

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

January 3, 2025

Dear New Mexico Environment Department:

Southwest Research and Information Center (SRIC) was an active participant in the June 2023 WIPP Renewal Permit process and in the negotiations that created the Section 4.2.1.5 Legacy TRU Waste Disposal Plan. That section was necessary because while WIPP was conceived and designed for disposal of Cold War legacy transuranic (TRU) waste, in recent years DOE is planning to expand WIPP for non-legacy waste. Such non-legacy waste includes waste from new plutonium pit production and from "surplus" plutonium that includes increased volumes and radioactively compared with most legacy TRU waste. The Legacy Plan section also relates to two other Renewal Permit sections: (1) Section 4.2.1.4 regarding the prioritization of Los Alamos National Lab (LANL) waste to ensure that New Mexico generated waste can be disposed in the permitted panels and (2) Section 2.14.3 requiring an annual report of siting an additional repository in another state so that there would be other waste repositories and New Mexico would not solely bear the burden of all TRU waste disposal.

These comments provide SRIC's conclusions, recommendations to NMED for the path forward, specific language that should be in a Compliant Plan and background for that language, and additional comments about other aspects of the November 4, 2024 Plan ("11/4 Plan").

As always, SRIC is prepared to discuss with NMED and interested parties the process and details of a compliant WIPP Legacy TRU Waste Disposal Plan.

### 1.0 Conclusions

1.1 The Legacy Waste Plan as submitted on November 4, 2024 is inadequate and does not comply with the requirements of the Section 4.2.1.5 and other key sections of the Permit. Thus, NMED must issue and enforce a Compliant Plan.

- 1.2 A Compliant Plan will define legacy waste as waste that existed and was managed as TRU waste when WIPP was opened in 1999.
- 1.3 A Compliant Plan will detail how the Permittees will assist four generator sites Idaho, LANL, Oak Ridge (OR), and Savannah River (SRS) to prioritize their legacy waste characterization, packaging, and shipments so as to ensure all legacy waste from those four sites is disposed during the term of the Permit, as required by Section 4.2.1.5.
- 1.4 A Compliant Plan will provide for the prioritization of LANL legacy waste, as required by Section 4.2.1.4.
- 1.5 A Compliant Plan will provide that, to the extent practicable, permitted panels are reserved for legacy waste.
- 1.6 A Compliant Plan will detail how legacy waste that is not emplaced during the term of the Permit could be disposed, including the amounts and timeline for its disposal in an additional repository in a state other than New Mexico, as required by Section 2.14.3.

### 2.0 Recommendations for the Path Forward to finalize a Compliant Plan

Section 4.2.1.5 explicitly requires a 60-day public comment period after the Permittees submit their plan, clearly indicating that NMED must consider those comments before exercising its authority, pursuant to the New Mexico Hazardous Waste Act and Permit Section 1.10.2, to approve, disapprove, or modify this required submission. NMED also has authority under 20.4.1.901(B) NMAC to modify the Permit.

Despite having more than 16 months since agreeing to the Renewal Permit to develop a compliant Plan, the Permittee's 11/4 Plan is noncompliant. NMED cannot approve the Plan and must require a Compliant Plan that will be implemented by the Permittees and strictly enforced by NMED.

In the current situation where the Permittees are apparently incapable of developing a Compliant Plan and are shipping any waste they desire, including non-legacy waste, it is important to have a Compliant Plan in force. Therefore, NMED should modify the 11/4 Plan and issue the Compliant Plan as soon as possible.

SRIC acknowledges NMED's authority to modify the 11/4 Plan and require the Permittees to comply. NMED can issue such a revised Plan based on the 11/4 Plan, public comments, and any additional relevant information that NMED has. SRIC encourages NMED to proceed expeditiously to issue such a Compliant Plan.

### 3.0 Specific provisions to be included in a Compliant Plan

### 3.1 Definition of Legacy TRU and Legacy TRU mixed waste

Legacy TRU and Legacy TRU mixed waste is defense-related TRU waste

generated from defense activities and managed as TRU waste as of 1999, when WIPP opened. Any waste or material that does not meet that definition is "non-legacy" waste.

