DOE’s DWPF at SRS Pours 4,000th Canister of Vitrified Waste

AIKEN, S.C. (January 4, 2016) – The Savannah River Site (SRS) is ringing in the new year with a significant environmental cleanup success in its liquid waste program.

The U.S. Department of Energy’s (DOE) Defense Waste Processing Facility (DWPF) at SRS has poured its 4,000th canister of radioactive glass, a major milestone for the robust facility that will also mark 20 years of operation in 2016 supporting DOE’s Office of Environmental Management’s cleanup and risk reduction priorities.

If 4,000 of the 10-feet tall, 2-feet wide canisters were laid end to end, they would stretch more than 7.5 miles. That’s about how far it is from the Pentagon to the U.S. Capitol and back.

DWPF, which poured the milestone canister at the end of last week, is the nation’s largest operating vitrification facility that continues to reliably treat the high-activity fraction of legacy tank waste. Savannah River Remediation (SRR) operates DWPF as well as other liquid waste facilities as part of its SRS contract with DOE.

The facility converts high-level radioactive liquid waste, which is currently stored in 43 underground tanks at SRS, into a solid glass form suitable for long-term storage and disposal. DWPF operations began in March 1996 and are expected to continue for approximately 20 additional years. Four thousand is about half the canisters DWPF is scheduled to produce.

The entire 36 million gallons of waste in the Site’s waste tanks awaiting disposition has about 253 million curies of radioactivity, of which the vast majority will be vitrified at DWPF. A curie is a measure of radioactivity. DWPF has poured more than 15 million gallons of glassified waste to date, immobilizing nearly 58 million curies.

Jim Folk, DOE-Savannah River Assistant Manager for Waste Disposition, said DWPF continues to provide safe, reliable canister production.

“The results of nearly 20 years of DWPF work-horse operation shows how well this facility operates,” Folk said. “Turning waste into glass continues to provide significant risk reduction for South Carolina.”
Stuart MacVean, SRR President and Project Manager, said the milestone represents a key achievement in waste disposition, not just for SRS, but for the nation.

“Successfully immobilizing waste in glass is a technology that is important for our country,” MacVean said. “Our work demonstrates radioactive liquid waste can be put into a safe form, ready for permanent disposal.”

The glassified waste canisters are safely stored onsite until a federal repository is established.

SRS is owned by DOE. The SRS Liquid Waste contract is managed by SRR, which is composed of a team of companies led by AECOM with partners Bechtel National, CH2M and BWX Technologies. Critical subcontractors for the contract are AREVA, EnergySolutions and URS Professional Solutions.

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