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*Via e-mail to [ricardo.maestas@env.nm.gov](mailto:ricardo.maestas@env.nm.gov)*

Re: Comments on the draft Waste Isolation Pilot Plant (WIPP) hazardous waste facility ten-year Permit renewal application and Request for Hearing

Dear Mr. Maestas:

Nuclear Watch New Mexico (“NukeWatch”) appreciates the opportunity to provide comments on the draft Waste Isolation Pilot Plant (WIPP) hazardous waste facility Permit ten-year renewal application. This Permit contains terms and conditions that the Secretary has determined are necessary to protect human health and the environment, pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.32(b)(2)).

The mission of Nuclear Watch New Mexico is to promote safety and environmental protection at nuclear facilities; mission diversification away from nuclear weapons programs; greater accountability and cleanup in the nation-wide nuclear weapons complex; and consistent U.S. leadership toward a world free of nuclear weapons.

DOE’s ten-year WIPP Hazardous Waste Permit (“Permit”), last issued by the New Mexico Environment Department (NMED) in November 2010, is due to be renewed in 2023. WIPP is a facility authorized by Congress for the disposal of transuranic (TRU) radioactive wastes generated by the United States’ nuclear weapons research and production programs. The Department of Energy (DOE) owns the WIPP facility, and DOE and Salado Isolation Mining Contractors cooperate the WIPP facility, who together are referred to as the “Permittees.” WIPP first received a hazardous waste Permit from NMED in 1999 to dispose of TRU mixed waste containers 2,150 feet below ground in a mined geologic repository.

Disposal at WIPP is limited to defense-generated TRU and mixed TRU wastes. Mixed TRU waste has both a hazardous component and radioactive component of elements with atomic numbers 92 (uranium) and greater. Generally, TRU mixed wastes consist of clothing, tools, rags, residues, debris, soil and other items contaminated with radioactive elements, mostly plutonium, and hazardous components listed under the Resource Conservation and Recovery Act (RCRA) as heavy and toxic metals, non-liquid organic residues and inorganic and organometallic compounds.

Please note that throughout our comments, italics will be used to indicate large sections excerpted from the draft Permit.

## General WIPP Renewal Draft Permit Comments

Some of the major problems in the draft Permit are the Permittee's proposed changes to extend operations at WIPP until 2080 and beyond. This Permit also includes plans to mine new waste panels. More than half of WIPP's future capacity is being reserved for future radioactive wastes from expanded plutonium "pit" bomb core production. This will fundamentally change WIPP's mission from cleanup to direct support of increased nuclear weapons production, and relevant details and analysis of these operations must be included in this Permit. In addition, if the Permittees plan to dispose of plutonium from the DOE Surplus Plutonium Distribution Plan during the term of this Permit, those relevant details and analysis must be included in this Permit as well.

If WIPP is to be operating three times longer than originally planned, then it should be three times safer than originally planned. Safety must be upgraded because workers will be in the underground longer with older waste. Salt will be crushing barrels in the completed panels while more workers will be in WIPP. The idea of installing monitoring in filled panels must be reexamined. The new panels must not be larger or taller. The workers must get more training, not less. Inspections must be more frequent.

We strongly agree with NMED's proposal to emphasize Permit language reiterating the mission of WIPP as a "pilot" plant for the permanent disposal of TRU wastes, as well as language related to the history of the Permit and post-closure activities. That will remind us and the federal government that WIPP is only a pilot plant, not a "forever" radioactive waste dump per DOE wishes that takes advantage of New Mexico.

The Permittees have proposed many editorial changes that seem unnecessary, including;

- Changing many names to acronyms;
- Changing many acronyms to names;
- Spelling out numbers;
- Spelling out measurement units, such as "gal" to "gallon (gal)";
- Moving tables and figures to other sections;
- Moving sections to other sections;
- Changing "will be" to "are" many times, and;
- Removing "will" many times.

The Permittees must clearly explain the benefits of these proposed changes.

The Permittees have proposed to remove the word "all" in many places. These changes seem unnecessary. The Permittees must clearly explain the benefits of these proposed changes.

We agree with NMED's proposed changes to the draft Permit, including that the closure date of WIPP shall be tied to the Permit term of ten years and the waste capacities in Permit Part 4, Table 4.1.1. This proposed change will require the Permittees to make a case for Permit Renewal at the end of the Permit term, that is every ten years. This allows the State of New Mexico to require an accurate inventory of waste awaiting cleanup around the United States, including the Los Alamos National Laboratory, for emplacement at WIPP. The original WIPP closure date is 2024. However, DOE would like to extend the closure date to 2050 or beyond. NMED's proposed

change would require DOE to justify keeping WIPP open every ten years as part of the Permit renewal process, including public hearings. We think this is a good start, but there must still be an actual date for the end of operations.

A new NMED Permit condition would trigger the revocation of the Permit if the disposal limit of 6.2 million cubic feet of transuranic wastes under WIPP's enabling legislation, the Land Withdrawal Act, is increased or otherwise changed by the U.S. Congress. We strongly support this new provision. It will help protect WIPP from being expanded.

