



SOUTHWEST RESEARCH AND INFORMATION CENTER

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September 20, 2018

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

via email

RE: Class 3 Draft Permit – TRU Mixed Waste Disposal Volume Reporting

Dear Ricardo:

Southwest Research and Information Center (SRIC) provides the following comments on the package of Class 3 Draft Permit Modification TRU Mixed Waste Disposal Volume Reporting, which was noticed for public comment on August 6, 2018, according to the NMED Fact Sheet. As NMED is well aware, SRIC is a non-profit organization based in Albuquerque, New Mexico that focuses on public education and involvement and public health and environmental justice. SRIC has been involved in WIPP permitting activities for more than 20 years, including being a party in the original permit proceeding, the permit renewal, and dozens of permit modification requests.

On April 3, 2018, SRIC submitted detailed comments on the class 2 permit modification request. Administrative Record (AR) 180402. While SRIC appreciates that class 3 procedures are being followed, SRIC continues its strong objections to the modification request and the Draft Permit because the proposed Volume of Record is contrary to the requirements of the two primary federal laws that specifically govern the Waste Isolation Pilot Plant (WIPP) – the WIPP Authorization and the WIPP Land Withdrawal Act (LWA), as well as state statutory authorities.

Request for Public Hearing and Negotiations

For the reasons stated in its comments on April 3, 2018 and the comments that follow, SRIC opposes the Draft Permit and requests a public hearing. Further, and prior to any notice of public hearing, pursuant to 20.4.1.901. A.4 NMAC and NMED practice regarding past class 3 modifications and the permit renewal hearing, SRIC requests that NMED, the Permittees, SRIC, and other parties conduct negotiations to attempt to resolve issues.

Objections to NMED's planned schedule for negotiations and public hearing

On September 19, 2018, SRIC, Concerned Citizens for Nuclear Safety (CCNS), Nuclear Watch New Mexico (NWNM), and Citizens for Alternatives to Radioactive Dumping (CARD) sent NMED a letter objecting to the proposed schedule for negotiations to begin on September 24 and to the proposed Notice of Public Hearing. The four organizations requested changes to the negotiation and hearing schedules. SRIC incorporates and reiterates those requests and objections.

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Objections to the Administrative Record

The AR Index provided with the Public Notice No. 18-05 is grossly inadequate in form and content. The inadequate AR significantly inhibits commenting on the Draft Permit, because it is impossible to determine what items NMED has included and excluded from the AR. Further, it is difficult to identify and cite to particular comments or documents. While it unnecessarily requires additional time and effort, SRIC is again citing many documents from its April 3 comments to ensure that they are included in the AR.

In form, the AR separately lists and numbers documents from the Permittees and from some individuals, but combines in AR 180316 numerous emails and comment letters and in AR 10401, 180402, 180404, and 180405 numerous comments. Such combining is inconsistent with previous practice, requires people to go through numerous comments to find and cite particular comments or documents, and leads to confusion and likely inconsistent citing to the record. Each individual comment and each document should be separately listed and numbered.

As to content, many of the references included in SRIC's comments of April 3 (and those of other commenters, including Steve Zappe) are not listed. SRIC specifically cited 23 references and provided active links to those documents. But they are not listed in the AR Index. SRIC also cited to numerous other documents, including (but not limited to) Public Law 96-164, Section 213, which is AR 180121; Public Law 97-425, which is not included in the AR Index; Public Law 102-579, which is AR 180706 (along with other documents); NMED's written Direct Testimony Regarding Regulatory Process and Imposed Conditions for the original permit, which is not included in the AR Index; the original Permit Hearing Transcript, which is not included in the AR Index; the Permittees' Part A application, Original Permit Attachment O, which is not in the AR Index; WIPP Transuranic Waste Baseline Inventory Report (WTWBIR) in June 1994. Revision 2 (DOE/CAO-95-1121), which is not in the AR Index; Senate Report 102-196, which is not in the AR Index; H.Rept 102-241 Part 1, H.Rept 102-241 Part 2, and H.Rept 102-241 Part 3, which are not in the AR Index; DOE/EIS-0026-S-2, which is AR 180706 (along with other documents). All of those SRIC and other commentors' documents must be included and separately numbered in the AR.

Further, the AR effectively begins the record on January 31, 2018 with the submission of the modification request. In fact, the AR should begin with the original Permit application documents, and include the Permit AR in 1999 and the Permit Renewal AR in 2010. In addition, selected prior references cited by the Permittees, SRIC, and other parties must be in the AR.

SRIC suggests that, unless NMED has issued a revised AR Index that adequately addresses the many deficiencies, the negotiations begin with resolving issues in the Administrative Record. Resolving those issues would provide the basis for the negotiations, as well as being essential for an efficient public hearing.

Insofar as NMED has changed its procedures – without public notice or explanation or change in the regulations – to exclude from the AR documents cited unless they are submitted in hard copy or on a compact disk (CD), SRIC strongly objects. Such a procedure, among other problems, is an improper suppression of public participation, especially when many documents can be accessed by NMED and other parties on the internet. Such a procedure also will greatly complicate and

lengthen a public hearing by requiring significant time and effort to challenge whether documents are in the AR and adding documents that should have already been included in the AR.

