

For Immediate Release

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SRS Milestone: Facility Surpasses 10 Million Gallons of Waste Processed

AIKEN, S.C. (November 13, 2024) – The <u>Savannah River Site</u> (SRS) has achieved a milestone with more than 10 million gallons of liquid radioactive waste processed through the <u>Salt Waste Processing</u> <u>Facility</u> (SWPF).

This new milestone in the U.S. Department of Energy <u>Office of Environmental Management</u> (EM) mission at SRS comes on the fourth anniversary of the start of SWPF "hot commissioning" testing. Completion of that testing phase signaled the facility's entrance into fully integrated operations with the other SRS <u>liquid</u> <u>waste facilities.</u>

SWPF, operated by EM liquid waste contractor Savannah River Mission Completion (SRMC), is helping eliminate more than 33 million gallons of waste remaining in the 43 waste tanks in the site's two radioactive <u>tank farms</u>, which are groupings of underground waste tanks.

SWPF and End Stream Delivery Project Director Steve Howell said the facility is proving to be a valuable addition to the effort to safely treat the waste.

"The Salt Waste Processing Facility is operating more efficiently than before," Howell said. "We have added the ability to clean certain pieces of equipment without the need for shutting down operations."

Howell noted that SRS acquired additional contactors, a key part of the operation, making it possible to replace an entire bank of contactors during a single shutdown instead of numerous shutdowns to replace only a few at a time. The specially engineered contactors are used to remove radioactive cesium from the liquid salt waste stored in underground, carbon-steel tanks.

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"These enhancements provide us greater efficiency," Howell said. "We experienced dramatic improvements resulting from online Strip Effluent Coalescer cleaning and online Solvent Drain Tank filtering, and we expect less downtime needed for contactor changeouts. We are also optimizing our use of monosodium titanate used for actinides removal, reducing the potential for clogging of the filters. These improvements are contributing to increased production time."

SWPF, which receives salt waste from the site's H Tank Farm, decontaminates the salt solution by removing highly radioactive contaminants. The highly radioactive waste stream is transferred to the <u>Defense Waste Processing Facility</u> for vitrification, while the decontaminated salt solution is sent to the Saltstone Production Facility (SPF). Vitrification converts the high-activity radioactive waste into a solidified glass form suitable for long-term storage and safe disposal.

SPF also boosted its production in the fiscal year that ended Sept. 30 by processing more than 8 million gallons of a cement-like grout, the most ever produced in a year. In recent years, equipment, production software and <u>other upgrades</u> have strengthened the facility's production. SPF also has moved to 24/7 continuous coverage, further improving the facility's capacity.

The combination of improvements at SRS liquid waste facilities is resulting in more efficient production as SRMC works to complete the overall liquid waste program by 2037.

Jim Folk, DOE-Savannah River assistant manager for waste disposition, noted that the work across the liquid waste facilities is providing greater run times.

"These modifications are helping us optimize the processing capabilities of each of these facilities," Folk said. "Additional optimizations will lead to even greater efficiency while always maintaining safety as we continue to empty these waste tanks."



<u>Cutline</u>: The Salt Waste Processing Facility recently surpassed a production milestone by processing more than 10 million gallons of high-level waste at the Savannah River Site. The facility separates the radioactive particles from the salt solution and forwards the decontaminated salt solution to the Saltstone Production Facility, where it is mixed with dry materials to make a cement-like grout.



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<u>*Cutline:*</u> The Saltstone Production Facility mixes a decontaminated salt solution with dry materials to produce a cement-like grout that is pumped into saltstone disposal units for permanent disposal.