



[6450-01-P]

DEPARTMENT OF ENERGY

National Nuclear Security Administration

Amended Record of Decision for the Complex Transformation Supplemental Programmatic Environmental Impact Statement

AGENCY: National Nuclear Security Administration, Department of Energy.

ACTION: Amended record of decision.

SUMMARY: The National Nuclear Security Administration (NNSA), a semi-autonomous agency within the U.S. Department of Energy (DOE), is announcing this amendment to the December 19, 2008, Record of Decision (ROD) for the Complex Transformation Supplemental Programmatic Environmental Impact Statement—Operations Involving Plutonium, Uranium, and the Assembly and Disassembly of Nuclear Weapons (Complex Transformation SPEIS—2008 Programmatic ROD). In this Amended ROD, NNSA announces its programmatic decision to implement elements of a Modified Distributed Centers of Excellence (DCE) Alternative whereby Los Alamos National Laboratory (LANL) will produce a minimum of 30 war reserve pits per year for the national pit production mission during 2026 and implement surge efforts to exceed 30 pits per year as needed. NNSA will implement this decision without construction of the Chemistry and Metallurgy Research and Replacement Nuclear Facility (CMRR-NF). NNSA has previously evaluated this action at the programmatic level in the Complex Transformation SPEIS and at the site-specific level in the LANL Sitewide Environmental Impact Statement (SWEIS), and recently completed a review of those prior analyses in a separate Supplement Analysis (SA) for each document. Pit production alternatives were previously analyzed in the Complex Transformation SPEIS.

FOR FURTHER INFORMATION CONTACT: For further information on this Amended ROD or the 2019 SPEIS SA, contact: Mr. James R. Sanderson, Office of NEPA Policy and Compliance, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585-0119; phone: (202) 586-1402; or email to: *Jim.Sanderson@hq.doe.gov*. This Amended ROD, the 2019 SPEIS SA, and related NEPA documents are available on the internet at <https://www.energy.gov/nnsa/nnsa-nepa-reading-room>.

SUPPLEMENTARY INFORMATION:

Background

As national policy and national defense needs have evolved, NNSA prepared an SA to the Complex Transformation SPEIS (2019 SPEIS SA) (DOE/EIS-0236-SA-02). The 2019 SPEIS SA evaluates whether since issuing the Complex Transformation SPEIS there have been substantial changes to NNSA's proposed implementation of expanded pit production in the U.S. or significant new circumstances or information relevant to environmental concerns, within the meaning of the National Environmental Policy Act (NEPA). NNSA has re-evaluated the single-site pit production strategy announced in the 2008 Programmatic ROD but will not announce any further decisions on pit production until completion of a site-specific Environmental Impact Statement (EIS) for pit production at the Savannah River Site (SRS).

NNSA has a statutory mission to maintain and enhance the safety, reliability, and performance of the U.S. nuclear weapons stockpile, including the ability to design, produce, and test, in order to meet national security requirements. In the Complex Transformation SPEIS, NNSA considered how to configure facilities that hold Category I and Category II quantities of Special Nuclear Material (SNM) across the nuclear weapons complex (Complex), including the three functional areas of plutonium, uranium operations, and assembly/disassembly/high explosives in various

ways. These alternatives were broadly categorized into a Distributed Centers of Excellence (DCE) Alternative, a Consolidated Centers of Excellence (CCE) Alternative, and Capability-Based Alternative. The Complex Transformation SPEIS also analyzed a No Action Alternative. Pit production levels of up to 200 pits per year at a single site were analyzed in the DCE and CCE Alternatives, and nominal pit production levels of up to 50 pits per year were analyzed under the Capability-Based Alternative. With respect to plutonium operations and pit production, the 2008 Programmatic ROD continued NNSA's prior decision to produce 20 pits per year at LANL until completion of a future Nuclear Posture Review (NPR).