A new NMED Permit section will require the prioritization of waste from New Mexico generator and storage sites for emplacement at WIPP. We strongly support this new provision. It will help to prioritize the disposal of TRU wastes from LANL at WIPP instead of DOE's current prioritization of out-of-state wastes.

In the new Permit, NMED proposes to clearly define its ability to suspend waste shipments to WIPP if there is evidence of a threat to human health or the environment or any Permit noncompliance. We strongly support this new provision. It enhances NMED's position to suspend shipments if something goes wrong.

NMED is adding a new section requiring compliance with transportation guidance to ensure the safe transport of waste through New Mexico, helping to keep the roads safer. We concur.

NMED is adding a new section requiring the submittal of an annual report detailing DOE's progress (or not) toward siting another repository for transuranic waste in a state other than New Mexico. This will force DOE to start looking for a WIPP replacement. We strongly support this new provision.

NMED proposes to update the requirements of the WIPP Community Relations Plan to include quarterly public forums that provide notice and allow for ample opportunity for public engagement on Permit and non-Permit related issues, as well as a return of pre-submittal meetings for Class 2 and 3 Permit Modification Requests. In addition, the Permittees must invite the members of the New Mexico Radioactive Waste Consultation Task Force to each quarterly public forum. This will help get more WIPP information out to the public. We strongly support this new provision.

NMED goals for WIPP must be to prevent its expansion in terms of both types of radioactive wastes disposed and its operating lifetime. We commend NMED on its tougher enforcement policy and urge the Department to continue doing so with respect to WIPP issues.

## **Specific WIPP Renewal Draft Permit Comments**

### **Part 1 Specific Comments**

We agree with this section –

#### *1.3.1. Permit Modification, Suspension, and Revocation*

*This permit shall be revoked within 30 calendar days if the Land Withdrawal Act (Pub. L. 102-579, as amended) volumetric disposal limit for TRU waste of 6.2 million cubic feet at the WIPP facility is increased or otherwise changed by the U.S. Congress.*

We agree with this earlier Permit definition:

*1.5.21. TRU Mixed Waste RCRA Volume*

*“TRU Mixed Waste RCRA Volume (TRU Mixed Waste Volume)” means the gross internal volume of the outermost disposal container of TRU mixed waste pursuant to waste volumes in this Permit. For purposes of this Permit, all TRU waste is managed as though it were mixed. This volume is tracked and reported by the Permittees relative to the authorized maximum capacities in Permit Part 4, Table 4.1.1.*

This is the original definition for TRU wastes destined for WIPP. DOE originally used the gross internal volume of the outermost disposal container of TRU mixed waste. So, a 55-gallon drum was counted as 55 gallons of waste no matter the amount of waste in the drum. Ultimately, this would allow less containers and less waste into WIPP. Measuring the the gross internal volume of the outermost disposal container will violate the allowed 6.2 million cubic feet before the “Land Withdrawal Act TRU Waste Volume” described below. This must be explained in the Permit.

We disagree with this proposed definition:

*1.5.22. Land Withdrawal Act TRU Waste Volume*

*“Land Withdrawal Act TRU Waste Volume (LWA TRU Waste Volume)” means the volume of TRU waste inside a disposal container. This volume is tracked and reported by the DOE internally relative to the WIPP Land Withdrawal Act total capacity limit of 6.2 million ft<sup>3</sup> (175,564 m<sup>3</sup>) (Pub. L. 102-579, as amended). For informational purposes, the LWA TRU Waste Volume is included in Table 4.1.1.*

The previous New Mexico gubernatorial administration was able to change the definition of the amount of waste to the volume of TRU waste inside a disposal container. This will allow more containers and more waste into WIPP. DOE will have to stop disposing in WIPP when it reaches the limit of 6.2 million cubic feet. Keeping two sets of books is confusing to the public. This must be explained in the Permit.

We agree with this addition:

*1.7.7.1 Safe Transport of TRU Mixed Waste*

*It is a violation of this Permit if the DOE or the DOE contractor fail to safely transport TRU mixed waste to the WIPP facility. The NMED is requiring compliance with applicable requirements of the WIPP Transportation Plan Implementation Guide and any transportation plans under the authority of the Western Interstate Energy Board’s High-Level Radioactive Waste Committee.*

We request that there be many additions to the public e-mail notification list:

*1.11. PUBLIC E-MAIL NOTIFICATION LIST*

*The Permittees shall develop and maintain an e-mail list to notify members of the public concerning actions identified in this Permit requiring e-mail notification. The Permittees shall send e-mail notifications required by this Permit to the e-mail list within seven days of the submittal date to the Secretary and shall include in the e-mail a direct link to the specific document to which it relates. The Permittees shall provide a link on the WIPP Home Page <<http://www.wipp.energy.gov>> whereby members of the public may review the actions requiring e-mail notification and submit a request to be placed on this list.*

Basically, all notifications must be sent to the public e-mail notification list.

