

MICHELLE LUJAN GRISHAM GOVERNOR

February 13, 2023

Ms. Maxcine Maxted, NEPA Document Manager National Nuclear Security Administration, Office of Material Management and Minimization P.O. Box A, Aiken, SC 29802

Submitted electronically to: SPDP-EIS@nnsa.doe.gov

RE: Draft Environmental Impact Statement for Plutonium Surplus

Dear Maxcine Maxted,

On behalf of the New Mexico Environment Department (NMED), attached please find our comments for the Draft Environmental Impact Statement (EIS) regarding surplus plutonium at Los Alamos National Laboratory (LANL) and the Waste Isolation Pilot Plant (WIPP).

All activities at LANL and WIPP are of importance to the residents of New Mexico, and strong intergovernmental coordination is essential to ensure continued progress in addressing potential impacts to human health and the environment from ongoing and proposed activities at LANL and WIPP. Strong coordination and rigorous public process are also imperative in addressing LANL's legacy contamination, nuclear safety, and the possibility of increased plutonium pit production and disposal in New Mexico.

We are the only state in the country to have taken on the risk associated with disposal of nuclear waste, hosting the WIPP in southern New Mexico for disposal of transuranic waste. The U.S. Department of Energy (DOE) plan for surplus plutonium disposition includes considerable time on highways for trucks carrying radioactive material, including through New Mexico at least twice, increasing the risk to New Mexicans and our resources.

NMED offers important comments in the form of concerns regarding the sourcing, hauling and disposing of nuclear waste as it pertains to treatment and storage, as outlined in the attachment for the National Nuclear Security Administration (NNSA) to evaluate. Thank you for providing the opportunity to comment.

Sincerely,

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James C. Kenney Cabinet Secretary

Attachment (1)

Cc: Courtney Kerster, Senior Advisor, Office of Governor Michelle Lujan Grisham

Attachment

New Mexico Environment Department Comments on the Department of Energy National Nuclear Security Administration Draft Environmental Impact Statement for the Surplus Plutonium Disposition Program, DOE/EIS-0549

- 1. NMED strongly objects that both the Preferred Alternative and the No Action Alternative in the Draft EIS use the dilute and dispose strategy and both alternatives propose pit and non-pit surplus plutonium shipments to WIPP. Of the options considered, NMED prefers the "All SRS [Savannah River Site] Sub-Alternative" so LANL is not implicated.
 - a. The DOE's Preferred Alternative is to use the dilute and dispose strategy for 34 MT of surplus plutonium comprised of both pit and non-pit plutonium. Two of the five DOE sites proposed for these activities are LANL and WIPP.
 - b. The proposal to treat or process the plutonium at LANL prior to shipping to WIPP is problematic on multiple levels. Changes to existing processes can potentially require modifications to existing environmental permits or necessitate additional environmental permits. The introduction of additional processes involving plutonium waste increase the risk of air, surface water, groundwater and land contamination.
 - c. Recognizing that space in the WIPP is limited by disposal volumes authorized by federal law and the state hazardous waste permit, NNSA must account for and reserve space in the WIPP for environmental clean-up of legacy wastes generated in New Mexico.
 - d. The WIPP mission is limited to disposal of defense generated TRU waste from DOE sites around the country. DOE has always described TRU waste as consisting of clothing, tools, rags, residues, debris, soil, and other items contaminated with small amounts of plutonium and other man-made radioactive elements. However, the large amounts of plutonium involved in this program would no longer enable waste sent to WIPP to be described in such a manner without a major caveat, a problem we feel goes against the social contract DOE made with the people of New Mexico regardless of whether the surplus plutonium waste stream strictly meets the permit's waste acceptance criteria.
 - e. DOE revised its interpretation of the definition of "high level waste" and developed a "dilute and dispose" program to ship surplus plutonium from South Carolina to WIPP in a potential manipulation of NMED's waste acceptance criteria as found in the state operating permit. In another example, DOE EM expressed interest in sending Americium-241 to WIPP, which is currently not allowed under the federal Land Withdrawal Act. Finally, DOE will soon begin operating a nuclear waste treatment plant in Idaho, reclassifying a high-level liquid waste stream as a solid waste, which DOE officials have noted could be diluted to simply meet WIPP permit requirements.
 - f. NMED recommends the "All SRS Sub-Alternative." In the All SRS Sub-Alternative, NNSA would use only capabilities at SRS. Under this sub-alternative, NNSA analyzes the impacts of shipping 34 MT of pit plutonium from Pantex to SRS and the disassembly and processing of the 34 MT of pit plutonium in a new capability installed at SRS in either K-Area or F-Area. In the All SRS Sub-Alternative, NNSA also analyzes the subsequent shipment of 8 the decontaminated and oxidized HEU to Y-12 as well as the impacts of processing 7.1 MT of non-pit surplus plutonium at SRS using the same new capability used for PDP. The resulting plutonium oxide would remain at SRS for dilution and C&P before shipment to and disposal at the WIPP facility as CH11 TRU waste.

