news

FROM THE SAVANNAH RIVER SITE

Contact: Fran Poda
803.952-8671
fran.poda@srs.gov

For Immediate Release

SRS Introduces New Environmentally Friendly Monitoring Method in Fragile R Area Wetlands

AIKEN, S.C., February 12, 2009 – Fragile ecosystems and wetlands provide the Department of Energy's (DOE) Savannah River Site (SRS) a unique opportunity to incorporate a simple yet effective means of groundwater monitoring, soil sampling and educational training to college interns.

A method called hand augering is being used in 16 shallow wells along the waterways in R Area, one of five areas at SRS that for decades were home to operating production reactors.

Hand augering is a minimally invasive means of groundwater sampling that is designed to protect the wetlands and wildlife that frequent the area. It consists of manually inserting drill rods into the subsurface in small increments, to allow the testing of subsurface soils, until the maximum depth is achieved. Once augering is complete, engineers are able to install a well and sample the groundwater for contaminants and monitor the progress of natural attenuation.

"We will always try to protect the ecosystems in whatever approach we take," says Chuck Munns, President and CEO of Savannah River Nuclear Solutions, LLC, which holds the management and operating contract at SRS. "R Area provided an excellent opportunity give some of our interns a valuable experience."

In the R Area Operable Unit, one of the methods being considered for groundwater cleanup is called Monitored Natural Attenuation, which means that nature is being allowed to take its course-with some assistance.

More invasive remediation methods would have required the clearing of a large wooded area and demolition of the wetlands to provide traditional drilling rigs access to the well sites.

"Traditional methods of well installation are not always appropriate in ecologically sensitive areas. Well installation by hand augering allows the project team to investigate groundwater in ecologically sensitive areas," said Terry Killeen, principal geologist and characterization lead for the R Area Operable Unit.

The process is a time consuming and physically arduous task that reaps many benefits. The land along the water ways is teeming with wildlife. In fact, one well was drilled approximately 25 feet from an active pig wallow, while other signs of wildlife activity were evident throughout the area.

This project has also allowed a unique training opportunity for one SRNS intern.

"I have really enjoyed being able to have 'hands-on' experiences during my internship like the Joyce Branch seepline sampling. It's great to be able to apply the training I have received on site and in the classroom to a real world problem," said Steven Ballesteros, biology graduate and intern with the Area Completion Projects organization. "With a project like the seepline sampling, I am able see the progression from sampling plan, to pre-job, to execution and finally to data review," he said.

The R Area Operable Unit is just one of the many projects that SRNS has used minimally invasive techniques to ensure the protection of fragile habitats across the Site while achieving 100 percent of their regulatory commitments. In addition, the group showcases many new technologies that support remediation goals while minimizing budgetary requirements and the need for subcontract work.

P Area and R Area are undergoing a process called Area Completion, in which entire geographic areas are closed as one unit. SRS has already closed one geographic area, T Area in 2006.

SRS is owned by the Department of Energy. The management and operating contract is held by Savannah River Nuclear Solutions, LLC.

SRNS-09-16