DEPARTMENT OF ENERGY

Amended Record of Decision for the Continued Interim Operation of the Y–12 National Security Complex

AGENCY: Department of Energy, National Nuclear Security Administration.

ACTION: Amended record of decision.

SUMMARY: The National Nuclear Security Administration (NNSA), a separately organized agency within the U.S. Department of Energy (DOE), is amending its July 2011 Record of Decision for the Continued Operation of the Y-12 National Security Complex (2011 ROD) to reflect its decision to continue to implement on an interim basis a revised approach for meeting enriched uranium requirements (while addressing issues related to seismic analysis), by upgrading existing enriched uranium (EU) processing buildings and constructing a new Uranium Processing Facility (UPF). Additionally, NNSA has decided to separate the single-structure UPF design concept into a new design consisting of multiple buildings, with each constructed to safety and security requirements appropriate to the building’s function. This revised approach is combining elements of the two alternatives previously analyzed in the Final Site-Wide Environmental Impact Statement for the Y–12 National Security Complex, DOE/EIS–0387 (Y-12 SWEIS).

FOR FURTHER INFORMATION CONTACT: For further information on this Amended Record of Decision (ROD), contact: Ms. Terri Slack, Field Counsel, U.S. Department of Energy, National Nuclear Security Administration, NNSA Production Office, P.O. Box 2050, Oak Ridge, TN 37831, (865) 576–1722. For information on the DOE National Environmental Policy Act
SUPPLEMENTARY INFORMATION:

Background

Y-12 is NNSA’s primary site for uranium operations, including EU processing and storage, and is one of the primary manufacturing facilities for maintaining the U.S. nuclear weapons stockpile. Y-12 is unique in that it is the only source of secondaries, cases, and other nuclear weapons components for the NNSA nuclear security mission.

In the Y-12 SWEIS, NNSA analyzed the potential environmental impacts of ongoing and future operations and activities at Y-12. Five alternatives were analyzed in the Y-12 SWEIS: (1) No Action Alternative (maintain the status quo), (2) UPF Alternative, (3) Upgrade in-Place Alternative (4) Capability-sized UPF Alternative, and (5) No Net Production/Capability-sized UPF Alternative. In the 2011 ROD (July 20, 2011, 76 FR 43319), NNSA decided to implement the Capability-sized UPF Alternative and to construct and operate a single-structure Capability-sized UPF at Y-12 as a replacement for certain existing buildings. Subsequent to the publication of the 2011 ROD, concerns about UPF cost and schedule growth prompted NNSA to reevaluate its strategy for meeting EU requirements, including the UPF design approach.

Under the updated strategy, previously approved in a July 12, 2016, Amended Record of Decision (2016 AROD), NNSA would meet enriched uranium requirements using a revised
approach of upgrading existing enriched uranium processing buildings and constructing a
smaller-scale UPF facility implementing a new multiple building design approach. The updated
strategy is consistent with recommendations from a project peer review of the UPF ["Final
Report of the Committee to Recommend Alternatives to the Uranium Processing Facility Plan in
Meeting the Nation’s Enriched Uranium Strategy"] conducted in 2014. In the new UPF design
approach, the single-structure UPF concept would be separated into multiple buildings, each
being constructed to safety and security requirements appropriate to the building’s function.

NEPA Process for Amending the ROD and Subsequent Litigation
The Y-12 SWEIS evaluated the potential impacts of the reasonable range of alternatives for
continuing enriched uranium processing operations at Y-12 and provided a basis for the 2011
ROD. As discussed above, NNSA’s new strategy of upgrading existing enriched uranium
buildings and constructing UPF with multiple buildings, previously approved in the 2016
AROD, is different from the Capability-sized UPF that NNSA selected in the 2011 ROD.
Instead it is a hybrid approach that combines elements of the Capability-sized UPF Alternative
and certain elements of the Upgrade in Place Alternative. Consequently, NNSA prepared a
Supplement Analysis (DOE/EIS-0387-SA-01) in accordance with CEQ and DOE regulations
implementing NEPA (40 CFR 1502.9(c) and 10 CFR 1021.314(c)) to determine (1) if there are
potential environmental impacts that differ from those analyzed in the Y-12 SWEIS that would
be expected to result from NNSA’s new strategy and (2), if so, if the impacts would be
considered significant in the context of NEPA (40 CFR 1508.27), which would require
preparation of a new or Supplemental Environmental Impact Statement (EIS). On July 12,
2016, NNSA issued the 2016 AROD, determining that because the action was a hybrid of two
alternatives reviewed in the 2011 SWEIS and its environmental impacts would not be significantly different or significantly greater than those reviewed in the prior analysis, it need not prepare a new or supplemental environmental impact statement (EIS). NNSA again updated this environmental analysis under NEPA in its Supplement Analysis issued in August 2018. This Supplement Analysis reviewed new information post-dating the 2011 SWEIS, and again determined that NNSA need not prepare a new or supplemental EIS because this new information did not result in environmental impacts significantly different or significantly greater than those reviewed in the prior analysis.