### 3.2 Identification of Legacy TRU waste and TRU mixed waste storage sites

On November 4, 2024, the following DOE sites stored legacy TRU and TRU mixed waste: Hanford, WA; Idaho National Lab, ID; Los Alamos, NM; Oak Ridge, TN; and Savannah River Site, SC. The Permittees shall report to NMED within 60 days of approval of the Compliant Plan of the actions to ensure that all legacy waste from Idaho, LANL, OR, and SRS is disposed at WIPP during the term of the Permit. The Permittees shall report annually on the results of the actions to prioritize such legacy waste disposal and further actions to ensure that all legacy waste from those sites is disposed at WIPP during the term of the Permit.

### 3.3 Tracking of Legacy TRU waste and TRU mixed waste

As of the date that the Legacy Waste Plan is approved, all legacy TRU and TRU mixed waste containers not then emplaced at WIPP shall be identified in the WIPP Waste Information System (WWIS) Database, including the WDS/WWIS Public Access System, as provided in Permit Section 2.3.1.7.

### 3.4 Prioritization of LANL waste

Beginning no later than January 1, 2026, the annual certification of LANL waste, pursuant to Permit Section 4.2.1.4, shall identify in which permitted HWDU the LANL TRU and TRU mixed legacy waste are currently expected to be emplaced. The certification shall describe how all LANL waste will be disposed while the permit remains in effect.

### 3.5 Reserving Panels for legacy waste during the term of the Permit

To the extent practicable as articulated in the Final Plan, permitted HWDUs will be reserved for disposal of legacy TRU and TRU mixed waste at WIPP.

### 3.6 Managing the legacy waste inventory after the term of the Permit

The annual report required by Section 2.14.3 shall identify legacy waste and non-legacy waste planned for disposal in an additional repository in a state other than New Mexico. DOE also shall report annually on plans to store TRU waste and TRU mixed waste if WIPP is not receiving waste and an additional repository in another state is not operational.

- 4.0 Background for specific provisions in a Compliant Plan.
- 4.1. Compliant Definition of Legacy TRU and Legacy TRU mixed waste.

WIPP was conceived in the 1970s and developed in the 1980s for disposal of Cold War Legacy Waste. The Cold War ended when Germans began to demolish the Berlin Wall on November 9, 1989.and with the dissolution of the Soviet Union on December 25, 1991. Thus, an appropriate end date for the definition of legacy waste would be the end of 1991.

An earlier appropriate end date for legacy TRU waste generation would be when the Rocky Flats Plant, the principal generator of Cold War TRU waste, was raided by the FBI in June 1989 and formally ceased operations in November 1989.<sup>2</sup>

However, WIPP did not begin receiving waste until March 26, 1999. After Rocky Flats operations ended, DOE managed TRU waste at various sites with the intention that the waste would go to WIPP. Thus, SRIC can support a reasonable later end date of 1999 in the definition of legacy TRU waste.

The practical impact on DOE legacy waste sites from using the 1999 date is minimal. According to the 11/4 Plan Appendix A, Hanford defines legacy waste as being stored or generated prior to June 2000. at 21. Since Hanford ceased operations several years before 1999, little or no TRU waste would have been generated after 1999.

Idaho National Lab defines legacy waste as being generated prior to October 1995. at 22. Thus, the 1999 date would have no effect on its remaining legacy waste volume.

LANL has an October 1, 1999 date for legacy waste. at 23. Thus, the 1999 date should have little or no effect on its remaining legacy waste volume.

Oak Ridge legacy waste is primarily defined by the Site Treatment Plan (STP). at 23. Table 4.1 of the STP shows that as of 9/30/2023 there were 1,479 m³ of Mixed TRU waste under the STP. Of that volume, more than 2/3s is sludge, and some of that sludge is low-level waste, which would not be disposed at WIPP.³ How much of that waste was generated and managed as TRU waste as of 1999 is not stated. The 11/4 Plan states that ORNL-EM waste will be shipped to WIPP prior to the start of operations in Panel 12. at 15.Thus, the 1999 date should have little or no effect on the remaining OR TRU legacy waste volume.

