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FOR IMMEDIATE RELEASE

Savannah River Site Reaches Milestone in Construction of Large-Scale Disposal Unit

AIKEN, S.C. (December 11, 2019) – The liquid waste contractor at the Savannah River Site (SRS), Savannah River Remediation (SRR), completed construction of the outer shell of the site's second large-scale saltstone disposal unit on Dec. 6.

Saltstone Disposal Unit (SDU) 7 is a permanent disposal facility designed to hold 32 million gallons of saltstone, a non-hazardous waste form produced by mixing decontaminated salt waste from the site's high-level tank waste with dry materials to create a cement-like grout.

The structure — 43 feet high and 375 feet in diameter — comprises 14 floor sections, 25 wall sections, and seven roof sections each made of high-strength, reinforced concrete. Two hundred and eight columns support the roof, and 1,915 tons of rebar reinforce the concrete in the SDU shell.

“We are pleased with the progress on SDU 7,” DOE-Savannah River SDU 7 Federal Project Director Shayne Farrell said. “Each step completed along the way is further proof of successfully continuing DOE’s waste disposition mission at the Savannah River Site.”

The next step, which is expected to be completed in the spring, involves wrapping the outside of the unit with



Workers build the roof of the mega-unit Saltstone Disposal Unit (SDU) 7, at right. Construction of the SDU 7's outer shell was completed Dec. 6. Also pictured are the construction sites for SDU 9, top, and SDU 8, left, along with the completed SDU 6, center.

seven layers — 341 miles — of steel cable for added strength. An interior rubber liner will be installed once the cable has been added.

SDU 7 is scheduled to be ready for operations by spring 2022.

Work is also ongoing on the next two mega-units, SDUs 8 and 9. A leakage detection system has been installed for SDU 8. This system, just like what was installed in the previous seven units, comprises a geosynthetic clay liner and high-density plastic liner sandwiched between two concrete layers called “mud mats.”

Initial excavation for SDU 9 has also been completed, and the leak detection liner and mud mat installation will follow. SDUs 8 and 9 are being built simultaneously, optimizing crews and resources and ultimately cutting costs.

SDU 7, as well as future additional SDUs, are being constructed to safely and permanently store the large volume of decontaminated salt solution to be generated at the Salt Waste Processing Facility (SWPF), the salt waste treatment facility currently undergoing testing and commissioning. Five SDUs are scheduled to be constructed in addition to SDUs 6 and 7.

SWPF will process salt waste at much higher rates than ever accomplished on-site by a previous pilot-scale facility, making the mega-SDUs critical components of waste disposition at SRS.

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