SRS CREWS COMPLETE STARTUP TESTING ON PROJECT TO SPEED TANK WASTE REMOVAL

AIKEN, S.C. (October 24, 2018) – Savannah River Site (SRS) crews recently completed onsite startup testing for a project designed to accelerate removal of radioactive waste from underground tanks.

The project, called Tank Closure Cesium Removal (TCCR), is being deployed by liquid waste contractor Savannah River Remediation (SRR). TCCR uses an innovative technology including prefilters, ion exchange columns, and a specially engineered resin to remove cesium — a radioactive chemical element — from the salt waste to accelerate waste removal and tank closure.

Completion of onsite testing means the Department of Energy (DOE) is another step closer to launching the TCCR demonstration, said Jim Folk, DOE-Savannah River assistant manager for waste disposition.

“Tank Closure Cesium Removal is important to the liquid waste mission because it has the potential to supplement our overall waste pre-treatment capability, ultimately accelerating the pace of waste removal and tank closure work,” Folk said.

The testing involved running water through the TCCR process, including the pre-filters and ion exchange columns; valve manipulation; pump tests; ventilation tests; and checks of alarms, interlocks, remote cameras, radiation monitors, and a computer that controls the automated process.

Initial factory acceptance testing of the TCCR process was conducted by the vendor, Westinghouse Electric Company, in Richland, Washington. After it passed all factory testing, the equipment was delivered to SRS on 10 tractor-trailers and assembled onsite by SRR workers.

Installation of the TCCR equipment began in April and was completed in July. The equipment includes upper and lower process enclosures, ion exchange columns inside the enclosures, and a ventilation skid.
The modules are connected to the underground tanks via lead-shielded hose-in-hose waste transfer lines.

Post-testing and pre-commissioning activities, such as safety basis implementation, operational procedures, training, and readiness assessments are planned for completion by the end of this year. Crews would then begin processing the salt waste through TCCR.

**Cutline**
*Workers install an ion exchange column on the Tank Closure Cesium Removal process enclosure in the Savannah River Site’s H Tank Farm.*