News from the Savannah River Site
U.S. Department of Energy • Aiken • SC • 29808

For Immediate Release

Media Contacts:
Sonya Goines, U.S. Department of Energy
(803) 646-2788
Sonya.Goines@srs.gov

Jim Beasley, SRMC
(803) 208-1391
Jim.Beasley@srs.gov

Savannah River Site Marks Waste Canister Double-Stack Milestone

AIKEN, S.C. (April 29, 2024) – The U.S. Department of Energy Office of Environmental Management (EM) and its liquid waste contractor at the Savannah River Site (SRS) have completed canister storage modifications in one of two glass waste storage buildings (GWSB), effectively doubling that facility's waste storage capacity and avoiding construction of a third storage building.

GWSB 1 consists of a below-grade concrete vault containing support frames for vertical storage of the canisters, which are 10 feet tall, 2 feet in diameter and filled with radioactive waste mixed with glass produced at the Defense Waste Processing Facility (DWPF). The building is also seismically qualified, meaning it was built to withstand and operate after an event such as an earthquake.

Jim Folk, DOE-Savannah River assistant manager for waste disposition, said the changes support progress toward safely moving the liquid waste mission forward.

"By doubling the space available for canister storage, we achieved an estimated cost savings that exceeds $100 million, as each of these buildings has been built to strict safety standards," Folk said.

Canister storage capacity in GWSBs 1 and 2 is less than the projected number of canisters expected to be produced to complete the site's liquid waste mission. Radioactive liquid waste is generated at SRS as byproducts from processing nuclear materials for national defense, research, medical programs and for NASA missions. The waste — totaling 33 million gallons — is stored at SRS in two groupings of underground waste tanks known as tank farms.

An evaluation in 2015 concluded that, with some minor changes to each vertical position in GWSB 1, two canisters could be stored one on top of the other in an area previously used to store only one. Double-stacking canisters would allow for completion of the mission using existing space without construction of additional storage buildings.

-more-

Page 2 - Savannah River Site Marks Waste Canister Double-Stack Milestone

In GWSB 1, space in all 2,262 original storage positions have now been modified to allow storage of a total of 4,524 canisters.

EM liquid waste contractor Savannah River Mission Completion (SRMC) finished the modification work. To achieve double-stack modifications, workers used a specially designed cutting tool to remotely remove an existing steel crossbar from each canister support. The elevated crossbar is replaced with a plate that rests on the storage vault floor. This change increases the height available and allows stacking of canisters.

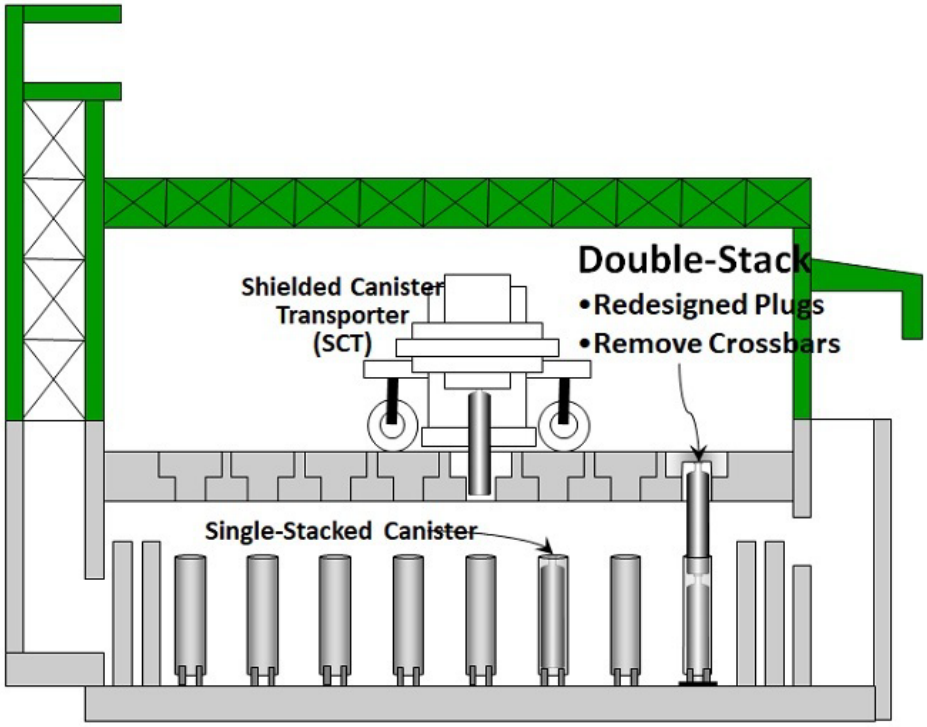
The glass waste storage buildings are for interim storage of canisters, which are destined for final disposal in a future federal repository.

SRMC President and Program Manager Dave Olson said the canister double-stack project demonstrates exceptional work by SRMC employees.

“Our workforce has safely performed this necessary work inside Glass Waste Storage Building 1,” Olson said. “Our work continues as we seek safe and innovative methods to complete our mission by 2037. Further, these cost savings allow additional funds to be used for tank cleanup and closure.”

Double-stack modification of GWSB 2 is underway. The canisters will be stored on site temporarily until a federal repository is identified.

The U.S. Department of Energy Office of Environmental Management’s canister double-stack project at Savannah River Site’s Glass Waste Storage Building 1 required numerous employees from across Savannah River Mission Completion’s liquid waste workforce. Standing in front of the shielded canister transporter are construction, project management and radiological control representatives.



The canister double-stack project at Savannah River Site modifies each canister storage position to provide enough room to add a second canister on top of the first, saving more than $100 million by deferring the expense of constructing another storage building.