

News from the Savannah River Site

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For Immediate Release

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SRR Completes Elastomeric Roof Coating on Saltstone Disposal Facility Vault 4

AIKEN, S.C. (August 6, 2015) – The U.S. Department of Energy's (DOE) liquid waste contractor, Savannah River Remediation (SRR), finished adding a clean grout cap and an elastomeric roof coating to all 12 cells in Saltstone Disposal Facility (SDF) Vault 4. Completion of this work mitigates the environmental risk of any potential radioactive contamination migration.

Construction of the Vault 4 disposal unit was completed in 1988. The vault started receiving a low-level waste grout mixture in 1990. The grout mixture contains low-level radioactive salt solution mixed with cement, fly ash and a slag material to produce a solid non-hazardous grout called "saltstone."

In the past, contaminated liquid had leaked through Vault 4 cracks and construction joints and small damp spots had been observed on the outside of the vault walls caused by seepage of liquid through cracks in the concrete walls. This condition was aggravated by rainwater in-leakage.

In 2013, DOE directed SRR to begin closing Vault 4 by covering the 12 cells with a more permanent, elastomeric roof coating. The permanent coating is designed to prevent rainwater in-leakage. A clean grout cap was the first step toward installing the elastomeric coating, allowing the workers to safely access the roof while keeping radiation dose rates As Low As Reasonably Achievable (ALARA). The recently installed elastomeric roof covering will prevent in-leakage of rainwater into the Vault 4 cells, which in turn will mitigate migration of radioactive contamination.

Elastomeric coatings have been used commercially to effectively solve roof leaks. The coating has elastic properties that can stretch in the summertime heat and then return to its original shape in cooler temperatures without damage.

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Vault 4 continues to be inspected on a routine basis. Additionally, the vault is inspected monthly by South Carolina Department of Health and Environmental Control.

The Savannah River Site is owned by the Department of Energy. The SRS Liquid Waste contract is managed by Savannah River Remediation, LLC, which is composed of a team of companies led by AECOM with Bechtel National, CH2M and Babcock & Wilcox. Critical subcontractors for the contract are AREVA, EnergySolutions and URS Professional Solutions.

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