Department of Energy
Savannah River Operations Office
P.O. Box A
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APR 21 2021

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, South Carolina 29201

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

Dear Ms. Fulmer and Mr. Richards:

SUBJECT: Savannah River Site Responses to the Regulatory Comments on the Decommissioning Project Final Reports for Building 681-7G, PAR Pond Pump House Equipment Building (V-PCOR-G-00023, Revision 0, September 12, 2011), Building 735-7G, PAR Pond Environmental Support Facility (V-PCOR-G-00022, Revision 0, September 12, 2011), and Federal Facility Agreement Path Forward for Buildings 651-6G, 681-7G, and 735-7G and Ancillary Facility Remnants

The U. S. Department of Energy (DOE) submitted the Revision 0 Decommissioning Project Final Reports (DPFRs) for Building 651-6G, PAR Pond Primary Transformer Substation (V-PCOR-G-00026, Revision 0, September 12, 2011), Building 681-7G, PAR Pond Pump House Equipment Building (V-PCOR-G-00023, Revision 0, September 12, 2011), and Building 735-7G, PAR Pond Environmental Support Facility (V-PCOR-G-00022, Revision 0, September 12, 2011) on September 21, 2011. Buildings 651-6G, 681-7G, and 735-7G and any associated ancillary facilities were decommissioned using the Integrated Sampling Model (ISM). Per the respective DPFRs, the facilities and associated ancillary facilities did not require any further evaluation or response action and were proposed for inclusion in Federal Facility Agreement (FFA) Appendix K.2, D&D Facilities (or remnants) that Require No Further Evaluation.

In their letter dated November 10, 2011, the South Carolina Department of Health and Environmental Control (SCDHEC) stated that they did not disagree with the intent of, or rationale for, the proposed action of transferring Building 651-6G to FFA Appendix K.2; however, neither the Facility Decommissioning Evaluation (FDE) nor the DPFR protocol provided a mechanism for ISM facility remnants to be transferred to Appendix K.2. SCDHEC requested that the protocol be revised to allow the transfer of ISM facility remnants to Appendix K.2. In their letter dated December 21, 2011, the U. S. Environmental

Protection Agency (EPA) stated that Building 651-6G should be transferred to FFA Appendix C.4 because it was decommissioned as an ISM.

For Buildings 681-7G and 735-7G, SCDHEC provided comments on the respective DPFRs in letters dated November 10, 2011. EPA conditionally concurred on the DPFRs for Buildings 681-7G and 735-7G in their letters dated December 21, 2011, pending resolution of the comments generated by SCDHEC. The Savannah River Site (SRS) delayed providing responses to the SCDHEC's comments pending the revision and approval of the FDE/DPFR protocol to allow ISM facility remnants to be transferred to FFA Appendix K.2.

Buildings 651-6G, 681-7G, and 735-7G and ancillary facility remnants have remained on FFA Appendix K.1 pending finalization of the FDE/DPFR protocol. DOE, SCDHEC, and EPA recently approved the *Core Team Protocol for Review and Concurrence on Facility Decommissioning Evaluations and Decommissioning Project Final Reports* (SRNS-RP-2021-00120, Revision 0 (corrected), February 2021). The protocol allows for the transfer of ISM facility remnants to FFA Appendix K.2. Buildings 651-6G, 681-7G, and 735-7G and associated ancillary facility remnants are appropriate candidates for transfer to FFA Appendix K.2.

In accordance with the approved protocol, on March 29, 2021, SRS prepared and electronically submitted draft responses to the SCDHEC's comments on the DPFRs for Buildings 681-7G and 735-7G for review. On April 12, 2021, SCDHEC responded via email that they approved the draft responses to their comments on the DPFR for Building 681-7G, PAR Pond Pump House Equipment Building. SCDHEC provided two comments on the draft responses to their comments on the DPFR for Building 735-7G, PAR Pond Environmental Support Facility concerning Table 2 (SRNS-OS-2021-00097). To address SCDHEC's comments on the draft responses, SRS added footnotes to Table 2 in the final responses for the Building 735-7G DPFR. On April 19, 2021, EPA replied via email that they agreed with moving Building 651-6G, PAR Pond Primary Transformer Substation, to FFA Appendix K.2 (SRNS-OS-2021-00098).

