



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

August 15, 2019

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

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

**ENVIRONMENTAL COMPLIANCE &**

**AUG 22 2019**

**AREA COMPLETION PROJECTS**

Dear Mr. Hennessey:

The U.S. Environmental Protection Agency (EPA) is providing additional clarification on the Action Memorandum for the Non-Time Critical Removal Action for the D-Area Coal Storage Area (484-17D), SEMS #63. EPA concurs with the above Removal Action and the associated Removal Site Evaluation Report and Engineering Evaluation/Cost Analysis (EE/CA) on March 4, 2019. Each of the above referenced documents was reviewed, commented on and concurred on by EPA.

As the lead agency, DOE-SRS determined that a non-time critical removal action was necessary to address low pH levels (acidic) within the D-Area Operable Unit (DAOU). DOE-SRS determined that the DAOU Coal Storage Area contains surface units and source areas that potentially pose a threat to human health and the environment. DOE-SRS has consistently reported low pH levels within the approximately 15-acre D-Area Coal Storage Area which served as a temporary coal storage area from 1953 to 2012 throughout the operations of the D-Area Powerhouse which burned ~160,000 tons of coal/year during its 59 years of operation. DOE-SRS further reported that the long term storage of coal led to the low (acidic) pH levels in the vadose zone soil and groundwater in the D-Area Coal Storage area and throughout the DAOU which have resulted in the leaching of metals and other contaminants into the soil and groundwater columns and a groundwater contaminant plume under the area.

The DOE-SRS proposed a non-time critical removal action within the D-Area Coal Storage Area to address the above described issue to mitigate the acidity in the upper portion of the vadose zone which would also mitigate the acidic groundwater and retard the leaching of metals and other contaminants as the pH levels are adjusted upwards (more neutral) to pH levels near 5.5 and will result in the minimization of future impacts to groundwater over time.

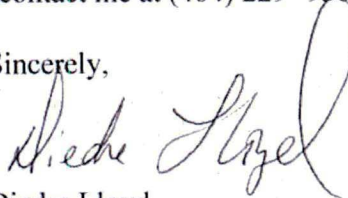
The DOE-SRS chose the National Hazardous Substances Pollution Contingency Plan [40 CFR Section 300.415(b)(2)(iv)] rationale of "*High Levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that might migrate*" to justify the above described non-time critical removal action.

EPA approved and continues to support the action but would like to offer additional clarification with respect to the chosen *40 CFR Section 300.415 (b)(2) iv* rationale. The DOE-SRS listed the high levels of pH as the hazardous substance or pollutant or contaminant in surface soils that might migrate, however, pH is not considered a hazardous substance or pollutant or contaminant. EPA concurs with DOE that the pH is the underlying cause for the leaching of metals and the high levels of metals present within the DAOU groundwater plume which resulted in high levels of hazardous substances or pollutants or contaminants in the groundwater which have the potential to migrate and cause further contamination. The low pH is anticipated to continue (unless action is taken) and has the potential to further exacerbate groundwater MCL levels for metals and other contaminants within the DAOU. Chromium is a hazardous substance with an MCL of 100 ug/L and has been documented in the DAOU groundwater at 209 µg/L and Cobalt is a pollutant or contaminant with an RSL of 6 ug/L and has also been documented in the DAOU groundwater at 464 µg/L. These 2 levels represent hazardous substances or pollutants or contaminants that are significantly above the respective drinking water maximum contaminant levels or the respective regional screening levels that indicate the need for immediate action. There are additional hazardous substances or pollutants or contaminants that have been documented within the DAOU groundwater plume.

EPA concurs on the Removal Action Memorandum for the D Area Coal Storage Yard based on the following rationale which should also be used in the upcoming Removal Action Report. Please use the *40 CFR Section 300.415 (b)(2) i* rationale "*Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants*". The rationale is more appropriate and better utilized for the above described action and associated groundwater exceedances. The metals present in groundwater and soils at the D Area Coal Storage Yard are either hazardous substances or pollutants or contaminants and are present at levels that require action for the protection of human health and the environment and that have the potential to impact nearby human and/or animals and associated food chains.

If you have any questions or concerns, please contact me at (404) 229 -9500.

Sincerely,



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