Deficiencies of the Fact Sheet

The permitting regulations provide: “The fact sheet shall briefly set forth the principal facts and the significant factual legal, methodological and policy questions considered in preparing the Draft Permit.” 20.4.1.901.D.(1) NMAC. The Fact Sheet, issued on August 6, 2018, does not set out such questions. The Fact Sheet does not even mention the 6.2 million feet number that is the crux of the request and Draft Permit. The Fact Sheet does not even mention that quantity is established by the WIPP LWA. The Fact Sheet does not even mention that quantity is included in the legally binding Consultation and Cooperation Agreement, nor does it even mention that Agreement.

The permitting regulations also provide: “The fact sheet shall include, when applicable: ... the type and quantity of wastes which are proposed to be or are being treated, stored, disposed, injected, emitted, or discharged.” 20.4.1.901.D.(2)(b) NMAC. As already discussed, the Fact Sheet includes no such quantities. Nor does the Fact Sheet mention that the Draft Permit could increase the capacity of WIPP by approximately 30 percent, according to the Permittees’ Request. Page 9.

The Draft Permit and the request are contrary to federal laws

The modification request is contrary to the requirements of the two primary federal laws that specifically govern the Waste Isolation Pilot Plant (WIPP) – the WIPP Authorization and the WIPP Land Withdrawal Act (LWA). NMED has long required: “The Permittees must establish that their proposed changes both comply with applicable law and regulations and are supported by objective technical data.” Notice of Deficiency Comments at 4.

https://www.env.nm.gov/wipp/Consolidated_Response_NOD_Final_09-01.pdf

The Permittees must establish that proposed modifications comply with applicable law, because NMED cannot approve a request or issue permit changes that do not comply with federal and state laws.

A. WIPP Authorization - Public Law 96-164, Section 213

In December 1979, Congress authorized WIPP in southeastern New Mexico “to demonstrate the safe disposal of radioactive waste resulting from the defense activities and programs of the United States exempted from regulation by the Nuclear Regulatory Commission.” The law specifically designates WIPP as a “pilot plant,” and to “demonstrate the safe disposal.” Both of those designations clearly indicate that WIPP was not the disposal site for all transuranic (TRU) waste. Congress has maintained those legal requirements and constraints for the last 39 years, including in subsequent nuclear waste laws.

In 1982, Congress passed the Nuclear Waste Policy Act (NWPA) of 1982 (Public Law 97-425), “to provide for the development of repositories for the disposal of high-level radioactive waste and spent nuclear fuel, to establish a program of research, development, and demonstration regarding the disposal of high-level radioactive waste and spent nuclear fuel, and for other purposes.”

The law did not apply to WIPP because the facility was authorized as being exempt from Nuclear Regulatory Commission (NRC) licensing, while any repository only for high-level defense waste would be licensed by the NRC. Section 8(b)(3).

In 1987, Congress amended the NWPA to designate a single high-level waste and spent fuel repository, and discussed whether that facility should be WIPP, but again determined that WIPP would not be that facility, and instead designated Yucca Mountain, Nevada as the repository.

The Permittees have not addressed the issue that WIPP is not the disposal site for all transuranic (TRU) waste in the permit modification request, nor in the July 12, 2018 Response to the NMED Technical Incompleteness Determination (TID). Thus, the Administrative Record is undisputed that Congress has limited WIPP's capacity, determining that WIPP is not the disposal site for all transuranic (TRU) waste.

B. WIPP Land Withdrawal Act (LWA)

In 1992, Congress passed and President George H.W. Bush signed, Public Law 102-579 that established many requirements for WIPP, including that it was subject to the Solid Waste Disposal Act. Section 9(a)(1)(C).

The LWA clearly states:

“CAPACITY OF WIPP.—The total capacity of WIPP by volume is 6.2 million cubic feet of transuranic waste.” Section 7(a)(3).

Thus, Congress again determined that WIPP was to demonstrate safe disposal of a limited amount of TRU waste, not more than the capacity, and not all TRU waste. Indeed, in the House floor debate before the final vote, one of the bill co-sponsors, Rep. Peter Kostmayer stated:

“Whether we are going to generate more nuclear waste is not the question. The question is we have got to get rid of the material we have. This facility will take only 20 percent of all the waste that we have. Still 80 percent will remain unburied. We have to deal with that.” Cong. Rec. 32552 (c. 2), October 5, 1992.

Further, Congress recognized that the 6.2 million cubic feet limit is based on gross internal container volumes, which the request and the Draft Permit do not discuss and do not adequately consider, even though the factual basis for the limit is included in SRIC's April 3, 2018 comments and documents that must be in the Administrative Record.

Congress was well aware of container volume as the basis for the WIPP capacity limits that were in the land withdrawal bills. Senate Report 102-196 on the WIPP LWA (S 1671) from the Energy and Natural Resources Committee specifically states: “According to DOE's current plans, a total of 4,525 55-gallon drums of transuranic waste would be used during the experimental program.” Page 27. The House Land Withdrawal Bill (HR 2637) version reported by the House Armed Services Committee stated:

“CAPACITY OF THE WIPP.—The total capacity of the WIPP by volume is 6.2 million cubic feet of transuranic waste. Not more than 850,000 drums (or drum equivalents) of transuranic waste may be emplaced at the WIPP.” Section 9(a)(3). House Report 102-241, Part 2.

