

SAVANNAH RIVER NUCLEAR SOLUTIONS

# SRNS Today

## p 6 Operational Highlights

a look back at our first tenure as SRS M&O contractor



PAGE 4 ▲  
Enterprise•SRS topic of leaders forum



PAGE 8 ▲  
C Reactor basin grouting completed



PAGE 9  
Radioecologists discuss research programs



FLUOR • NEWPORT NEWS NUCLEAR • HONEYWELL

[www.savannahrivernuclearsolutions.com](http://www.savannahrivernuclearsolutions.com)



**Dwayne Wilson**  
SRNS President and CEO

## Welcome to the September 2012 edition of “SRNS Today.”

September has been a month of great news for Savannah River Nuclear Solutions.

First and best, our employees have not missed a day away from work due to serious injury since October 19, 2011—an impressive 10 million safe hours. This is no small feat, particularly given the amount and complexity of work we’ve accomplished during that time. Congratulations to our employees on their outstanding achievement!

This demonstrated commitment to safety was an important factor in the next “good news” story. I’m pleased to announce that the Department of Energy has extended our contract to operate the Savannah River Site through September 2016. The terms and conditions of the original contract remain unchanged, and through our continued focus on safety and security, quality work performance and teamwork, we will continue to excel, meet and exceed DOE’s expectations. For highlights of our first tenure as the SRS management and operations (M&O) contractor, please see Page 6.

As M&O contractor, the initiatives of Enterprise•SRS are the foundation of our mission. National security, clean energy and environmental stewardship were the topics of the day at a recent community leaders forum. This gathering of leaders from the Department of Energy, National Nuclear Security Administration, major SRS contractors and key stakeholders from the area provided an opportunity to discuss the evolving initiatives of Enterprise•SRS and how those initiatives are moving forward. For photos of the forum, please see Page 4.

I hope you enjoy this edition of “SRNS Today.” As always, thank you for your interest in Savannah River Nuclear Solutions.



*Savannah River Nuclear Solutions, LLC, is a Fluor partnership with Newport News Nuclear and Honeywell. Since August 2008, SRNS has been the management and operating contractor for the Savannah River Site, a Department of Energy-owned site near Aiken, South Carolina, including the Savannah River National Laboratory. The SRNS corporate and community offices are located in the renovated 1912 “Old Post Office” building in Aiken, S.C.*

*The primary initiatives of SRNS are national security, clean energy and environmental stewardship.*

*SRNS Today is published monthly by SRNS Corporate Communications to inform our stakeholders of the company’s operational and community-related activities. If you have questions or comments, please contact us at 803.952.9584.*

**For additional information about SRNS, please visit our website at [savannahrivernuclearsolutions.com](http://savannahrivernuclearsolutions.com).**

## USC Aiken Chancellor tours SRS



Representatives from the University of South Carolina—Aiken met with DOE and SRNS executives during a recent tour of the Savannah River Site (SRS). Pictured from left are Dave Eyler, SRNS Senior Vice President and Deputy Director of Savannah River National Laboratory (SRNL); Dr. Clifton Jones, Dean of the USC Aiken School of Business Administration; Dwayne Wilson, SRNS President and CEO; Dr. Sandra Jordan, Chancellor of USC Aiken; Dr. Jeff Priest, USC Aiken, Interim Executive Vice Chancellor for Academic Affairs; Dr. David Moody, Manager, DOE Savannah River Operations Office; and Paul Deason, Deputy Director of SRNS Support Services.

## 'Raising the Steaks'



Dennis Donati (right), SRNS Senior Vice President for National Nuclear Security Programs, trades his management duties for serving detail at "Raising the Steaks," a fundraiser for the United Way. This year's event was held at Outback in Aiken. Approximately 250 SRNS employees attended, with SRNS executives and managers serving as celebrity waiters. The event raised more than \$4,800 in ticket sales and more than \$1,500 in tips.

### In the community



### Fred Dohse named to S.C. Chamber Board

*SRNS Executive Vice President and Chief Operations Officer Fred Dohse was selected to become a member of the South Carolina Chamber of Commerce Board of Directors on Oct. 1, providing a broad range of experience and support for this important organization.*

*The South Carolina Chamber is the voice of business and the premier advocacy organization in the state. The Chamber creates prosperity for all citizens through an economy of increased productivity and global competitiveness.*

*"We are thrilled that Fred Dohse will join the South Carolina Chamber of Commerce Board of Directors. With the nuclear renaissance on the horizon in South Carolina, Fred will add a great deal of knowledge and perspective to this diverse group of business leaders," said Otis Rawl, President and CEO, South Carolina Chamber of Commerce.*

*The Chamber leads the way in achieving global competitiveness and ultimately increasing prosperity for S.C. citizens.*

*"I fully recognize the great value of the South Carolina Chamber of Commerce," said Dohse. "I am honored by this invitation to assist the South Carolina Chamber Board members with this important work."*



SRNS President and CEO Dwayne Wilson (left) and Dr. David Moody (right), Manager, DOE-Savannah River, were among the speakers at the E•SRS Community Leaders Forum.