We agree with these additions:

*1.15.2. Contents of Community Relations Plan*

*3. Keep communities and interested members of the public informed of permit actions of interest (e.g., implementation of the Contingency Plan, Permit modification requests, Permit compliance issues), to include pre-submittal meetings for Class 2 and 3 permit modification requests;*

...

*7. The Permittees shall conduct WIPP Community Forum and Open House quarterly public meetings with interested stakeholders, communities, and members of the public. Specifically, the Permittees must invite the members of the New Mexico Radioactive Waste Consultation Task Force to each quarterly meeting. The Permittees shall provide evidence of at least 30 days' public notice prior to the quarterly meeting taking place.*

We question the removal of the Permit Attachments at the end of this Part 1.

## **Part 2 Specific Comments**

We agree with this addition:

*2.3.2.2. Observation of Audit*

*The Secretary may observe such audits as necessary to validate the implementation of and compliance with applicable WAP requirements at each generator/storage site. The NMED will be invited to the daily audit team caucus as observers. The NMED will be invited to observe biennial Generator Site Technical Reviews (GSTRs). DOE shall provide the Secretary with a current audit schedule on a monthly basis and notify the Secretary no later than 30 calendar days prior to each audit and GSTR.*

We request that the audits be made publicly available.

2.3.3.1. Liquid

*Liquid waste is not acceptable at WIPP. Liquid in the quantities delineated below is acceptable.*

- *Observable liquid shall be no more than 1 percent by volume of the outermost container at the time of radiography or visual examination.*

We request that this be adjusted for the 'Land Withdrawal Act TRU Waste Volume', so it must read, "Observable liquid shall be no more than 1 percent by volume of the amount of waste in the container at the time of radiography or visual examination."

We request that "unless specifically approved through a Class 3 permit modification" be removed from the Permit. Then *Table 2.3.3.8 – Additional Approved Waste Streams* must be removed from the Permit.

*2.3.3.8. Excluded Waste*

*TRU mixed waste that has ever been managed as high-level waste and waste from tanks specified in Permit Attachment C are not acceptable at WIPP unless specifically approved through a Class 3 permit modification. Such wastes are listed in Table 2.3.3.8 below.*

We request that inspection records be maintained until post-closure –

*2.7.5. Inspection Records*

*Beginning with the effective date of this Permit, the Permittees shall maintain inspection logbooks and forms in the operating record until closure, as required by 20.4.1.500 NMAC (incorporating 40 CFR §§264.15(d) and 264.73(b)(5)).*

We request that the issue of Environmental Justice be required training in this section –

*2.8. PERSONNEL TRAINING*

*The Permittees shall conduct personnel training, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.16).*

We agree that vegetarian radios should be used –

*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, mobile phones, mine phones, **plant-based radios**, and portable two-way radios. The alarm system shall include local and facility-wide alarm systems.*

Foam-producing equipment must not add PFAS-type chemicals to WIPP:

*2.10.1.4. Water for Fire Control*

*The Permittees shall have water at adequate volume and pressure to supply water-hose streams, foam-producing equipment, automatic sprinklers, or water-spray systems, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.32(d)).*

We request that back-up power supply must be automatic and immediate:

*2.10.1.5. Electrical Backup*

*iii. Generators are brought on line within 30 minutes, at which time hoisting can be initiated so that personnel do not have to stay underground for extended lengths of time.*

We request that a Live Fire Extinguisher Training class must be mandatory for all employees:

*2.10.6. Live Fire Extinguisher Training*

*The Permittees shall develop and implement a Live Fire Extinguisher Training class. The Live Fire Extinguisher Training class will be made available to employees as a preparedness and prevention measure, but is not a mandatory training class for the general employee. It is mandatory for unescorted access in the underground.*

We agree with the addition of this section:

*2.14.3 Repository Siting Annual Report*

*The Department of Energy (DOE) shall submit an annual report summarizing its progress toward siting another geologic repository for transuranic waste in a state other than New Mexico. The annual report shall summarize the steps the DOE has taken toward siting such a geologic repository in another state and the report shall include documentation supporting the summary. Such documentation may include: budget appropriation requests; land acquisition(s); state and public engagement activities; feasibility studies; and design, construction, and operation plans.*

We question the removal of the Permit Attachments at the end of this Part 2.

## Specific Comments on PART 3 - CONTAINER STORAGE

We question moving the figures to Attachment M throughout the Permit, including below:

### *3.1.1.2. Storage Locations and Quantities*

*The Permittees may store TRU mixed waste containers in the locations in the WHB Unit, as specified in Table 3.1.1 below and depicted in Permit Attachment M A1, Figures M-1A1-1 and M-14A1-17a, M-15b, and M- 16c. The Permittees may store quantities of TRU mixed waste containers in these locations not to exceed the maximum capacities specified in Table 3.1.1 below.*

We question the removal of the Permit Attachments at the end of this Part 3.