House Report 102-241, Part 1 from the Interior and Insular Affairs Committee included capacity limits of 5.6 million cubic feet of contact-handled waste and 95,000 cubic feet of remote-handled waste. Section 7(a). The Report noted that the Test Phase was limited to no more than 4,250 55-gallon drums. Page 18. House Report 102-241, Part 3 from the Energy and Commerce Committee included a dissent opposing the capacity limits “of not more than 5.6 cubic million cubic feet of contact-handled transuranic waste and 95,000 cubic feet of remote-handled transuranic radioactive waste in WIPP.” Section 7(a). The dissenters also opposed the limits of the Test Phase of 4,250 barrels or 8,500 barrels of waste. Page 42.

The capacity of a 55-gallon drum is 7.4 cubic feet. The volume of 850,000 55-gallon drums is 6,290,000 cubic feet. Thus, the 6.2 million cubic feet volume included in the LWA is clearly based on a maximum of 850,000 55-gallon drums (or drum equivalents) being emplaced, regardless of whether they are filled with waste. The fact that the law did not leave in the redundant drum limit to calculate the waste capacity does not change the clearly established limit and its basis.

In their TID Response #6 (AR 180706), the Permittees do not address that legislative history. The Permittees erroneously – with no evidence – state: “the Congress ultimately focused on the 6.2 million ft³ of waste identified in the DOE NEPA documentation.” at 6. There is no NEPA documentation, and the Permittees do not cite to any, that states that the total capacity of WIPP should be 6.2 million cubic feet. The Final Environmental Impact Statement (FEIS, AR 180706) and the 1981 Record of Decision (AR 180706) state that the WIPP capacity is 6.45 million cubic feet, so Congress clearly did not rely or focus on that capacity. The TID Response tries to “deduce” that the FEIS “assumes the containers are filled.” As is more fully discussed below, that is not true, as DOE has long known that not all containers are filled, including many of the TRU containers that existed in 1980 when the FEIS was issued and in 1992 when the LWA was passed.

Moreover, the request and the TID Response do not discuss the then-current WIPP NEPA documentation, which was the Final Supplement Environmental Impact Statement (DOE/EIS-0026-FS, January 1990 “SEIS-I”).

https://www.energy.gov/sites/prod/files/2015/01/f19/EIS-0026-S-volume1_0.pdf

That document repeatedly describes the WIPP capacity as 6.45 million cubic feet. Pages 1-2, 1-6, 2-8, 3-2, 3-4 and others.

So there is no basis to say that Congress focused on or derived the capacity limit from the then current NEPA documentation. The Permittees have provided no evidence that Congress was not aware of the SEIS-I. Nor have the Permittees provided any explanation of why they did not discuss that document. As with the request, the Permittees are not being complete and accurate in their TID Response, and the NMED cannot rely on such submittals. Such incompleteness and inaccuracy is an additional reason that the request and the Draft Permit cannot be approved.

DOE has complied with the capacity limit calculations in reports to Congress

Not only is the WIPP capacity limit appropriately based on those gross internal container volumes, that is the way that DOE has reported to Congress how much waste is disposed at WIPP.

In the annual budget requests to Congress, the volume of waste disposed at WIPP is reported as the gross internal container volumes. See page 17 (and others) of the Fiscal Year 2005 Request.

<https://www.energy.gov/sites/prod/files/FY05Volume5.pdf>
See page 15 (and others) of the Fiscal Year 2006 Request.
<https://www.energy.gov/sites/prod/files/FY06Volume5.pdf>
See page 32 (and others) of the Fiscal Year 2007 Request.
<https://www.energy.gov/sites/prod/files/FY07Volume5.pdf>
See page 33 (and others) of the Fiscal Year 2008 Request.
<https://www.energy.gov/sites/prod/files/FY08Volume5.pdf>
See page 98 (and others) of the Fiscal Year 2009 Request.
<https://www.energy.gov/sites/prod/files/FY09Volume5.pdf>
See page 97 (and others) of the Fiscal Year 2010 Request.
<https://www.energy.gov/sites/prod/files/FY10Volume5.pdf>
See page 94 (and others) of the Fiscal Year 2011 Request.
<https://www.energy.gov/sites/prod/files/FY11Volume5.pdf>
See page 45 (and others) of the Fiscal Year 2012 Request.
<https://www.energy.gov/sites/prod/files/FY12Volume5.pdf>
See page 88 (and others) of the Fiscal Year 2013 Request.
<https://www.energy.gov/sites/prod/files/FY13Volume5.pdf>
See page EM-52 (and others) of the Fiscal Year 2014 Request.
<https://www.energy.gov/sites/prod/files/2013/04/f0/Volume5.pdf>
See page 90 (and others) of the Fiscal Year 2015 Request.
<https://www.energy.gov/sites/prod/files/2014/04/f14/Volume%205%20EM.pdf>
See page 101 (and others) of the Fiscal Year 2016 Request.
<https://www.energy.gov/sites/prod/files/2015/02/f19/FY2016BudgetVolume5.pdf>
See page 91 (and others) of the Fiscal Year 2017 Request.
https://www.energy.gov/sites/prod/files/2016/02/f29/FY2017BudgetVolume5_3.pdf
See page 102 (and others) of the Fiscal Year 2018 Request.
<https://www.energy.gov/sites/prod/files/2017/06/f34/FY2018BudgetVolume5.pdf>
See page 117 (and others) of the Fiscal Year 2019 Request.
https://www.energy.gov/sites/prod/files/2018/03/f49/DOE-FY2019-Budget-Volume-5_0.pdf

Thus, DOE has been reporting to Congress each year about the amount of waste emplaced at WIPP compared with the LWA and Permit capacity limit. Those amounts are the same, again showing that the capacity limit is based on gross internal container volume. The AR is undisputed that DOE has continued to report WIPP volumes as gross internal container volumes, as Congress intended with the LWA capacity volumes.