Savannah River Site defines legacy waste as prior to the 2014 WIPP events. at 24. That date is not supported by any document, since the referenced April 12, 2019 "direction memo" has not been released, despite numerous SRIC requests. But SRS officials

<sup>3</sup> https://ucor.com/wp-content/uploads/2024/02/STP.pdf at 4A-1

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<sup>&</sup>lt;sup>1</sup> https://history.state.gov/departmenthistory/short-history/berlinwall

<sup>&</sup>lt;sup>2</sup> https://ehss.energy.gov/ohre/new/findingaids/epidemiologic/rockyfire/intro.html

have identified and calculated of its legacy waste volumes from prior to 2014 that are publicly available in presentations to the SRS Citizens Advisory Board. On May 25, 2010, DOE reported on the "Legacy TRU Program Waste Disposition," including "Disposition of 5,000 m³ remaining legacy CH-and RH-TRU wastes" with a completion date of shipments to WIPP by 2012. On January 27, 2015, DOE reported that 11,063 m³ of "TRU-Legacy" waste had been disposed at WIPP of the total amount of 11,600 m³. At the September 2024 SRS CAB meeting, DOE reported that the remaining volume of legacy TRU waste was 167.01 m³. Thus, the 1999 date for legacy waste would have minimal impact on the remaining SRS legacy waste volume.

The 11/4 Plan states: "The South Carolina Settlement Agreement requires removal of 9.5 metric tons of surplus plutonium from the state of South Carolina by December 31, 2036." at 15. The federal statute (50 U.S.C. 2566) and that Agreement do not require removal of the waste, but the Agreement provides a \$600 million payment by DOE to South Carolina in 2020 and for further financial payments to South Carolina if 9.5 metric tons of "defense plutonium" is not removed from the state by January 1, 2037. The implication that the Settlement Agreement relates to WIPP is false. The Agreement is not about and does not mention TRU waste or TRU mixed waste. The Agreement does not mention WIPP or disposal of any of the subject plutonium at WIPP. The Agreement does not require that any of the waste to be removed from South Carolina by 2037 will come to New Mexico. None of that "defense plutonium" was managed as TRU waste in 1999 and none of it should be defined as legacy TRU or TRU mixed waste. Under federal law that "defense plutonium" is "weapons-usable plutonium." Weapons-usable plutonium is not TRU waste and cannot legally be disposed at WIPP.

Permit Section 2.3.3.8 has always referred to how TRU waste has been managed, and it is consistent to use similar language in the legacy waste definition.

Therefore, using a 1999 date for defining legacy TRU waste is reasonable and practical. Using the 11/4 Plan definition is contrary to the agreements and provisions in the Renewal Permit and to the history, purpose, and limitations on WIPP. See also Section 5.1 below.

Thus, a Compliant Plan will include:

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<sup>&</sup>lt;sup>4</sup> https://cab.srs.gov/library/meetings/2010/fb/fb\_tru\_program\_update\_may\_2010.pdf at slides 6-11.

<sup>&</sup>lt;sup>5</sup>https://cab.srs.gov/library/meetings/2015/fb/RichOlsenCABPerfMeasures012715Rev1. pdf at slides 8 and 12.

<sup>&</sup>lt;sup>6</sup> <a href="https://cab.srs.gov/library/meetings/2024/ms/4.%20Legacy%20TRU%20Waste.pdf">https://cab.srs.gov/library/meetings/2024/ms/4.%20Legacy%20TRU%20Waste.pdf</a> at Slide 7. In FY 24, SRS was making more non-legacy waste shipments than legacy shipments. at slide 5.

<sup>&</sup>lt;sup>7</sup> 50 U.S.C. 2566 (h)(3).

### **Definition of Legacy TRU and Legacy TRU mixed waste**

Legacy TRU and Legacy TRU mixed waste is defense-related TRU waste generated from defense activities and managed as TRU waste as of 1999, when WIPP opened. Any waste or material that does not meet that definition is "non-legacy" waste.

### 4.2 Compliant identification of remaining sites with legacy TRU waste

Section 4.2.1.5 requires the Plan to be developed "in consultation with the generator/storage sites and stakeholders," which requires that those sites be specifically identified in a Compliant Plan. The WIPP website homepage states: "WIPP has been disposing of legacy transuranic (TRU) waste since 1999, cleaning up 22 generator sites nationwide." Many DOE sites have completed sending their legacy waste to WIPP. The 11/4 Plan states that there was consultation with Argonne, Hanford, Idaho National Lab, Livermore, Los Alamos, Oak Ridge, Savannah River. Appendix A.

