May 18, 2020

Jennifer Nelson
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Savannah River Field Office
P.O. Box A
Aiken, SC 29802

Submitted electronically to: NEPA-SRS@srs.gov

RE: Savannah River Site, Draft Environmental Impact Statement for Plutonium Pit Production

Dear Ms. Nelson,

On behalf of the New Mexico Environment Department (NMED), attached please find our comments on the April 2020 Savannah River Site (SRS) Draft Environmental Impact Statement for Plutonium Pit Production. NMED’s comments are attached.

Please do not hesitate to contact me to discuss further.

Sincerely,

James C. Kenney
Cabinet Secretary

Attachment (1)

cc: Courtney Kerster, Director of Federal Affairs, Office of Governor Michelle Lujan Grisham
Sarah Cottrell Propst, Secretary, New Mexico Energy, Minerals and Natural Resources Department
Mike Sandoval, Secretary, New Mexico Department of Transportation
Rebecca Roose, Director, NMED Water Protection Division
Stephane Stringer, Director, NMED Resource Protection Division
Attachment

Introduction

To meet national security requirements, the National Nuclear Security Administration (NNSA) is pursuing a two-prong approach to the production of plutonium pits—produce a minimum of 50 pits per year at the Savannah River Site (SRS) near Aiken, South Carolina and a minimum of 30 pits per year at Los Alamos National Laboratory (LANL) in New Mexico.

The NNSA prepared an Environmental Impact Statement (EIS) to evaluate the potential environmental impacts of producing a minimum of 50 pits per year at SRS. The NNSA’s Proposed Action is to repurpose the Mixed Oxide Fuel Fabrication Facility (MFFF) at the SRS to produce a minimum of 50 war reserve pits per year and to develop the ability to implement a short-term surge capacity to enable NNSA to meet the requirements of producing pits at a rate of not less than 80 war reserve pits per year beginning during 2030 for the nuclear weapons stockpile. The Proposed Action also includes activities across the Nuclear Weapons Complex associated with transportation, waste management, and ancillary support (e.g., staging and testing) for the pit production mission at SRS. Apart from this EIS, the NNSA also has prepared a separate analysis of increasing production activities at LANL.

Comments

1. Department of Energy (DOE) and National Nuclear Security Administration (NNSA) did not disclose, discuss and/or quantify various environmental legal matters that could have a material impact on its Proposed Action.

Under the Proposed Action, NNSA states that “…a significant quantities of TRU [transuranic] waste could be generated at SRS and shipped to WIPP [Waste Isolation Pilot Plant] for disposal. It is estimated that approximately 31,350 cubic meters of TRU waste could be generated over the life of the project (i.e., 50 years) at SRS, assuming a production rate of 50 pits per year. In addition, approximately 5,350 cubic meters of TRU waste could be generated over the life of the project (i.e., 50 years) at LANL [Los Alamos National Laboratory], assuming a production rate of 30 pits per year. The available capacity of WIPP would accommodate the conservatively estimated TRU waste that could be generated over the next 50 years.” NNSA further explained that the Proposed Action would represent an increase of 14 to 21 percent in shipments to the WIPP from SRS over current planning.

