



**Department of Energy**  
Savannah River Operations Office  
P.O. Box A  
Aiken, South Carolina 29802

**MAY 11 2018**

Ms. Susan B. Fulmer, P. G., Manager  
Federal Remediation Section  
Division of Site Assessment, Remediation and Revitalization  
Bureau of Land and Waste Management  
South Carolina Department of Health and Environmental Control  
2600 Bull Street  
Columbia, SC 29201

Mr. Jon Richards  
Acting Savannah River Site Remedial Project Manager  
Superfund Division  
U. S. Environmental Protection Agency, Region 4  
61 Forsyth Street, SW  
Atlanta, GA 30303

Dear Ms. Fulmer and Mr. Richards:

SUBJECT: Continued Usage of 242-25H (3H) Evaporator Pot, SEMS Number: 89

In accordance with the Federal Facility Agreement (FFA), this letter is to request your approval for continued operation of the 242-25H (3H) Evaporator pot, which is included in FFA Appendix B as a high-level radioactive waste tank system.

After nearly sixteen years of operation, the 3H Evaporator pot initially began leaking into secondary containment in February 2016 and operation was suspended. Repair of the pot was completed in December 2017 by installing and welding a conical cap covering the leak site. A copy of the *FFA Assessment Report for 242-25H Evaporator Vessel Modification Conical Cap Installation (M-ESR-H-00519)* was included within the appendices to the *CY2017 Annual Report Status of F/H Area Radioactive Liquid Waste Tanks Being Removed from Service, March 2018 (SRR-ESH-2018-00007)*.

Following repair of the pot, the evaporator system was restarted on December 13, 2017. After operating for approximately 55 hours, two salt deposits were discovered on the uninsulated pot at approximately 3 – 5 feet above the conical cap and are indicative of new leak sites. Operation of the system was suspended again. There was no liquid accumulation on the secondary containment cell floor resulting from these new leak sites.

The Department of Energy (DOE) and Savannah River Remediation (SRR) provided your agencies a presentation titled *Status and Operation of the 242-25H Evaporator System* (Enclosure 1) on April 25, 2018 which describes both the original leak and its repair as well as the evaluation

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Ms. Fulmer  
Mr. Richards

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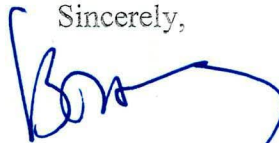
of the new leak sites and options considered to minimize overall impacts to the Liquid Waste System.

DOE and SRR have concluded that operation of the 3H Evaporator System as-is with enhanced monitoring will not have adverse impacts to human health or the environment. The Evaporator pot remains structurally sound. These new leak sites are likely original welding discontinuities that could not be seen previously since the pot was covered with insulating material. An addendum to the Documented Safety Analysis for the H-Area Tank Farm and an Enhanced Operations and Monitoring Plan have been developed for safe operations with known leaks.

DOE requests your approval, within thirty-days of receipt of this letter, for continued operation of 3H Evaporator pot as-is with enhanced surveillance.

The effort and time that the South Carolina Department of Health and Environmental Control and the U.S. Environmental Protection Agency have given on the subject are greatly appreciated. DOE will keep you informed of operation of the 3H Evaporator system during our quarterly Liquid Waste regulatory meetings. Questions from you or your staff may be directed to me at (803) 952-8365, Mr. Roberto Gonzalez at (803) 208-6168, or Ms. Jolene Seitz at (803) 208-6234.

Sincerely,



Brian T. Hennessey  
SRS Remedial Project Manager  
Infrastructure and Area Completion Project

WDPD-18-28

Enclosures:

1. Status and Operation of the 242-25H Evaporator System (SRR-CWDA-2018-00022)
2. Technical Justification for Operation of 242-25H Evaporator Pot with Known Leak Sites

cc w/encl:

H. H. Cathcart, SCDHEC – Columbia  
B. S. Mullinax, SCDHEC-Columbia  
J. Dawson, TechLaw, Inc

Ms. Fulmer  
Mr. Richards

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cc w/o encl:

G. N. O'Quinn, SCDHEC – Aiken Environmental Affairs Office

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