TWO HUNDRED CANISTERS DOUBLE-STACKED AT THE SAVANNAH RIVER SITE


Since the first canisters were double-stacked in August 2016, 200 canisters have been placed in 100 modified positions, stacked one on top of the other, in Glass Waste Storage Building 1 (GWSB 1) at the Defense Waste Processing Facility (DWPF).

In the fall of 2015, workers began relocating existing canisters from GWSB 1 to GWSB 2 and began to modify the vault locations in GWSB 1 to accommodate two of the 10-foot tall stainless steel canisters. To modify the canister positions, SRS employees developed and implemented a remote cutting tool that removes the existing canister support crossbar. The canisters were stacked using the Shielded Canister Transporter, a 235,000 pound vehicle used since the startup of DWPF specifically designed and built for transporting the canisters.

“Double-stacking canisters proved to be the right solution for additional safe storage space and saving money that would have been needed to build a new storage facility,” said Jim Folk, DOE-Savannah River Assistant Manager for Waste Disposition.

The canister double-stack project will increase the storage capacity in GWSB 1 from 2,254 slots to 4,508 slots. This initiative creates adequate safe interim canister storage until at least fiscal year 2029. It also postpones the expense of another storage facility.

Tom Foster, President and Project Manager of the SRS liquid waste contractor Savannah River Remediation (SRR), said the canister double-stack project continues to be a success story for SRR.

“The canister double-stack team is top-notch,” Foster said. “Not only has the team continued this unprecedented project safely, but they also reached the 200 canister milestone nearly two months ahead of the goal.”
PHOTO CUTLINES:

Savannah River Site liquid waste contractor Savannah River Remediation developed a specialized cutting tool to cut the cross bar and removed the riser in the concrete reinforced vaults where the canisters are temporarily stored. Removing the riser at the bottom of the vault allows the canister to be lowered and another canister to fit on top.

The diagram shows the innovative concept for the canister double-stack project. Canister positions are modified using a specialized cutting tool to accommodate two canisters per existing slot.