## Community leaders gather to learn more about Enterprise•SRS

SRNS President and CEO Dwayne Wilson was one of the speakers at the Enterprise•SRS Community Leaders meeting held Sept. 27 in Aiken. The attendees heard presentations by DOE-Savannah River, NNSA-Savannah River Site Office and the major contractors at SRS on a variety of subjects relating to E•SRS.



Dwayne Wilson with Roland Smith, Chairman of the South Carolina State Representatives Delegation



Dr. Terry Michalske (right), SRNS Executive Vice President and Savannah River National Laboratory Director, with Tim Simmons, Chairman of Aiken Together.

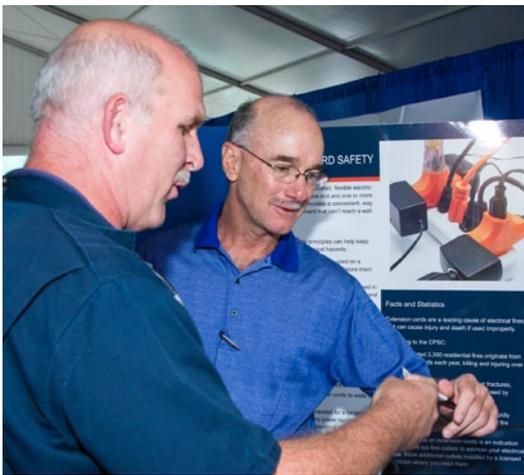


LaVerne Gold (right), President and CEO, United Way of the CSRA, Inc., and Reggie Castleberry (center), Office of U.S. Congressman John Barrow, with Paul Hunt, SRNS Senior Vice President of Environmental Management Operations.



## Safety Expo focuses employee attention on safety, security and stewardship

More than 1,600 Savannah River Site employees participated in the 2012 SRS Safety Expo at the Center for Hydrogen Research on Sept. 13-14. Approximately 50 booths organized by SRNS and other Site contractors, Local Safety Improvement Teams and several community organizations emphasized personal safety, security, wellness and environmental stewardship. Attendees perused booths on topics from alcohol and drug awareness to personal protective equipment.



Photos (clockwise from top); The SRNS Site Services booth was one of many sponsored by Site organizations; SRNL employees demonstrate glovebox work; tents outside the Center for Hydrogen Research greeted visitors to the Safety Expo; and electrical safety was one of the many topics that attendees could explore at the Expo.

# 2008-2012

and counting!

## SRNS Operational Highlights: The First Four Years



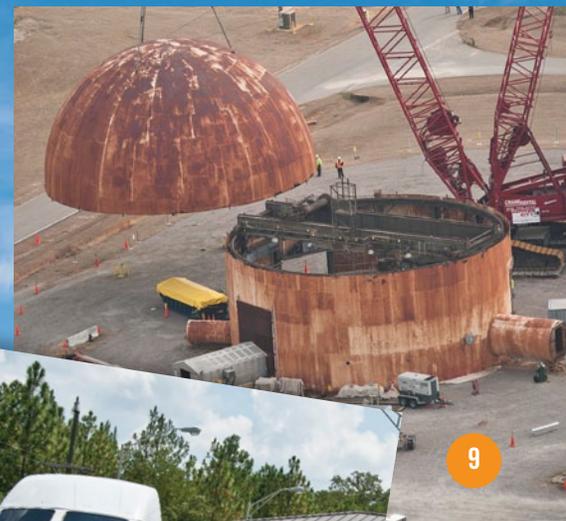
In 2008, Savannah River Nuclear Solutions became the new management and operations contractor for the Savannah River Site. Since then, SRNS has led SRS in safety, security and high-impact project accomplishments. With the extension of its contract through September 2016, SRNS will continue its leadership role in the Site's national security, clean energy and environmental stewardship missions.



6



- 1 The "Safety begins with me" campaign raised safety awareness for the entire Savannah River Site;
- 2 SRNS was a leader in creating the Enterprise•SRS core missions;
- 3 Nonproliferation activities continued at L Basin;
- 4 SRNL provided assistance to Japan in the wake of the Fukushima disaster;
- 5 SRNL marked 10 consecutive years;
- 6 Fueled by American Recovery and Reinvestment Act funding, SRNS reduced the Site's operational footprint by 85 percent through the closure of the Heavy Water Components Test Reactor, as well as
- 7 accelerating the shipment of legacy transuranic waste from SRS to the Waste Isolation Pilot Plant



concept, which focuses on national security, clean energy and environmental stewardship  
10 million safe hours as it continued as the DOE safest national lab for the eighth  
cleanup of M Area, 7 closure of P and R Reactors, and 8 demolition of K Cooling Tower and  
in New Mexico.



