

We do the right thing.

Delivering the Mission





“ We were able to safely accelerate our work per our plan ”



SRR Accelerates Waste Disposition

I am pleased to provide you with this Savannah River Remediation LLC (SRR) annual report. You will see many achievements that reflect the diligence and innovation of our employees and partners. Because of them, I can say with pride that 2010 ranks as an incredibly productive year in our contract.

Our safety performance led the way, even in the face of our high-hazard work. We were outstanding in demonstrating rigorous adherence to conduct of operations. We were able to safely accelerate our work per our plan, and as SRR introduces more technology into the field, we will find even better results. SRR exceeded its goals in radiological safety, and earned recognition along the way from others who see what we are accomplishing.

This annual report is an opportunity to highlight what makes 2010 a significant year of safety and success for Savannah River Remediation. I appreciate the work of all our employees, and I look forward to our workforce and partners rising to the challenges 2011 will bring.

Jim French
SRR President and Project Manager



James W French.

MISSION

Resolve the major legacy of nuclear weapons production at Savannah River Site by treating and disposing of Radioactive Liquid Waste and closing tanks

- Safely treat and disposition 37 million gallons of waste and close 49 underground storage tanks by 2028 to reduce risk and meet regulatory commitments
- Resolve the primary source of risk to public health and the environment
- Continually improve efficiency to accelerate schedule and reduce cost for the taxpayers
- Enable transformation of the site for future missions

