Department of Energy
National Nuclear Security Administration
Washington, DC 20585

FINDING OF NO SIGNIFICANT IMPACT FOR THE ENVIRONMENTAL ASSESSMENT FOR THE CONSTRUCTION TO SUPPORT INITIAL PRODUCTION OF HIGH-PURITY DEPLETED URANIUM PROJECT (DOE/EA-2252-S1)

RESPONSIBLE AGENCY: U.S. Department of Energy National Nuclear Security Administration (DOE/NNSA)

ACTION: Finding of No Significant Impact

SUMMARY: The National Nuclear Security Administration (NNSA), a semi-autonomous agency within the United States (U.S.) Department of Energy (DOE), completed a Supplemental Environmental Assessment (DOE/EA-2252-S1) for the construction necessary to support initial production of the high-purity depleted uranium (HPDU) project.

NNSA published a Final Environmental Assessment (EA) for 'Off-site Depleted Uranium Manufacturing' (DOE/EA-2252) and Finding of No Significant Impact (FONSI) in November 2024, relative to HPDU contracting services. This assessment analyzed the potential environmental effects associated with depleted uranium (DU) manufacturing in existing commercial facilities in Oak Ridge, Tennessee and Jonesborough, Tennessee. The analysis included expanding HPDU production at the Aerojet Ordnance Tennessee facility, now known as BWXT Nuclear Operations Group – Jonesborough (NOG-J) site in Jonesborough, Tennessee following BWXT's January 2025 acquisition of the site.

Design of the expanded HPDU production at BWXT NOG-J has progressed since DOE/EA-2252 was published. Due to design changes and associated consideration of worker health and safety, a supplemental Environmental Assessment (SEA) was performed for *Construction to Support Initial Production of the High-Purity Depleted Uranium Project*. The SEA analyzes a Modified Action to construct four supporting structures and associated infrastructure that were not specifically part of the original contract or design concepts evaluated in DOE/EA-2252.

The *Construction to Support Initial Production of the High-Purity Depleted Uranium Project* SEA demonstrates that the Modified Action is not a federal action likely to significantly affect the quality of the human environment within the meaning of the National Environmental Policy Act (NEPA). Therefore, preparation of an environmental impact statement (EIS) is not required.

BACKGROUND: DOE/NNSA has the primary responsibility to maintain and enhance the safety, security, and performance of the U.S. nuclear weapons stockpile.

NNSA requires HPDU metal to fulfill its national security requirements. NNSA has contracted with BWXT Ordnance Tennessee, Inc. to produce HPDU metal at BWXT NOG-J. The Y-12 National Security Complex will use the HPDU metal produced at BWXT NOG-J to satisfy NNSA's warhead modernization program efforts.

BWXT plans to expand current HPDU operations in an existing building at NOG-J, Building 300, to meet the initial production milestone of 200 metric tons (MT) of HPDU by the first

quarter of fiscal year 2029. This activity was fully addressed in DOE/EA-2252 from November 2024.

SUPPLEMENTAL INFORMATION: Design of the expanded HPDU production at BWXT NOG-J progressed since DOE/EA-2252 was published and now some activity that was to be performed entirely in Building 300 will take place in separate structures. Therefore, a SEA was necessary to analyze the potential environmental effects of NNSA's proposal to construct a 20 MT HPDU pilot hydrofluorination operations building (Building 301), and three operations facilities to support the production of nominally 150 MT HPDU per year, including a chemical reactor and storage building (Building 310), two tank farms (311 Tank Farm and 312 Tank Farm), and support structures. These facilities and the electric and gas utility easements will cover 3.1 acres.

ENVIRONMENTAL CONSEQUENCES: Regional effects analyzed in DOE/EA-2252 were found not to have significant impacts. The analysis in Section 3 of the SEA demonstrates that effects associated with construction identified in the Modified Action are minor. Land disturbance would be minimal (i.e., 3.1 acres) and generally limited to previously disturbed land. Construction activities require land disturbance permits that include sediment and erosion control measures to protect receiving water bodies. Visually, the external modifications would not noticeably change the viewshed for areas within one mile of the site. Short-term air quality effects associated with construction would occur, but emissions would be controlled with dust suppression controls and other construction-based best management practices identified in required permits. Impacts to biological resources, including threatened and endangered or special status species, are not anticipated given construction would occur in an industrial-use area and primarily on previously disturbed land. Additional traffic for construction-related functions to the site will be routed on commercial traffic roadways and will not cause a significant increase in traffic approaching the NOG-J facility. Electricity and natural gas requirements would be met with utility line extensions, which will also be installed on previously disturbed land by local utility companies.

DETERMINATION: Based on the analysis in DOE/EA-2252 and as supplemented by the *Construction to Support Initial Production of the High-Purity Depleted Uranium Project* SEA in DOE/EA-2252-S1, a Modified Action of constructing four supporting structures and associated infrastructure for DU manufacturing in Jonesborough, Tennessee will not have a significant effect on the quality of the human environment. Therefore, preparation of an EIS is not required.

PUBLIC AVAILABILITY: The Final SEA and this Finding of No Significant Impact (FONSI) are available to the general public on the DOE NEPA web page (https://www.energy.gov/nepa/doe-environmental-assessments).

Requests for additional information may be submitted via regular mail to the NNSA NEPA Document Manager, Attn: Matthew Tweardy; or by email: nepa@nnsa.doe.gov

Department of Energy
National Nuclear Security Administration
Washington, DC 20585

July 21, 2026

Signature:

JUSTIN RIZZI Digitally signed by JUSTIN RIZZI
Date: 2026.07.21 18:26:24
-04'00'

Brittany Lockhart ACTING FOR
Assistant Deputy Administrator
Office of Strategic Materials Production Modernization
U.S. Department of Energy National Nuclear Security Administration