

SOUTHWEST RESEARCH AND INFORMATION CENTER

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May 18, 2020

Ricardo Maestas
New Mexico Environment Department (NMED)
2095 Rodeo Park Drive, Building 1
Santa Fe, NM 87505

Via email: Ricardo.Maestas@state.nm.us

RE: WIPP Permit Renewal Application

Dear Ricardo,

Southwest Research and Information Center (SRIC) provides the following initial comments on WIPP Permit Renewal Application, dated March 31, 2020. The comments are primarily limited to issues that are inadequately discussed in the Application that could be included in a Technical Incompleteness Determination (TID). Those are some issues that SRIC will raise during the renewal process. Some documents that should be in the administrative record are identified. SRIC requests that these comments be considered in any information or TID requests that NMED provides to the Permittees.

1. The Application inadequately describes the “Forever WIPP” Disposal Phase timeline.

The WIPP Permit has always included:

G-1d(2) Schedule for Final Facility Closure.

The Disposal Phase for the WIPP facility is expected to require a period of 25 years beginning with the first receipt of TRU waste at the WIPP facility and followed by a period ranging from 7 to 10 years for decontamination, decommissioning, and final closure. The Disposal Phase may therefore extend until 2024, and the latest expected year of final closure of the WIPP facility (i.e., date of final closure certification) would be 2034. at G-6.

In addition, other provisions of the Permit refer to the 25-year Disposal Phase. at B-10, G-5, and H1-3. That 25-year language was included in the Permit Application (DOE/WIPP-91-005, Revision 7, May 1996). The language was not proposed for change in the 2009 Amended Renewal Application, September 2009. Thus, SRIC and other members of the public expected that the current Renewal Application would include the ending of the Disposal Phase and beginning of the Facility Closure Phase.

However, in the Renewal Application, the permittees propose deleting provisions regarding the 25-year timeframe. The rationale:

The Disposal Phase will last until the disposal objectives of the DOE are reached, i.e., disposal of the nation's TRU waste per the WIPP Authorization Act of 1980 (PL 96-164). The 25-year duration used previously was based on assumptions regarding inventories (current and future) in the 1970's and a WIPP facility design criterion. at 63.

Consistent with the changes being proposed in Attachment G, 25 years is no longer the assumption regarding the duration of the Disposal Phase. at 74.

In the Draft Renewal Application, the permittees proposed to change the 2024 date to 2052, based on a December 16, 2019 Memorandum from RFK Consulting Services. Previously, the DOE Carlsbad Field Office ("CBFO") *Draft 2019-2024 Strategic Plan* declares the objective of operating WIPP through the year 2050. at 5, 14, and 24. The *EM Vision 2020-2030*¹ states: "WIPP is currently anticipated to operate beyond 2050." at 59. The *Final Supplement Analysis of the Complex Transformation Supplemental Programmatic Environmental Impact Statement*,² DOE/EIS-0236-S4-SA-02 (Dec. 2019) stated that WIPP's Disposal Phase could extend beyond 2080 to accommodate new transuranic (TRU) waste generation that would begin in 2030 and continue for 50 years. at 65.

Subsequent to the submission of the Renewal Application, the April 2020 *Draft Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site in South Carolina*,³ DOE/EIS-0541 states that WIPP would dispose of the TRU waste produced from new pit production through 2080, even if SRS produced 125 plutonium pits per year for 50 years, rather than the 80 pits per year. at 2-26.

Thus, the actual proposed timeframe for WIPP's Disposal Phase is until after 2080, or indefinitely or essentially forever in the Renewal Application.

Not only does the Permit not allow such a long Disposal Phase, nor should it, but the WIPP Authorization of 1979, Consultation and Cooperation Agreement (C&C), and WIPP Land Withdrawal Act do not provide for such a forever timeframe.

Additional information required:

DOE must clearly describe the proposed duration of the Disposal Phase. DOE must also provide the legal authority for such a timeframe. None of the documents in the Supplemental Information References provide that information.

Administrative Record: None of the documents cited above are included in the Supplemental Information References. All of those cited documents must be included in the Administrative Record (AR) in this proceeding.

