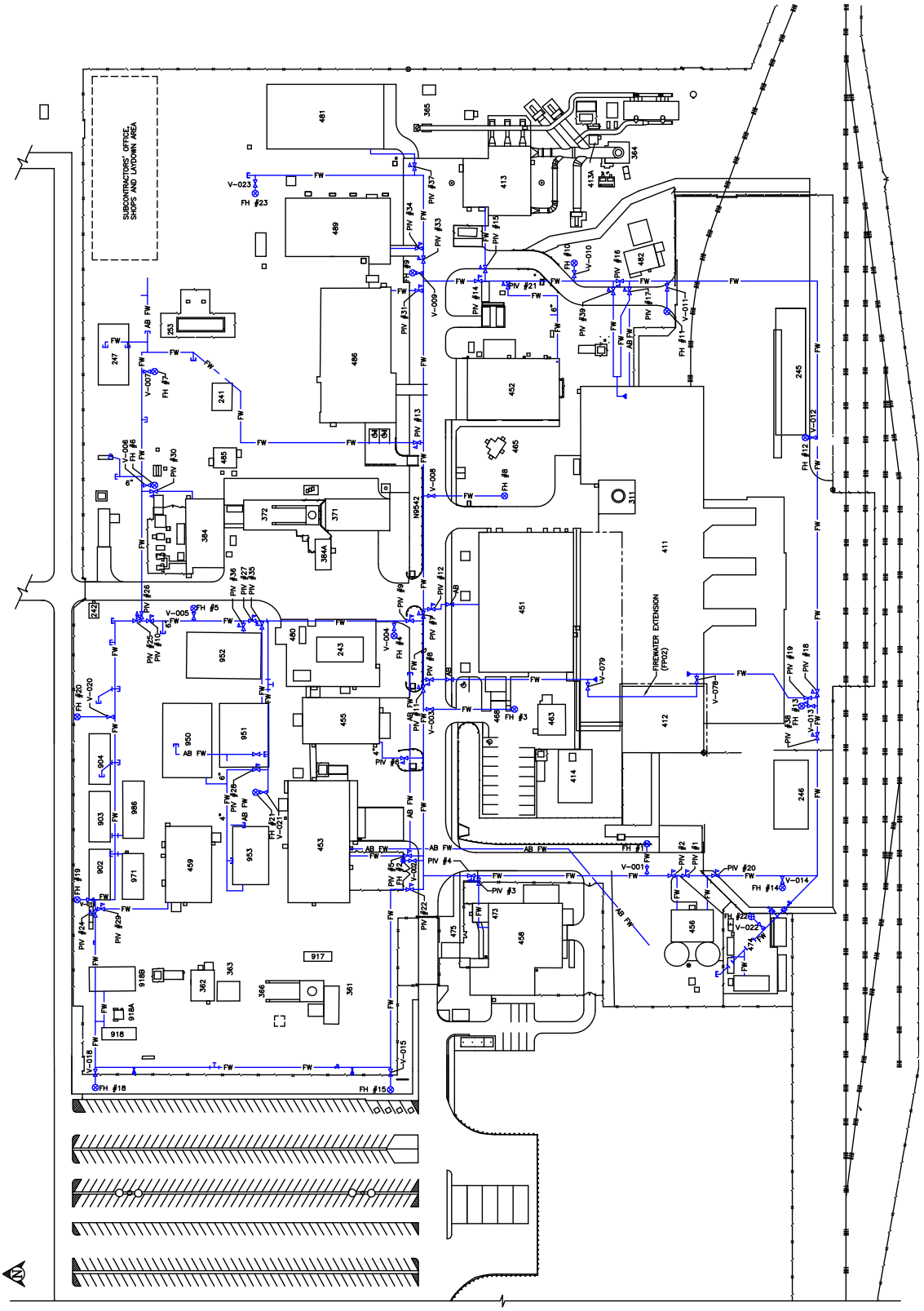

Figure D-~~5~~6
Fire Water Distribution System