Please review the enclosures and provide your concurrence of the final responses and the proposed path forward to move Buildings 651-6G, 681-7G, and 735-7G and Ancillary Facility Remnants from Appendix K.1 to Appendix K.2 within thirty (30) days of receipt. The effort and time that the SCDHEC and EPA have given on the subject documents are greatly appreciated.

Ms. Susan Fulmer
Mr. Jon Richards

APR 21 2021

Questions from you or your staff may be directed to me at (803) 952-8365.

Sincerely,

Brian T. Hennessey

Digitally signed by Brian T. Hennessey
Date: 2021.04.21 10:50:52 -04'00'

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

IACD-21-133

Enclosures:
1. Final Savannah River Site Response to the South Carolina Department of Health and Environmental Control Comment on Decommissioning Project Final Report (DPFR): PAR Pond Pump House Equipment Building, Building 681-7G, V-PCOR-G-00023, Revision 0, September 12, 2011 (Cover letter dated September 21, 2011)Federal Facility Agreement Revision 0 Appendix G Site Evaluation Areas for Fiscal Year 2021 (Print Date: 09/24/2020)
2. Final Savannah River Site Responses to the South Carolina Department of Health and Environmental Control Comments on Decommissioning Project Final Report (DPFR): PAR Pond Environmental Support Facility, Building 735-7G, V-PCOR-G-00022, Revision 0, September 12, 2011 (Cover letter dated September 21, 2011)

cc w/o encl:
J. Blalock, SCDHEC-Columbia
G. K. Taylor, SCDHEC-Columbia
S. French, SCDHEC-Columbia
M. Reece, SCDHEC-Columbia
T. R. Fuss, SCDHEC-Aiken Environmental Affairs Office
B. Cameron, SCDHEC-Aiken Environmental Affairs Office
G. O'Quinn, SCDHEC-Aiken Environmental Affairs Office
R. H. Pope, EPA-Atlanta

cc w/encl:
K. L. Beatty, SCDHEC-Aiken Environmental Affairs Office

Final Savannah River Site Response to the
South Carolina Department of Health and Environmental Control Comment on
Decommissioning Project Final Report (DPFR): PAR Pond Pump House Equipment Building, Building 681-7G, V-PCOR-G-00023, Revision 0, September 12, 2011 (Cover letter dated September 21, 2011)

Comments Received: November 10, 2011

1. Please explain how the internal walls of the process piping and associated pumps and motors were radiologically assessed. It does not appear that they were radiologically surveyed (ref.: Appendix B) or assumed contaminated and disposed of as radioactive waste since Table 1 is devoid of a radioactive waste stream.

Response Comment #1: Agree. The Savannah River Site (SRS) generated some low-level radioactive waste (LLW) during the decommissioning of Building 681-7G, which consisted of piping and equipment that came into contact with water from PAR Pond. Because the interior of this piping and equipment were not readily accessible for radiological survey, SRS assumed the piping and equipment were radiologically contaminated and conservatively managed it as LLW. Exterior surveys of the piping and equipment along with analysis of the sump water showed no evidence of radiological contamination in Building 681-7G. In addition, Building 681-7G was surveyed prior to demolition and found to be free of radiological contamination. A copy of the Radiological Survey for Building 681-7G is contained in Appendix B of the DPFR (V-PCOR-G-00023, Revision 0, 9/12/2011). Therefore, the Building 681-7G DPFR reported that the building contained no radiological contamination (see Sections 1.0 and 6.02 of the DPFR).

During the reporting of the PAR Pond Complex decommissioning, SRS combined the volume of material managed as LLW from Buildings 681-7G (525 cu. ft.) with the volume of LLW material from Building 735-7G (82 cu. ft.) and reported the combined total LLW waste generation from the two buildings (607 cu. ft.) in the Building 735-7G DPFR (V-PCOR-G-00022, Revision 0, 9/12/2011). No LLW volumes were reported in the Building 681-7G DPFR (V-PCOR-G-00023).

Provided below is the revised Table 1 – Summary of Waste Generation, Building 681-7G, which correctly shows the LLW volume of 525 cu. ft. for Building 681-7G from disposal of miscellaneous piping and equipment.

