



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

December 08, 2018

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Brian Hennessey, 730-B
SRS Remedial Project Manager
Savannah River Operations Office
Area Completion Projects
Post Office Box A
Aiken, South Carolina 29802

ENVIRONMENTAL COMPLIANCE &

DEC 10 2018

AREA COMPLETION PROJECTS

Dear Mr. Hennessey:

The U.S. Environmental Protection Agency (EPA) has reviewed the DOE-SRS D Area Groundwater Operable Unit Letter Report for Calendar Year 2017 Data, CERCLIS # 63, dated July 31, 2018.

EPA cannot approve the above mentioned report until the comments below have been addressed. Should you have any questions or concerns, please feel free to call me at on my cell number 404-229-9500.

Sincerely,

A handwritten signature in black ink, appearing to read "Diedre Lloyd".

Diedre Lloyd
Remedial Project Manager
Restoration & Sustainability Branch
Superfund Division

cc: Angelia Holmes, DOE-SRS, Brian Hennessey, DOE-SRS, Phil Prater, DOE-SRS, Karen Adams, DOE-SRS, Chris Bergren, SRNS-ACP (Signed Original), Susan Fulmer, SCDIEC;

**EPA COMMENTS on the
D AREA GROUNDWATER OPERABLE UNIT LETTER REPORT
for CALENDAR YEAR 2017 DATA**

**SEMS NUMBER: 63
DATED JULY JULY 31, 2018**

**SAVANNAH RIVER SITE
AIKEN, SOUTH CAROLINA**

EPA COMMENTS:

1. The D-Area Groundwater Operable Unit Letter Report for Calendar Year 2017 Data, SEMS Number: 63; dated July 31, 2018 (Letter Report) indicates the metals contamination in groundwater is related to the low pH conditions from the former power plant operations including coal storage and runoff. As such, the pH values in groundwater reportedly correlate with the metals exceedances downgradient of the D-Area Coal Pile Runoff Basin (489-D) and Coal Storage Area (484-17D). However, the figures presented in the Letter Report do not clearly illustrate or define the location of the former D-Area Coal Pile Runoff Basin (489-D) or Coal Storage Area (484-17D). In order to provide a more complete understanding of the site conditions and conceptual site model, revise the figures as appropriate to address this issue.
2. The last paragraph on page 5 of the Letter Report states, "The upcoming D-Area Groundwater OU Treatability Study will involve an injection scenario that will flush low-pH groundwater of out of the upper water table aquifer." It is noted the *Treatability Study Work Plan for Groundwater Injection and Discharge Canal Treatment at the D-Area Groundwater (OU) (U)*, SEMS Number: 63, SRNS-TR-2018-00128, Revision 0, July 2018 indicates an estimated 10 pore space volumes are sufficient to flush the aquifer with an estimated duration of 3 years to meet treatability study objectives. As such, the flushing of 10 pore space volumes would result in some dilution of the upper water table of the Upper Three Runs Aquifer (UTRA) via injection wells. The Letter Report also indicates the primary natural attenuation mechanisms responsible for decreasing trichloroethylene (TCE) concentrations include dilution and dispersion. As such, it is unclear how the reduction in volatile organic compounds (VOCs) and metals concentrations in groundwater will be quantified with respect to natural attenuation mechanisms. For example, it is unclear if decreases in VOCs and/or metals concentrations in groundwater would be the result of dilution created by flushing of 10 pore space volumes or due to dispersion, sorption and/or redox attenuation mechanisms. Revise the Letter Report to provide clarity and explanation that will address these issues.