Final Legacy Solvents Now Gone from South Carolina

Aiken, S.C. (Sept. 5, 2008) – With the last shipment of PUREX solvents from the Department of Energy’s (DOE) Savannah River Site (SRS), all legacy solvents from canyon operations have left South Carolina for treatment necessary before final disposition.

“This is a milestone in material disposition for SRS and the state of South Carolina,” says Chuck Munns, president of Savannah River Nuclear Solutions. “This represents the last step in a major risk reduction effort successfully undertaken by the talented men and women of SRS.”

Much of the material came from F Canyon, which operated for more than 50 years for the national defense, producing one-third of the nation’s plutonium. F Canyon was a large-scale chemical separations building and accompanying equipment located near the center of the 310-square-mile site. Operations required a large amount of support materials, one of which was solvents for use in the chemical process.

When F Canyon shut down for the last time in 2003, a major task was clearing out its systems of all legacy chemicals. This included uranium-bearing materials, plutonium-bearing materials, and 50,000 gallons of PUREX solvents. PUREX (Plutonium and Uranium Extraction) was the chemical process used. These materials had to be removed from F Canyon and other buildings, and disposition paths found.

The path chosen for the solvents was incineration and/or stabilization at a treatment vendor in Tennessee. The final shipment of these solvents was made in February 2007.

The remainder of the material, about 27,000 gallons, is PUREX solvent mixed waste, which had been stored in tanks permitted by SCDHEC. The deadline to complete shipments for treatment was the end of December; SRS met this milestone more than four months early by making its last shipment Aug. 28 to the treatment vendor in Tennessee. The treated material will be disposed of outside of South Carolina by the end of 2009, according to an agreement with SCDHEC.

F Canyon and adjoining facilities are now deactivated and awaiting the determination of a final end state. H Canyon, a similar building inside SRS, is now the only operational large-scale chemical separations plant in the United States.

SRS is owned by DOE and operated by Savannah River Nuclear Solutions, a Fluor Daniel partnership.