The modification request ignores those legal requirements and states that the capacity limit: “constrains the DOE from achieving the goal of removing the inventory of TRU mixed waste from the generator/storage sites.” Page 9. As already discussed on pages 3-4, Congress was fully aware and intentionally “constrained” WIPP’s mission and capacity. In fact, the laws prohibit DOE from expanding the capacity limit or from managing other than defense transuranic waste at WIPP.

The permittees’ request – and the Draft Permit – attempt to circumvent the legal capacity limit, or any regulatory limit. The request and Draft Permit would allow DOE to calculate the amount of waste in an unknown and unverifiable way (which could change in the future). The attempt is to deny the state’s authority to enforce any capacity limit on the Permittees. To the contrary, NMED

has the authority to prohibit any more waste from coming to the facility, to restrict the amount of waste in any panel, regardless of whether the capacity limit is reached.

The Permit correctly complies with the legal capacity limit, so no changes are warranted
NMED cannot issue a Permit modification that is contrary to the LWA. NMED is well aware of the LWA. In its written Direct Testimony Regarding Regulatory Process and Imposed Conditions for the original permit, the “Statutory Background” began with the WIPP Authorization and LWA. Page 1 of 9. NMED’s permit writer (Steve Zappe) testified extensively about the LWA. Hearing Transcript, p. 2586-2617.

The WIPP Permit has always incorporated the LWA and the capacity limit. The definition of the facility is:

“The WIPP facility comprises the entire complex within the WIPP Site Boundary as specified in the WIPP Land Withdrawal Act of 1992, Pub. L. 102-579 (1992), including all contiguous land, and structures, other appurtenances, and improvements on the Permittees' land, used for management, storage, or disposal of TRU mixed waste.” Original (1999) Permit Module I.D.2, now Section 1.5.3.

The 6.2 million cubic feet capacity limit always has been incorporated into the WIPP Permit. The limit was included in the Permittees’ Part A application, Original Permit Attachment O, now Attachment B. The capacity limit also is now included in Table 4.1.1, Attachment B, Attachment G1, Attachment G1c, Attachment H1, and Table J3. Until submittal of this request, the permittees have never publicly opposed the capacity limit, measured by gross interior container volume, being in the Permit, nor is there any such evidence in the AR.

SRIC also agrees with Steve Zappe’s April 3, 2018 detailed comments (AR 180402) on pages 4-7 regarding the permit history.

Although the permittees apparently no longer want to comply with the WIPP legal capacity limits, NMED must ensure compliance with the federal law and cannot approve a Permit modification that is contrary to federal laws. Indeed, the history of the Permit includes occasions when the permittees strongly objected to the Permit including provisions that they deemed contrary to legal requirements.

In November 1999, the permittees sued NMED in federal and state courts regarding several provisions of the original WIPP Permit, including the financial assurance conditions that were alleged to be contrary to federal law. On August 9, 2000, the NMED Secretary withdrew the financial assurance conditions because of changed federal law that prohibited such contractor financial assurance requirements. In 2003-2005, there was a prolonged permit modification process regarding Energy and Water Development Appropriations Acts “Section 310 and 311” requirements, in which because of federal law changes, NMED agreed to certain waste characterization and related requirements to be included in the Permit.

NMED has a practice and legal obligation to ensure that provisions of the Permit must comply with federal law. This current request and Draft Permit are contrary to the intent and specific provisions of laws, and NMED must deny the request and not approve the Draft Permit.

The modification request and Draft Permit are contrary to the State's legal authority

In 1981, the State of New Mexico sued the Department of Energy regarding WIPP in Federal District Court in New Mexico. Case Civil Action No. 81-0363 JB. On July 1, 1981, the State Attorney General and U.S. Attorney filed a Joint Motion to Stay All Proceedings, which was approved that day by the Court. As part of the Stipulated Agreement, the Governor of New Mexico and DOE Secretary signed a Consultation and Cooperation (C&C) Agreement, which was provided for by Public Law 96-164, Section 213(b). The C&C Agreement has been modified. AR 180706 (and other documents). The Second Modification, signed on August 4, 1987, incorporates the 6.2 million cubic feet limit into the agreement. Page 4.

The WIPP LWA, passed five years later, states:

“Section 21. Consultation and Cooperation Agreement. Nothing in this Act shall affect the Agreement or the Supplemental Stipulated Agreement between the State and the United States Department of Energy except as explicitly stated herein.”

Further, the New Mexico Hazardous Waste Act (HWA-Chapter 74, Article 4 NMSA 1978) and its regulations require that NMED protect human health and the environment. Complying with federal and state laws is required by the HWA.

Neither the request nor the Draft Permit demonstrate that the “Volume of Record” is needed

The HWA and its regulations, 20 NMAC 4.1.900 (incorporating 40 CFR 270.42(c)(1)(iii), require a request to “explain[s] why the modification is needed.” The request includes a section 3 purportedly to explain the need (pages 6-11), but the explanation is grossly inadequate and does not explain why the modification is needed. The Fact Sheet does not discuss why the change is needed, nor has NMED stated why the modification is needed.