## Specific Comments on PART 4 - GEOLOGIC REPOSITORY DISPOSAL

Sections 4.1.1.2.i and 4.1.1.2.ii should be deleted from the Permit:

### *4.1.1.2. Disposal Locations and Quantities*

*The Permittees shall dispose TRU mixed waste containers in teneight Underground HWDUs, as specified in Table 4.1.1 below and depicted in Permit Attachment MA2, Figure M-43A2-1. The Permittees may dispose quantities of TRU mixed waste containers in these locations not to exceed the maximum capacities specified in Table 4.1.1 below.*

*The Permittees may increase these capacities for a specific HWDU subject to the following conditions:*

*i. The Permittees may submit a Class 1 permit modification requiring prior approval of the Secretary in accordance with 20.4.1.900 NMAC (incorporating 40 CFR §270.42(a)) to increase the CH TRU mixed waste capacity by 35,300 ft<sup>3</sup> (1,000 m<sup>3</sup>) or less, and the RH TRU mixed waste capacities in Panels 5 and 6 to a maximum of 22,950 ft<sup>3</sup> (650 m<sup>3</sup>).*

*At least 15 calendar days before submittal to NMED, the Permittees shall post a link to the Class 1 permit modification on the WIPP Home Page and inform those on the e-mail notification list.*

*ii. Notwithstanding Permit Section 4.1.1.2.i, any Underground HWDU CH TRU waste capacity may be increased by up to 25 percent of the total maximum capacity in Table 4.1.1 by submitting a Class 2 permit modification request in accordance with 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)).*

The Table 4.1.1 - Underground HWDUs – is confusing and must be explained in clearer terms.

The footnotes are contradictory and must be more clearly articulated:

*Footnote 2 “Maximum TRU Mixed Waste Capacity” is the maximum TRU mixed waste volume that may be emplaced in each panel. This volume is calculated based on the gross internal volume of the outermost disposal containers.*

*Footnote 3 Final TRU Mixed Waste Volume is calculated based on the gross internal volume of the outermost disposal containers. The volume listed here is reported pursuant to Permit Part 6, Section 6.10.1.*

*Footnote 4 Final LWA TRU Waste Volume is calculated based on the volume of TRU waste inside a disposal container. The volume listed here is tracked and reported by the DOE internally pursuant to the WIPP Land Withdrawal Act total capacity limit of 6.2*

*million ft<sup>3</sup> (175,564 m<sup>3</sup>) of TRU waste (Pub. L. 102-579, as amended) and is included here for informational purposes. A link to the LWA TRU Waste Volume is posted on [www.wipp.energy.gov](http://www.wipp.energy.gov).*

All links must go to the actual page within the document, not to WIPP.gov where the document will be nearly impossible to find.

We agree with this section -

*4.2.1.4 Prioritization and Risk Reduction of New Mexico Waste*

*Pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.10.k), within 15 days of publishing the Annual Transuranic Waste Inventory Report (ATWIR), the Permittees shall certify to the NMED that there is sufficient disposal capacity to dispose of the New Mexico generator/storage site waste detailed in this report. The report shall contain the underlying calculations and data to validate the certification. While this permit remains in effect, the Permittees shall prioritize the emplacement of stored TRU mixed waste at WIPP from the clean-up activities at the Los Alamos National Laboratory (LANL). On an annual basis, the volume of stored TRU mixed waste emplaced in a HWDU from the LANL must exceed the volume of stored TRU mixed waste from all other individual generator sites.*

We request that the Permit must define and prioritize “legacy” waste at LANL. “Legacy” waste should be defined as generated in or before 1999.

We propose this revision to Section 4.2.1.4 (proposed additions in red text):

4.2.1.4 Prioritization and Risk Reduction of New Mexico Waste

Pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.10.k), within 15 days of publishing the Annual Transuranic Waste Inventory Report (ATWIR), the Permittees shall certify to the NMED that there is sufficient disposal capacity **in permitted HWDUs** to dispose of **all of** the New Mexico generator/storage site waste detailed in this report. The report shall contain the underlying calculations and data to validate the certification. **Public access to the Comprehensive Inventory Database (CID) shall be provided to assist in verification of the calculations and data.** While this permit remains in effect, the Permittees shall prioritize the emplacement of stored TRU mixed waste at WIPP from the clean-up activities **of waste generated prior to 1999** at the Los Alamos National Laboratory (LANL). **The** ~~On an annual basis,~~ **certification shall provide that** the volume of stored TRU mixed waste emplaced in a HWDU from the LANL ~~must~~ **will** exceed the volume of stored TRU mixed waste from all other individual generator sites **or provide the basis of why such volume emplacement cannot be accomplished.**

Table 4.4.1 - VOC Room-Based Limits - is confusing and must be explained in clearer terms.

For instance, why do Panels 1-7, Panel 8, and Panels 11-12 all have different limits?