Both federal law and national security policy now require pit production rates of a minimum of 30 pits per year at LANL during 2026 and not less than 80 pits per year nationally during 2030. (50 USC 2538a; Pub. L. 115-232). Because operations involving SNM are complex, implementing changes in operations such as pit production takes several years. NNSA is issuing this Amended ROD on those aspects of the national pit production mission at LANL that have been analyzed at both the programmatic and site-specific level by final environmental impact statements. NNSA may issue additional Amended RODs, as appropriate, on other aspects of the national pit production mission upon completion of further site-specific analysis at SRS. Prior to issuing this Amended ROD, NNSA prepared the 2019 SPEIS SA to determine if the existing Complex Transformation SPEIS should be supplemented, a new EIS should be prepared, or that no further NEPA analysis would be required. Based on the analysis presented in the 2019 SPEIS SA, NNSA determined that no further NEPA analysis was needed prior to issuing this Amended ROD. The scope of this Amended ROD is limited to plutonium operations related to pit production to sustain NNSA's pit production capability and fulfill NNSA's requirements under

federal law and national policy. All other activities conducted pursuant to decisions announced in the 2008 Programmatic ROD are outside the scope of this decision.

Synopsis of the Programmatic EIS and the Supplemental Programmatic EIS Related to Plutonium Operations and the Associated Records of Decision

During the Cold War, the U.S. maintained a pit production capacity of approximately 2,000 pits per year (actual production numbers are classified) but lost this large-scale production capability in the late 1980s. In 1996, the environmental effects of a production rate of up to 80 pits per year at the Savannah River Site (SRS) in South Carolina and at LANL were analyzed in the *Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (SSM PEIS). In December 1996, NNSA issued a ROD announcing a decision setting pit production at LANL at 20 pits per year (61 FR 68014; December 26, 1996). Tiering from the SSM PEIS, the 1999 LANL SWEIS (DOE/EIS-0283) provided site-specific analysis for pit production levels at LANL of up to 80 pits per year. In the 1999 LANL ROD, NNSA confirmed its decision for pit production at LANL at 20 pits per year. Various supplements to and re-evaluations of the SSM PEIS were completed over the next several years.

In 2008, NNSA prepared the Complex Transformation SPEIS, which analyzes the potential environmental impacts of alternatives for transforming the Complex in a manner consistent with national policy. Acknowledging the shifting needs of national security policy, the Complex Transformation SPEIS was prepared to provide NNSA with a flexible programmatic EIS that could be tiered from when the United States faced the need to implement changes to operations such as pit production. As it relates to plutonium operations, the Complex Transformation SPEIS evaluates the potential impacts of alternatives for structuring the Complex including the DCE Alternative, CCE Alternative, and Capability-Based Alternative, and each of these

alternatives have several sub-alternatives. The 2008 LANL SWEIS again provided site-specific analysis for pit production levels at LANL of up to 80 pits per year. In the 2008 LANL SWEIS ROD and subsequent RODs, NNSA selected a No Action Alternative (continuation of existing operations) with some elements of an Expanded Operations Alternative, which maintained NNSA's decision for pit production levels of 20 pits per year at LANL. In 2019, NNSA published its first site-specific analysis for pit production at SRS, the *Draft Environmental Impact Statement (EIS) for Plutonium Pit Production at the Savannah River Site (SRS) in South Carolina* (DOE/EIS-0541), but at this time that site-specific analysis for SRS has not been finalized.

The Complex Transformation SPEIS considered a wide range of alternatives to provide NNSA with sufficient flexibility in the continued transformation of the Complex. Some of the specific elements of different alternatives and sub-alternatives in the Complex Transformation SPEIS include an analysis of the impacts associated with construction of a new pit production facility to produce 125 pits per year, with surge capacity to produce 200 pits per year. Sites that the Complex Transformation SPEIS evaluates for this level of pit production include LANL, SRS, the Pantex Plant (Pantex) in Texas, the Y-12 National Security Complex (Y-12) in Tennessee, and the Nevada National Security Site in Nevada. At LANL, the Complex Transformation SPEIS also includes an analysis of two distinct upgrades to existing facilities, rather than construction of a new facilities, including one to support production of 125 pits per year (with surge capacity to produce 200 pits per year) and one to support production of 50-80 pits per year. At SRS, the Complex Transformation SPEIS evaluated a pit production facility that would use the planned Mixed-Oxide Fuel Fabrication Facility (MFFF) and Pit Disassembly and Conversion Facility infrastructure. The alternative selected in the 2008 Programmatic ROD was a

combination of the DCE Alternative and a Capability-Based Alternative in which, with respect to plutonium operations, NNSA did not make any new decisions related to pit production capacity beyond 20 pits per year at LANL. In the 2008 Programmatic ROD, NNSA envisioned constructing a new facility—the Chemistry and Metallurgy Research and Replacement Nuclear Facility (CMRR-NF)—as a replacement for portions of an older facility at LANL called the Chemistry and Metallurgy Research (CMR) Facility.

