



*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**  
**Hazardous Waste Bureau**



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**MEMORANDUM**

**TO:** Butch Tongate, Secretary, New Mexico Environment Department (NMED)

**THROUGH:** J.C. Borrego, Deputy Secretary, NMED  
 John E. Kieling, Chief, Hazardous Waste Bureau, NMED *JK*

**FROM:** Ricardo Maestas, WIPP Staff Manager, Hazardous Waste Bureau, NMED *RM*

**CC:** Jennifer Hower, General Counsel, Office of General Counsel, NMED

**DATE:** May 7, 2018

**RE:** **RECOMMENDATION TO ELEVATE CLASS 2 PERMIT MODIFICATION  
 CLARIFICATION OF TRU MIXED WASTE DISPOSAL VOLUME REPORTING  
 TO FOLLOW PROCEDURES FOR CLASS 3 MODIFICATIONS  
 WASTE ISOLATION PILOT PLANT  
 EPA I.D. NUMBER NM4890139088**

On February 2, 2018, the New Mexico Environment Department (“NMED”) Hazardous Waste Bureau received a Request for a Class 2 Permit Modification (“Modification”) to the Waste Isolation Pilot Plant (“WIPP”) Hazardous Waste Facility Permit (“Permit”) from the Department of Energy (“DOE”) and Nuclear Waste Partnership LLC (“NWP”) (collectively the “Permittees”) dated January 31, 2018. The Modification is entitled “*Clarification of TRU Mixed Waste Disposal Volume Reporting*” and seeks to clarify the transuranic (“TRU”) mixed waste disposal volumes reported in Permit Part 4, Table 4.1.1, *Underground Hazardous Waste Disposal Units* (“HWDUs”), in accordance with Permit Part 6, Section 6.10.1, *Panel Closure*. This Request was submitted pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b) *Class 2 modifications*).

**Technical Review**

The Hazardous Waste Bureau WIPP Group has conducted a technical review of the Permit Modification, pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(6)(i)) which states:



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*“No later than 90 days after receipt of the notification request, the Director must:*

*(A) Approve the modification request, with or without changes, and modify the permit accordingly;*

*(B) Deny the request;*

*(C) Determine that the modification request must follow the procedures in §270.42(c) for Class 3 modifications for the following reasons:*

*(1) There is significant public concern about the proposed modification; or*

*(2) The complex nature of the change requires the more extensive procedures of Class 3.*

*(D) Approve the request, with or without changes, as a temporary authorization having a term of up to 180 days, or*

*(E) Notify the permittee that he or she will decide on the request within the next 30 days.*

On April 27, 2018, NMED notified the Permittees of a 30-day extension and that final decision on the Modification will take place no later than June 1, 2018, pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(6)(i)(E) above.

After our review it is our **recommendation to elevate** the Class 2 Modification to follow the procedures of a Class 3 pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(6)(i)(C) above.

The recommendation to elevate the Class 2 Modification to a Class 3 Permit Modification is based upon the regulation criteria mentioned above. First, an analysis was conducted to determine if there was significant public concern and, second, an analysis was conducted to determine if the Modification was complex enough to warrant the more extensive procedures of the Class 3 Permit Modification Request. Each on these are discussed further below.

### **Public Concern**

Based on our review pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(6)(i)(C)(1) we have determined that there is significant public concern with the Modification based on the number of comments received. The 60-day comment period was held February 2, 2018 through April 3, 2018. A summary of comments received and some of the factors involved in making the recommendation to elevate follow below:

- In total, 88 comments were received (59 on-time, 29 late). There was public input both in support and against this Modification as summarized below:

#### On-Time Comments (received during the Comment Period)

*-In Support Emails/Letters: 14*

*-Against Emails/Letters: 34*

*-Against Blue Cards: 11*

*-Total On-Time: 59*

Late Comments

*-In Support* Emails/Letters: 0

*-Against* Emails/Letters: 10

*-Against* Blue Cards: 19

*-Total Late (against)*: 29

- There is public concern, as stated, regarding the number, complexity and timing of numerous WIPP Permit Modification Requests, which, in many of the public's opinion, are leading to an expansion of the WIPP Facility and support having a Class 3 public hearing to address the multiple proposed modifications instead of addressing them individually.
- Three of the public comments were extensive and very technical, and were not supportive of the Modification. Some commenters believe that the Request should have been more descriptive and inclusive of past waste volume reporting details.
- There is significant public concern that the DOE would be "self-regulating" when reporting the TRU waste volume of record pursuant to the Land Withdrawal Act ("LWA"), and that NMED would have a smaller or more limited role in regulation and enforcement of the final disposal volume of waste at WIPP.
- It is the opinion of many of the public commenters that the WIPP site has the express purpose to function as a pilot plant for the demonstration of the safe disposal of radioactive waste and not be expanded to emplace the entire inventory of DOE's TRU waste across the country. Some members of the public are concerned the mission of WIPP is changing without their input.
- Some members of the public are concerned that the DOE believes it has a mandate to self-regulate at WIPP with respect to the LWA total capacity limit. However, the Federal Facility Compliance Act ("FFCA") brings all federal facilities into compliance with applicable federal and state hazardous waste laws. The FFCA was enacted prior to the LWA, therefore the public is concerned that the DOE is trying to exceed its authority. The FFCA also amended the Solid Waste Disposal Act ("SWDA"), which includes the Resource Conservation and Recovery Act ("RCRA").

**Complexity of the Modification**

Additionally, based on our review pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(6)(i)(C)(2) we have determined that the Modification is complex enough to recommend the more extensive Class 3 procedures. This recommendation was based on a thorough analysis of the Modification and based upon the complexity of the comments received from some members of the public. A summary of some of the factors follow below:

- There are numerous complex references that the public and NMED would need time to effectively review to make an informed decision on whether or not to support this

Modification including: Environmental Impact Statements from 1980 and 1997, the WIPP Authorization Act, the 1981 Record of Decision, the Consultation and Cooperation Agreement (as amended), the DOE Organization Act, the DOE National Security and Military Applications of Nuclear Energy Authorization Act, the Land Withdrawal Act, and the National Defense Authorization Act.

- Many of the concerns commenters point out is that the historical record, as presented in the Modification, is not complete and does not provide the entire record. For one example, the Federal Facility Compliance Act is not included or discussed in the Modification.
- Based on several public comments, the Modification is viewed as incomplete and missing technical information. Specifically, the complex nature of various container volumes are not explained in enough detail to satisfy the public's request for how the TRU waste volume of record will be accounted for if the proposed Permit Modification is approved. There are two main unanswered questions that have not been clarified for the record.
  - 1) Will the waste volume of record, counting against the LWA, be calculated based off inner container volume or the fill factor of these individual drums? A 30% increase in waste emplaced would be expected with the former and a 50% increase with the latter.
  - 2) Will the Permittees begin calculating this new method for waste volume against the LWA from the date of issuance of this Permit Modification, or will they propose to retroactively go back to recalculate waste volumes from the inception of the Permit (1999-time frame)?
- A potential waste volume increase of greater than 25% would make the proposed Permit Modification a Class 3 per Appendix I to 40 CFR §270.42(F)(1)(a): "*Modification or addition of container units: a. Resulting in greater than 25% increase in the facility's container storage capacity...*" This case can be made based on the following reasoning. If the waste volumes reported against the LWA were recalculated using inner container volume, this would allow approximately 30% more waste to be emplaced at WIPP (if recalculated using fill factor, a 50% increase would result). The Permittees are not proposing to physically modify the waste container units, but they are proposing to add additional container units (30-50% more units depending on how they plan to calculate the waste volume of record). However, viewed from the Permittees perspective, the argument could be made that there is no such increase as they are not proposing to change the reported waste volumes for the individual RCRA-permitted HWDUs in the Permit nor change the way the RCRA volume is being reported, i.e., waste volumes will still be counted as the outer most container.
- Historically, it has sometimes been necessary for the Permittees to consider an overpack as one waste unit rather than viewing them as the individual units inside the overpack that they are proposing in this Permit Modification. This has occurred for two reasons:

- 1) When there is a drum with integrity issues, the overpack provides the necessary safe packaging and thus the entire overpack becomes waste;
- 2) The Permittees developed a payload management process whereby drums from the same waste stream may be overpacked together and the TRU alpha activity average for the entire overpack is used even though individual drums within that overpack may exceed or fall below the LWA threshold for alpha activity.

In these instances, it may not be appropriate to use the inner container volume as the waste volume of record counting against the LWA. The entire overpack has become the waste volume unit.

### **Conclusion**

In conclusion, based on the analysis described above, it is the Bureau's recommendation that the Modification for the *Clarification of TRU Mixed Waste Disposal Volume Reporting* for the Waste Isolation Pilot Plant, be elevated to a Class 3 pursuant to 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)(6)(i)(C) (1) and (2)) for both significant public concern and complex nature of the Modification. There are several complex and high-level issues, and unanswered questions regarding this Modification. We believe The State of New Mexico, the Permittees, and the public would greatly benefit from the more extensive procedures of a Class 3 Permit Modification.