In addition, the Permit should prohibit moving Panels closer to the western boundary as there are questions about bedded salt vs. shale, giving rise to a letter of concern by EPA. Moreover, there are known brine injection wells on the western boundary.

We agree with this monthly surveillance of oil and gas production wells:

Section A2-5b(2)(a), p. 23

*NMED is requiring a summary of the results of the monthly surveillance of oil and gas production wells, and now saltwater disposal wells, within a one-mile perimeter outside*



*the LWA boundary be included as a new component of the Annual Geotechnical Analysis Report.*

Asa previously stated, the Permit must not allow moving Panels closer to the western boundary:

*4.5.2.1. Construction Requirements*

*Subject to Permit Section 4.5.1, the Permittees may excavate the following Underground HWDUs, as specified in Section A2-2a(3), “Subsurface Structures (Underground Hazardous Waste Disposal Units (HWDUs))”*

We request public education forums about the WIPP Waste Information System (WWIS):

*4.8.2. Disposal Waste Type and Location*

*The Permittees shall maintain, in the operating record, a record identifying the types and quantities of TRU mixed waste in each Underground HWDU and the disposal location of each container or container assembly (e.g., a 7-pack of standard 55-gallons drums) within each Underground HWDU, using the following fields from the WWIS data dictionary:*

We question the removal of the Permit Attachments at the end of this Part 4.

### **Specific Comments on PART 5 - GROUNDWATER DETECTION MONITORING**

We question the removal of the Permit Attachments at the end of this Part 5.

### **Specific Comments on PART 6 – CLOSURE REQUIREMENTS**

We agree with the two sections below. But please add that NMED can revoke the Permit and that an actual end date must be included:

*6.5.2. Final Facility Closure*

*When the Permit term has expired or after the HWDUs have received the final volume of waste as specified in Permit Part 4, Table 4.1.1, the Permittees shall remove from the facility all non-mixed hazardous waste, dispose in the Underground HWDUs all TRU-mixed hazardous waste and derived waste, and complete closure activities as specified in Permit Attachment G and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.113).*

*The closure date of WIPP is tied to the Permit term of ten years and capacities in Permit Part 4, Table 4.1.1. This proposed change will require the Permittees to make a case for Permit Renewal at the end of the Permit term. This Permit term allows the State and the public to require an accurate inventory of waste awaiting clean-up around the United States, including Los Alamos National Laboratory, for emplacement at WIPP.*

*6.10.1. Panel Closure*

*The Permittees shall close each Underground HWDU in a manner that meets the closure standard for volatile organic compounds in Table 6.10.1, which represent health based levels (HBLs) at the location of the nearest resident beyond the WIPP site boundary. Upon completion of disposal in an Underground HWDU, the Permittees shall provide written notification to the Secretary stating the final TRU mixed waste volume, calculated based on the gross internal volume of the outermost disposal container, emplaced in the*

*Underground HWDU. The Permittees shall also close the Underground HWDU as specified in Permit Attachment G and Permit Attachment G1 (WIPP Panel Closure Design Description and Specifications) and submit a Closure Report to the Secretary pursuant to 20.4.2.201.G NMAC. The Permittees shall post a link to the final Underground HWDU TRU mixed waste volume notice transmittal letter on the WIPP Home Page and inform those on the e-mail notification list as specified in Permit Section 1.11.*

## **Specific Comments on PART 7 - POST-CLOSURE CARE PLAN**

The current number of Panels and access drifts must be included in the Permit. “Eight” panels and “two” drifts must be included:

### *7.2. UNIT IDENTIFICATION*

*The Permittees shall provide post-closure care for the closed Underground HWDUs (eight panels and two access drifts), and for the facility after final closure, as specified in Permit Attachment H (Post-Closure Plan) and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.110(b)).*

The Permit must state the hazards and the amount of the wastes:

### *7.4.2.1. Deed Recordation*

*The Permittees shall record, in accordance with New Mexico law, a notation on the deed to the facility property, or on some other instrument that is normally examined during a title search, that will in perpetuity notify any potential purchaser of the property that...*

Removal of wastes or contaminated soils should not be allowed:

### *7.4.3. Removal of Wastes or Contaminated Soils*

*If the Permittees, or any subsequent owner or operator of the land upon which the Underground HWDUs are located, wishes to remove TRU mixed wastes, TRU mixed waste residues, or contaminated soils, they shall request a modification to this permit in accordance with the applicable requirements in 20.4.1.900 NMAC (incorporating 40 CFR Part 270) and 4.1.901. The Permittees or any subsequent owner or operator of the land shall demonstrate the removal of TRU mixed wastes will satisfy the criteria of 20.4.1.500 NMAC (incorporating 40 CFR §264.117(c) and §264.119(c)).*

This must be noticed and sent to the public reading room:

### *7.5. POST-CLOSURE PERMIT MODIFICATIONS*

*The Permittees shall submit a written notification of or request for a permit modification to amend the approved Post-Closure Plan at any time during the active life of the facility or during the post-closure care period, as required by 20.4.1.500, .900, and .901 NMAC (incorporating 40 CFR §§264.118(d) and 270). The Permittees shall include a copy of the proposed amended Post-Closure Plan for approval by the Secretary, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.118(d)).*

Anything related to this section must be in the Electronic Public Reading Room (EPRR).