In its first 19+ years of operations – March 26, 1999 to September 15, 2018 – based on Permit calculations, WIPP has emplaced 93,856 cubic meters of contact-handled (CH) waste and 641 cubic meters of remote-handled (RH) waste, for a total of 94,497 cubic meters, or less than 54 percent of the 6.2 million cubic feet (175,564 cubic meters) volume capacity limit. The request and the Fact Sheet do not specifically discuss that fact, nor address why any change in the capacity limit or a “Volume of Record” is needed now or at any time in the future since waste emplacement will not approach the capacity limit for years or even decades into the future.

SRIC's conclusion is that the reason for the request now is because it is part of the Department of Energy (DOE) efforts to expand WIPP for several missions that are also not allowed by the LWA.

- High-Level Tank Waste. The permittees proposal for bringing high-level tank waste resulted in the Excluded Waste Permit Section 2.3.3.8 in 2004. Nevertheless, the *Final Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland, Washington*, DOE/EIS-0391, November 2012, continues to include WIPP as a reasonable alternative disposal site. Further, DOE's current Notice of Preferred Alternative states:
“DOE's preferred alternative is to retrieve, treat, package, and characterize and certify the wastes for disposal at the Waste Isolation Pilot Plant (WIPP) in

Carlsbad, New Mexico, a geologic repository for the disposal of mixed TRU waste generated by atomic energy defense activities.”

<https://www.energy.gov/sites/prod/files/EIS-0391-FEIS-NoticeofPreferredAlternative-2013.pdf>

- Greater-Than-Class C Commercial Waste. *Final Environmental Impact Statement for the Disposal of Greater-Than-Class C (GTCC) Low-Level Radioactive Waste and GTCC-Like Waste*, DOE/EIS-0375 states that WIPP is the preferred geologic disposal alternative and that the “WIPP Vicinity” is a reasonable alternative for Intermediate-Depth Borehole disposal, Enhanced Near-Surface Trench disposal, and Above-Ground Vault disposal. https://www.energy.gov/sites/prod/files/2017/02/f34/EIS-0375-FEIS_NOA-DOE-2016.pdf
- West Valley Commercial Waste. *Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center*, (DOE/EIS-0226), states that WIPP is the preferred alternative for disposal of its commercial TRU waste. Because of SRIC’s objections to the FEIS, DOE has deferred a TRU waste disposal decision, but has not changed that alternative. <https://www.gpo.gov/fdsys/pkg/FR-2005-06-16/pdf/05-11882.pdf>
- Elemental Mercury storage. *Final Long-Term Management and Storage of Elemental Mercury Environmental Impact Statement Supplemental Environmental Impact Statement*, DOE/EIS-0423-S1 states that WIPP is a reasonable alternative for elemental mercury storage. <https://www.energy.gov/sites/prod/files/2013/09/f3/EIS-0423-S1-FEIS-Summary-2013.pdf>
- Surplus Weapons Plutonium. The National Academy of Sciences currently has a panel examining DOE’s proposal to bring 34 metric tons or more of surplus weapons plutonium to WIPP. <http://dels.nas.edu/Study-In-Progress/Disposal-Surplus-Plutonium/DELS-NRSB-17-03?bname=nrsb>
- Surface storage at WIPP. On September 29, 2016, the permittees submitted a Class 3 Modification Request for Addition of a Concrete Overpack Container Storage Unit. SRIC has strongly objected to the request as being contrary to the LWA, among other things.

The permittees desire to expand WIPP, including for missions contrary to federal laws (for some of the expansions even DOE admits are contrary to the LWA), does not meet the regulatory need requirement. The modification is not needed, and NMED must deny the request and not approve the Draft Permit.

Approving the “Volume of Record” also inevitably leads to expanding the physical underground footprint beyond panels 1-8 and 10. Such an expansion must be approved by NMED through permit modification processes that have not occurred. Such proposed physical expansion must be part of request and Draft Permit for the “Volume of Record.”

SRIC's conclusion regarding why NMED is rushing to approve the Draft Permit, including providing a negotiation schedule that is designed to not resolve the issues and scheduling the Permit Hearing in Carlsbad on October 23, is that the state administration wants to approve the Draft Permit by the time its term expires on December 31, 2018. Such a result would be contrary to federal and state laws, violate numerous permitting regulations, and not protect public health and the environment for present and future generations.

Gross internal container volume is the historic practice of calculating TRU waste volume

Even before WIPP opened in 1999, the waste volume is measured by the size of the gross internal volume of the container, as included in the Permit. To support the WIPP Permit application and other requirements, DOE published a WIPP Transuranic Waste Baseline Inventory Report (WTWBIR) in June 1994. Revision 2 (DOE/CAO-95-1121) included all DOE TRU waste. Page xi. The document calculated all waste volumes in "Final Waste Form," which was the gross internal container volume. In their Permit Application, the permittees included the gross internal container volume amounts, which were incorporated into the original Permit and remain in the current permit. Section 3.3.1.

In their modification request, the permittees admit: "At the time the Permittees prepared the Part B Permit Application, the WIPP LWA limit and the HWDU limit were considered to be the same." Page 7. Moreover, the Permittees have supported the original Permit with WIPP capacity limits based on those gross internal container volumes, Permit modifications with WIPP capacity limits based on those gross internal container volumes, and the Permit renewal with WIPP capacity limits based on those gross internal container volumes. The permittees have not previously stated that there is a reason for a second measurement regarding the capacity limit. There is no basis in the AR to change the capacity limit, nor any reason to add the proposed new Section 1.5.22. Land Withdrawal Act TRU Waste Volume of Record.

