

Integrating Salt Waste Systems

Processing salt waste at SRS will continue through the Interim Salt Disposition Process until the Salt Waste Processing Facility (SWPF), which is currently under construction, becomes operational in the 2013 to 2015 time frame.

To ensure SRS's Liquid Waste Program is ready to support the SWPF and provide for a smooth transition, SRR formed the Salt Disposition Integration (SDI) team in 2009.

SDI will provide design authority support for the integration of Liquid Waste and the SWPF Project for the Department of Energy via modifications to existing facilities within liquid waste, including H Tank Farm, Effluent Treatment Project (ETP), Defense Waste Processing Facility and Saltstone Production Facility.

Returning Tank 48 to Service

The return of the 1.3 million gallon Tank 48 into liquid operations service will be a key component of future processing operations and tank closure. In 2009, DOE authorized award to THOR Treatment Technologies (TTT) a contract to provide detailed engineering and construction of the Fluidized Bed Steam Reforming (FBSR) process, the technology selected to treat the 238,000 gallons of high-level waste in Tank 48.

Once the water in Tank 48 is treated, it will be converted to a blend tank for the Salt Waste Processing Facility (SWPF) and will be used to qualify salt batches for transfer to the SWPF feed tank.

ARRA Leads to Job Creation, Retention



In September 2009, SRR received \$200 million in American Recovery and Reinvestment Act funds from \$1.6 billion allocated to the Savannah River Site. The funds will support the acceleration of both salt and sludge waste disposition, and respond to aging liquid waste infrastructure in order to assure continued waste processing. It is projected that approximately 500 jobs will be created or retained to perform the work in FY 2010.

SRR's recovery act activities will focus on major liquid waste facilities to include the Defense Waste Processing Facility, the Saltstone Processing Facility, integration with the Salt Waste Processing Facility now under construction and enhancements at the H and F Tank Farms. All recovery act work is scheduled to be completed by September 30, 2011.

Community Giving



SRR's liquid waste employees continued their exemplary support of local communities in 2009, giving of their time and finances. From building residential wheelchair ramps in Barnwell, SC, to improving a homeless shelter in Augusta, SRR

employees have distinguished themselves once again by helping when called upon to help the area's less fortunate.

As a company, SRR has contributed to many local charities, civic organizations and educational institutions during 2009, including educational scholarships and school grants; donations to assist with economic development and to ease unemployment



in locally depressed areas; and charitable gifts to the United Way, Salvation Army and Habitat For Humanity, to name a few.

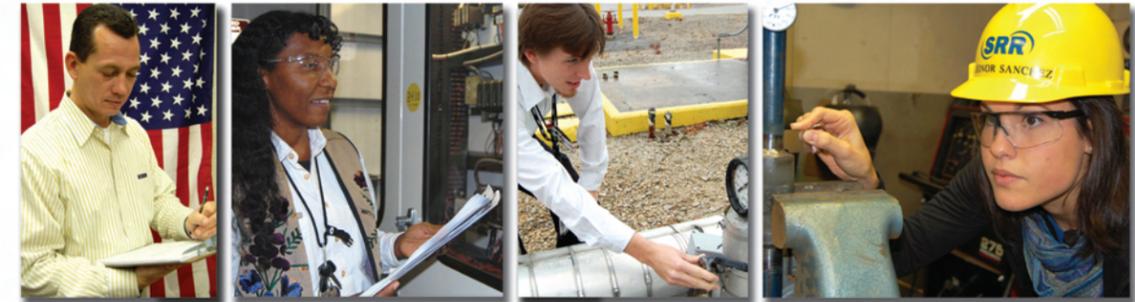


SRR believes in being a good corporate citizen and will continue its contributions in 2010. The company will encourage and support employees who continue to give back to communities because it is the right thing to do.



We do the right thing.

2009 ANNUAL REPORT



Jim French
SRR President

Our place in history is before us

Savannah River Remediation (SRR) will be judged, not just by our distinguished safety record or our successful management of liquid waste, but by the number of hazardous waste tanks we close at Savannah River Site (SRS) during our contract.

We have accomplished much during our first six months as the Department of Energy's (DOE) first dedicated liquid waste contractor at SRS. This New Year report will highlight many of those accomplishments.

We have made tremendous strides and continue to enhance our existing processes at all levels. We are promoting the development and implementation of new technology, all in the pursuit of accomplishing our commitments.

Since beginning the contract July 1, 2009, we have demonstrated our commitment as a corporate citizen as well, investing in educational and economic development efforts, assisting agencies that make a difference in the lives of our area's less fortunate, and giving of our time to help when help is needed.

SRR employees are the best in the world at what they do. What we have committed to achieve at SRS will be an asset to the Central Savannah River Area and our nation. The work we do will protect our environment and our lives.

At SRR, we do the right thing

Building on the Past; Preparing for the Future

For more than a decade, the Liquid Waste Program at the Savannah River Site has been removing waste from tanks, treating it, dispositioning it, and pouring the glassified waste into canisters for long-term storage and disposal. As a result of this waste removal, of the 12 old-style waste tanks, four are totally empty, five contain only dry waste with no liquid that could leak, and three contain liquid, which will remain under SRR surveillance until they are emptied.

From 1996 through August 2009, over 2,800 canisters of waste have been dispositioned. This represents approximately 40 percent of the total projected 7,235 canisters.

SRR has committed to close 22 old-style waste tanks in eight years. Utilizing the strengths of its partners, lessons learned, employee experience, enhancements to existing processes and the implementation of new technology, SRR will succeed. Eliminating legacy hazardous waste and the risk it poses to South Carolina, Georgia and our country is essential to the well being of everyone and our environment.

