[6450-01-P]

DEPARTMENT OF ENERGY

National Nuclear Security Administration

Notice of Availability of Draft Environmental Impact Statement for the Surplus Plutonium Disposition Program and Announcement of Public Hearings

AGENCY: National Nuclear Security Administration, Department of Energy.

ACTION: Notice of availability and public hearings.

SUMMARY: The National Nuclear Security Administration (NNSA), a semi-autonomous agency within the Department of Energy (DOE), announces the availability of a Draft Environmental Impact Statement for the Surplus Plutonium Disposition Program (SPDP EIS) (DOE/EIS–0549) in compliance with the National Environmental Policy Act of 1969 (NEPA). NNSA is also announcing a 60-day public comment period and four public hearings to receive comments on the Draft SPDP EIS. NNSA prepared the Draft SPDP EIS to evaluate the potential environmental impacts of dispositioning 34 metric tons (MT) of surplus plutonium.

DATES: NNSA invites Federal and state agencies, Native American tribes, state and local governments, industry, other organizations, and members of the public to review and submit comments on the Draft SPDP EIS through [***INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER***]. NNSA will hold four public hearings (three in-person hearings and one online virtual hearing) to present information and receive comments on the Draft SPDP EIS. This information will also be published in local New Mexico and South Carolina newspapers in advance of the hearings. Any changes to the public hearing dates or locations will be announced in the local media and posted on the following website at least 15 days before the hearing date: *https://www.energy.gov/nnsa/nnsa-nepa-reading-room*.

The four public hearings on the Draft SPDP EIS will be at the following dates, times, and locations:

Date	Time	Location

January 19, 2023	Thursday; 6:00 p.m. to 9:00 p.m. Eastern Time	North Augusta Municipal Building, 100 Georgia Avenue, North Augusta, SC 29841
January 24, 2023	Tuesday; 6:00 p.m. to 9:00 p.m. Mountain Time	Carousel House at Pecos River Village Conference Center, 711 Muscatel Drive, Carlsbad, NM 88220
January 26, 2023	Thursday; 6:00 p.m. to 9:00 p.m. Mountain Time	Duane Smith Auditorium, Los Alamos High School, 1300 Diamond Drive, Los Alamos, NM 87544
January 30, 2023	Monday; 7:00 p.m. to 10:00 p.m. Eastern Time 6:00 p.m. to 9:00 p.m. Central Time 5:00 p.m. to 8:00 p.m. Mountain Time 4:00 p.m. to 7:00 p.m. Pacific Time	Online Virtual Hearing NNSA will post the link before the hearing at *https://www.energy.gov/nnsa/nnsa-nepa-reading-room*.

ADDRESSES: Written and oral comments will be given equal weight and NNSA will consider all comments received or postmarked by the end of the comment period in preparing the Final SPDP EIS. Comments received or postmarked after the comment period will be considered to the extent practicable. Written comments on the Draft SPDP EIS or requests for information related to the Draft SPDP EIS should be sent by email to SPDP-EIS*@nnsa.doe.gov* or to Ms. Maxcine Maxted, NEPA Document Manager, National Nuclear Security Administration, Office of Material Management and Minimization, P.O. Box A, Aiken, SC 29802. You may also comment by phone by leaving a message at (803) 952-7434. Before including your address, phone number, email address, or other personally identifiable information in your comment, please be advised that your entire comment—including your personally identifiable information—may be made publicly available. If you wish for NNSA to withhold your name and/or other personally identifiable information, please state this prominently at the beginning of your comment. You may also submit comments anonymously.

The Draft SPDP EIS is available online at: *https://www.energy.gov/nnsa/nnsa-nepa-reading-room* and *https://www.energy.gov/nepa/doeeis-0549-surplus-plutonium-disposition-program*.

