



May 13, 2022

Reinhard Knerr, Manager
Department of Energy - Carlsbad Field Office
P.O. Box 3090
Carlsbad, New Mexico 88221-3090

Sean Dunagan, President and Project Manager
Nuclear Waste Partnership, LLC
P.O. Box 2078
Carlsbad, New Mexico 88221-2078

**Re: Technical Incompleteness Determination (TID)
Permit Renewal Application
Waste Isolation Pilot Plant
EPA I.D. Number NM4890139088**

Dear Messrs. Knerr and Dunagan,

On April 2, 2020, the New Mexico Environment Department (NMED) received a Hazardous Waste Facility Permit (Permit) Renewal Application (Renewal Application) for the Waste Isolation Pilot Plant (WIPP) from the Department of Energy (DOE) and Nuclear Waste Partnership, LLC (collectively, the Permittees), dated March 31, 2020. On August 28, 2020, NMED issued a Public Notice of the submittal and availability for review of the Renewal Application, including locations where the public might access and copy the Renewal Application and supporting documents per 40 CFR §124.32.

The Request is currently being processed by NMED in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(c)) and 40 CFR §124.32. The Renewal Application was deemed administratively complete on October 6, 2020.

On December 17, 2021, NMED notified the Permittees of the decision to consolidate the Class 3 Permit Modification Request (PMR) for Panels 11 and 12, received July 31, 2021, with the Renewal Application. The Renewal Application again was acknowledged as administratively complete in the December 17, 2021 letter to the Permittees which stated, *"Formally, NMED continues to consider the Renewal Application administratively complete, the inclusion of the Class 3 PMR for Panels 11 and 12 being a supplement to previously submitted material."* Furthermore, on its own, the Class 3 PMR had already been deemed administratively complete after an NMED review in October 2021. On March 17, 2022, the Permittees submitted the updated redline strikeout for the Renewal Application requested by NMED.

In its technical review of the consolidated Renewal Application, per 20.4.1.900 and 20.4.1.901.A.1 NMAC (incorporating 40 CFR §270.30), NMED has determined that additional information is needed in order to proceed. The attached comments list the specific additional information requested by NMED. The Permittees must respond to the information request for NMED to complete its technical review and prepare a draft Permit. The Permittees must submit responses to comments marked with an asterisk (*)

Messrs. Knerr and Dunagan
Permit Renewal Application TID

to NMED within 45 days, no later than June 27, 2022, and within 60 days, no later than July 12, 2022 , for all other comments, except where noted for a later submittal date. By July 2, 2022, the Permittees may request a 30-day extension for any responses due within 60 days. However, the Permittees must make a good faith effort to provide all responses within the requested time frames.

Per Permit Part 1, Section 1.9 and as specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.11), the Permittees, as responsible parties, must sign and certify all responses submitted to NMED affirming the responses contain true, accurate, and complete information.

If you have any questions regarding this correspondence, please contact Ricardo Maestas of my staff at (505) 690-6148.

Sincerely,

Rick Shean
Digitally signed by Rick Shean
Date: 2022.05.13
10:58:54 -06'00'

Rick Shean
Chief
Hazardous Waste Bureau

cc: C. Catechis, NMED RPD
R. Maestas, NMED HWB
D. Biswell, NMED HWB
M. McLean, NMED HWB
B. Masse, NMED DOE-OB
L. King, EPA Region 6
T. Peake, EPA ORIA
E. Garza, DOE-CBFO
M. Navarrete, DOE-CBFO
R. Chavez, RES
File: WIPP '22

Permit Renewal Application Information Request

Closure

1. *Please propose an operating period **closure date** (i.e., month, day, year) to be added to the Permit to realistically portray the operating period of the WIPP facility based on waste projections and within volume limits set by the Land Withdrawal Act (LWA).
2. Please provide a breakdown, itemized annually, of the emplacement schedule through the proposed operating period closure date of WIPP, as bound by the volume limits set by the LWA, to provide justification for this date.
3. Please provide a schematic of the conceptual plan for the anticipated final facility footprint.
4. Please provide the most current anticipated physical capacity (Final TRU Mixed Waste Volume) needed for underground hazardous waste units, above and beyond Panels 11 and 12, both over the next ten years and at final facility closure.
5. Please provide analyses demonstrating how WIPP structures, both surface and underground, can be safely maintained and operated through the proposed closure date.
6. Please provide a plan and budget for WIPP transportation routes through the operating period closure date of WIPP.
7. Please discuss how the proposed end date of the operating period for the WIPP facility will impact the public along WIPP transportation routes.
8. Please provide a list of risk analyses for human health and the environment proceeding from the proposed date of the operating period for the WIPP facility (i.e., title of document, date conducted); please provide the referenced studies upon request.
9. Please provide documentation of DOE's engagement with other states regarding the construction and operation of another geologic repository for transuranic waste.
10. Please provide documentation of feasibility studies conducted by DOE relating to the construction and operation of another geologic repository for transuranic waste.
11. *In Table G-1, please suggest Permit language to clarify that equipment proposed for disposition at WIPP at the end of the operating period, as opposed to being decontaminated, will still meet the chemical compatibility requirements of the DOE Waste Acceptance Criteria (WAC).
12. *In Attachment G, please suggest Permit language to clarify that the closure of Panel 9 effectively also closed Panels 3, 4, 5, and 6, and to clarify that substantial barriers were installed in Panel 3, 4, and 6, an explosion-isolation wall was installed in Panel 5, and to clarify how Panel 9 was closed.