Of the seven sites with which consultations occurred, Argonne has not identified any more legacy waste. at 21. Livermore has not identified having more legacy waste. at 23.

Thus, DOE has identified five sites with remaining legacy TRU waste that could meet the compliant definition. Of those five sites, the 11/4 Plan states that INL, SRS-EM, and LANL can send virtually all legacy waste to WIPP by 2033, during the term of the Permit. at 14. The11/4 Plan further states that INL-EM, LANL-EM, ORNL-EM, and SRS-EM legacy waste inventories will be shipped prior to the Panel 12 operations start date of 2033, at 15.

The Compliant Plan should require that the Permittees assist those four sites to characterize, package, and ship their legacy waste to WIPP during the term of the Permit. To encourage and enforce such assistance, the Compliant Plan should require an annual report of the actions taken and results thereof to prioritize that such legacy waste is being disposed in the permitted panels. Thus, a Compliant Plan will include:

## Identification of Legacy TRU waste and TRU mixed waste storage sites

On November 4, 2024, the following DOE sites stored legacy TRU and TRU mixed waste: Hanford, WA; Idaho National Lab, ID; Los Alamos, NM; Oak Ridge, TN; and Savannah River Site, SC. The Permittees shall report to NMED within 60 days of approval of the Compliant Plan of the actions to ensure that all legacy waste from Idaho, LANL, OR, and SRS is disposed at WIPP during the term of the Permit. The Permittees shall report annually on the results of the actions to prioritize such legacy waste disposal and further actions to ensure that all legacy waste from those sites is disposed at WIPP during the term of the Permit.

### 4.3 Compliant tracking of Legacy TRU waste and TRU mixed waste

The waste that meets the compliant legacy waste definition at those five sites must be tracked so that WIPP, the sites, NMED, and the public know what legacy waste is being shipped to and emplaced at WIPP. Such tracking can also show how much legacy waste remains to be disposed in the permitted panels at WIPP, which is essential to determine whether legacy waste is being prioritized for disposal, as compared with non-legacy waste. The 11/4 Plan states: "This definition applies after the effective date of this Plan (November 4, 2024)." at 9.

Such tracking should be done in the WIPP Waste Information System (WWIS) Database, which is required by the Permit and tracks all waste at WIPP, including its emplacement location. Thus, a Compliant Plan will include:

### Tracking of Legacy TRU waste and TRU mixed waste

As of the date that the Legacy Waste Plan is approved, all legacy TRU and TRU mixed waste containers not then emplaced at WIPP shall be identified in the WIPP Waste Information System (WWIS) Database, including the WDS/WWIS Public Access System, as provided in Permit Section 2.3.1.7.

### 4.4. Compliant prioritization of LANL legacy waste

Permit Section 4.2.1.4 requires prioritization and risk reduction of New Mexico waste. The section requires an annual certification that the permitted panels have sufficient capacity to dispose of all the TRU waste at Los Alamos and Sandia national labs while the permit is in effect. The prioritization relates to the emplacement of all stored and buried TRU and TRU mixed waste at LANL. Each certification must be issued within 15 days of the Annual Transuranic Waste Inventory Report (ATWIR) being published.

A Compliant Plan must incorporate those enforceable requirements. For the data and calculations to be validated, the ATWIR must identify the waste that meets the legacy definition. Thus, the Compliant Plan must identify what LANL waste is expected to be emplaced in the existing panels, so that NMED and the public can ascertain annually what progress is being made in the prioritization of New Mexico waste, as compared to waste emplaced from other sites. As will be discussed in Section 4.5 below, since the 11/4 Plan indicates that only Panels 8 and 11 will be filled during the term of the Permit, the certification should provide that all LANL legacy waste be emplaced by the time Panel 11 is filled.

The ATWIR and annual certification to be issued in 2025 will not include information about the waste that meets the compliant definition. However, the ATWIR and certification in 2026 and thereafter should provide that data.

Thus, a Compliant Plan will include:

### **Prioritization of LANL legacy waste**

Beginning no later than January 1, 2026, the annual certification of LANL waste, pursuant to Permit Section 4.2.1.4, shall identify in which permitted HWDU the LANL TRU and TRU mixed legacy waste are currently expected to be emplaced. The certification shall describe how all LANL waste will be disposed while the permit remains in effect.