FOR FURTHER INFORMATION CONTACT: For further information about this notice, please contact Ms. Maxcine Maxted, NEPA Document Manager, National Nuclear Security Administration, Office of Material Management and Minimization, P.O. Box A, Aiken, SC 29802; email: *SPDP-EIS@nnsa.doe.gov*; or call (803) 952-7434 to leave a message.

SUPPLEMENTARY INFORMATION:

Background

NNSA prepared the Draft SPDP EIS pursuant to NEPA (42 U.S.C. 4321 *et seq*.), the Council on Environmental Quality's NEPA regulations (40 CFR parts 1500–1508) and the DOE NEPA implementing procedures (10 CFR part 1021). NNSA's previous NEPA reviews and decisions regarding the disposition of surplus plutonium are summarized in section 1.1 of the SPDP EIS. The following paragraphs describe recent developments relevant to the scope of the SPDP EIS.

In 2015, NNSA completed the Surplus Plutonium Disposition Supplemental Environmental Impact Statement (SPD Supplemental EIS) (DOE/EIS-0283-S2). In the SPD Supplemental EIS, NNSA evaluated the environmental impacts of alternatives for dispositioning 13.1 MT of surplus plutonium (7.1 MT of pit and 6 MT of non-pit) for which a disposition path had not been assigned. The alternatives evaluated in the 2015 SPD Supplemental EIS included the Mixed Oxide (MOX) Fuel Alternative, the Waste Isolation Pilot Plant (WIPP) Alternative, and two variations of waste immobilization. In addition, NNSA evaluated four options for pit disassembly and conversion (pit disassembly and conversion is equivalent to pit disassembly and processing [PDP] as used in this Notice and the Draft SPDP EIS) using facilities at the Savannah River Site (SRS) and Los Alamos National Laboratory (LANL). In 2015, NNSA announced its preferred alternative for the 6 MT of non-pit surplus plutonium evaluated in the SPD Supplemental EIS was to prepare this plutonium for eventual disposal at the WIPP facility in Carlsbad, New Mexico (80 FR 80348, December 24, 2015). In a 2016 Record of Decision (ROD), NNSA announced a decision to disposition the 6 MT of non-pit surplus plutonium by

downblending it with an adulterant (downblending is a process equivalent to dilution in the dilute and dispose strategy in the Draft SPDP EIS), packaging it as contact-handled transuranic (CH-TRU) waste, and shipping it to the WIPP facility for disposal (81 FR 19588). In the 2016 ROD, NNSA did not make a decision about the disposition of the 7.1 MT of pit plutonium or about the various options for pit disassembly and conversion that were analyzed in the 2015 SPD Supplemental EIS.

In 2016, NNSA, partnering with the U.S. Army Corps of Engineers, developed an independent cost estimate for the MOX Fuel Fabrication Facility (MFFF) project, and concluded that the cost of the project, upon completion of construction, would be approximately $17 billion, and construction would not be complete until 2048. Congress directed NNSA to prepare a lifecycle cost estimate for disposal of surplus plutonium using the same approach announced for the 6 MT, now referred to as the dilute and dispose strategy. The completed cost estimate indicated that the estimate-to-complete lifecycle cost of the dilute and dispose strategy would be substantially lower than the cost to complete the MOX project. In response, the Secretary of Energy halted construction of the MOX fuel project in May 2018 by waiving the requirement to use funds for construction and support activities for the MFFF per the National Defense Authorization Act. In a letter dated May 10, 2018, the Secretary of Energy certified that "the remaining lifecycle cost for the dilute and dispose approach will be less than approximately half of the estimated remaining lifecycle cost of the MOX fuel program." On October 10, 2018, NNSA issued a notice of terminating the contract for construction of MFFF. On February 8, 2019, the U.S. Nuclear Regulatory Commission (NRC) terminated the construction license for MFFF (NRC 2019). NNSA is preparing this SPDP EIS to evaluate alternatives for disposition of the 34 MT of surplus plutonium previously designated for disposition using the MOX fuel program that no longer has a disposition path.