As the result of a lawsuit filed against DOE and NNSA, the federal district court issued several rulings related to NNSA’s NEPA documents for Y-12. While the judge vacated the AROD, the 2016 Supplement Analysis, and the 2018 Supplement Analysis based on its determination that additional NEPA analysis of new information pertaining to seismic risks at Y-12 was needed, the court held that the NNSA’s new strategy of upgrading existing enriched uranium buildings pursuant to the Extended Life Program and constructing UPF with multiple buildings was adequately considered as part of the 2011 SWEIS. The court further held that NNSA is not required to prepare a Supplemental EIS for the UPF Project or the Extended Life Program. See Memorandum Opinion and Order in Case 3:18-cv-00150-PLR-DCP.

**Summary of Impacts Associated with Continued Interim Operation of the Y-12 National Security Complex**

With respect to the environmental impacts associated with the revised UPF strategy and the Extended Life Program, the court determined that “[b]ecause the environmental effects in the 2011 SWEIS were evaluated along a spectrum – from ‘no action’ at one end, to a brand-new
UPF at the other, and with an ‘Upgrade-in-Place’ program occupying the middle,” NNSA’s new strategy is adequately supported by the Y-12 SWEIS, and the court did not vacate the 2011 ROD or Y-12 SWEIS or enjoin any activities at Y-12. The court also found the NEPA analysis in the 2016 Supplement Analysis and the 2018 Supplement Analysis deficient only as to their analysis of new information pertaining to seismic risks. Thus, consistent with 10 CFR 1021.315(e), the existing 2011 ROD for the Y-12 SWEIS can be amended. However, in accordance with the court’s determination that additional NEPA analysis of new information pertaining to seismic risks at Y-12 is needed, further NEPA documentation will be developed on an expedited basis that includes an unbounded accident analysis of earthquake consequences at Y-12, using updated seismic hazard analyses that incorporate the 2014 United States Geological Survey maps.

Amended Decision

NNSA has decided to continue to operate Y-12 to meet the stockpile stewardship mission critical activities assigned to the site on an interim basis, pending further review of seismic risks at Y-12. NNSA will also meet EU requirements using a hybrid approach of upgrading existing EU buildings under its Extended Life Program and separating the single-structure UPF into multiple buildings, with each constructed to safety and security requirements appropriate to the building’s function;

This amended decision will enable NNSA to maintain the required expertise and capabilities to deliver uranium products while modernizing production facilities. This amended decision to continue operations on an interim basis will avoid many of the safety risks of operating aged buildings and equipment by relocating processes that cannot be sustained in existing, enduring
buildings or through process improvements. Through an Extended Life Program, mission-critical existing and enduring buildings and infrastructure will be maintained and/or upgraded, which will enhance safety and security at the Y-12 site, pending further review of seismic risks at Y-12. Such continued operations are consistent with the court’s ruling and will continue to implement safety improvements under previously approved contracts, pending the completion of additional NEPA documentation on an expedited basis. Once further seismic analysis has been performed, NNSA will issue a new ROD describing, what, if any, changes it has decided to make in light of that analysis.

Signed in Washington, DC, this 21st day of September 2019, for the United States Department of Energy.

Lisa E. Gordon-Hagerty
Under Secretary for Nuclear Security
National Nuclear Security Administration