4.5 Compliant emplacement of legacy waste throughout the Permit term.

The term of the existing Permit ends no later than November 4, 2033.<sup>8</sup> The Renewal Application stated: "Based on the nominal time it takes to fill a panel with TRU mixed waste, the current emplacement schedule, and the need to replace lost waste volume capacity, a *minimum of two additional panels will be needed during the next 10-year term of the Permit.*" (*emphasis supplied*.)

Thus, the Renewal Permit includes two new panels 11 and 12. Table 4.1.1; Section 4.5.2; and other provisions.

The Permit further includes that Panels 11 and 12 will be filled during the term of the Permit. Table G-1 anticipates Panel 11 being filled by July 2028 and Panel 12 being filled by June 2031. The stated requirement for two new panels during the term of the Permit also was significant in reserving Panel 12 for the disposal of legacy TRU mixed waste to the extent practical.

However, the 11/4 Plan states: "waste emplacement is projected to begin in Panel 12 in 2033." at 14. Thus, Panel 12 would be filled <u>after</u> the Permit expires. The 11/4 Plan also states: "For the purposes of this Plan, the Legacy TRU waste definition applies only to waste disposed in Panel 12 pursuant to Permit Part 4, Section 4.2.1.5." at 9

The changed date for use of Panel 12 and that the 11/4 Plan definition applies only to Panel 12 would effectively mean that the 11/4 Plan has little or no effect during the term of the Permit. That is not what the Permittees (and all other parties to the negotiations) agreed to. It is also not compliant with the Permit.

NMED has stated that the Plan will define legacy waste and "work with generator/storage sites and stakeholders to accurately inventory this waste once defined." <sup>10</sup>

<sup>&</sup>lt;sup>8</sup> Permit Section 1.7.2. Pursuant to Section 1.7.4, the Permit term can be extended. <sup>9</sup>https://wipp.energy.gov/Library/Information\_Repository\_A/10\_Year\_Permit\_Renewal/2 <u>020%20Renewal%20Application%202020-03-31\_osof.pdf</u>, Addendum G1 at 8 (page 1105 of PDF).

<sup>&</sup>lt;sup>10</sup> <a href="https://www.westernenergyboard.org/wp-content/uploads/5-MEGAN-MCLEAN.pdf">https://www.westernenergyboard.org/wp-content/uploads/5-MEGAN-MCLEAN.pdf</a> at slide 16.

NMED must require that legacy waste be identified and tracked from the time the Compliant Plan is approved (see Section 4.3 above). Having accurate tracking and the associated inventory also is consistent the Permit Section 1.7.3 that requires: "The Permittees shall provide an inventory of TRU waste from the DOE complex to support the renewal application. The inventory shall include the basis for estimated quantities." Having an accurate inventory during the term of the Permit will provide the basis for the required accurate inventory in the next renewal application.

Furthermore, SRIC is very concerned about fundamentally flawed information in the Renewal Application regarding panels needed during the term of the Permit. Permit Section 1.6 states that the Permit "is based on the assumption that all information contained in the permit application" is accurate. Inaccuracies may be grounds for termination or modification of the Permit.

The 11/4 Plan briefly describes the reasons for the five-year delay (from operations starting in 7/28 to not until 2033) in waste emplacement in Panel 12 to "reduced shipping rates" and outages planned in 2025 and 2027. at 14. Those reasons do not add up to a five-year delay. Nor have the Permittees previously publicly described the delay. Further, at least some of that delay information must have been known to the Permittees in 2023 but was not disclosed in the Administrative Record. SRIC believes that the Permittees must immediately provide a detailed basis for the delay in using Panel 12 along with the measures that it will take to prevent ground control and other operational problems in Panels 8 and 11.

A purpose of Section 4.2.1.5 was to reserve the last permitted panel (then said to be Panel 12) for legacy waste emplacement. That purpose remains valid and the Compliant Plan will therefore recognize that provisions relate to the term of the Permit, regardless of whether Panel 12 is filled during that time. Thus, a Compliant Plan will include:

### Reserving Panels for legacy waste during the term of the Permit

To the extent practicable as articulated in the Final Plan, permitted HWDUs will be reserved for disposal of legacy TRU and TRU mixed waste at WIPP.