In 2020 NNSA prepared a Supplement Analysis (SA) based on the analysis presented in the 2015 SPD Supplemental EIS. NNSA determined that disposition of 7.1 MT of non-pit surplus

plutonium was not a substantial change in the action analyzed in the 2015 SPD Supplemental EIS to disposition 7.1 MT of pit plutonium via the WIPP Alternative, and that the environmental impacts had been sufficiently analyzed. NNSA subsequently issued an Amended ROD (AROD) to include preparation of an additional 7.1 MT of non-pit surplus plutonium for disposal as CH-TRU waste at the WIPP facility (85 FR 53350, August 28, 2020). The SA and AROD are available online at *https://www.energy.gov/nnsa/nnsa-nepa-reading-room*.

The 7.1 MT of non-pit surplus plutonium to be sent to the WIPP facility as CH-TRU waste is part of the 34 MT of surplus plutonium that NNSA had decided to disposition by fabricating it into MOX fuel for use in commercial reactors. In the same 2020 AROD, NNSA also decided that non-pit metal processing (NPMP) may be performed at either LANL or SRS.

Purpose and Need for Agency Action

Since the end of the Cold War in the early 1990s and the Presidential declarations of surplus fissile materials, DOE has been charged with the disposition of surplus plutonium.

NNSA's purpose in taking action is to support safe and secure disposition of 34 MT of plutonium that is surplus to the Nation's defense needs, in a reasonable time frame and at a reasonable cost, so that it is not readily usable in nuclear weapons. To achieve this, NNSA must use mature methods and proven technologies that are based on processes requiring minimal research and engineering development.

Proposed Action and Alternatives

Both the Preferred Alternative and the No Action Alternative in the Draft SPDP EIS use the dilute and dispose strategy and both address up to 7.1 MT of non-pit surplus plutonium that NNSA previously decided to dispose of using the dilute and dispose strategy (85 FR 53350). The dilute and dispose strategy includes processing surplus plutonium to plutonium oxide,

diluting it with an adulterant to inhibit plutonium recovery, and disposing the resulting CH-TRU waste at the WIPP facility.

Preferred Alternative

NNSA's Preferred Alternative is to use the dilute and dispose strategy for 34 MT of surplus plutonium comprised of both surplus pit and non-pit surplus plutonium. The exact amounts of pit and non-pit forms of plutonium that compose the 34 MT are safeguarded, so they cannot be delineated further. Therefore, to bound the impacts, the analysis in the SPDP EIS evaluates the impacts of dispositioning 34 MT of surplus plutonium in pit form and the impacts of dispositioning 7.1 MT of non-pit surplus plutonium. However, the SPDP mission involves only 34 MT of surplus plutonium. The activities that are part of the Preferred Alternative would occur at five DOE sites—Pantex in Texas, LANL in New Mexico, SRS in South Carolina, the Y-12 National Security Complex (Y-12) in Tennessee, and the WIPP facility in New Mexico. NNSA has developed four sub-alternatives for the Preferred Alternative based on the location of activities.

Base Approach Sub-Alternative

Under the Base Approach Sub-Alternative, NNSA analyzes the impacts of shipping 34 MT of surplus pit plutonium from Pantex to LANL and disassembling and processing (*i.e.,* PDP) the 34 MT of surplus pit plutonium at LANL with subsequent shipment of the decontaminated and oxidized highly enriched uranium (HEU) to Y-12. NNSA also analyzes the impacts of processing 7.1 MT of non-pit surplus plutonium at LANL, using some of the same capabilities as PDP. This sub-alternative would rely on expanding existing capabilities at LANL in the Plutonium Facility (PF-4) for PDP and modifying or building additional support facilities. The resulting plutonium oxide from the surplus pit and non-pit surplus plutonium would be shipped to K-Area at SRS, where it would be diluted, characterized, and packaged for shipment to and disposal at the WIPP facility.

