Savannah River Site Crews Knock Down Cold War Cooling Tower

AIKEN, S.C., October 11, 2021 – The management and operations contractor at the Savannah River Site (SRS), Savannah River Nuclear Solutions (SRNS), has torn down a large industrial cooling tower built in 1952, part of more than 85,000 cubic feet of waste and scrap material removed from the site’s D Area complex.

Made of fiberglass, steel, and wood, likely from cypress trees, the tower was constructed over a large concrete basin to remove heat from water used to generate steam in a nearby powerhouse. During the Cold War, D Area facilities extracted heavy water from the Savannah River for use in SRS reactors.

“Working closely with our subcontractor, this demolition task was completed inexpensively, ahead of schedule, and without a safety incident,” said Kelsey Holcomb, a Project Manager with SRNS. “One of the few remaining steps is to remove 70 years’ worth of debris out of the concrete basin itself, where water accumulated before being pumped back to the powerhouse.”

Crews also removed two large motors and fans on top of the tower installed to draw cooling air across cascading water within the structure.

The 3,800-square-foot tower stood about 50 feet tall. Its large concrete foundation reached seven feet in depth to form the water-filled holding basin.

SRNS awarded the cooling tower demolition subcontract to CTI and Associates, which has conducted the majority of deactivation and demolition work in D Area over the past year.

CTI is an SRNS mentor-protégé company. The SRNS Mentor-Protégé Program is a DOE initiative designed to help small businesses enhance their capabilities as subcontractors across the DOE complex. The SRNS program includes the Mentor-Protégé Center of Excellence, where mentor companies share best practices and lessons learned.

“CTI continues to impress us with their performance, including meeting, and often exceeding, our safety and quality-of-work requirements,” Holcomb said. “SRNS requested that this project be accelerated, and CTI ensured that the task was safely and effectively accomplished as asked.”

CTI is set to demolish additional structures this year, helping to further reduce the footprint at the 310-square-mile site. So far, 89% of the footprint has been removed there.

“In the near future, we are scheduled to have a total of 34 structures removed from D Area. The completion of the D Area closure project will result in a significant footprint reduction for the site,” Holcomb said. “Our goal is to return every waste site at SRS to a more natural state, which also reduces associated maintenance and environmental surveillance costs. Project by project, we’re continually learning how to better treat area closure sites.”

Savannah River Nuclear Solutions, a Fluor-led company with Newport News Nuclear and Honeywell, is responsible for the management and operations of the Department of Energy’s Savannah River Site located near Aiken, South Carolina.