Although Building 681-7G was decommissioned using the Integrated Sampling Model due to some components' (piping, drains) contact with potentially contaminated PAR Pond water, there is no potential for residual radiological contamination after decommissioning. In accordance with the recently approved *Core Team Protocol for Review and Concurrence on Facility Decommissioning Evaluations and Decommissioning Project Final Reports* (SRNS-RP-2021-00120, Revision 0 (corrected), February 2021), the facility is an appropriate candidate for transfer to Appendix K.2., D&D Facilities (or

remnants) that Require No Further Action. No change to the Building 681-7G DPFR is proposed.

Table 1 – Summary of Waste Generation, Building 681-7G

Waste Classification	Waste Source	Disposed to	Total Volume
ACM	Non-friable asbestos containing material (mastic, tile, glazing, cementitious panels, structural rubble, JCW and PPE)	SRS C&D Landfill	8,100 cu. ft.
Universal	Light bulbs	SRS Collection Point (N-Area) for light bulbs*	<5 cu. ft.
Wastewater	Water from sumps	SRS Central Sanitary Wastewater Treatment Facility	6,000 gallons
Wastewater	Water removed from excess motors	SRS Building 716-A Oil/Water Separator	110 gallons
LLW**	**Miscellaneous piping & equipment that came in contact with PAR Pond water**	**E Area Slit Trenches**	**525 cu. ft.**
Sanitary	Miscellaneous metal debris: gate valves, couplings, fasteners, etc.	Three Rivers Landfill	1,822 cu. ft.
Sanitary	Vertical pumps	SRS C&D Landfill	4,546 cu. ft.
Sanitary	Motors for vertical pumps	Three Rivers Landfill	7,798 cu. ft.

ACM – Asbestos-containing material
C&D Landfill – SRS Burma Road Construction, Demolition and Land Clearing Debris Landfill
JCW - Job Control Waste
LLW – Low Level (Radioactive) Waste
PPE - Personal Protective Equipment

*Due to small volumes generated, these wastes were consolidated with similar decommissioning wastes and are being managed in accordance with State and Federal regulations until shipment to off-site treatment and disposal and/or recycle, as appropriate.
**** Radiological surveys and water analysis did not detect radiological contamination; however, SRS assumed piping and equipment that contacted PAR Pond water was radiologically contaminated and conservatively managed it as LLW.**

Final Savannah River Site Responses to the
South Carolina Department of Health and Environmental Control Comments on
Decommissioning Project Final Report (DPFR): PAR Pond Environmental Support Facility,
Building 735-7G, V-PCOR-G-00022, Revision 0, September 12, 2011 (Cover letter dated
September 21, 2011)

Comments Received: November 10, 2011

1. Table 2 in Section 5.02, Waste Disposal, indicates Low Level Waste and Mixed Waste were generated during the decommissioning of this facility. Please explain how this does not contradict the conclusion that the buildings contained no radioactive contamination (Section 6.02).

Response Comment #1: Agree. The Savannah River Site (SRS) generated some low-level radioactive waste (LLW) during the decommissioning of Building 735-7G, which consisted of piping that came into contact with water from PAR Pond. Because the interior of the piping and equipment were not readily accessible for radiological survey, it was presumed that potential radioactive particulates may have plated out on the internal wall surfaces. SRS assumed the piping and equipment were radiologically contaminated and conservatively managed it as LLW. Therefore, the piping system was disposed of as LLW and/or mixed waste (e.g., brass valves).

During decommissioning of the PAR Pond complex, exterior surveys of piping and equipment that came into contact with PAR Pond water showed no evidence of radiological contamination. In addition, Building 735-7G and its ancillary structure, Building 735-8G, were surveyed prior to demolition and found to be free of radiological contamination. Copies of the Radiological Surveys for Buildings 735-7G/-8G are included in Appendix B of the Building 735-7G DPFR (V-PCOR-G-00022, Revision 0, 9/12/2011). Therefore, the Building 731-7G DPFR reported that the building and its ancillary structure, Building 735-8G, contained no radiological contamination (see Sections 1.0 and 6.02 of the DPFR).