LIQUID WASTE OPERATIONS

High DOE priority

Single Liquid Waste Operations contractor

Focused on acceleration of liquid waste mission

Workforce of ~2,600 employees

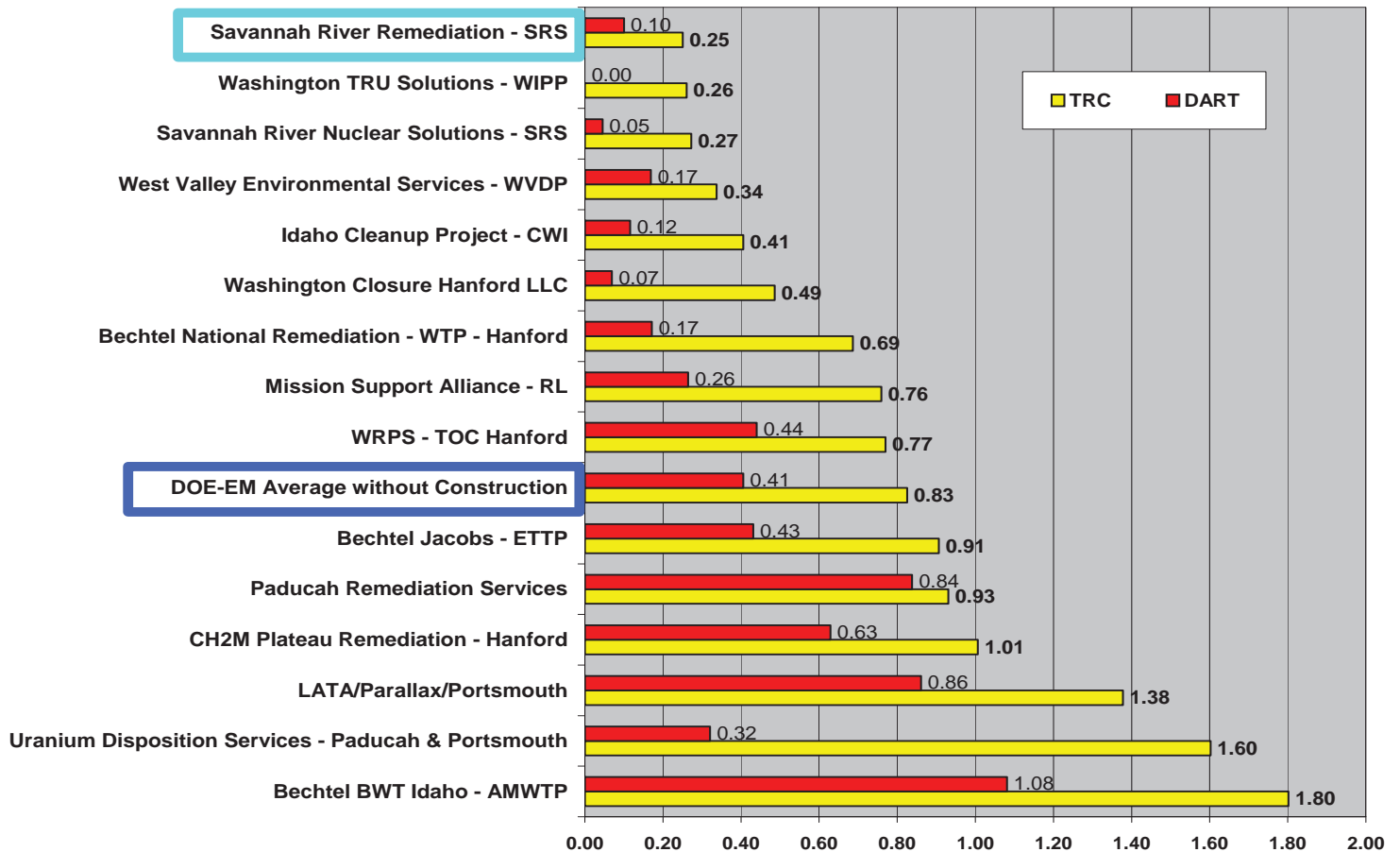
Began work in July 2009

SAFETY

- Achieve two URS President's Safety Awards for working 2.5 million safe hours.
- SRR number 1 in Department of Energy-Environmental Management contractors, according to the most recent report
- SRR achieved 3 million hours without a loss day of work due to work injury (DART /DA) in operations
- 23 million-plus hours without a loss day of work due to work injury (DART /DA) in Liquid Waste construction
- Received DOE Integrated Safety Management Verification – July 2010
- Recent Awards:
 - Voluntary Protection Program (VPP) Star of Excellence
 - VPP Legacy of Stars (3rd award)
- Conduct of operations rate is the lowest in five years



DOE-EM Prime Contractor Safety Ranking
 FY 2010 - Including Service Subcontractors (Ranked by TRC Rate)
 > 600,000 hours per year



Source: DOE Computerized Accident Incident Reporting System

DWPF Accelerates Canister Production

Perhaps 2010 will be remembered as the year that the Defense Waste Processing Facility (DWPF) began accelerating canister production.

DWPF is the largest radioactive waste glassification plant in the nation. It converts the liquid nuclear waste currently stored at the Savannah River Site (SRS) into a solid glass form suitable for long-term storage and disposal.

New equipment was added to blow bubbles into the DWPF melter, which evens out the melt pool temperature, allowing for faster pouring of canisters of glassified waste. The new bubblers, purchased with American Recovery and Reinvestment Act funding, will help pave the way for Savannah River Remediation to achieve its contract goal of closing waste tanks.

Developed for use at DWPF by the Vitreous State Laboratory of Catholic University and Energy Solutions, the four bubbler devices in the melter will increase the annual average production rate of waste canisters from the current level of 215 canisters a year to 325 annually. When all facility enhancements are complete, the annual canister production rate is projected to reach 400 canisters a year. The canisters will be temporarily stored at SRS awaiting transfer to a national waste storage facility.

The bubblers, six foot long tube-like structures, were installed in the melter in September 2010 during a planned outage. The bubblers inject argon gas into a molten glass and waste mixture inside the melter and significantly increase the capability of the 15 year-old waste processing facility to process radioactive waste.

Briefed on the installation of the bubblers during a visit to SRS, Assistant Secretary of Energy for Environmental Management, Dr. Inés Triay described deployment of the technology as “real progress.”

Inclusion of the bubbler technology in subsequent replacement melters is expected to provide substantial life-cycle cost savings to the U.S. Department of Energy. DWPF is currently operating the second melter since operations began in 1996. A third melter with bubbler capability awaits installation when required. The original DWPF melter required replacement after six years of operation.

As the bubbler installation project team successfully completed its task and the facility resumed operation, the DWPF staff produced the 3,000th canister of vitrified high-level waste and glass since operations at the facility commenced in 1996.



Defense Waste Processing Facility (DWPF) canisters are safely stored in the glass waste storage buildings located near DWPF



While Saltstone is performing well, upcoming upgrades to Saltstone will enable 24/7 facility operation when the flow of feedstock from the new Salt Waste Processing Facility occurs.



Salt waste material processing begins moving faster

Savannah River Remediation has reached an operation milestone by processing more than one million gallons of salt waste at the Savannah River Site (SRS).

Removing and processing salt waste, which constitutes 90 percent of the total waste inventory stored in SRS's two tank farms, is a major step toward operationally closing the Site's waste tanks. The milestone, reached in 2010, demonstrates safe and continuous operations of a key component in the waste removal process at SRS.

The one million gallons of salt waste was processed from a waste tank as part of the work of the Actinide Removal Process/Modular Caustic Side Solvent Extraction Unit, and has been processed through the Site's Saltstone Production and Disposal Facilities.

Salt waste processing is key to emptying and closing waste tanks at SRS since salt waste comprises about 90 percent of the volume in the tanks. The salt processing technologies, which have proven very effective in removing the radioactive constituents from salt waste, are an integral part of U.S. Department of Energy's strategy to complete tank closures and protect workers, human health and the environment.