Safety at SRR

Significant change always presents challenges to an organization and this fact especially holds true in the area of safety. When Savannah River Remediation (SRR) became the liquid waste contractor at Savannah River Site on July 1, 2009, change was in the air, but safety did not take a break.

SRR employees responded to the pre-and post-contract transition distractions in world-class fashion. There were no injuries during the year that required an employee to miss a day of work, thus extending the phenomenal strings of greater than 12 million safe hours established by Liquid Waste Operations and 23 million safe hours earned by Construction workers. The operations record represents nearly four years without a significant injury and over 11 years of safe work for the Construction crafts.

Given this performance, it is no coincidence that SRR employees continue to receive awards for safety excellence at the state and national levels, including recognition from DOE-HQ for continued excellence in the Voluntary Protection Program.



Safety

"22 in 8" Philosophy



Savannah River Remediation (SRR) has committed to closing 22 old-style underground hazardous waste tanks at SRS during its eight-year contract. It is an aggressive goal that relies on the integration of several projects producing at optimal capacities, the incorporation of new technologies, and the safe work performance of employees.

considerable piping inside are cleaned with chemicals while other tanks that are open with no piping can be cleaned with remote-controlled mechanical devices.

The sampling stage consists of getting several samples of the residual waste and demonstrating that the tanks can be closed while still protecting human health and the environment. This stage is followed by grouting of the tanks. Seven other waste tanks are in the different stages of the closure process and five additional tanks will begin preparations for waste removal in 2010.

Important in this integration is waste tank space management and waste removal.

Three evaporator systems, which reduce water in the waste tanks, currently are operating at SRS, evaporating liquid waste and reducing waste volume. At certain times last year, the evaporators operated simultaneously. This process will need to continue throughout 2010 to provide the needed space to support accelerated waste removal and tank closure.



Working in parallel is the preparation of tanks for closure, specifically, Tanks 5, 6, 18 and 19, which are the next tanks designated for closure.

Tanks 5 and 6 have been chemically cleaned and are moving toward final sampling before putting grout inside them, sealing tanks from future use. Mechanical cleaning of Tanks 18 and 19 has been completed and final sampling is under way. Tanks that have



BEFORE



AFTER

Processing Sludge Waste



The world's largest waste glassification facility, the Defense Waste Processing Facility (DWPF), continued its excellent performance during the year and exceeded its target of filling 81 stainless steel canisters with glassified waste. At year's end, the DWPF filled 107 canisters. Since beginning operations in March 1996, some 2,845 canisters have been filled.

Work will continue this year on additional process improvements and replacement equipment to the DWPF. Installation of additional melter bubblers and related enhancements will increase canister production by 70 percent and significantly accelerate the waste processing rate to fill 325 canisters in 2010, on its way to 400 canisters in 2012.

Processing Salt Waste



Process improvements and system enhancements to the Interim Salt Disposition Processing (ISDP) during 2009 has resulted in salt processing achieving the necessary rate to increase production levels projected under the contract period. On

two recent occasions, the ISDP attained a processing rate of four to six gallons per minute, which is the standard needed to achieve our tank closure commitment.

The ISDP has processed over 698,000 gallons of salt waste in 2009 and over 840,000 gallons since beginning operations in April 2008.

Removing salt waste, which fills approximately 90 percent of the tank space in the SRS tank farms, is a major step toward closing the Site's waste tanks. What the ISDP team is doing to enhance cycle time, cut absorption time, make adjustments to temperature and chemistry and improve caustic conditions is very encouraging and will enable SRR to be successful.

Environmental Impact



SRR continued the SRS tradition of posting another exemplary environmental compliance record in 2009, as liquid waste operations continued to result in minimal impact to the off-site public and the surrounding environment.

The Site's radioactive and chemical discharges to air and water were well below regulatory standards for environmental and public health protection. Its air and water quality met applicable requirements and the potential radiation dose from its discharges was less than the national dose standards.

Technology Development / Process Enhancements



SRR's commitment to close 22 old-style tanks in eight years will depend largely on the implementation of new technology and continued enhancements and improvements to existing processes. Considerable work has taken place in 2009, setting the stage for the new technology.

To accelerate tank cleaning and closure, initial work has started on Enhanced Chemical Cleaning (ECC), which is a commercial technology that will render the waste tanks visibly clean allowing the tanks to meet or exceed closure requirements.



SRR will streamline and enhance many of its existing processes. At the Defense Waste Processing Facility (DWPF), the feed preparation system will be improved, along with the installation of melter bubblers, which will provide optimum heat transfers that will increase melter throughput and will enable emptying tanks quicker.

Continued refining and optimizing the Interim Salt Disposition Process and facilities has resulted in achieving the required process attainment rate of 40,000 gallons of salt waste processed in one week at four to six gallons per minute. This rate is needed to double the salt processing throughput, which supports waste removal and tank closures.

Low-level Waste Disposal

Safely stabilizing and disposing of low-level radioactive liquid waste produced and stored at SRS is the function of the Saltstone Facility, which consists of two parts: the Saltstone Production Facility and the Saltstone Disposal Facility.

Since assuming the SRR contract, efforts have been focused on refining the Saltstone Production Facility to increase reliability and prevent process upsets, which can result in extensive downtime for equipment restoration. These efforts enabled 25 percent of the annual production to be achieved in December 2009.

During December 2009, the facility experienced its highest processing production rate ever, processing approximately 510,414 gallons of salt waste. The previous highest production rate was 374,000 gallons for any one month. For 2009, over 2.3 million gallons of salt waste has been processed through the Saltstone Facility.

To ensure needed capacity is available in the Saltstone Disposal Facility, extensive construction has taken place on the first disposal vault utilizing the new enhanced design. Site preparation activities were initiated for the next two disposal cells. During the upcoming year, the organic modifications will be placed in service in the current vault and required tie-ins will be completed for the next vault.