The DOE submitted a request to modify the NMED WIPP Hazardous Waste Facility Permit to differentiate between the way waste volumes was defined versus the way the WIPP Land Withdrawal Act (LWA) waste volume (175,564 cubic meters) was calculated and tracked. In December 2018, the NMED approved the DOE’s request to modify the existing WIPP Hazardous Waste Facility Permit and in January of 2019 the DOE fully implemented the change in the method of tracking, reporting, and recording the volumes of generated waste. The DOE used this approved Volume of Record method to calculate the estimated shipments and emplacement in WIPP from SRS in the Draft Environmental Impact Statement for Plutonium Pit Production at the Savannah River Site in South Carolina (EIS). It is important to note that also in January 2019 this modification to the WIPP Permit was appealed. There has been no action on this appeal by the courts. Should the approval of the permit modification be overturned by the courts, the volume of waste shipped from SRS for emplacement at the WIPP would constitute a greater percentage of the LWA volume. The DOE and NNSA must make available the volumetric contribution of all defense waste and environmental legacy waste estimated for the WIPP for SRS and all other DOE and NNSA sites around the U.S. which plan to utilize the WIPP. The DOE and NNSA must update this information on a periodic basis (i.e., quarterly).
Additionally, the April 2020 draft EIS does not discuss the November 2019 settlement between the DOE and the State of Idaho related to Idaho National Laboratories and the associated impacts of how the DOE prioritizes shipments and emplacement at WIPP. The total volume of emplaced and future waste shipments is expected to exceed the legislated volume capacity for WIPP (National Academy of Sciences Review of Department of Energy’s Plans for Disposal of Surplus Plutonium in the Waste Isolation Pilot Plant, April 2020). The Idaho Settlement allocates fifty-five percent (55%) of all TRU waste shipments received at WIPP for Idaho. Depending on how the DOE prioritizes future waste shipments across the complex, other facilities around the U.S., including LANL, will need to store remediated legacy waste and/or delay remediating legacy waste. The State of New Mexico objects to the DOE prioritizing defense waste over remediating and emplacing legacy contamination at the WIPP, particularly in the state that hosts and regulates the WIPP.

The DOE and NNSA failed to disclose, discuss and/or quantify various environmental legal matters that will have a material impact on legacy contamination and risk to communities.

2. 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).

At pit production rates of 50 to 80 pits per year, the SRS shipments of TRU waste to the WIPP are expected to be about 106 to 156 annually. The additional waste shipments represent increases of 14 to 21 percent over current planning.

The shipments of waste from SRS travel across New Mexico’s designated WIPP highways. Due to the significant industrialization in Southeast New Mexico, there is a significant 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.

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.

To mitigate risk, the DOE and NNSA must reinstate funding to the State of New Mexico as authorized in Section 15 of the LWA and provide an annual appropriation of $31.5 million in federal fiscal year 2021 and 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.

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 a permitted by NMED pursuant to federal and state law for the management of mixed wastes.

The DOE and NNSA failed to quantify the risk, impacts, and costs associated with the successful
emplacement of SRS wastes at the WIPP in the draft EIS. Prior to implementing the Proposed Action and increasing shipments on New Mexico on designated WIPP highways, the State of New Mexico 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.

3. **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.**

According to Figure 4-4 in the draft EIS, TRU waste materials would be shipped along U.S. Highway 285, state highways, and local roads to the WIPP in southeastern New Mexico. 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.

If the Proposed Action is implemented, it is critical that the packaging and transport regulations and emergency response protocols described in Section 3.12 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.

4. **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.**

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 has long created 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.

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, [https://www.census.gov/quickfacts/fact/table/US/PST045219](https://www.census.gov/quickfacts/fact/table/US/PST045219)).

**Table 1: New Mexico Demographics Data**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>United States</th>
<th>New Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latino</td>
<td>18.3%</td>
<td>49.1%</td>
</tr>
<tr>
<td>American Indian</td>
<td>1.3%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Persons in poverty</td>
<td>11.8%</td>
<td>19.5%</td>
</tr>
</tbody>
</table>

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.”

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:

a. Failure to identify and discuss vulnerable populations in New Mexico;

b. Failure to identify and evaluate the cumulative history of adverse human health and environmental effects on New Mexico’s vulnerable populations;

c. Failure to evaluate release scenarios from the Proposed Action, such as transportation accidents, that might adversely affect vulnerable populations in New Mexico; and

d. Repeated, yet unsubstantiated, assertions that cumulative environmental impacts from the Proposed Action would be either not notable or not expected.

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.

5. Disposal of plutonium pit waste at the WIPP must be done in compliance with existing laws, permits, settlements and acceptance criteria.

The disposal of SRS TRU waste at the WIPP site must conform to the following requirements:

a. Future waste streams must meet requirements in the DOE WIPP Waste Acceptance Criteria, the WIPP Hazardous Waste Facility Permit Waste Analysis Plan, and the WIPP Transportation Safety Plan Implementation Guide;

b. DOE must adhere to the limits on types and quantity of waste imposed by the 1992 WIPP Land Withdrawal Act, as amended by Public Law No. 104–201 (1996); and

c. Legacy waste, particularly from LANL, must remain a high priority for disposal at the WIPP.