The salt removal process – known as the Interim Salt Disposition Processing (ISDP) – began operations in April 2008 as an interim salt disposition system designed to remove nearly all radioactivity from salt waste solutions prior to its transfer to the Site's Saltstone facilities, which safely stabilize and dispose the waste. The ISDP is referred to as



“interim” because it was designed to operate while the Site's Salt Waste Processing Facility (SWPF) is being constructed.

SWPF will use processes similar to those found within ISDP, but on a larger scale, to safely process the majority of the Site's salt waste inventory. Lessons learned from processing experience will be evaluated and factored into the final design and operation of the SWPF.

Saltstone safely stabilizes and disposes of low-level radioactive liquid salt wastes resulting from the processing of waste from underground storage tanks at SRS. Saltstone mixes the salt solution with cement, fly ash and slag. The resulting grout mixture is mechanically pumped into nearby concrete disposal units.

SRS is the only DOE site treating salt waste from its tanks.

Salt processing technology made significant strides in 2010

Improving and deploying a technology solution to accelerate salt waste processing and tank closure at Savannah River Site (SRS) was a major highlight during 2010.

Savannah River Remediation LLC (SRR) engineers were given the go-ahead to apply the Small Column Ion Exchange (SCIX) technology, a cesium removal process, as a means of speeding liquid salt waste processing and expediting closure of the site's 49 underground waste storage tanks. Cesium is a by-product of nuclear material processing.

SCIX is a chemical process that removes radioactive constituents, such as cesium and other insoluble solids from salt waste contained in radioactive liquid waste tanks. Removing those constituents allows the remaining salt waste to be processed more quickly.

Currently, salt waste can be removed from SRS waste tanks at approximately 1 million gallons per year. However, by employing the SCIX technology, the annual salt removal rate from tanks could increase by another 2.5 million gallons annually. The \$130 million program, when coupled with the full suite of supplemental salt initiatives, is projected to result in \$3 billion in lifecycle cost savings for DOE by removing 6 years from the salt-removal schedule.

As 2010 neared an end, two successful reviews were completed, giving the green light to proceed with SCIX. An independent Engineering Technical Review sponsored by the U.S. Department of Energy (DOE) and second, a Formal Design Review panel. Each review panel approved and supported the SCIX maturity and process.

SCIX is part of a larger Supplemental Salt Initiative developed jointly between DOE and URS, the parent company of SRR.

The success of SCIX at SRS may mean that the process can also be deployed at DOE's Hanford Site in Richland, Washington, where URS is also a major site contractor.



The Supplemental Salt Initiative, a proven set of technologies, is proposed to be fully deployed at the Savannah River Site by Savannah River Remediation by October 2013.

Tank 48 Project achieves major milestone for material procurement

Savannah River Remediation LLC (SRR) achieved a major milestone in 2010 in its work to return to unrestricted service Tank 48, a 1.3 million gallon waste tank at the Savannah River Site.



The Tank 48 Treatment Integrated Project Team recently earned approval of the U.S. Department of Energy to purchase long lead-time materials to construct the unrestricted key vessels that will be used to treat radioactive and organic waste in Tank 48. The tank was taken out of service more than a decade ago. Organic material in the waste tank cannot be mixed with other wastes in the Site's other 48 waste tanks.

The approval means the project can now place orders for the production and receipt of specialty alloys for two major process vessels, called the Denitration and Mineralizer Reformer and the Product Separation Filter. The two vessels will work to break down and separate the radioactive and organic materials, which can then be sent to other on-site disposition paths.

The ability to procure these long-lead items keeps the project on schedule and on budget by supporting the SRR Liquid Waste System Plan Rev. 16, released near the end of 2010.

Tank 48 is scheduled to be returned to unrestricted service by December 2016.

Savannah River Remediation is working with subcontractor AREVA to develop and deploy two Enhanced Chemical Cleaning units (a specialized form of acid cleaning) that will be used for the planned final cleaning process for several waste tanks. The first unit is expected to be operational in 2013.

Accelerating waste removal and tank closure

Ultimately, Savannah River Remediation's (SRR) job is to operationally close waste tanks.

In 2010, much progress was made in getting many of the old-style underground waste tanks ready for closure. Fifteen of the 22 old-style tanks are in various stages of the seven-step process to prepare them for eventual operational closure. There are now more waste tanks in the closure process than at any time in the history of the Savannah River Site.