DOE must provide proof that WIPP will be safe before any changes or additions.

Please explain the difference between these two documents -

### 8.13.2. Soil Cleanup Levels

The Permittees shall attain the following cleanup levels for hazardous waste and hazardous constituents in soil:

1. For all individual contaminants for which NMED has specified a soil screening level in NMED's [Risk Assessment Guidance for Site Investigation and Remediation \(as updated\) Technical Background Document for Development of Soil Screening Levels](#), the residential or industrial land use scenario cleanup level shall be the screening level specified in the most recent version of that document. The method for determining cleanup levels for sites with multiple contaminants shall follow NMED's [Risk Assessment Guidance for Site Investigation and Remediation Technical Background Document for Development of Soil Screening Levels](#) (as updated) and items 2 and 3 below, as applicable;

Please substitute “shall” for “may”:

#### 8.14.1.11. *Tables*

*The following summary tables **may** be included in the investigation work plans, if previous investigations have been conducted at the site.*

Please explain why some documents were removed from the Permit:

#### 8.15. REFERENCES

## **Specific Comments on ATTACHMENT A GENERAL FACILITY DESCRIPTION AND PROCESS INFORMATION**

Do not remove the word “all” here or anywhere in the Permit:

#### *A-3 Property Description*

*8 The WIPP property has been divided into functional areas. The Property Protection Area (PPA) 9 is surrounded by a security barrier, which encompasses approximately 34 acres without the 10 New Filter Building (NFB) and approximately 44 acres with the NFB and provides security and 11 protection for **all** the major surface structures.*

Keep 50 and 14 amounts in the Permit:

- . *A-4 Facility Type*
- . *26 ...The Parking*
- . *27 Area UnitPAU provides storage space for up to **50** loaded Contact-Handled PackagesCH*
- . *28 shipping containers referred to as CH packages and **14** loaded Remote-Handled PackagesRH*
- . *29 shipping containers referred to as RH packages on*

Please clarify these questions:

Is all of WIPP a miscellaneous unit? Why is just the underground called a miscellaneous unit?

Is a shaft a miscellaneous unit?

- . *A-4 Facility Type*
- . *41 approximately 2,150 feet below the surface. The underground facility is defined in 20.4.1.100*
- . *42 NMAC (incorporating 40 CFR §260.10) as a “miscellaneous unit.” As a miscellaneous unit,*
- . *43 hazardous waste management units within the repository are subject to permitting according to*

This is one of the many areas that have too many random deletions -

#### *A-5 Waste Description*

## Specific Comments on ATTACHMENT A1 CONTAINER STORAGE

We request an actual figure (not a percentage) for the amount of liquids for each type of container:

- . *A1-1a Containers with Liquid*
- . *19 The Permit Treatment, Storage, and Disposal Facility (TSDF) Waste Acceptance Criteria (WAC)*
- . *20 and the Waste Analysis Plan (Permit Attachment C) prohibit the shipment of waste to the WIPP*
- . *21 facility with liquid in excess of one percent of the volume of the waste container (e.g., drum,*
- . *22 standard waste box [(SWB)], or canister). Since the maximum amount of liquid is one percent,*
- . *23 calculations made to determine the secondary containment as required by 20.4.1.500 NMAC*
- . *24 (incorporating §264.175) are based on ten percent of one percent of the volume of the*
- . *25 containers, or one percent of the largest container, whichever is greater.*

Please use “shall” instead of “may”:

Since WIPP may be open longer, more detail is needed.

- . *A1-1b(1) CH TRU Mixed Waste Containers*
- . *6 Contact- handled (CH) TRU mixed waste containers will bear either 55-gal gallon (gal) (208-*
- . *7 Liter (L)) drums singly or arranged into 7seven-packs, 85-gal (322-L) drums singly or arranged*
- . *8 into 4four-packs, 100-gal (379 L) drums singly or arranged into 3three-packs, ten-drum*
- . *9 overpacks (TDOP), standard large box 2s (SLB2), or SWBs. These CH mixed waste containers*
- . *10 may be either direct-loaded or used to overpack CH TRU mixed containers that are leaking or*
- . *11 are not in good condition. The CH TRU mixed waste containers are constructed of steel. Drums*
- . *12 may also contain rigid, molded polyethylene (or other material compatible with TRU mixed*
- . *13 waste) liners.*

This is an example of how hard it is for the public to read the Permit. One has to open 5 documents to follow this one sentence. The Permittees must consider using hyperlinks for documents, tables, and figures that are not in the section being read:

