Workers have now relocated 156 canisters of glassified waste from Glass Waste Storage Building (GWSB) 1 to GWSB 2, which begins the modification process for double-stacking canisters at the Savannah River Site (SRS). Actual double-stacking of the canisters could begin as early as calendar year 2016.

The innovative approach to store canisters was created by Savannah River Remediation (SRR), the U.S. Department of Energy’s (DOE) liquid waste contractor at SRS. The concept is to take existing canister storage positions in GWSB 1, where canisters are now stored one per slot, and modify the slots to allow two canisters to be safely stored vertically in one position, one canister on top of the other.

Double-stacking canisters in existing GWSB 1 could increase storage capacity from 2,254 slots to 4,508 slots, continuing safe interim storage while creating adequate canister storage through Fiscal Year 2026. It would also postpone the expense of another storage facility.

The canisters contain vitrified waste from the Defense Waste Processing Facility, where high-level waste and a borosilicate glass are heated to create a molten glass, which hardens inside the stainless steel canisters. The canisters are destined for a future federal repository, but pose no technical or radiological issues staying at SRS in this interim double-stack storage arrangement, according to engineering studies.

To accommodate two, 10-foot tall canisters, the 21-foot-deep slot will have to be modified. Currently, each canister storage position has an elevated steel crossbar support base and a four-foot-thick shield plug that seals the opening at the top of each canister’s slot.

The crossbar base support, on which canisters sit, will have to be removed and the four-foot-thick concrete shield plug will be replaced by a thinner, denser cast iron shield plug, which will provide equivalent radiation shielding and structural support. In addition to the shield plugs, steel-support plates will be installed in place of the crossbar base support.

The physical work to modify canister positions will begin this month, and the project will continue to modify canister positions as needed.

SRR Recognizes DN Tanks, Inc. for Safe Work

DN Tanks, Inc. is in the process of completing construction work on Saltstone Disposal Unit (SDU) 6 and has logged more than 215,000 hours without a recordable injury, setting a high bar for other companies to follow. DN Tanks is also excelling at Savannah River Remediation’s (SRR) number one safety goal - zero injuries.

DN Tanks was subcontracted by SRR in April 2014 to construct SDU 6 at SRS’s Saltstone Facility.

SDUs are permanent disposal units that will store low-activity waste grout produced from solidification of decontaminated non-hazardous salt waste.

This most recent unit, SDU 6, is 10 times larger than the other units at SRS. It is 375 feet in diameter, and 43 feet tall, and will hold approximately 30 million gallons of grouted decontaminated salt solution.

Randy Wilkerson, SRR Area Lead Sub-contracts Technical Representative for the SDU 6 Project, said the DN Tanks workforce met and overcame challenges during construction.

“As with any construction project, there were times and opportunities for things to go wrong, but DN Tanks maintained a good, solid work site and a safety culture that carried every single craftsperson home at the end of the day the same way they arrived,” said Wilkerson. “That’s our goal - zero injuries.”

Picture, from left, is Eric Swift, Albert Penaloza, Jon Lunn, Joe Pacheco, Randy Wilkerson, and Stuart MacVean.
Savannah River Remediation employees “adopted” 187 children, or angels, in the CSRA through the Salvation Army’s Adopt-an-Angel campaign. The campaign helps provide children with a better and more meaningful Christmas, with toys, games, and clothes.

Additionally, SRR employees alone collected nearly more than 7,000 toys for the U.S. Marine Corps’ Toys for Tots campaign.

Savannah River Remediation (SRR) LLC is the Savannah River Site’s (SRS) Liquid Waste contractor. SRS is owned by DOE. SRR is composed of personnel from a team of companies led by AECOM with partners Bechtel National, CH2M and BWX Technologies. For more information, contact the SRR Public Affairs Department: Dean Campbell at 803.208.8270

Savannah River Remediation has donated $5,000 to the Salvation Army to help cover needs in South Carolina three counties – Aiken, Allendale and Barnwell.

The Salvation Army, which provides numerous services to those in need, will determine the best use of the money in their many programs.

Stuart MacVean, SRR President and Project Manager, said his company is pleased to be a consistent supporter of the Salvation Army.

“The Salvation Army provides important outreach to our community through its services,” MacVean said. “SRR is happy to be a part of making their work possible all year long, but particularly during the holiday season.”