

# The Savannah River Site Environmental Bulletin

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## **DOE Supplement Analysis (SA) and Amended Record of Decision (AROD) for the Blend Down of Existing Stocks of Highly Enriched Uranium (HEU) to High-Assay Low-Enriched Uranium (HALEU)**

The U.S. Department of Energy (DOE) has prepared a Supplement Analysis (SA) and Amended Record of Decision (AROD) for Highly Enriched Uranium Blend Down to High-Assay Low-Enriched Uranium at the Savannah River Site (DOE/EIS-0240 and DOE/EIS-0279). This SA evaluated the potential environmental impacts of DOE's decision to blend down of approximately 2.2 metric tons (MT) of highly enriched uranium (HEU) to produce approximately 3.1 MT of high-assay low-enriched uranium (HALEU) at the Savannah River Site (SRS) and later transport the HALEU liquid to an offsite commercial vendor for fabrication into reactor fuel for use in nuclear reactors.

HALEU fuels are needed to support the replacement of HEU fuels used in U.S. High-Performance Research Reactors as well as advanced nuclear power reactor designs. The projected demand for HALEU far exceeds the current supply. The current inventory of HEU solution in storage in H-Area can be blended down to HALEU which could help satisfy the nation's needs until other commercial initiatives can begin HALEU production.

DOE prepared this SA to evaluate the use of existing H-Area facilities to blend down existing stocks of HEU to HALEU by mixing HEU and natural uranium solutions to achieve a 19.75 percent U-235 (HALEU) solution. The HALEU solution would be shipped to offsite commercial facilities for further processing into HALEU fuel to use in advanced reactors. DOE concludes after analysis that the proposed change and new information discussed in the SA is not a substantial change relative to the proposal analyzed in DOE/EIS-0240 and DOE/EIS-0279. Therefore, no further NEPA analysis is required. DOE has issued an AROD to reflect the decision with respect to blending down HEU to HALEU in H-Area at SRS.

- DOE/EIS-0240-SA-02 and DOE/EIS-0279-SA-08, Supplement Analysis for Highly Enriched Uranium Blend Down to High-Assay Low-Enriched Uranium at Savannah River Site, (DOE/EIS-0240-SA-02 and DOE/EIS-0279-SA-08: Supplement Analysis (April 2025) | Department of Energy)
- DOE/EIS-0240 and DOE/EIS-0279, Amended Record of Decision to the Supplement Analysis for Highly Enriched Uranium Blend Down to High-Assay Low-Enriched Uranium at Savannah River Site, (DOE/EIS-0240 and DOE/EIS-0279: Amended Record of Decision (April 2025) | Department of Energy)

DOE is committed to meeting its obligations under the National Environmental Policy Act (NEPA) as it explores effective measures in managing its natural resources and promoting environmental stewardship.

DOE's NEPA documents are available on the SRS website: <https://www.srs.gov/general/pubs/envbul/nepa1.htm>

FOR FURTHER INFORMATION CONTACT:

Mr. Vernard Dicker, NEPA Compliance Officer, U.S. Department of Energy, Savannah River Operations Office, PO Box A, Aiken, SC 29802; Email: [NEPA-SR-EM@srs.gov](mailto:NEPA-SR-EM@srs.gov)

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**For additional information, contact: Barbara Smoak**, Savannah River Nuclear Solutions, Savannah River Site, Building 703-43A, Aiken, SC 29808 / (803) 952-8060 / [barbara.smoak@srs.gov](mailto:barbara.smoak@srs.gov)

# The SRS Environmental Bulletin

For additional information, contact:

Barbara Smoak

Savannah River Nuclear Solutions, LLC

Savannah River Site

Aiken, S.C. 29808

(803) 952-8060

email: [barbara.smoak@srs.gov](mailto:barbara.smoak@srs.gov)

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Building 703-43A

Aiken, S.C. 29808