*A1-1b(2) RH TRU Mixed Waste Containers*

- . *16 A summary description of each RH*
- . *17 TRU mixed waste container type is provided in Table A1-1, and the containers are illustrated in*
- . *18 Figures M-9 through M-11. The maximum loaded, or gross, weights of these containers are*
- . *19 listed in Tables A1-2 and A1-3.*

What is a rigid molded poly liner? What is DOE, 1997a? An update for DOE 1997a must be used. This is another example that shows the need for hyperlinks that opens the reference document in a new window-

*A1-1b(3) Container Compatibility*

- . *4 All Containers will be made of steel, and some will contain rigid, molded polyethylene liners.*
- . *5 The compatibility study, documented in Appendix C1 of the WIPP RCRA Part B Permit*
- . *6 Application (DOE, 1997a),*

How often are the interlocks inspected? Is this in Attachment E?

*Pg. 10*

*5 CH TRU Mixed Waste*

- . *6 The Contact-Handled Packages CH packages used to transport TRU mixed waste containers*
- . *7 will be received through one of three air-lock entries to the CH Bay of the WHB Unit. The*
- . *8 WHB heating, ventilation and air conditioning (HVAC) system maintains the interior of the WHB*
- . *9 at a pressure lower than the ambient atmosphere to ensure that air flows into the WHB,*

10 preventing the inadvertent release of any hazardous or radioactive constituents contamination  
11 as the result of a contamination event. The doors at each end of the air lock are interlocked to  
12 prevent both from opening simultaneously and equalizing CH Bay pressure with outside  
13 atmospheric pressure.

This paragraph must not be removed:

*A1-1d(1) Derived Waste*

22 The Safety Analysis Report (DOE 1997b) for packaging requires the lids of TRU mixed waste  
23 containers to be vented through high efficiency particulate air (HEPA)-grade filters to preclude  
24 container pressurization caused by gas generation and to prevent particulate material from  
25 escaping. Filtered vents used in CH TRU mixed waste containers (55-gal (208-L) drums, 85-gal  
26 (322 L) drums, 100-gal (379-L) drums, TDOPs, and SWBs) have an orifice approximately 0.375-  
27 in. (9.53-millimeters) in diameter through which internally generated gas may pass. The filter  
28 media can be any material (e.g., composite carbon, sintered metal).

We agree that there must be a root cause analysis:

*Pg. 24*

*The Permittees must perform a root cause analysis on generation, transport, or disposal activities for the following reasons: (1) contamination may have occurred within the shipping container; (2) a shipping container may be compromised; or (3) at any time when directed by the NMED. Once a root cause analysis is required on a specific shipment or waste stream, the shipment or waste stream may not be disposed of at the WIPP facility until the root cause analysis is completed and corrective measures are implemented to prevent such concerns in the future. Prior to submitting the root cause analysis and corrective measures to the NMED for review and approval, the Permittees shall provide a copy of the root cause analysis and corrective measures to all generator/storage sites that ship waste to the WIPP facility. When submitting the root cause analysis and corrective measures to the NMED for review and approval, the Permittees shall provide a certification signed by responsible officials from each organization that the root cause analysis and corrective measures were received by a responsible official at the generator/storage sites.*

Is there a new Table A1-1? Where is it?

### **Specific Comments on ATTACHMENT A2 GEOLOGIC REPOSITORY**

Panels must not be taller in the future.

Where are the calculations for the different heights?

How did P8 get to be 16' tall?

Why do we now have 14' tall proposed Panels 11 & 12?

A2-2a(3) Subsurface Structures

Main entries and cross cuts in the repository provide access and ventilation to the HWDUs. The main entries link the shaft pillar/service area with the TRU mixed waste management area and are separated by pillars. Each of the ~~Underground-underground~~ HWDUs labeled Panels 1 through 8, 11, and 12 will have seven rooms. The locations of these HWDUs are shown in Figure ~~A2-4M-43~~. The rooms in Panels 1-7 ~~will~~ have nominal dimensions of 13 ft (4.0 m) high by 33 ft (10 m) wide by 300 ft (91 m) long and ~~will be supported separated~~ by 100 ft (30 m) wide pillars. The rooms in Panel 8 ~~will~~ have nominal dimensions of 16 ft (5.0 m) high by 33 ft (10 m) wide by 300 ft (91 m) long and ~~will be supported separated~~ by 100 ft (30 m) wide pillars. The rooms in Panel 11 and Panel 12 will have nominal dimensions of 14 ft (4.3 m) high by 33 ft (10 m) wide by 300 ft (91 m) long and will be separated by 100 ft (30 m) wide pillars.

We support this new section:

*A2-5b(2)(a) Description of the Geomechanical Monitoring System*

*In the annual Geotechnical Analysis Report, the Permittees shall provide a summary of the results of the monthly surveillance of oil and gas production and salt water disposal wells within a one-mile perimeter outside the Land Withdrawal Act boundary.*

### **Specific Comments on ATTACHMENT C WASTE ANALYSIS PLAN**

We support the new NMED proposal to clearly define its ability to suspend waste shipments to WIPP if there is evidence of a threat to human health or the environment or any Permit noncompliance.

