Savannah River Site Facility Produces 30 Million Gallons of Decontaminated Mixture

AIKEN, S.C. (January 28, 2019) – A Savannah River Site (SRS) facility has produced more than 30 million gallons of decontaminated salt solution mixed with a cement-like grout since beginning operations in 1990, a vital cog in the system that removes waste from tanks and moves it ultimately into safe storage.

The Saltstone Production Facility (SPF) is the last stop for this solution after it is sent from the site’s 43 remaining underground waste tanks — eight have been closed — to other SRS liquid waste facilities for processing. Sludge and salt are the two forms of radioactive liquid waste inside the tanks, and salt waste accounts for 90 percent of the tanks’ contents.

Processing salt waste to achieve tank closure is critical to reducing the risk the waste poses, said Jim Folk, DOE-Savannah River Assistant Manager for Waste Disposition.

“Innovation, together with hard work, has brought us to where we are today in producing over 30 million gallons of saltstone,” said Folk. “DOE is committed to safely executing the liquid waste mission at SRS, and this milestone continues to demonstrate the long-term success of this process.”

The salt waste is treated at interim salt processing facilities known as the Actinide Removal Process and Modular Caustic Side Solvent Extraction Unit. This integrated system removes radionuclides from the salt, resulting in the decontaminated salt solution. This solution is then sent to the SPF to create the saltstone, a safe and permanent disposal solution for decontaminated salt waste at SRS.

Saltstone is stored in the Saltstone Disposal Units, which are reinforced concrete tanks that are modeled after commercial water storage tanks.

(more)
Cutline: Savannah River Remediation engineers Jay McCrary and Connie Yung work in front of the silos at the Saltstone Production Facility, where decontaminated salt solution is mixed with a cement-like grout for safe and permanent storage in Environmental Management’s Saltstone Disposal Units.

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