4.6. Compliant Plan description of TRU waste disposal in a repository in another state.

Permit Section 2.14.3 requires an annual report of DOE's progress toward siting another repository for TRU waste in a state other than New Mexico in order to ensure that New Mexico does not solely bear the burden of disposing of all TRU waste. As of December 14, 2024, of the 108,757.91 cubic meters of TMW volume emplaced at WIPP, 11,737.67 cubic meters of TRU waste is from Sandia and LANL. That is 10.8 percent of the total TMW waste emplaced. Of the 78,238.31 cubic meters of LWA

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<sup>&</sup>lt;sup>11</sup> https://www.wipp.energy.gov/general/GenerateWippStatusReport.pdf

volume emplaced at WIPP, 7,876.84 cubic meters if from Sandia and LANL. That is 10.1 percent of the LWA volume emplaced at WIPP. Idaho National Lab, SRS, and Rocky Flats have each shipped substantially more waste than the New Mexico sites. Thus, a change in prioritization is required in the Compliant Plan and that reprioritization of New Mexico can be enforced by NMED.

As evidenced in Permit Section 2.14.3 and the Administrative Record in the renewal process, DOE knows that much of the New Mexico public believe that another repository must be developed in another state. Nonetheless, the 11/4 Plan does not include any discussion of TRU waste or TRU mixed waste being disposed in another repository. The first annual report related to Permit Section 2.14.3 was submitted on December 23, 2024. 12 That report also does include any discussion of TRU waste or TRU mixed waste being disposed in another repository. The Report only states: "additional defense TRU waste capacity may be needed to accommodate future waste once the WIPP LWA capacity limit is met." at 14.

The 11/4 Plan does state: "It will take years after Panel 12 is filled to deplete the inventory of Hanford legacy waste." at 14. From consultations about the Legacy Plan with Hanford stakeholders as represented by the Hanford Advisory Board (HAB), the fact is recognized that DOE does not plan to dispose of much Hanford TRU waste during the term of the Permit. Consequently, in its May 22, 2024 letter to DOE<sup>13</sup>, the HAB had four recommendations, including:

- \* The Board advises the TPA [Tri-Party Agreement] agencies to identify all known or suspected transuranic and mixed transuranic at the site, which would allow the Carlsbad Field Office to assign Hanford TRU wastes priority over down-blended plutonium if practicable.
- \* The Board advises the US DOE Hanford office to request that US DOE-EM pursue a transparent and equitable process to identify additional repository locations for transuranic and mixed transuranic waste.

at 4. 14

Thus, DOE and Hanford stakeholders are well aware that most Hanford legacy waste that will not be emplaced at WIPP during the term of the Permit. The stakeholders are concerned that DOE is not prioritizing legacy waste at WIPP. 15 DOE cannot guarantee that New Mexico will continue to renew waste emplacement in future WIPP Permit. In

13 https://www.hanford.gov/files.cfm/HAB\_Advice\_316\_-Planning for Disposition of TRU - Final Signed.pdf

<sup>&</sup>lt;sup>12</sup> AR 241209.

<sup>&</sup>lt;sup>14</sup> DOE's response to the Advice is at: <a href="https://www.hanford.gov/files.cfm/316-24-HOC-">https://www.hanford.gov/files.cfm/316-24-HOC-</a> 0072- Letter.pdf

<sup>&</sup>lt;sup>15</sup> On December 18, 2024, the State of Oregon commented on the 11/4 Plan and expressed its concerns about surplus plutonium displacing Hanford legacy waste.

addition to New Mexicans, DOE has also received advice from the HAB representing other most affected stakeholders at the Hanford site that it should identify another repository site. Therefore, it is reckless and irresponsible for DOE to not begin such a siting process.

If DOE needs additional basis to initiate such a siting process, NMED should provide such reason in the Compliant Plan.

A Compliant Plan must include that DOE now proceed with a process to site a repository in another state because such an additional repository is necessary. Because DOE's delay in siting another repository may mean that another repository will not be operational before WIPP closes, the Compliant Plan must require that DOE report on its plans for the potential need to store TRU waste and TRU mixed waste prior to another repository being operational.