*C-1d Control of Waste Acceptance*

*The NMED retains the right, under the New Mexico Hazardous Waste Act at 74-4-13, which is cited in Permit Part 1, Section 1.1, to take action, such as issuing orders, to address evidence of an imminent and substantial endangerment to human health or the environment, including orders to suspend TRU mixed waste shipments and emplacement at the WIPP facility for cause. The Secretary reserves the right to prohibit shipment and emplacement of TRU mixed wastes at the WIPP facility for, but not limited to, the following reasons: (1) the Permittees have not satisfied any conditions of this Permit; (2) a TRU mixed waste stream or shipment may pose a threat to human health or the environment; (3) the Permittees are in violation of a Permit condition; or (4) based on any allegation of noncompliance. This attachment also requires that all waste shipped to the WIPP facility is compliant with the WAP contained herein and all shipments arriving at the WIPP facility go through a screening and verification process per Section C-5 before emplacement in a HWDU. NMED retains the right to suspend any and all waste shipments to the WIPP facility associated for not complying with the WAP.*

### **Specific Comments on ATTACHMENT E INSPECTION SCHEDULE, PROCESS AND FORMS**

We do not agree with the removal of the sentence in E-1:

*E-1 Inspection Schedule*

*13 Equipment instrumental in preventing, detecting, or responding to environmental or human  
14 health hazards, such as monitoring equipment, safety and emergency equipment, security  
15 devices, and operating or structural equipment are inspected. The equipment will be inspected  
16 for malfunctions, deterioration, potential for operator errors, and discharges which could lead to  
17 a release of hazardous waste constituents to the environment or pose a threat to human health.*

This must not be removed. And because WIPP may be open longer, the records must be maintained longer:

36 ... *The operational procedures are*  
37 *maintained at the WIPP facility. Tables E-1 and E-1a summarize inspections, frequencies,*  
38 *responsible organizations, and the types of anticipated problems as well as the references for*  
39 *the operational procedures. Inspection records are maintained at the WIPP site facility for three*  
40 *years. Beginning with the effective date of this Permit, records that are over the three year three-*  
41 *year retention period are either maintained at the WIPP site facility or transferred to the WIPP*  
42 *Records Archive located in Carlsbad, NM New Mexico until closure. The records maintained at*

Is the 2018 Documented Safety Analysis (DSA) publicly available? The 2014 release was neither a 1) surface contamination or an 2) accident. It was a radiologic release from a drum that was packed according to approved methods. It was not an accident because all procedures were followed. The Permittees must come up with a name for a third type of release. Because the WIPP may be opened longer than originally planned, all operating procedures must be more frequently reexamined.

*G3-3c Nature of the Releases*

24 *The WIPP facility personnel will handle only sealed containers of TRU mixed waste and derived*  
25 *waste. The practice of handling sealed containers minimizes the opportunity for releases or*  
26 *spills. For the purposes of safety analysis (DOE 20181997) 1, it was assumed that releases and*  
27 *spills during operations occur by either of two mechanisms: 1) surface contamination and 2)*  
28 *accidents.*

29 *Radioactive materials releases resulting from unique and representative hazard evaluation*  
30 *events are Surface contamination is documented in the WIPP Documented Safety Analysis*  
31 *(DSA) Safety Analysis Report (SAR) (DOE 20181997). Surface contamination of a waste*  
32 *container is considered to be the only credible source of contamination external to the*  
33 *containers during normal operations. Surface contamination is assumed to be caused by waste*  
34 *management activities at the generator site that result in the contamination of the outside of a*  
35 *waste container. Contamination would most likely be particulates (dirt or dust) that would be*  
36 *deposited during generator-site handling/loading activities. This contamination may not be*  
37 *detected by visible inspections. Surface contamination is detected/monitored upon after arrival at*  
38 *the WIPP facility through the use of swipes and radiation monitoring surveying equipment, as*  
39 *specified in radiological control procedures pursuant to 10 CFR Part 835. Surveying for*  
40 *radioactive constituents allows for the detection of contamination that may not be visible on the*  
41 *surface of the container. WIPP Procedure WP 12-HP1100, "Radiological Surveys" (DOE, 1995).*  
42 *WP 12-HP1100 is a technical procedure that provides specific methods and guidance for*  
1 *DOE 2018, Waste Isolation Pilot Plant Documented Safety Analysis, DOE/WIPP 07-3372, REV. 6a,*  
*February 2018.*

In closing, again we strongly support NMED's proposed changes to the WIPP RCRA permit.

For the above reasons and others, Nuclear Watch New Mexico respectfully requests a hearing.

Should you have any questions and want any more information, please feel free to contact Scott Kovac at [scott@nukewatch.org](mailto:scott@nukewatch.org)

Sincerely,

Jay Coghlan  
Executive Director

Scott Kovac  
Research Director