During the reporting of the PAR Pond Complex decommissioning, SRS combined the volume of material managed as LLW and/or mixed waste from Building 735-7G (82 cu. ft.) with the volume of LLW material from Building 681-7G (525 cu. ft.) and reported the combined total LLW waste generation from the two buildings (607 cu. ft.) in the Building 735-7G DPFR (V-PCOR-G-00022). Provided below is the revised Table 2 - Summary of Waste Generation, Building 735-7G and its Ancillaries, which correctly shows the LLW and/or mixed waste volume of 82 cu. ft. for Building 735-7G from disposal of miscellaneous piping and equipment.

Although Building 735-7G and its ancillary structure, Building 735-8G, were decommissioned using the Integrated Sampling Model because some components (piping, drains) came in contact with PAR Pond water, there is no potential for residual radiological contamination after decommissioning. In

accordance with the recently approved *Core Team Protocol for Review and Concurrence on Facility Decommissioning Evaluations and Decommissioning Project Final Reports* (SRNS-RP-2021-00120, Revision 0 (corrected), February 2021), the facilities are appropriate candidates for transfer to Appendix K.2., D&D Facilities (or remnants) that Require No Further Action. No change to the Building 735-7G DPFR is proposed.

2. Please explain how the internal walls of the process piping were radiologically assessed.

Response to Comment #2: Agree. Please see the response to Comment #1. The internal walls of the process piping were not readily accessible for radiological survey. SRS conservatively assumed the piping and equipment were radiologically contaminated from contact with PAR Pond water and managed it as LLW and/or mixed waste (e.g., brass valves).

Final Savannah River Site Responses to the
South Carolina Department of Health and Environmental Control Comments on
Decommissioning Project Final Report (DPFR): PAR Pond Environmental Support Facility,
Building 735-7G, V-PCOR-G-00022, Revision 0, September 12, 2011 (Cover letter dated
September 21, 2011)

Comments Received: November 10, 2011

Table 2 – Summary of Waste Generation, Building 735-7G and its Ancillaries

Waste Classification	Waste Source	Disposed to	Total Volume
735-7G, Environmental Support Facility			
Sanitary	Structural rubble, JCW and PPE	SRS C&D Landfill	9,112 cu. ft.
ACM	Floors tiles, mastic, JCW, PPE	SRS C&D Landfill	540 cu. ft.
LLW**	De**commissioning**~~activation~~ debris (piping, metal supports, etc.)	E-Area Slit Trenches	~~607~~ **82 cu. ft.**
Mixed	Brass (valves, couplings, gauges, etc.)	SRS MWSF	1 cu. ft.
Universal	Light bulbs	SRS Collection Point (N-Area) for light bulbs*	30 cu. ft.
Universal	Batteries	SRS Collection Point (722-A) for batteries*	<1 cu. ft.
SRSPB0084 and SRSPB01168, Portable Buildings			
Sanitary	Structure rubble (e.g., metal frame/ siding and wood)	SRS C&D Landfill	1,215 cu. ft.
662-2G, Limnology Lab Boathouse and Boat Dock			
LLW**	Miscellaneous wood, foam debris, JCW, PPE	SRS E-Area Slit Trenches	3,037 cu. ft.
Sanitary	Miscellaneous wood debris, JCW	Three Rivers Landfill	607 cu. ft.
735-8G, Green House			
Sanitary	Structural rubble, JCW and PPE	SRS C&D Landfill	2,430 cu. ft.
760-8G, Park Shelter			
Sanitary	Miscellaneous wood, roofing debris, JCW	Three Rivers Landfill	1,215 cu. ft.

ACM – Asbestos-containing material
C&D Landfill – SRS Burma Road Construction, Demolition and Land Clearing Debris Landfill
JCW – Job Control Waste
LLW – Low Level (Radioactive) Waste
MWSF – Mixed Waste Storage Facility
PPE – Personal Protective Equipment

*Due to small volumes generated, these wastes were consolidated with similar decommissioning wastes and are being managed in accordance with State and Federal regulations until shipment to off-site treatment and disposal and/or recycle, as appropriate.

__Radiological surveys and water analysis did not detect radiological contamination; however, SRS assumed piping and equipment that contacted PAR Pond water was radiologically contaminated and conservatively managed it as LLW.**__