Changes Since Issuance of the Complex Transformation 2008 Programmatic ROD

NNSA has implemented many, but not all, aspects of the 2008 Programmatic ROD with respect to plutonium operations. The primary change is that the CMRR-NF was not constructed.

CMRR-NF was always planned as a support facility for pit production and was not itself to be a pit production facility. Many support operations for pit production have been historically located in CMR. While NNSA remains committed to the closure of the CMR Facility, NNSA has made upgrades to existing plutonium facilities, constructed new support facilities, and made administrative changes that have enabled more efficient use of newer existing LANL facilities. Capabilities once housed in CMR can be relocated to other facilities at LANL, and a new CMRR-NF is no longer required to meet mission needs.

Another change since issuance of the Complex Transformation SPEIS is that NNSA has made substantial facility upgrades to address previous technical and seismic concerns related to LANL's pit production facility, the Plutonium Facility. In the 2009 Amended ROD to the 2008 LANL SWEIS, NNSA issued a decision on certain elements of an Expanded Operations Alternative at LANL that authorized upgrades to the Plutonium Facility. Over the past ten years, NNSA has been implementing these upgrade projects. Separately, there was a three-year

operational pause in LANL's Plutonium Facility but operations have resumed. The Plutonium Facility is again operational and pit production activities have resumed.

The United States has emphasized the need to eventually produce 80 pits per year and while the drivers and the requirement for pit production have remained relatively unchanged there have been specific changes in the law and national policy regarding pit production since issuance of the Complex Transformation SPEIS. Since 2014, federal law has required the nuclear security enterprise to produce not less than 30 war reserve plutonium pits during 2026. Federal law now requires that the nuclear security enterprise produces not less than 80 war reserve plutonium pits during 2030 (50 USC 2538a).

In addition, on January 27, 2017, the President directed the Department of Defense (DoD) to conduct an NPR which was issued in 2018. The 2018 NPR echoed the need for pit production and articulated a national policy that is consistent with Congressional and Presidential direction, stating that the United States will pursue initiatives to ensure the necessary capability, capacity, and responsiveness of the nuclear weapons infrastructure and the needed skill of the workforce, including providing the enduring capability and capacity to produce plutonium pits at a rate of no fewer than 80 pits per year during 2030. The 2018 NPR also details the evolving and uncertain nuclear threat environment facing the United States. Concurrent with the 2018 NPR, DOE conducted an Analysis of Alternatives (AoA) to identify and assess alternatives across DOE sites that could deliver the infrastructure to meet the sustained plutonium pit requirements of 80 pits per year. To achieve the required annual pit production rate, the AoA report considered the construction of new facilities and the refurbishment of existing facilities and identifies SRS and LANL as the two preferred alternatives to meet pit production requirements.

In 2018, Congress and the President also directed that LANL will produce a minimum of 30 pits per year for the national pit production mission and directed it be capable of surge efforts to exceed 30 pits per year to meet NPR and national policy (Public Law 115-232, Section 3120). To these ends, the DoD Under Secretary of Defense for Acquisition and Sustainment and the NNSA Administrator issued a Joint Statement on May 10, 2018, describing NNSA's recommended alternative to pursue a two-prong approach—50 pits per year produced at SRS and a minimum of 30 pits per year produced at LANL. In addition to improving the resiliency, flexibility, and redundancy of our Nuclear Security Enterprise by reducing reliance on a single production site, this approach enables the capability to allow for enhanced warhead safety and security to meet DoD and NNSA requirements; deliberate, methodical replacement of older existing plutonium pits with newly manufactured pits as risk mitigation against plutonium aging; and response to changes in deterrent requirements driven by renewed great power competition. Finally, since issuance of the 2008 Programmatic ROD, a significant portion of the MFFF at SRS has been constructed. At the time that the Complex Transformation SPEIS was being completed, construction of the MFFF had just begun. The MFFF was built to produce mixed oxide fuel from surplus plutonium for use in commercial nuclear reactors. For a variety of reasons NNSA issued a Notice of Termination to the MFFF construction contractor on October 10, 2018, cancelling the contract for the facility. The constructed portion of MFFF was built to current safety and security standards and contains three floors and more than 400,000 square feet of available space. The potential availability of this facility is, in part, why NNSA has reevaluated a single pit production site at the programmatic level and is currently conducting a site-specific NEPA analysis for pit production at SRS.