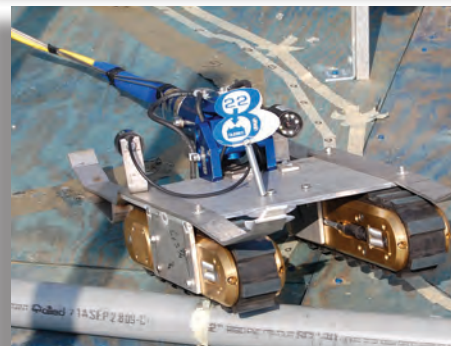
The seven-step process includes bulk waste removal, mechanical heel removal, chemical cleaning, cooling coil flushing, annulus cleaning, final sampling and isolation, and ends with the tank being filled with grout. Tanks 18 and 19 are scheduled to be grouted and closed in 2012, followed closely by Tanks 5 and 6.

Tanks 18 and 19 have been through the final planned waste removal and chemical cleaning processes. Tank 18 has been mechanically and electrically isolated. Tank 19 is mechanically isolated, with electrical isolation still in progress. Grout design and field modifications are scheduled to be complete in 2011 for Tanks 18 and 19.

Tanks 5 and 6 have been through the final planned waste removal and chemical cleaning processes. High definition photos and preliminary sample analysis indicate that the tanks are clean enough to close. Isolation design and sampling of the residual waste, which is necessary for the closure, has begun. Grout preparation will commence once electrical and mechanical isolation is complete.

As part of the Federal Facility Agreement, SRR was to complete bulk waste removal efforts on two tanks prior to September 30, 2010. DOE, EPA and SCDEC agreed that bulk waste removal efforts were completed on Tanks 8 and 12 prior to September 30, 2010, to meet the requirement.

Significant tank closure activities on Tank 13 for sludge removal and for use as a hub tank are in progress. Preparation for annulus residual sampling on Tank 16 and waste removal from Tanks 12, 4 and 7 is also under way.



Recovery Act funding yields outstanding results

American Recovery and Reinvestment Act (ARRA) funding contributed to some major accomplishments at the Savannah River Site in 2010 by accelerating high-level nuclear waste processing and moving more underground liquid waste storage tanks towards closure.

Due in large part to ARRA funding, more underground waste storage tanks are in the tank closure process at SRS than at any time in the Site's history. ARRA funding has supported the development and deployment of robot devices to sample the composition of tank waste. Two tanks are nearing completion of operational closure and, following regulatory approval, will be ready for grouting and final closure in 2012. Four other tanks, also with ARRA support, are following closely behind in the operational closure process.

Significant improvements to aging SRS liquid waste operations infrastructure – some of which is more than five decades old – have also benefitted from ARRA funding. Upgrades to infrastructure will avoid delays due to equipment failure and disruptions to scheduled waste processing. Enhancements to electrical systems, added protective pipe shielding and construction of waste transfer facilities will prepare SRS liquid waste operations for integration with the Salt Waste Processing Facility, now under construction.



Savannah River Remediation was allocated \$200 million of ARRA funding in September 2009. Peak employment reached more than 600 full-time equivalent positions either created or retained with ARRA funding. ARRA work is currently planned to continue until September 30, 2011.





Community Giving shows employee, company dedication

Inside Savannah River Remediation beats a big heart.

As a company, we are following the lead of our employees. They prove year in and year out that they are actively involved in their community – by giving money and giving of their time and talents in areas that have their heart and passion. In addition, they always respond to opportunities to reach out, just as they did in 2010 through our Habitat House work and the United Way days set aside to perform jobs at area agencies.

Savannah River Remediation (SRR) has given hundreds of thousands of dollars to areas that include education, health and welfare, civic and social work, and cultural performances and programs. We believe that supporting these areas raises everyone's quality of life.

As part of that giving, under an employee-based safety program, SRR employees select a United Way-member charity for each month worked without an injury, and the company donates \$500 to that charity.

In education, we are particularly proud that our work is opening doors. For example, we almost tripled the number of summer interns last year, from 15 students in 2009 to 42 students last year, ensuring we gathered a diverse set of students from across area colleges and universities. We funded numerous educational endeavors in our surrounding school districts, including saving taxpayers about \$190,000 a year and avoiding another \$400,000, all in electricity cost savings, thanks to a partnership between the Aiken County School District and SRR.

We also funded flu shots for low income and senior citizens who needed them in Allendale and Barnwell counties. We rang Red Kettle bells for the Salvation Army, and provided economic development incentive and seed money to area groups whose mission is to bring more jobs to our area.

In all, the SRR community giving program, coupled with our employees' personal community investment, achieved real results, brought needed funding to those charities hurt by the economy, and touched people's lives.



Our work outside the Savannah River Site fence line demonstrates that Savannah River Remediation is serious about being a good corporate neighbor.



“ I look forward to our workforce and partners rising to the challenges 2011 will bring. ”





Aiken, South Carolina



The Savannah River Site is owned by the U.S. Department of Energy.
Savannah River Remediation LLC manages and operates the liquid waste mission at SRS.