

SPDP DEIS Public Hearing Poster Scripts

1. **What is an Environmental Impact Statement?**

This poster describes the environmental impact statement, or “EIS” process. The National Environmental Policy Act (NEPA) requires an EIS for major actions that could significantly impact the human environment. The human environment as defined by NEPA includes both the natural and physical environment (such as air and water), as well as people’s relationship with the environment (including infrastructure, socioeconomics). EIS process steps include notifying the public of the intent to prepare an EIS and providing an opportunity to comment on the scope of the EIS. The National Nuclear Security Administration, also known as NNSA, then describes the proposed action, associated alternatives, and evaluates their potential impacts in a draft EIS. The public is provided with an opportunity to comment on the Draft EIS. All public comments received during the public comment period are considered by NNSA when preparing the final EIS. NNSA issues a Record of Decision based on the environmental impacts, technical feasibility, safety, cost and other factors.

2. **How to Comment on the Draft EIS**

This poster presents the various options for providing public comments on the Draft Environmental Impact Statement. Verbal comments may be submitted during the public hearing and will be transcribed. Comments may also be provided through a written comment form available at the meeting. In addition, comments may be submitted by e-mail, phone, and U.S. mail. All comments received by the end of the public comment period, which is February 14, 2023, will be considered in the Final Environmental Impact Statement.

3. **NEPA Documents Supporting SPDP**

This poster presents a timeline of National Environmental Policy Act documentation supporting surplus plutonium storage and disposition analyses and decisions, beginning in 1996 with a Programmatic Environmental Impact Statement.

4. **Dilute and Dispose Process Flow**

This poster provides a high-level process outline of the dilute and dispose strategy. Using this alternative, NNSA would disassemble pits; convert surplus pit and non-pit plutonium to oxide; blend the surplus plutonium in oxide form with an adulterant to inhibit plutonium recovery; package the diluted plutonium oxide as contact handled transuranic defense waste; characterize, certify, and transport the waste to the Waste Isolation Pilot Plant (WIPP); and dispose of it underground at the WIPP facility.

5. **Alternatives and Sub-Alternatives**

This poster presents the alternatives described in the Draft Surplus Plutonium Disposition Program Environmental Impact Statement. NNSA’s Preferred Alternative is to use the dilute and dispose strategy to disposition 34 metric tons of surplus plutonium, including up to 7.1 MT of non-pit surplus plutonium. The Preferred Alternative has 4 sub-alternatives based on the geographic location of the process steps. The No Action Alternative is the continued

management of both surplus pit and non-pit plutonium, as well as disposition of up to 7.1 MT of non-pit plutonium that already has a disposition decision.

6. Sites Affected

This poster provides a map that shows the geographic location of sites that have been analyzed for the Preferred and No Action Alternatives. The dilute and dispose strategy would require new, modified, or existing capabilities within the DOE Complex. Sites under consideration for this program are the Savannah River Site, the Los Alamos National Laboratory, the Pantex Plant, the Y-12 National Security Complex, and the Waste Isolation Pilot Plant. In addition, the transportation analysis evaluated the Nevada National Security Site as a potential disposal location for LANL low-level waste disposal.

7. Los Alamos National Laboratory Affected Environment

This poster portrays the potentially affected areas at the Los Alamos National Laboratory that are located in Technical Areas 52 and 55.

8. Savannah River Site Affected Environment

This poster portrays the potentially affected areas at the Savannah River Site, located in K-Area and F-Area.

9. Transportation Routes

This poster presents the transportation routes associated with the dilute and dispose strategy. Routes differ based on the sub-alternatives of the preferred alternative. The maps on this poster represent all transportation routes analyzed for offsite shipments to and from the Los Alamos National Laboratory and the Savannah River Site. These shipment routes are representative of those that may be used to transport surplus pits, non-pit material, plutonium oxide and contact-handled transuranic defense waste including job control waste and diluted plutonium oxide waste. The figure also shows the route analyzed for shipment of low-level waste and mixed low-level waste generated at LANL. A variety of locations will accept low-level and mixed low-level waste generated at LANL, however, the route to the Nevada National Security Site was analyzed to provide a reasonably bounding estimate of human health impacts from transportation activities. NSSA assumes that low-level waste generated at SRS would be disposed of onsite.

10. WIPP

This poster portrays the location of the final step of the dilute and dispose strategy: disposal in a geologic repository. The Waste Isolation Pilot Plant is the only deep geologic repository for permanent disposal of transuranic waste in the United States. This poster depicts the above surface structures and underground disposal panels at the Waste Isolation Pilot Plant facility.

11. Shipping Containers

This poster presents the different types of packaging used to ship the plutonium metal and oxide and the diluted plutonium oxide as defense contact-handled transuranic waste. In each shipping scenario, the final shipping package, shown as the image at the far right, consists of all prior containers nested within each other. For example, the first container shown at the left is

placed within the second container, which is placed within the third container. The number of each container type that may be placed within the next container is marked with an arrow and number.

12. Summary of Key Potential Environmental Consequences

This poster presents a selection of construction and operational impacts associated with the alternatives and sub-alternatives. The impacts of the alternatives and sub-alternatives would be generally minor. The biggest differences between alternatives are found in waste generation, employment levels, and workforce latent cancer fatalities, which would range from 1 to 3 LCFs over the life of the program.