FINDING OF NO SIGNIFICANT IMPACT

For the

PROPOSED RENEWAL OF SOURCE MATERIAL LICENSE SUB-526 METROPOLIS WORKS URANIUM CONVERSION FACILITY (MASSAC COUNTY, ILLINOIS)

RESPONSIBLE AGENCY: U.S. Department of Energy

ACTION: Adoption of Environmental Assessment and Issuance of Finding of No Significant Impact

SUMMARY:

As authorized by the Atomic Energy Act of 1954 (AEA), as amended, Section 66, the Department of Energy's National Nuclear Security Administration (NNSA) intends to conduct two or more procurement actions in fiscal year (FY) 2022. First, NNSA will purchase natural assay uranium oxide (U_3O_8) from one or more domestic production firms. NNSA will acquire uranium by book transfer of material already packaged, shipped to, and stored at uranium conversion facilities. Secondly, NNSA will procure services for converting U_3O_8 to uranium hexafluoride (UF₆). The second procurement scope will likely include continued storage of UF₆ at the domestic conversion facility for multiple years. NNSA proposes these procurements to establish a reserve of U.S.origin uranium, in accordance with the Atomic Energy Act of 2020 (AEA), as part of the Consolidated Appropriations Act, 2021 (Public Law 116-260).

The end use of this material is programmatic uses authorized by the AEA. The estimated scope will involve approximately one million pounds of U_3O_8 to be converted to an estimated 450,000 kilograms U in UF₆.

The proposed procurement is modest and will likely result in no new production of U_3O_8 at domestic production facilities. Rather, the procurement will involve U_3O_8 already produced, transported to, and stored at a conversion plant. Conversion services will likely be subject to a sole-source procurement involving a contract with ConverDyn, the marketer of services for the only domestic commercial sector uranium conversion facility authorized to convert U_3O_8 to UF₆. The facility is located in Metropolis, Illinois, and is known as the Metropolis Works Plant (MTW). The proposed conversion activity would represent approximately 10 percent of MTW's annual operating capacity. Again, as the procurement of conversion services is modest, it will not likely result in new conversion activities.

Specific environmental impacts associated with the uranium conversion facility are assessed by the NRC in *Environmental Assessment for the Proposed Renewal of Source Material License SUB–526, Metropolis Works Uranium Conversion Facility*, Massac County, Illinois, October 2019 (see 84 FR 55339). NNSA has adopted the Final EA after independently reviewing it and determining that the actions covered by the EA and the proposed action are substantially the same.

Purpose and Need: In 2019, the President established the Nuclear Fuel Working Group (NFWG) to perform "a fuller analysis of national security considerations with respect to the entire nuclear fuel supply chain". One of the recommendations of the NFWG was to establish a strategic uranium reserve. The President's FY 2021 Budget Request (PBR) sought \$150M for DOE's Office of Nuclear Energy (NE) to establish a Uranium Reserve. In FY 2021, Congress ultimately appropriated \$75M to NNSA's Weapons Activities account and directed NNSA to implement the program in coordination with NE. NNSA issued a Request for Information in August 2021 to solicit stakeholder input, and in January 2022 posted a summary of the over 26,000 responses received, at regulations.gov.

Proposed Action: NNSA plans to establish a reserve of U.S.-origin uranium, in accordance with the Atomic Energy Act of 2020 (AEA), as part of the Consolidated Appropriations Act, 2021 (Public Law 116-260). NNSA will accomplish this by:

- Purchasing U₃O₈ in FY 2022 from one or more domestic production firms. NNSA will acquire uranium by book transfer of material already packaged, shipped to, and stored by uranium conversion facilities.
- Procuring services for converting U_3O_8 to uranium hexafluoride (UF₆). The second procurement scope will likely include continued storage of UF₆ at the domestic conversion facility for multiple years.

No Action Alternative: The No Action Alternative provides a baseline from which to compare the effects of the action alternatives. Under the No Action Alternative, there would be no purchase of uranium oxide and no book transfer of this material. In addition, NNSA would not procure services for converting uranium oxide to uranium hexafluoride or pursue storage of this material.

NRC EA:

NRC prepared the Final *Environmental Assessment for the Proposed Renewal of Source Material License SUB-526 Metropolis Works Uranium Conversion Facility* (Massac County, Illinois) (ML 19273A012) (October 2019) following NRC regulations in 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions, " that implement the National Environmental Policy Act of 1969 (NEPA), as amended (Title 42 of the United States Code (42 U.S.C.) Section 4321 et seq.), and pursuant to NRC staff guidance in NUREG-1748, "Environmental Review Guidance for Licensing Action Associated with NMSS programs," issued August 2003 (NRC 2003).

In parallel with the Environmental Report (ER) described in the EA, the NRC is performing its detailed safety analysis to assess compliance with applicable regulations 10 CRF Part 20, "Standards for Protection Against Radiation," and 10 CRFR Part 40, "Domestic Licensing of Source Material." The NRC's safety analysis will be documented in a separate safety evaluation report (SER).

AGENCY CONSULTATION: NRC staff consulted with the Illinois State Historic Preservation Officer and invited 11 potentially affected American Indian Tribes to consult under the requirements of Section 106 of the NHPA. As part of the Endangered Species Act (ESA) Section 7 consultation process, the NRC staff contacted the USFWS to discuss the federally listed species that may occur near the MRW. The NRC staff also consulted with State of Illinois (IEPA) staff and with local officials.

DETERMINATION: NNSA has independently reviewed the NRC's Final EA and determined that the analysis meets DOE NEPA regulations and adequately assesses and discloses the environmental impacts of the Proposed Action and No Action Alternatives. Based on the NNSA's independent evaluation, the Final EA is hereby adopted.

Based on the evaluation presented in the Final EA, DOE has determined there would be no significant impact from proceeding with the Proposed Action. The basis of this determination is that there are no adverse direct, indirect, or cumulative environmental effects that would likely result from the Proposed Action.

The DOE therefore approves this Finding of No Significant Impact pursuant to NEPA, the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CRF 1500), and DOE NEPA Implementing Procedures (10 CRF 1021). No Environmental Impact Statement is required for this Proposal.

FOR FURTHER INFORMATION CONTACT: For further information on this EA, contact Mr. James Sanderson, NA-GC, National Nuclear Security Administration, 1000 Independence Ave., SW, Rm 6E-067, Washington, DC 20585 or via email at <u>jim.sanderson@nnsa.doe.gov</u>.

For further information on the DOE NEPA process contact the Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Ave., SW, Washington DC 20585; telephone (202) 586-4600 or (800) 472-2756.

2854N22

Date

Summer N.Jones Assistant Deputy Administrator

For Production Modernization