NEPA Process for Amending the ROD

NNSA prepared this Amended ROD pursuant to the regulations of the Council on Environmental Quality (CEQ) for implementing NEPA (40 CFR parts 1500-1508) and DOE's NEPA implementing procedures (10 CFR part 1021). This Amended ROD is based on information and analysis in the Complex Transformation SPEIS (DOE/EIS-0236-S4) issued on October 24, 2008 (73 FR 63460) and public comments received; the 2019 SPEIS SA (DOE/EIS-0236-SA-02) and public comments received; other NEPA analysis and public comments as noted in the 2019 SPEIS SA; and other factors including federal law and NNSA's mission.

The Draft Complex Transformation SPEIS included a robust public participation process. NNSA received comments from Federal agencies; state, local, and tribal governments; public and private organizations; and individuals. In addition, during the 20 public meetings that NNSA held on the Draft Complex Transformation SPEIS, more than 600 speakers made oral comments. NNSA reviewed and considered all comments received on the Draft Complex Transformation SPEIS before issuing the 2008 Programmatic ROD.

NNSA prepared the 2019 SPEIS SA to determine whether, prior to proceeding with the effort to produce plutonium pits at a rate of not less than 80 pits per year during 2030, the existing Complex Transformation SPEIS should be supplemented, a new environmental impact statement be prepared, or that no further NEPA analysis is required. Although pertinent regulations do not require public comment on an SA, NNSA decided, in its discretion, that public comment in this instance would be helpful. NNSA issued the Draft 2019 SPEIS SA for public review on June 28, 2019 (84 FR 31055). NNSA considered all comments received during the public comment period. NNSA also reviewed all comment documents received during the public scoping process for the site-specific SRS Pit Production EIS for relevance to the 2019 SPEIS SA. NNSA included a comment response document as Appendix A to the Final 2019 SPEIS SA. After

preparing and considering the 2019 SPEIS SA, NNSA has determined that no further NEPA analysis is needed prior to issuing this Amended ROD.

Summary of Impacts

In Section 2.3 of the 2019 SPEIS SA, NNSA discusses environmental changes at LANL that have occurred since publication of the Complex Transformation SPEIS and that are relevant to the analysis in the 2019 SPEIS SA. The 2019 SPEIS SA analyzes the potential impacts of the Proposed Action on land resources, visual resources, noise, air quality, water resources, geology and soils, ecological resources, cultural resources, socioeconomics, environmental justice, infrastructure, health and safety for normal operations, accidents and intentional destructive acts, waste management, and transportation and traffic. Section 3.2 of the 2019 SPEIS SA provides (1) a summary of the potential environmental impacts from the Complex Transformation SPEIS, (2) the estimate of potential impacts specific to the Proposed Action, and (3) a more detailed analysis of potential impacts for those NEPA resource areas where NNSA determined that there might be potentially significant new circumstances or information relevant to environmental concerns. Tables 3-1 and 3-2 of the 2019 SPEIS SA present information in a comparative fashion for each resource area. Table 3-3 addresses the combined impacts, to the extent that they are known at this time, from pit production at both SRS and LANL. Table 3-4 addresses Complex-wide transportation impacts. Section 4.0 of the 2019 SPEIS SA analyzes cumulative impacts at both a programmatic level and site-specific level.

NNSA's conclusion based on the Final 2019 SPEIS SA is that complex-wide impacts of adopting a Modified DCE Alternative for plutonium operations for all resource areas would not be different, or would not be significantly different, than impacts in existing NEPA analyses.