Public Participation

13. Please provide revisions to the WIPP Community Relations Plan, with milestones and timelines, to increase public participation efforts related to the following:
 - a. Class 2 and 3 Permit Modification Request (PMR) submittals, particularly at the pre-submittal stage. (NMED encourages any plan to bring back the productive stakeholder pre-submittal meetings once conventionally held.)
 - b. Increasing the public's understanding of the Permit and helping the public identify which issues are not Permit-related and are best addressed directly to DOE and how that may be accomplished.
 - c. Quarterly public meetings to explain and discuss upcoming PMRs and other planned activities at WIPP.
14. Please describe the role the Consultation and Cooperation Agreement has in DOE's plans for WIPP's present and future operations.

Waste Streams

15. Please provide a breakdown, itemized annually and projected over the next ten years, of the waste streams coming to WIPP, specifying whether they are stored (legacy) waste or projected to be generated waste; and, if projected to be generated, whether from pit production or research.
16. Please provide DOE documents that govern the prioritization of generator site waste cleanup and generator site waste shipments to WIPP.
17. Please provide estimates for currently known projected WIPP waste streams, sometimes considered in DOE or Government Accountability Office (GAO) reports, that may or may not be included in the most recent Annual Transuranic Waste Inventory Report (ATWIR), through final facility closure.
18. Please provide an explanation of how the change in the "high-level waste" definition will affect waste shipments planned for WIPP on a site-by-site basis for each generator site that currently utilizes or plans to utilize WIPP for disposition.
19. Please provide a chronology of public engagement and tribal consultation meetings conducted to date, as well a list of associated public materials (i.e., presentations, factsheets, etc.), regarding the "dilute and dispose" program for surplus plutonium waste streams from the Savannah River Site (SRS) in South Carolina; please provide the referenced materials upon request.

Audits/Generator Site Technical Reviews

20. *Please suggest new Permit language to specifically ensure NMED participation in audit team meetings (caucuses), as observers.
21. *Please suggest new Permit language to ensure applicable elements of the enhanced acceptable knowledge (AK) processes ((such as the Basis of Knowledge (BOK) and chemical compatibility requirements)), developed as a result of the December 2014 Administrative Compliance Order (ACO) and outlined in Appendix H of the DOE WAC, will continue.
22. *Please suggest new Permit language to clearly define NMED's ability to suspend waste shipments to WIPP for good cause if human health or the environment is at risk.
23. *Please suggest new Permit language for adding the Generator Site Technical Review (GSTR) requirements, developed as a result of the ACO, into the Permit to include final actions on GSTRs (evidence given of issues resolved or status) to be included in final audit reports.
24. *Please review and determine an appropriate GSTR frequency and schedule for the generator sites, to be shared with NMED, and suggest language to be added to the Permit to capture this.
25. *Please suggest a method, and language for the Permit, for insuring GSTR issues identified are resolved at generator sites and the evidence of such resolutions is communicated back to the Permittees, with this information being included in final audit reports.

Ventilation Systems

26. Please provide current projections for all projects for underground ventilation on-going at the site to include proposed completion dates.
27. Please provide general configurations for underground ventilation in a timetable format until the final configuration is in service.
28. Please describe whether sufficient redundancy in underground ventilation capabilities for waste management operations exists in the case that one or more fans in any configuration at any given time would experience a failure.
29. Please respond as to how and why the current test and balance schedules for each underground ventilation configuration remain appropriate.

General

30. Please provide further explanation for how the exposure information submitted in the Application meets Resource Conservation and Recovery Act (RCRA) requirements.
31. Please provide updated land use information, specifically regarding oil and gas production on wells surrounding and adjacent to the WIPP LWA boundary.
32. Please provide a list of floodplain or earthquake studies that have been performed in the vicinity of the facility over the last ten years; please provide the referenced studies upon request.
33. Please provide a description of safeguards in place to protect operations from hydraulic fracking, as well as information detailing at what depths and in what formations the fracking is occurring outside the LWA boundary.
34. *Since the project plans to submit a new Shielded Container modification to the Permit, preferably after the Renewal process has concluded, further reducing the need to process RH waste on site, please provide the rationale for keeping the RH hot cell in place at the facility.
35. *Please provide the rationale for the proposed removal of descriptive text relating to aisle spacing between the west wall of the CH Bay and facility pallets in Permit Attachment A1, Section A1-1c(1).
36. *Please provide any administrative or editorial updates or additional technical information necessary to the Renewal Application as appropriate, for example edits related to the explanatory matrix submitted with the updated redline strikeout for the Renewal Application.
37. The April 2022 Office of Inspector General report [AR 220415.5] found "...significant and recurring issues pertaining to the Fire Department training program..." Please explain if and how these issues and recommendations have been addressed.

Later Submittal Date

38. Please submit the most up to date list of RCRA Emergency Coordinators when requested by NMED ahead of draft Permit issuance.
39. Please submit the updated Part A application when requested by NMED ahead of draft Permit issuance.