ARF-023974

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

ENVIRONMENTAL COMPLIANCE &

November 22, 2022

Mr. Brian T. Hennessey, SRS Remedial Project Manager
Infrastructure and Area Completion Division
U.S. Department of Energy
Savannah River Operations Office
Post Office Box A
Aiken, South Carolina 29802

NOV 28 2022

AREA COMPLETION PROJECTS

Dear Mr. Hennessey:

The U.S. Environmental Protection Agency has reviewed the Department of Energy (DOE) Savannah River Site (SRS) Second Early Action Post-Construction Report (EAPCR) for the D Area Operable Unit (DAOU), SEMS #63, ~~May~~ September 2022, including the 488-4D Ash Basin.

Remedial Action was needed at portions of the DAOU because coal related contaminants, associated with past operations of the 484-D Powerhouse, were present that could pose a threat to human health and the environment. This EAPCR summarizes activities performed to implement the selected remedy requirements defined in the 2nd Early Action Record of Decision (EAROD) and the 2nd Early Action Land Use Control Implementation Plan (EALUCIP) for the 488-4D DAOU subunit. The EAPCR documents the Remedial Action Completion for the 488-4D Ash Basin; the report is approved.

488-4D Ash Basin

Arsenic and coal related radionuclides in surface ash were identified as Contaminants of Concern (COCs) that could pose a risk to human receptors (future industrial worker risk >1E-06) at the 488-4D Ash Basin. Additionally, arsenic could pose a risk to ecological receptors (Hazard Quotient (HQ)>1) at the 488-4D Ash Basin. A non-time critical removal action was completed to address surface ash that included water/vegetation removal, monitoring well abandonment and replacement, ash excavation/ consolidation, installation of a geosynthetic cover system and confirmation sampling.

Following removal action completion, coal-related contaminants remain beneath the engineered cover system at the 488-4D Ash Basin that required final remedial action:

- Coal related contaminants may pose a risk to a future industrial worker (> 1E-06) and ecological receptors if direct exposure were to occur and/or pose a potential migration of contaminants to groundwater if leaching of source material occurred.

- Coal related contaminants remain in soil that would pose a risk to human receptors (hypothetical future resident).

- Coal related contaminants beneath the engineered cover system pose a potential for migration of contaminants to groundwater above protection standards if leaching of source material were to occur.

Remedy: Land Use Controls to prevent unrestricted land use

- Maintain engineered cover system to eliminate and/or control all routes of exposure to contaminants beneath the cover that pose a risk to future industrial workers and ecological receptors and/or present a contaminant migration concern.

- Protect hypothetical future residents from exposure to residual contamination in soil.

- No current or future development of the DAOU is planned and land use is anticipated to be industrial.

- SRS will restrict land use through administrative measures and placement and maintenance of warning signs at this subunit.

EALUCIP:

SRS will implement, maintain and monitor the Land Use Control (LUC) elements for the DAOU to ensure remedial action remain protective of human health and the environment, per the EALUCIP. The LUCS include controlled access to SRS, controlled industrial use, warning signs, and deed restriction (upon property transfer) for future use. Annual inspection requirements for the 2nd EALUCIP (signs, access roads and cover system integrity) are specified in the 2nd EALUCIP. Additional inspections may be necessary in the event of unusual weather or any condition warranting inspection.

Land Use Controls cost for all DAOU subunits over 200 years of O&M (indirect and direct) is anticipated to be $9,846,699.00.

If you have any questions or require additional information, please contact Diedre Lloyd at (404) 229-9500 or by email at Lloyd.Diedre@epa.gov.

Sincerely,

H ADAMS Digitally signed by H ADAMS Date: 2022.11.23 14:32:57 -05'00'

H. Glenn Adams, Chief
Restoration & Site Evaluation Branch
Superfund & Emergency Management Division

cc: C.L. Bergren, SRNS-ACP
Susan Fulmer, SCDHEC