2. DOE must quantify the remaining legacy, or stored, waste at LANL and set aside the volume of WIPP space necessary to accommodate LANL wastes.

- Currently, DOE and the National Nuclear Safety Administration (NNSA) rely on WIPP for waste streams generated from DOE EM and NNSA activities. However, WIPP is 41% full, which means DOE and NNSA will need to plan, design, and build another geological repository elsewhere in the United States to continue to support its domestic operations. While DOE initiates that effort, the remaining 59% of WIPP capacity will continue to shrink.
- b. DOE must calculate the volume of legacy, or stored, waste at LANL, and a corresponding percentage of space held at WIPP for this waste. This is especially important given that the Trump Administration entered into settlement agreements with other states that prioritized their shipments to WIPP over shipments from LANL.
- c. NMED believes WIPP should prioritize emplacement of waste from LANL. Any new proposed or increased waste streams from other states should not be considered until a clear path forward has been identified and adequately funded for waste at LANL, with a particular emphasis on legacy waste clean-up.

3. DOE and NNSA failed to contemplate the successful emplacement of TRU waste at the WIPP due to limitations of New Mexico transportation infrastructure (i.e., highways and roads).

- a. The shipments of waste travel across New Mexico's designated WIPP highways. Due to the significant industrialization in Southeast New Mexico, there has been a substantial increase in traffic and degradation of road conditions. Further, there has been a significant increase in motor vehicle crashes along designated WIPP highways. The severity of such motor vehicle crashes has also increased due to the volume of large trucks using these roadways. The greatest concentration of crashes involving heavy duty trucks is along WIPP designated routes due to road conditions. While the EIS recognizes the potential for transportation cumulative impacts, it estimates the additional increase in traffic fatalities over a 30-year period at less than 1. Without further support for this estimate, NMED disputes its accuracy.
- b. The DOE and NNSA acknowledge that a major investment in facility maintenance and infrastructure repair recapitalization and modernization is necessary to prevent costly failures and to continue to safely perform mission requirements. Just as the WIPP facility has exceeded its design life and needs regular upgrades and maintenance (DOE *Carlsbad Field Office Strategic Plan 2019-2024,* August 2019), the roads in New Mexico also need regular upgrades and maintenance to ensure safe transport of shipments to WIPP and prevent catastrophic consequences to human health and the environment.
- c. To mitigate risk, the DOE and NNSA must reinstate funding to the State of New Mexico as authorized in Section 15 of the WIPP Land Withdrawal Act (LWA) and support an annual appropriation of \$37 million in federal fiscal year 2024, subsequently indexed for inflation for the remaining useful life of the WIPP. This LWA funding is a necessary infrastructure investment to minimize risk of radiological and hazardous waste releases that could impact public health and safety of New Mexicans, as well as the environment.
- d. Further, the Resource Conservation and Recovery Act (RCRA) and New Mexico's Hazardous Waste Act (HWA) gives NMED the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, *transportation*, treatment, storage, and disposal of hazardous waste [emphasis added]. As DOE states in the draft EIS, the

Federal Facility Compliance Act of 1992 waives sovereign immunity for federal facilities under RCRA and requires DOE to conduct an inventory and develop a treatment plan for mixed wastes. The WIPP is permitted by NMED pursuant to federal and state law for the management of mixed wastes.

e. The DOE and NNSA failed to quantify the risk, impacts, and costs associated with the successful implementation of the Proposed Action. Prior to implementation, and increasing shipments in New Mexico on designated WIPP highways, NMED requests the DOE and NNSA conduct such an analysis and share the results with the Governor of New Mexico, Secretary of the New Mexico Department of Transportation, the Secretary of the Energy, Minerals and Natural Resources Department, and the Secretary of the NMED.