Here again, Steve Zappe's comments on pages 3-4 regarding DOE Order 5820.1 and overpacks (AR 180402) are compelling evidence about the Permit and the historical practice. The Permittees have provide no credible, different evidence in the AR.

Numerous other official DOE documents use the gross internal container volume to calculate TRU waste volumes. For example, the calculation for the total volume of legacy TRU waste planned for disposal is approximately 131,000 cubic meters, based on container volumes. See page 13 of: https://www.energy.gov/sites/prod/files/2014/03/f8/Roadmap_Journey_to_Excellence_2010.pdf

The *Annual Transuranic Waste Inventory Report* continues to use the "final form" volumes from the earlier *Baseline Inventory Reports*, though it also uses other terms, including "the volume the waste container occupies in the repository" or "payload container volume" or Contact-Handled "outer container volume," which are the same as the gross internal container volume of the Permit. See, for example, Page 18 of the current 2017 Inventory.

http://www.wipp.energy.gov/library/TRUwaste/DOE-TRU-17-3425_Rev_0.pdf

(SRIC has consistently objected to the calculated RH volume amounts, and DOE has annually provided RH volumes based on gross internal container volume.)

Moreover, WIPP has used those container volumes in the Permit in its operating contracts, including with co-permittee Nuclear Waste Partnership (NWP). The original NWP contract from 2012 included Programmatic Goal 3: "Complete disposition of 90 percent of the legacy transuranic waste by the end of fiscal year 2015" from the *Roadmap for EM's Journey to Excellence*, cited above. Page C-3 of:

http://www.wipp.energy.gov/library/foia/NWP_M&OContract/NWP_M&O_Contract.pdf

Not only goals, but performance awards (bonuses) have been provided based on container volumes.

Clearly, gross internal container volumes have consistently been used for calculating the WIPP legal capacity limit, as well as for numerous other reasons. The modification request does not discuss that plethora of documents, nor why those documents should now be considered inaccurate or non-dispositive. The AR inappropriately excludes those documents. The documents must be included in the AR, and they must be considered in determining whether to approve the Draft Permit. The conclusion must be that there is no legal or technical basis to change the Permit capacity limits, which are those provided by the LWA.

DOE and Co-Permittee Nuclear Waste Partnership (NWP) have not demonstrated that they can reliably operate WIPP and correctly calculate capacity limits

As already discussed, federal laws establish WIPP's volume capacity that is based on gross internal container capacity and do not allow DOE to establish the volume limit or how to calculate such capacity. Moreover, DOE and NWP have demonstrated that they cannot comply with all of the other provisions of the Permit, nor always properly operate the facility.

On February 5, 2014, a fire caused evacuation of 84 underground workers and shut down waste emplacement, which resulted in numerous reports, including from a DOE Accident Investigation Board. <http://www.wipp.energy.gov/Special/AIB%20Report.pdf>

NMED determined that there were numerous permit violations associated with the fire.

Administrative Compliance Order HWB-14-21 (December 6, 2014).

<https://www.env.nm.gov/wipp/documents/141214.6.pdf>

On February 14, 2014, a radiation release occurred at WIPP, which resulted in waste emplacement being suspended for almost three years, until January 2017. Numerous reports were done, including two reports from a DOE Accident Investigation Board.

https://www.energy.gov/sites/prod/files/2014/04/f15/Final%20WIPP%20Rad%20Release%20Phase%201%202004%2022%202014_0.pdf and

<https://www.energy.gov/sites/prod/files/2015/04/f21/WIPP%20Rad%20Event%20Report%20Phase%202%2004.16.2015.pdf>

NMED determined that there were numerous permit violations associated with the radiation release. Administrative Compliance Order HWB-14-21 (December 6, 2014).

<https://www.env.nm.gov/wipp/documents/141214.6.pdf>

Clearly, the Permittees have shown that they cannot operate the facility safely at all times and have had numerous and significant permit violations.

Even with the clear permit volume calculation requirements, DOE has not always correctly reported panel emplacement volumes to NMED. On August 8, 2011, the Permittees submitted a Class 1 modification to revise Table 4.1.1 to reflect final waste volumes in Panel 5.

http://wipp.energy.gov/Library/Information_Repository_A/Class_1_Permit_Modifications/Class_1_Revision_of_Table_4.1.1_and_Table_G1.pdf

The Permittees erroneously reported the RH volume as “5,403 ft³ (153 m³).” NMED did not accept those volumes and corrected them on November 9, 2011:

“NMED changed the final volume for remote-handled (RH) waste in Panel 5 to 8,300 ft³ (235 m³) to maintain consistency with the calculations used to report the RH volume for Panel 4. In their submittal, the Permittees reported the RH volume based on the volume of the containers within the RH canisters emplaced in Panel 5. The corrected RH volume is based on the volume of the RH canisters (264 canisters * 0.89 m³ per canister = 235 m³).”

http://wipp.energy.gov/Library/Information_Repository_A/Class_1_Permit_Modifications/Revised_Permit_11-2011.pdf

In the TID Response (AR 180706), the Permittees include Table 1, which includes a column of “LWA VOR VOLUME (m³)”. However, several of the volumes are not traceable to publicly available sources – nor are any sources provided in the TID Response. NMED and the public cannot rely on those volumes. Even if they erroneously are assumed to be valid currently, they are not binding on the Permittees in the future, nor enforceable by NMED. In contrast, the existing container volumes are based on publicly available information, and enforceable by NMED.

