Salt Waste Processing Reaches 6 Million Gallon Milestone

The Savannah River Site (SRS) reached another significant milestone by processing six million gallons of salt waste through its Interim Salt Disposition Process, known as the Actinide Removal Process and Modular Caustic Side Solvent Extraction Unit (ARP/MCU).

Liquid waste contractor Savannah River Remediation (SRR) operates the interim salt waste processing facilities, as well as the other SRS facilities that disposition radioactive liquid waste for the U.S. Department of Energy (DOE). SRR’s contract also calls for operationally closing waste tanks.

SRR representatives traveled to local schools to surprise 10 teachers from across Aiken, Barnwell, Columbia and Richmond counties with educational STAR grants to advance Science, Technology, Engineering and Math (STEM) curriculum in their classrooms.

Sandra Fairchild (right), Project Services & Support Director, awards STAR Grants to Mossy Creek teachers, Amy Edwards and Theresa Spieker.

STAR Grants & Family Scholarships Awarded

ARP/MCU production set a new monthly record by processing over 210,000 gallons in April 2016—breaking the previous record by nearly 15,000 gallons.

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The ARP and MCU work as an integrated system to remove nearly all of the radioactive isotopes from the salt waste portion of the SRS’s radioactive waste in storage tanks. ARP/MCU began radioactive operations in April 2008.

The primary radioactive isotope removed by ARP/MCU is cesium. These isotopes are transferred to the Defense Waste Processing Facility, where it is blended with a borosilicate frit and melted to form a molten glass mixture that is poured in stainless steel canisters and stored at SRS awaiting permanent disposal.

The remaining decontaminated salt solution from salt waste processing is transferred to the Saltstone facilities for disposition.

Achieving this milestone continues to prove the effectiveness of the salt processing technologies in removing the radioactive constituents from salt waste and reducing curies remaining at SRS, according to Jim Folk, DOE-Savannah River Assistant Manager for Waste Disposition.

“Processing salt waste is essential for us and our mission to close tanks, and ultimately reducing the risk of the waste,” Folkesaid.

Tom Foster, SRR President and Project Manager, said SRR is achieving its mission to disposition waste and close tanks. Salt waste constitutes about 90 percent of the total waste inventory stored in the two Site tank farms.

“Reaching these milestones at ARP/MCU demonstrates we are safely and efficiently preparing for the future the waste removal process at SRS,” Foster said.

During the past year, the ARP and MCU facilities underwent facility upgrades and process improvements designed to increase flowrate, minimize the amount of solids added during processing, and achieve greater performance and processing totals. Upgrades to the Interim Salt Disposition Process are helping prepare operations that will be used in the Salt Waste Processing Facility (SWPF).

STAR Grants & Family Scholarships Awarded

SRR representatives traveled to local schools to surprise 10 teachers from across Aiken, Barnwell, Columbia and Richmond counties with educational STAR grants to advance Science, Technology, Engineering and Math (STEM) curriculum in their classrooms.

Tom Foster, SRR President and Project Manager, said awarding elementary school grants is one of the ways the Company shows appreciation to teachers in the community.

“We want to help teachers excite students about math and science with these grants and make STEM-related concepts more hands-on in the classroom,” said Foster.

He continued, “This early introduction to STEM is important to us since SRR is a technology-based company. Our future workforce depends on it.”

In addition to the STAR grants, eight SRR Family Scholarships were recently awarded to local graduates, all of whom are children of SRR employees. The students were selected on the basis of leadership, extracurricular involvement, community service, grade point average, and scholastic achievement.

Foster commended the students for their accomplishments and recognized their parents at the reception.

Sandra Fairchild (right), Project Services & Support Director, awards STAR Grants to Mossy Creek teachers, Amy Edwards and Theresa Spieker.

President and Project Manager, Tom Foster, presents students of SRR employees with Family Scholarships.
SRR welcomed 42 students to their summer internship program where they will network and develop workplace skills, narrowing a gap between the classroom and the professional world.

SRR internships provide hands-on experience in diverse fields ranging from engineering to law to communications. In addition to a host of students from the full spectrum of engineering disciplines, this year’s interns are working towards degrees in programs such as business, information technology, emergency management, and statistics.

Of the 42 interns, six are involved in the School-to-Work program, which promotes work-based learning in occupational areas that may be pursued as future careers.

Three SRR interns are also participating in the Department of Energy’s Mentorship for Environmental Scholars, a program that provides exposure to laboratory research in the computer and environmental sciences to college students.

Many hail from universities throughout South Carolina as well as all over the Southeast, such as the University of South Carolina, Aiken Technical College, Clemson University, Claflin University, University of Georgia, University of Georgia School of Law, Georgia Tech, Georgia Southern, Augusta University, Florida State University, University of Alabama, Tuskegee University, University of Tennessee – Knoxville, Mars Hill University, and Meredith College.

SRR interns also represent universities such as Excelsior College in New York, the University of Illinois, the University of Akron in Ohio, and the Missouri University of Science and Technology.

Taylor Schneider, a mechanical engineering major from Clemson University, said that she hopes to gain real-world experience while working with the Salt Waste Processing Facility Integration Team this summer.

“The reason I accepted an internship at SRR was because I no longer wanted to only see a pump as something drawn on a piece of paper, but actually as a tangible machine that I could interact with,” said Schneider.

In addition to the experience gained for their degree programs, the SRR summer interns will also have the opportunity to give back to the local community through projects and support of organizations such as the United Way.

Allison Brown, Summer Intern Program Coordinator, said SRR not only supports the nuclear industry, but also the local community.

“Our interns are encouraged to embrace and uphold SRR’s community values...”
- Allison Brown, Intern Program Coordinator

SAFETY AND HEALTH ACHIEVEMENT AWARD

Christopher Holley, E & I First Line Manager, and Michael Young, Sheet Metal Mechanic, were presented with the SRR 2016 Safety and Health Achievement Awards for displaying exemplary safety behavior in their daily work. The award goes to a non-safety professional, non-exempt employee who spends less than 25 percent of their time on safety-related work.

Savannah River Remediation (SRR) LLC is the Savannah River Site’s (SRS) Liquid Waste contractor. SRS is owned by DOE. SRR is composed of personnel from a team of companies led by AECOM with partners Bechtel National, CH2M and BWX Technologies. For more information, contact the SRR Public Affairs Department: Amy Joslin at 803.208.1956.