4. New Mexico water sources and water supply systems must be protected from accidental releases of radioactive materials that may occur along transportation routes in the state.

- a. TRU waste materials would be shipped along U.S. Highway 285, state highways, and local roads to the WIPP in southeastern New Mexico.
- b. Additionally, plutonium, beryllium, and low-level radioactive wastes could potentially be transported between South Carolina and LANL, Nevada National Security Site, and/or a commercial facility in Utah along Interstates 25 and 40, U.S. Highway 285, and several state highways and local roads. In New Mexico, there are 156 regulated public surface or groundwater systems (PWS) located within one mile of these transportation corridors.
- c. If the Proposed Action is implemented, it is critical that the packaging and transport regulations and emergency response protocols described in Appendix E of the draft EIS are followed to the greatest extent possible in order to protect water sources and water supply systems from accidental releases of radioactive materials.

5. Given the disproportionate burden of public health and environmental risks that the State of New Mexico bears related to nuclear energy and weapons programs, every aspect of the Proposed Action must provide the highest level of protection to New Mexico citizens, including use of best available technology in these safeguards.

- a. DOE stated: "No disproportionately high and/or adverse impacts on minority or lowincome populations affected by activities at either the LANL or SRS sites are expected" but did not provide adequate quantitative information to support this conclusion, including the use of an objective tool, like U.S. EPA's EJ Screen tool.
- b. Uranium mining and milling, legacy contamination at national laboratories, disposal of defense waste at WIPP, and the proposed indefinite storage of commercial spent nuclear fuel at a private facility create risks to public health and the environment in the State of New Mexico that are disproportionately greater than such risks to the general population of the United States. This most recent Proposed Action, for example, includes transport of plutonium metal from Los Alamos National Laboratory to the SRS, and the transport of plutonium pit waste from SRS back to New Mexico for disposal at the WIPP.
- c. New Mexico contains significantly greater percentages of Hispanic or Latino and American Indian residents, as well as people living in poverty, than in the United States general population (see Table 1: New Mexico Demographics Data, <u>https://www.census.gov/quickfacts/fact/table/US/PST045219</u>).

Table 1: New Mexico Demographics Data

Demographic	United States	New Mexico
Hispanic or Latino	18.9%	50.1%
American Indian	1.3%	11.2%
Persons in Poverty	11.6%	18.4%

- d. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, states, ".... each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionally high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations of the United States."
- e. The draft EIS fails to demonstrate that the Proposed Action will achieve environmental justice for the high percentage of minority and low-income populations in the State of New Mexico that have already suffered disproportionately high adverse human health and environmental effects of U.S. Department of Energy programs. Environmental justice deficiencies in the draft EIS include:
 - i. Failure to identify and discuss vulnerable populations in New Mexico;
 - ii. Failure to identify and evaluate the cumulative history of adverse human health and environmental effects on New Mexico's vulnerable populations;
 - iii. Failure to evaluate release scenarios from the Proposed Action, such as transportation accidents, that might adversely affect vulnerable populations in New Mexico; and
 - iv. Repeated, yet unsubstantiated, assertions that cumulative environmental impacts from the Proposed Action would be either not notable or not expected.
- f. The environmental justice deficiencies in the draft EIS must be corrected by preparation of a proper risk assessment that evaluates all potential release scenarios and that quantifies incident-specific and cumulative impacts to vulnerable populations in New Mexico. In accordance with Executive Order 12898, every aspect of the Proposed Action must provide the highest level of protection to New Mexico citizens, including use of best available technology in these safeguards.