

Media contact: "DT" Townsend  
(803) 952-9256  
dt-lawrence.townsend@srs.gov

For immediate release

## **MCU Milestone Demonstrates Progress in Waste Cleanup at SRS**

AIKEN, S.C. (August 7, 2006) – Washington Savannah River Company (WSRC) has met an important U.S. Department of Energy (DOE) milestone in processing radioactive liquid waste for safe, long-term storage at the Savannah River Site (SRS). The achievement came via the use of specialized equipment, known as centrifugal contactors, for the Modular Caustic Side Solvent Extraction Unit (MCU), a new process designed to remove radioactive cesium from millions of gallons of liquid salt waste solution stored at the Site. Emptying waste tanks and meeting its tank closure obligations to the State of South Carolina is among DOE's highest priorities. Utilizing MCU as an interim waste treatment process is a significant step in implementing DOE plans for cleanup and closure of the SRS Tank Waste System.

Following completion of a thorough and rigorous testing program, a platform containing 18 centrifugal contactors was installed as part of the new MCU process, currently under construction in the Site's H Tank Farm. MCU construction is expected to be completed by the end of 2006, followed by testing of the entire MCU production process.

"The MCU process is a key component for safely and cost-effectively removing and treating salt solution from SRS waste tanks, thereby reducing risk to employees, surrounding communities and the environment," explained Bill Poulson, WSRC Liquid Waste Operations (LWO) executive vice president. "Removing the salt solution will create additional tank space and most importantly, it moves us closer to our ultimate goal – closing tanks."

Though centrifugal contactors have been used within the Site's chemical separations facilities for decades, this technology has been modified to support the removal of radioactive nuclides from liquid waste for the first time within the history of the nuclear industry.

The MCU project is scheduled to be operational in 2007 and expected to operate for approximately three years as an interim process until the Salt Waste Processing Facility (SWPF) fulfills this function long-term, with full scale operation beginning in 2011. Once it is on-line, lessons learned from the MCU processing experience will be considered and factored into the final design of the future SWPF.

### **The WSRC Team:**

Washington Savannah River Company LLC • Bechtel Savannah River, Inc. • BNG America Savannah River Corporation  
BWXT Savannah River Company • CH2 Savannah River Company

Using principles involving centrifugal force and a special engineered solvent, the contactors take high activity salt solution and divide it into two waste streams. The radioactive cesium is removed and sent to DWPF to be mixed with molten glass and poured into stainless steel canisters for safe, long-term storage. The remaining stream is a low-activity salt waste solution, which will be transferred to the Saltstone Disposal Facility to be mixed with concrete-like grout for safe permanent storage in engineered vaults.

“The contactors are the heart of this process. Proving they will perform well has been a critically important step in getting the MCU process designed and built,” said Brent Gifford, WSRC MCU project owner, LWO. “The results of extensive testing by the WSRC Team and subcontractors have been excellent and validate that the system will meet our process requirements. The entire effort has been very successful.”

“To date, we’ve met all of our major milestones for this project, and our safety record has been phenomenal,” said Tony Giordano, MCU project manager, Bechtel Savannah River, Inc.

“We have a strong WSRC and DOE team that is committed to seeing the successful transition of the MCU project from the initial planning phase into actual process operation,” Gifford added.

SRS is owned by the U.S. Department of Energy and operated by a team of companies led by the Washington Savannah River Company, a subsidiary of Washington Group International.