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from the Savannah River Site

Revision 4 Action Memorandum Issued for the Disposition of Water in the 105 P Disassembly Basin at the Savannah River Site

The U.S. Department of Energy (DOE) previously selected the preferred alternative for the non-time critical removal action at the Disassembly Basin within the 105 P Reactor Complex located at the Savannah River Site's (SRS's) P Area. A 30-day public comment period was held for the Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) from March 13, 2008 to April 14, 2008.

P Area, located in the southeast portion of the SRS, is approximately 14.2 miles from A Area, which is on the northwest edge of the SRS. P Area, which includes Building 105 P, is located entirely in Barnwell County. The Disassembly Basin, a concrete basin inside the 105 P Reactor Building, is comprised of seven interconnected sections and currently has approximately 4.4 million gallons of water over contaminated sediments and reactor activated metal components.

On June 16, 2008, the DOE submitted the Action Memorandum documenting its selection of RSER/EE/CA Alternative #3, Forced Evaporation of the Basin Water, as the preferred alternative to the U.S. Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (ARF #015483; DOE Letter, ACP-08-183). A revised Action Memorandum was issued on September 26, 2008 (ARF #01563; DOE Letter, ACP-08-225). The revised Action Memorandum acknowledged continued use of the 105 P Disassembly Basin to receive potentially contaminated rainwater from basins and sumps within the reactor building and from ancillary facilities.

Revision 3 of Action Memorandum for the 105 P Disassembly Basin (ACP-09-173, dated May 12, 2009) did not modify the original selection of forced evaporation to treat the basin water, but included sending approximately 380,000 gallons of shield water from the 105 R facility over to the 105 P Disassembly Basin for evaporation. The closure of the 105 R Disassembly Basin was being accomplished by placing the grout under the shield water and filling the basin with grout. The original calculations for the closure of the 105 R Disassembly Basin indicated that most of the radiological shield water would need to be transferred for treatment/disposal after completion of the grouting; however, the grouting process actually used all of the shield water. As a result, there will not be a transfer of this water over to the 105 P Disassembly Basin for evaporation.

This revision, Revision 4 of the Action Memorandum for the NTCR Action for Disposition of Water in the 105 P Disassembly Basin, includes the following additional actions:

- Acknowledgement that 380,000 gallons of shield water from the 105 R Disassembly Basin will not be sent to the 105 P Disassembly Basin for evaporation.
- Transfer of up to 300,000 gallons of water, primarily contaminated with tritium, from sources within the R-Area Operable Unit (RAOU), including the 106 R tank and the stack void area pit within the R Reactor building, to the 105 P Disassembly Basin for evaporation. The water is compatible with the water already undergoing evaporation in the 105 P Disassembly Basin. This water must be removed from the RAOU facilities to complete the RAOU CERCLA removal action. SRS will utilize the existing CERCLA Off-site Rule approval for the disposition of this water at the 105 P Disassembly Basin.

Copies of the Revision 4 Action Memorandum (ARF # 17061; DOE Letter, ACP-10-252) are available in the Administrative Record. The Administrative Record is available in the information repositories listed below:

- DOE Public Reading Room at the Gregg-Graniteville Library at the University of South Carolina Aiken campus in Aiken, SC; and
- Thomas Cooper Library Government Documents Department at the University of South Carolina in Columbia, SC.

Hard copies of the Action Memorandum are available at the following locations:

- Reese Library at Augusta State University in Augusta, GA; and
- Asa H. Gordon Library at Savannah State University in Savannah, GA

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