Allowing DOE or the Permittees to determine accurate calculations of the waste emplaced at WIPP is inappropriate, based on that history and other incidents and permit violations since 1999.

The Permittees explanations for the request are incomplete and inaccurate

As discussed in SRIC’s April 3, 2018 comments (AR 180402, SRIC Comments at 7-9), DOE did not accurately cite from their own environmental impact statements (AR 180121 and 180706, among other documents).

On page 8, the request includes a quotation from page 3-8 of the September 1997 *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement*, DOE/EIS-0026-S-26. The request then states: “As stated in the SEIS-II, containers would be totally full.”

Obviously, as discussed on pages 4-5, in passing the LWA in 1992, Congress did not rely or “focus” on the SEIS-II that was issued five years later.

Moreover, the discussion regarding the SEIS-II is not true, accurate, and complete. The SEIS-II also states:

“the waste volumes used for the SEIS-II analyses are estimates of “emplaced waste volumes” (the volumes of the containers that TRU wastes would be emplaced in), not actual waste volumes inside the containers, except as noted. DOE recognizes that virtually all containers would contain some void space and that some

containers may be only partially filled (for instance, to meet limits on weight or thermal power for transportation).” Page 2-9.

The SEIS-II also states:

“With the RH-TRU waste volume limit at WIPP of 7,080 cubic meters (250,000 cubic feet), the volume disposed of was calculated using the capacity of the waste containers rather than the volume of the waste within the containers.” Pages A-13 and 14.

The permittees’ very selective use of citations from the SEIS-II is not “true, accurate, and complete.” The quoted selection is highly misleading in light of other statements in the document. The assertion that the SEIS-II stated that “containers would be totally full” is clearly false and cannot be relied upon to support the request or the Draft Permit.

NMED has the authority to deny the request and not approve the Draft Permit

In addition to determining that the Class 2 modification request is considered using Class 3 procedures, as the NMED Secretary determined on June 1, 2018, the Secretary also has authority to deny the request and not approve the Draft Permit, pursuant to 20 NMAC 4.1.900 (incorporating 40 CFR 270.42(c)(6)). The Hearing Officer should recommend denial of the Draft Permit, and NMED should not approve the request and Draft Permit.

Draft Permit Provisions

Part 1 – SRIC opposes proposed Sections 1.5.21. TRU Mixed Waste RCRA Volume and 1.5.22. Land Withdrawal Act TRU Waste Volume. Both provisions are contrary to law. The Permit has always included definitions of waste permitted in Sections 1.5.6. TRU Waste and 1.5.7 TRU Mixed Waste.

Part 3 – SRIC opposes proposed Section 3.3.1.8. Shielded Container*. The first addition – “and an outermost container volume of 7.4 ft³ (0.21 m³)” – is contradicted by the last sentence – “Shielded containers may be overpacked into standard waste box or ten drum overpack.” The outermost container volume is not 7.4 ft³ if overpacked in a SWB or TDOP.

SRIC does support adding an additional sentence to Section 3.3.1.8: “The volume will be calculated based on the gross internal volume of the outermost container.”

Part 4 – SRIC opposes Table 4.1.1. The column “Final LWA TRU Waste Volume” is not a legal term that can be incorporated into the Permit. The changes to footnote 2 and new footnotes 3 and 4 are unacceptable because they are contrary to the law and the provisions that have always been in the Permit. There also is no need to change the column headings for “Capacity” and “Volume.” SRIC does not object to the change in RH volume in Panel 6, though we would note that such changes previously have been approved as class 1 modifications.

Part 6 – SRIC opposes the proposed changes in Section 6.5.2 because they are unnecessary. SRIC opposes the proposed changes in Section 6.10.1 because they incorporate provisions that are not consistent with longstanding provisions of the Permit. They proposed changes also in effect incorporate volume calculations that are not current with federal laws. Further, the Draft Permit

proposed changes in Section 6.10.1 do not incorporate changes made by the Panel Closure that were negotiated by SRIC and others with the Permittees and NMED, and approved by the NMED Secretary on September 7, 2018. A revised Draft Permit must be issued to incorporate those changes.

Attachment A1 – SRIC opposes the changes to “TRU mixed waste volume” from “volume of waste” on page A1-6 because the new term restricts calculation of waste to TRU mixed waste, whereas the Permit has always stated and included all waste, whether purely radioactive or mixed as covered by the Permit. SRIC does not object to the editorial changes on pages A1-7, A1-26, A1-27 (though we object to those changes not being indicated in the left margin), but we would note that a class 3 modification is not necessary for such modifications.

Attachment A2 – SRIC objects to the Draft Permit changes on page A2-6, lines 25-28, because they refer to the proposed changed Table 4.1.1, which is contrary to law, as noted above. SRIC objects to the change on page A2-6, line 39, because the change restricts calculation of waste to TRU mixed waste, whereas the Permit has always stated and included all waste, whether purely radioactive or mixed waste.

Attachment B – SRIC objects to the Draft Permit changes on page B-22, because the introduction of the Land Withdrawal Act tracking is contrary to law, as discussed above. The proposed changes on pages B-23 and B-24 restrict calculation of waste to TRU mixed waste, whereas the Permit has always stated and included all waste, whether purely radioactive or mixed waste.

SRIC does support changing the Process Design Capacity on page B-8: 175,564,600.00

On page B-22, SRIC does support the following changes:

“Approximately 120,000 cubic meters (m³) of the 175,564,600 m³ of WIPP wastes is categorized as debris waste.”

