

**Comments on the Draft Hazardous Waste Facility Permit for the Waste Isolation Pilot Plant,  
December 2022**

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**Comment 1**

WIPP is a pilot plant and to date it is the only operating geologic repository for storage of nuclear waste in the world. Some key benefits of a *pilot* facility are that it provides data to determine what works versus what doesn't work and to identify modifications to optimize facility operations with respect to safety, efficiency, cost, and schedule. After 23 years of WIPP operations, DOE must incorporate lessons learned into each permit renewal to promote continuing improvement of operations and timely closure. Some examples of lessons learned that warrant improvements before a permit renewal should be granted are as follows:

- It has taken DOE much longer to process, prepare, and place the legacy TRU waste in WIPP and the cost likely has been much greater than originally anticipated. Given there are now 23 years of operating data available, DOE must prepare updated, more accurate, and realistic schedules, facility designs (e.g., final footprint and volume), and costs required to place the full authorized 6.2 million cubic feet (mcf) into WIPP. This updated information must be included in each Hazardous Waste Facility Permit renewal.
- Accidents due to human error, as that observed when a drum exploded in 2014, likely will occur over time. Longer periods of operation for WIPP will result in more accidents, more delays, more cost incurred, and potential injuries. The consequences of these factors on operations must be addressed in each permit renewal.
- Significant mission creep has occurred including the addition of a surplus plutonium waste stream to WIPP and changing the volume of record, which results in changing the permitted underground footprint and volume of WIPP and the operation duration. Mission creep will continue to occur the longer WIPP operates due to inevitable changes over time in agency staff, elected public officials, public perceptions, and world politics. Stewards of WIPP must stay on course in meeting WIPP's original mission and resist temptation to respond to the many changing variables that inevitably will arise.
- There is significant public mistrust of the DOE's (and the NNSA's) management of WIPP, largely due to the factors discussed in the three bullets above. Without public trust in the stewardship of WIPP, no State in the US including New Mexico will be willing to accept additional nuclear waste from weapons production once WIPP reaches its legal capacity of 6.2 mcf. There also is and will continue to be reluctance for States to accept commercial nuclear waste. This will be a serious nation-wide problem if not corrected.

**Comment 2**

I support NMED's red-line strikeout changes to the permit and I commend NMED's call for additional State oversight of WIPP. In addition to NMED's changes, I request additional changes to the permit as follows:

- a. The permit renewal must include a 30 percent or greater level of design for WIPP to accommodate the legal limit of 6.2 mcf of waste and the associated schedule for placing this waste into WIPP. It is inappropriate to use an arbitrary date of 2030 that coincides with the next permit renewal when the final waste volume of 6.2 mcf is well known and it is known that "WIPP is currently anticipated to operate beyond 2050" (Draft Environmental Impact Statement

for the Surplus Plutonium Disposition Program, December 2022). Given that 40 percent of the waste has already been placed in WIPP, it should be no large task to develop such standard plans and include them in the permit renewal. This is common practice in private industry and it is DOE's responsibility to develop and disclose this information. This requires the waste generators to develop accurate remaining inventories and schedules to prepare the waste for transport to WIPP. NMED should include a permit condition that allows New Mexico to reject waste that is not delivered to WIPP in a reasonable and timely manner consistent with a schedule that DOE develops.

DOE's reluctance to provide design information beyond Panels 11 and 12 in this permit renewal because it first requires NEPA action (see DOE's response to NMED's Technical Incompleteness Determination in letter dated July 12, 2022) is unwarranted. DOE could have and should have provided this information in the December 2022 Draft EIS for the Surplus Plutonium Disposition Program or earlier.

- b. Consistent with WIPP's original mission, the priority for placing waste in WIPP should be first New Mexico legacy waste, then other States' legacy waste. If surplus plutonium is permitted in WIPP the priority should be New Mexico surplus plutonium followed by other States' surplus plutonium. This should be a permit condition.
- c. Diluted surplus plutonium should not be permitted in WIPP. EPA prohibits the dilution of hazardous waste to avoid meeting an applicable waste disposal standard. This makes good sense because dilution increases the volume of the contaminated media and it increases the handling of and potential for exposure to the contaminated media. Surplus plutonium that is diluted to meet the Waste Acceptance Criteria should not be allowed in WIPP.
- d. WIPP's volume of record should not have been changed in 2018. The public was not adequately informed of this change or the consequences of this change (i.e., increased footprint and volume for underground storage of waste and longer operating duration). The volume of record should be changed back to that consistent with WIPP's original mission. Also, language should be added as a Permit Condition that prohibits future increases in the volume of record.