Thus, a Compliant Plan will include:

### Managing the legacy waste inventory after the term of the Permit

The annual report required by Section 2.14.3 shall identify legacy waste and non-legacy waste planned for disposal in an additional repository in a state other than New Mexico. DOE also shall report annually on plans to store TRU waste and TRU mixed waste if WIPP is not receiving waste and an additional repository in another state is not operational.

### 5.0 Additional Comments

5.1 WIPP's mission is not accurately stated in the 11/4 Plan, which is part of the explanation for the inadequate and non-compliant Plan.

The Plan states:

The WIPP project is authorized under the WIPP Land Withdrawal Act [**LWA**; (Public Law 102-579)] to dispose of 6.2 million cubic feet (175,564 m<sup>3</sup>) of defense-related TRU waste generated from atomic energy defense activities. at 4.

That is not a correct description of WIPP's authorization and mission.

The original WIPP authorization of 1979 stated that WIPP is "for the express purpose of providing a research and development facility to demonstrate the safe disposal of radioactive wastes resulting from the defense activities and programs of the United States...." Public Law 96-164 § 213(a)

Under the WIPP Land Withdrawal Act the disposal capacity is <u>up to</u> 6.2 million cubic feet of TRU waste. Public Law 102-579, as amended, § 7(a)(3). The Act does not say

that the capacity is "exactly" 6.2 million cubic feet. The capacity is part of the section on "Transuranic Waste Limitations." Other limitations on rem limits and curie limits for remote-handled waste do not require that exactly 5,100,000 curies of remote-handled waste must be disposed at WIPP. Similarly, the law does not require that exactly 6.2 million cubic feet of waste must be disposed.

Furthermore, the limitations included in LWA § 7(a) all originated in the Consultation and Cooperation (C&C) Agreement, agreed to by New Mexico and DOE years before the LWA was passed by Congress. The limitations were incorporated into the LWA. The rem and curie limits were specifically agreed to in the 1984 First Modification of the C&C Agreement. at 4.

The 6.2 million cubic feet capacity limit was set in the 1981 DOE Record of Decision (46 *Federal Register* 9162-9164, January 28, 1981) and specifically incorporated into the 2<sup>nd</sup> Modification of the C&C Agreement in 1987. at 4.

There is no basis to say that New Mexico and DOE agreed that WIPP would have exactly 6.2 million cubic feet of defense TRU waste. Furthermore, at those times the capacity limit was based on the container capacity, which was then the only way that waste volume was measured. That limit is what the WIPP Permit calls "TRU Mixed Waste RCRA Volume." § 1.5.21.

Further, the 1998 WIPP Record of Decision (63 *Federal Register* 3624-3629, January 23, 1998) explicitly states: "The Department will dispose of <u>up to</u> 175,600 cubic meters (6.2 million cubic feet) of TRU waste (except PCB commingled TRU waste) at WIPP." at 3628, *emphasis supplied.* <sup>16</sup>

Additionally, the Permittees have agreed to sections of the WIPP Permit that provide for final facility closure before 6.2 million cubic feet of TRU waste is emplaced. The Permit provides that closure can occur when "permitted HWDUs are filled or have achieved their maximum capacities as outlined in Permit Part 4, Table 4.1.1." Attachment G-1, Attachment G-1(d), Attachment H1.

Thus, the Compliant Plan will state:

The WIPP project is authorized under the WIPP Land Withdrawal Act [**LWA**; (Public Law 102-579)] to dispose of up to 6.2 million cubic feet (175,564 m<sup>3</sup>) of defense-related TRU waste generated from atomic energy defense activities.

5.2 DOE historically has defined "legacy waste" by identifying and calculating its volume.

<sup>&</sup>lt;sup>16</sup> The 2004 Revised ROD provided that up to 2,500 cubic meters of TRU waste with PCBs could be disposed at WIPP without increasing the capacity limit.

The 11/4 Plan states that "there is no agreed-upon common definition of legacy waste." at 5. The 11/4 Plan states that the 2010 Roadmap "did not define legacy waste." at 6. However, the 2010 Roadmap does identify and calculate the volumes of legacy TRU waste at all Environmental Management sites. The Such identification and calculation is effectively a definition. WIPP's role in implementing the Roadmap legacy TRU waste goals was incorporated into the WIPP Operating Contract for Nuclear Waste Partnership in 2012. Thus, for WIPP there was an effective definition and contractual requirement (that was not accomplished). Incorporating the compliant definition in the Permit is appropriate and does not impose an unreasonable burden on DOE.