SRS NPMP Sub-Alternative

The SRS NPMP Sub-Alternative is similar to the Base Approach Sub-Alternative. NNSA analyzes the impacts of shipping 34 MT of surplus pit plutonium from Pantex to LANL and PDP of the 34 MT of surplus pit plutonium at LANL. The decontaminated and oxidized HEU would then be shipped to Y-12. This sub-alternative would rely on NNSA expanding existing capabilities at LANL in PF-4 for PDP and modifying or building additional support facilities. Plutonium oxide resulting from PDP would be shipped to SRS (K-Area). Unlike the Base Approach Sub-Alternative, under this sub-alternative, NNSA does not analyze NPMP at LANL. Instead, processing of 7.1 MT of non-pit surplus plutonium would occur in the SRS K-Area either in Building 105-K or in a modular system adjacent to the building. Under this sub-alternative, NNSA considers the impacts of dilution and characterization and packaging (C&P) of the diluted plutonium oxide CH-TRU waste in SRS's K-Area for shipment to and disposal at the WIPP facility.

All LANL Sub-Alternative

Under the All LANL Sub-Alternative NNSA would use only capabilities at LANL for the entire disposition pathway prior to shipment to the WIPP facility. Under this sub-alternative, NNSA analyzes the impacts of shipping 34 MT of surplus pit plutonium from Pantex to LANL, PDP at LANL, and shipment of the decontaminated and oxidized HEU to Y-12. NNSA would rely on expanding existing capabilities at LANL in PF-4 for PDP and modifying or building additional support facilities. NNSA also analyzes the impacts of processing 7.1 MT of non-pit surplus plutonium at LANL in PF-4. Under this sub-alternative, NNSA considers the impacts of dilution in PF-4 and C&P of the diluted plutonium oxide CH-TRU waste for shipment to and disposal at the WIPP facility.

All SRS Sub-Alternative

Under the All SRS Sub-Alternative NNSA would use only capabilities at SRS for the entire disposition pathway prior to shipment to the WIPP facility. Under this sub-alternative, NNSA analyzes the impacts of shipping 34 MT of surplus pit plutonium from Pantex to SRS and the disassembly and processing of the 34 MT of surplus pit plutonium and processing 7.1 MT of non-pit surplus plutonium in a new capability installed at SRS in either K-Area or F-Area. NNSA analyzes the subsequent shipment of the decontaminated and oxidized HEU to Y-12 and the shipment of by-product material to LANL. Under this sub-alternative, NNSA considers the impacts of dilution and C&P of the diluted plutonium oxide CH-TRU waste in SRS's K-Area for shipment to and disposal at the WIPP facility.

No Action Alternative

The No Action Alternative is the continued management of 34 MT of surplus plutonium. This includes (1) continued storage of surplus pits at Pantex, (2) continuing the plutonium mission at LANL to process up to 400 kg of actinides (including surplus plutonium) per year, and (3) disposition of up to 7.1 MT of non-pit surplus plutonium for which the decision to use the dilute and dispose strategy was announced in NNSA's 2020 AROD (85 FR 53350).

Final SPDP EIS

Following this public comment period on the Draft SPDP EIS, and after consideration of comments received, NNSA will prepare a Final SPDP EIS. NNSA will announce the availability of the Final SPDP EIS in the *Federal Register* and local media outlets. If warranted, NNSA will issue a ROD no sooner than 30 days after publication by the Environmental Protection Agency of a Notice of Availability of the Final SPDP EIS.

Signing Authority

This document of the Department of Energy was signed on December 8, 2022, by Jill Hruby, Under Secretary for Nuclear Security and Administrator, NNSA, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on December 9, 2022.

Treena V. Garrett,
Federal Register Liaison Officer,
U.S. Department of Energy.

[FR Doc. 2022-27152 Filed: 12/15/2022 8:45 am; Publication Date: 12/16/2022]