¹ <https://www.energy.gov/sites/prod/files/2020/03/f72/DOE-Strategic-Vision-LR.pdf>

² <https://www.energy.gov/sites/prod/files/2020/01/f70/final-supplement-analysis-eis-0236-s4-sa-02-complex-transformation-12-2019.pdf>

³ <https://www.energy.gov/sites/prod/files/2020/04/f73/draft-eis-0541-srs-pit-production-vol-1-2020-04.pdf>

2. The capacity of WIPP is inadequately described in the Renewal Application.

SRIC will propose deleting the Volume of Record (VOR) permit modification changes in the Renewal Permit.

The permittees must explain their plans to fill WIPP beyond its legal capacity limit of up to 6.2 million cubic feet of waste, which they have not done in the Application. The National Academy of Sciences *Review of the Department of Energy’s Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant*,⁴ released on April 30, 2020, clearly shows that those plans include waste that exceeds the WIPP capacity by about 50 percent using the correct outer container calculation, but even substantially exceeds the limit using the VOR calculation.

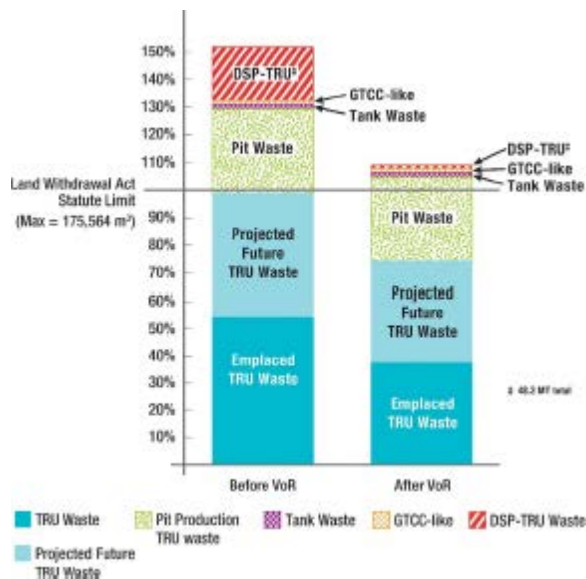


FIGURE S-5 DOE-reported emplaced and future transuranic wastes estimates (DOE-CBFO, 2018a, 2019a) and additional wastes, identified by the committee. Additional wastes are: DSP-TRU, Greater-than-Class-C-like (GTCC-like) TRU wastes, tank wastes, and TRU waste generated from pit production. The graphs illustrate the impact of the Volume of Record (VoR) recalculation, in particular the large reduction in DSP-TRU waste volumes. Both graphs also show that the Land Withdrawal Act statutory limit is likely to be exceeded. DSP-TRU volumes have been subtracted from TRU waste estimates. See Table 3-2. at 6.

Additional information required:

DOE must clearly describe the plans for amounts and types of waste to be disposed at WIPP. Since WIPP has a limited mission, DOE must describe what additional repository(ies) it will propose for wastes that exceed the WIPP capacity limit and when such facilities will be operational. None of the documents in the Supplemental Information References provide that information.

Administrative Record: The NAS Report must be included in the AR in this proceeding.

⁴ <https://www.nap.edu/download/25593>

3. DOE's plans for WIPP expansion, including physical facilities and waste types and volumes, are not included in National Environmental Policy Act (NEPA) documents.

Regardless of the adequacy of existing NEPA documents for the new shaft and connecting drifts, which SRIC believes are inadequate, it is undisputed that DOE has not provided NEPA documents necessary for the physical facilities and waste volumes it has proposed.

In its April 30, 2020 final report, the NAS Panel recommends:

RECOMMENDATION 5-5: The Department of Energy should implement a new comprehensive programmatic environmental impact statement (PEIS) to consider fully the environmental impacts of the total diluted surplus plutonium transuranic (DSP-TRU) waste inventory (up to an additional 48.2 MT) targeted for dilution at the Savannah River Site and disposal at the Waste Isolation Pilot Plant (WIPP). Given the scale and character of the diluted surplus plutonium inventory, the effect it has on redefining the character of the WIPP, the involvement of several facilities at several sites to prepare the plutonium for dilution, a schedule of decades requiring sustained support, and the environmental and programmatic significance of the changes therein, a PEIS for the whole of surplus plutonium that considers all affected sites as a system is appropriate to address the intent and direction of the National Environmental Policy Act and would better support the need for public acceptance and stakeholder engagement by affording all the opportunity to contemplate the full picture. at 9 and 101.