5.3 Non-legacy waste includes "surplus" plutonium, post-Cold War pit production, and tank waste.

The 11/4 Plan states that "plutonium declared excess to national security" is included in the definition of TRU legacy waste. at 8. As reiterated throughout these comments, such "weapons-grade plutonium" is not waste, was not identified or managed as TRU waste as of 1999, and cannot be defined as legacy waste.

The 11/4 Plan also includes [high-level] tank waste as included in the legacy waste definition. at 8. SRIC strongly disagrees. Permit Section 2.3.3.8 specifically states that such tank waste is "Excluded Waste." The Legacy Waste Plan cannot change that long-standing permit provision. The Permit Section provides for how such non-legacy waste might be approved.

SRIC does agree that waste generated from new plutonium pit production is non-legacy waste. However, we believe that the term "job control waste" is not a sufficient definition. Since Rocky Flats ceased operations in 1989, the U.S. did not produce the First Production Unit (new qualified pit) until October 1, 2024. 19

The Compliant Plan should state that waste from producing plutonium pits since 1989 is non-legacy waste.

### 5.4. "To the Extent Practicable"

Neither the Permittees' Renewal Application nor the NMED Draft Permit included a provision related to a Legacy Waste Disposal Plan. The section was included in the negotiated settlement to state that the desired goal that during the term of the Permit the last permitted HWDU will be reserved for the disposal of legacy TRU waste.

<sup>&</sup>lt;sup>17</sup>https://www.energy.gov/sites/prod/files/2014/03/f8/Roadmap\_Journey\_to\_Excellence 2010.pdf

<sup>&</sup>lt;sup>18</sup> <a href="https://wipp.energy.gov/library/foia/NWP\_M&OContract/Section\_C.pdf">https://wipp.energy.gov/library/foia/NWP\_M&OContract/Section\_C.pdf</a> at C-2 and C-3

<sup>&</sup>lt;sup>19</sup> <u>https://www.energy.gov/nnsa/articles/nnsa-completes-and-diamond-stamps-first-plutonium-pit-w87-1-warhead</u>

Recognizing that there might be rare circumstances that some non-legacy waste could be disposed in Panel 12, the last sentence included "to the extent practicable."

The 11/4 Plan includes almost three pages discussing the Permittees' view that "the availability of Legacy TRU waste for disposal during Panel 12 is affected by numerous factors not within the control of the Permittees." at 12. On the contrary, many of the factors then discussed are affected by the DOE's actions. The 11/4 Plan should expressly have included what DOE headquarters offices reviewed and approved the Plan before its submission. In implementing the Compliant Plan, DOE headquarters officials have the authority to direct individual sites to prioritize legacy waste at WIPP. DOE headquarters officials also have the authority to direct individual sites to safety store non-legacy waste until an another repository is operating.

As discussed above, SRIC believes that all legacy waste, except much of the Hanford legacy TRU waste, can and should be disposed during the term of the Permit, which is now stated by the Permittees to be before Panel 12 is filled.

If that goal is achieved during the term of the Permit, then any renewal application could focus on a further public discussion of whether there should be any additional permitted HWDUs and what legacy and non-legacy waste could be managed at WIPP.

## 5.5 Energy Communities Alliance (ECA) survey

In Appendix A2.1, the 11/4 Plan briefly describes the ECA survey. at 20. SRIC supports public engagement, including from those that participated in that survey. SRIC appreciates that it was able to provide input to ECA staff before the survey was released and after it was completed. However, a consistent recommendation from SRIC that was rejected was for ECA to provide the numbers of people that responded. Without that number, the scope and representativeness of the survey responses cannot be determined. For any future DOE or other surveys, SRIC encourages that the numbers of surveys distributed and the number of responses be provided.

### 6.0 Conclusion

NMED should issue a Compliant Plan consistent with key Permit conditions. SRIC's suggested provisions, or similar ones, should be incorporated in the Compliant Plan.

Thank you for your consideration of these and all comments and for taking action to ensure that there is a Compliant Legacy TRU Waste Disposal Plan.

Sincerely.

Don Hancock

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cc: Cabinet Secretary James Kenney; Megan McLean