NNSA has determined that that the proposed action does not constitute a substantial change from

actions analyzed previously and there are no significant new circumstances or information relevant to environmental concerns. While no further NEPA documentation is required at a programmatic level and NNSA may amend the existing Complex Transformation SPEIS ROD, to implement the proposed action NNSA is preparing a site-specific EIS for actions at SRS and has prepared a site-specific SA for actions at LANL. The site-specific SA that formally re-evaluates the SWEIS at LANL is now final. Thus, consistent with 10 CFR 1021.315(e), the existing 2008 Programmatic ROD for the Complex Transformation SPEIS can be amended at this time to document NNSA's decision on pit production at LANL and cancel NNSA's prior commitment to construct the CMRR-NF support facility. NNSA may issue an additional Amended ROD after the site-specific EIS for actins at SRS is completed.

Environmentally Preferable Alternative

The analyses in the Complex Transformation SPEIS of the environmental impacts associated with the programmatic alternatives indicated that the No Net Production/Capability Based Alternative is environmentally preferable. Under this alternative NNSA would maintain capabilities to continue surveillance of the weapons stockpile, produce limited life components, and dismantle weapons, but would not add new types or increased numbers of weapons to the stockpile. This alternative would result in the minimum infrastructure demands, produce the least amount of wastes, reduce worker radiation doses, and require the fewest employees. Almost all of these reductions in potential impacts result from the reduced production levels assumed for this alternative. The environmentally preferable alternative for programmatic alternatives accounts for actions across the complex at multiple sites. This determination may not apply to site-specific determinations where other factors are considered in the analysis.

Amended Decision

NNSA has decided at a programmatic level to implement aspects of a Modified DCE Alternative. LANL will implement actions to produce a minimum of 30 war reserve pits per year during 2026 for the national pit production mission and implement surge efforts to exceed 30 pits per year up to the analyzed limit as necessary. Pit production at these levels will take place without construction of CMRR-NF. Prior to implementing this decision, NNSA will issue a site-specific Amended ROD for the LANL SWEIS, as appropriate. NNSA will continue to re-evaluate the single-site pit production strategy announced in the 2008 Programmatic ROD and complete the site-specific SRS EIS prior to announcing further decisions on pit production. These decisions continue the transformation of the Complex following the end of the Cold War and the cessation of nuclear weapons testing, particularly decisions announced in the 1996 ROD for the SSM PEIS (DOE/EIS-0236) (61 FR 68014; Dec. 26, 1996) and the 2008 Programmatic Alternatives ROD for the Complex Transformation SPEIS. This Amended ROD modifies only the plutonium operations aspects of the 2008 Programmatic ROD related to pit production at LANL. NNSA has made no proposals to, and there are no changes to, NNSA's decisions on other aspects of the 2008 Programmatic ROD.

Basis for Decision

In making these decisions, NNSA considered the 2019 SPEIS SA, the Complex Transformation SPEIS, other referenced NEPA analyses, and its statutory responsibilities to support the nuclear weapons stockpile. Federal law and national security policies continue to require NNSA to maintain a safe, secure, and reliable nuclear weapons stockpile and create a responsive nuclear weapons infrastructure that are cost-effective and have adequate capacity to meet reasonably foreseeable national security requirements. This Amended ROD will enable NNSA to continue meeting federal law and national security requirements.

Mitigation Measures

As described in the Complex Transformation SPEIS and the 2008 Programmatic ROD, NNSA operates in compliance with environmental laws, regulations, and policies within a framework of contractual requirements; many of these requirements mandate actions to control and mitigate potential adverse environmental effects.

Examples of mitigation measures include site security and threat protection plans, emergency plans, Integrated Safety Management Systems, pollution prevention and waste minimization programs, cultural resource and protected species programs, and energy and water conservation programs. Any additional site-specific mitigation actions would be identified in site-specific NEPA documents.

Signing Authority

This document of the Department of Energy was signed on August 24, 2020, by Lisa E. Gordon-Hagerty, 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, D.C. on August 28, 2020.

Treena V. Garrett,

Federal Register Liaison Officer,

U.S. Department of Energy.

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