The draft PEIS must be subject to public comment and hearings before the final PEIS and Record(s) of Decision are issued. Subsequently, a new draft or supplemental draft WIPP EIS must be issued for public comment and hearings before a final EIS and Record(s) of Decision are issued.

Additional information required:

DOE must provide a schedule for its NEPA documents, including PEIS, WIPP EIS, and any other documents regarding WIPP's Disposal Phase timeframe, physical facilities, and waste types and capacities, and what the reasonable alternatives are to those plans.

Administrative Record: The Supplemental Information References include only the 1980 Final WIPP EIS, but not the 1997 *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement*, DOE/EIS-0026-S-2, which must be included in the AR in this proceeding.

4. The Hot Cell is not needed and should be eliminated from the Permit.

The Application proposes various changes in the Permit regarding the Hot Cell and associated facilities, including a change to Attachment A1 that the Hot Cell Bridge Crane "is used..." at 343 of PDF. However, SRIC is unaware of any documentation that the Hot Cell or the Bridge Crane is used or has been used "to lift the CNS 10-160B lid and the drum carriage units." The Application does not describe any specific need for the Hot Cell or the Crane.

Additional information required:

If the Hot Cell or the Bridge Crane has been used to handle RH waste, documentation of such usage should be provided. If it has not been used, the Permittees must provide specific plans for managing RH waste that require use of Hot Cell and the Crane. They should also discuss how such waste would be disposed in the underground HWDUs.

5. Proposed changes in surge storage have not been justified.

SRIC has long questioned the need for surge storage. SRIC believes that surge storage has been used only during the shutdown following the 2014 radiation release, and during that time various activities occurred that were not in compliance with the Permit. Thus, the need for surge storage has not been demonstrated. Thus, rather than modifying surge storage requirements, such storage should be eliminated.

Additional information required:

The Permittees should document the occasions that surge storage has been used. They should provide an explanation of how off-normal events could occur that so that surge storage would be needed to carry out future WIPP operations.

6. Changing the provision regarding suspending shipments has not been justified.

The Permittees propose changing the requirement to suspend shipments when off-normal events interrupt normal waste handling operations from more than three days. Among the changes, the Permittees propose a new sentence in Attachment A1-1d:

Shipments of waste from the generator sites will be stopped in an off-normal event which results in an interruption to normal waste handling operations that exceeds three days and could potentially cause the maximum permitted storage capacities and/or time limits to be exceeded. at 345 of PDF.

The Permittees also propose additional language to that same Attachment to limit off-normal events to ones “that prevent unloading or downloading waste to the underground.”

SRIC does not believe that the changes are justified. The existing provisions have not actually limited shipments to WIPP. Changing the requirements is apparently designed to allow more shipments to arrive at WIPP when off-normal events occur, which could increase risks to public health and the environment.

Additional information required:

The Permittees should provide documentation about the off-normal events that have required suspension of waste shipments. They should also provide further discussion of why they expect future events will be more frequent and have greater impact on operations than during the past years of WIPP operations. They should also provide information about why such requirements are needed, when the number of planned future shipments and the amount of waste to be managed is less than past peak years from Fiscal Year 2004-2007.

7. The Acceptable Knowledge Sufficiency Determination (AKSD) is not needed and should be eliminated.

The Permittees do not propose changes in AKSD, but neither do they provide any basis to include that requirement. According to the WIPP website, they have not submitted an Annual Proposed Acceptable Knowledge Sufficiency Determination List since June 2012 and have not submitted an AKSD request since 2010. If AKSD is no longer needed, the provisions are contrary to the Permittees frequently expressed intent in the Application to remove “obsolete information.”

Additional information required:

The Permittees should describe potential uses of AKSD in the future, including when they plan to submit the Annual List or an AKSD request. If they cannot provide such details, they should provide adequate justification for maintaining the provisions.

Thank you very much for your careful consideration of these comments. Please contact me if you want more information.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Hancock". The signature is fluid and cursive, with a large initial "D" and "H".

Don Hancock

cc: Kevin Pierard