“During the Disposal Phase of the facility, which is expected to last 25 years, the total amount of waste received from off-site generators and any derived waste will be limited to 175,564,600 m³ of TRU waste of which up to 7,079,800 m³ may be remote-handled (RH) TRU mixed waste. For purposes of this application, all TRU waste is managed as though it were mixed. Waste volume is reported as the gross internal volume of the outermost container.”

Attachment C – SRIC objects to the Draft Permit change on page C-26, because it restricts calculation of waste to TRU mixed waste, whereas the Permit has always stated and included all waste, whether purely radioactive or mixed waste.

Attachment G – SRIC objects to the Draft Permit changes on pages G-2 and G-5, because they refer to the proposed changed Table 4.1.1, which is contrary to law, as discussed above. Further, the Draft Permit proposed changes do not incorporate the Panel Closure changes that were negotiated by SRIC and others with the Permittees and NMED, and approved by the NMED Secretary on September 7, 2018.

Attachment H – SRIC objects to the Draft Permit change on page H-5, because it restricts calculation of waste to TRU mixed waste, whereas the Permit has always stated and included all waste, whether purely radioactive or mixed waste.

Attachment H1 – SRIC objects to the Draft Permit changes on page H1-3, because they would incorporate the WIPP Volume of Record waste measurements, which are contrary to laws, as discussed above. SRIC does support the following change to the sentence on page H1-3:

“This waste emplacement and disposal phase ~~may~~ will continue until the regulated capacity of the repository of ~~6.2 million 6,200,000~~ cubic feet (ft³) (175,564~~88~~ cubic meters) (m³) of TRU and TRU mixed waste has been reached, and as long as the Permittees comply with the requirements of the Permit.”

Attachment J – SRIC objects to the changed footnote 2 on page J-3, because they use the LWA Volume, which is contrary to law and refers to proposed Table 4.1.1, which includes changes which are contrary to law, as discussed above.

In summary, NMED should follow past practices and regulatory requirements for the permitting process, including the schedule for and conduct of negotiations and public hearing schedule and locations. NMED should follow federal laws and state authorities and deny the modification request and the Draft Permit.

Thank you very much for your careful consideration of these comments and all others received.

Sincerely,



Don Hancock

cc: John Kieling

| No | Author | Date | Title | Link | # of Pages |
|------------|--|------|--|---|------------|
| 180914.32A | New Mexico Environment Department (NMED) | 2005 | Notice of Deficiency (NOD), Consolidated Response to NOD Class 3 Permit Modification Request Submitted in Accordance with Pub. L. 108-137, Section 311 and Second NOD for RH TRU Waste WIPP Hazardous Waste Facility Permit EPA I.D. Number NM4890139088 | https://www.env.nm.gov/wipp/Consolidated_Response_NOD_Final_09-01.pdf | 26 |
| 180914.32B | U.S. Senate | 1992 | House Floor Debate – October 5, 1992 - Conference Report on S. 1671, Waste Isolation Pilot Plant Land Withdrawal Act | | 4 |
| 180914.32C | U.S. Department of Energy (DOE) | 1990 | Final Supplement Environmental Impact Statement Waste Isolation Pilot Plant, Volume 1 of 13 | https://www.energy.gov/sites/prod/files/2015/01/f19/EIS-0026-S-volume1_0.pdf | 534 |
| 180914.32D | U.S. Department of Energy (DOE) | 2014 | Accident Investigation Report Underground Salt Haul Truck Fire at the Waste Isolation Pilot Plant February 5, 2014 | www.wipp.energy.gov/Special/AIB%20Report.pdf | 187 |
| 180914.32E | New Mexico Environment Department (NMED) | 2014 | Administrative Compliance Order HWB-14-21 Waste Isolation Pilot Plant EPA I.D. Number NM4890139088 | https://www.env.nm.gov/wipp/documents/141214.6.pdf | 31 |
| 180914.32F | U.S. Department of Energy (DOE) | 2014 | Accident Investigation Report Phase 1 – Radiological Release Event at the Waste Isolation Pilot Plant on February 14, 2014 | https://www.energy.gov/sites/prod/files/2014/04/f15/Final%20WIPP%20Rad%20Release%20Phase%201%202004%2022%202014_0.pdf | 302 |
| 180914.32G | U.S. Department of Energy (DOE) | 2015 | Accident Investigation Report Phase 2 – Radiological Release Event at the Waste Isolation Pilot Plant on February 14, 2014 | https://www.energy.gov/sites/prod/files/2015/04/f21/WIPP%20Rad%20Event%20Report%20Phase%202%202004.16.2015.pdf | 394 |
| 180914.32H | U.S. Department of Energy (DOE) | | Notification of Class 1 Permit Modifications to the Hazardous Waste Facility Permit, Permit Number: NM4890139088-TSDF | wipp.energy.gov/Library/Information_Repository_A/Class_1_Permit_Modifications/Class_1_Revision_of_Tab1 | 10 |

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| | | | | e_4.1.1_and_Table_G1.pdf | |
| 180914.32I | New Mexico Environment Department (NMED) | 2011 | WIPP Hazardous Waste Facility Permit Revised November 2, 2011 EPA I.D. Number NM4890139088 | wipp.energy.gov/Library/Information_Repository_A/Class_1_Permit_Modifications/Revised_Permit_11-2011.pdf | 2 |