## Millions of gallons of grout complete C Reactor disassembly basin closure

### SRNS hosts Industry Day for SMR companies

#### The SRNS Small Modular Reactor (SMR)

Pursuit Team recently held an Industry Day for NuScale Power, Holtec International, Gen4 Energy and SCANA Energy, to investigate potential SRS areas for placement of SMRs.

Small modular reactors are part of a new generation of nuclear power plants designed to provide a flexible, cost-effective and clean energy alternative to large, high power, commercial nuclear reactor units. SMRs are defined by the International Atomic Energy Agency as those with an electricity output of less than 300 megawatts electric (MWe). In contrast, the two new reactors being built at Plant Vogtle in Waynesboro, Ga., are each capable of producing 1,100 MWe.

Modular reactors are primarily manufactured at a factory and transported to the designated site for final assembly. The SRS SMR initiative seeks to facilitate advancement of SMRs by assisting in the development, licensing, construction and testing of prototype reactors at SRS.

Two of the SMR companies, NuScale Power and Holtec International, named SRS as their ideal site for the housing of these reactors in recent funding requests made to DOE. Their decision was based on many already-existing benefits, including access to SRNL; an in-place Emergency Response Program and Security Team; geographical benefits such as easy access to cooling water; access to transportation; and a history of nuclear production from start to finish.

“Hosting SMRs would go a long way toward anchoring the future of Enterprise•SRS,” said Steve Sheetz, SRNS Program Manager for Advanced Reactors. “Not only do SMRs help move the energy industry forward, but they also would help us continue our work in materials management and disposition. Since SMRs produce energy, it would also assist the Site in its mission to be clean energy self-sufficient.”

**More than 50 years after it was built**, the SRS C Reactor disassembly basin is now closed, filled with 2,800,000 gallons of cement-like grout.

For decades, the huge basin was used to cut and temporarily store irradiated reactor fuel elements, prior to shipment to one of two onsite chemical separations facilities. This defense production reactor ran from 1955 to 1985 and played an integral role towards producing plutonium for nuclear weapons during the Cold War.

“Over two million gallons of water had to be evaporated using special equipment to create the space for the grout,” said Chris Bergren, Manager, Area Completion Projects. “Due to C Reactor’s historical status, the rest of the building will not be filled with grout. Our goal is to safely eliminate a potential source of contamination while fully preserving the historical integrity of the building as a whole.”

“Our goal is to safely eliminate a potential source of contamination while fully preserving the historical integrity of the building as a whole.”

**Chris Bergren,**  
Manager, SRNS Area Completion Projects

At peak operations in the 1950s, SRS maintained five production reactors. K Reactor was permanently shut down in 1992, although parts of the facility are still used as a safe and secure storage center for U.S. plutonium. Both P and R Reactors have been fully grouted and permanently sealed. L Reactor stores SRS used fuel in its modernized basin.

“Successfully completing this task at the former C Reactor facility is yet another example of our long-range plan to safely decommission and sometimes demolish SRS buildings that are no longer needed,” said Dr. David Moody, Manager, DOE-Savannah River Operations Office. Though SRS has many enduring missions, Moody noted that, to date, the footprint of the Site has effectively been reduced by 85 percent in size.

Photo: More than 2,800,000 gallons of grout were recently poured into SRS’ dormant C Reactor facility to safely eliminate a potential source of contamination while preserving the building’s historical integrity.



## SRNL hosts gathering of radioecologists for workshop on research programs

**The National Center for Radioecology (NCoRE)** recently hosted 61 people at an SRS workshop titled "Radioecology in the 21st Century - The Science, Tools and Research Goals to Advance the Field."

NCoRE was established to provide technical expertise to the nation on radioecology issues by providing a technical point of contact, prioritizing research efforts to develop new knowledge to address needs for the nuclear industry and homeland security, and to rebuild radioecology programs, including DOE and graduate education programs. SRNL is the lead organization tasked with managing NCoRE.

"The science of radioecology is critical to our understanding of how nuclear materials interact with the environment, yet we're running low on people with the academic and professional training to carry radioecology forward," said Dr. Wendy Kuhne, SRNL senior scientist and current Director of NCoRE. "With NCoRE, we hope to reconstitute the pipeline, and advance the science. SRS has all the attributes to be the focal point of this effort, and it's gratifying for SRNL to be in a leadership role."



Dr. Wendy Kuhne of SRNL and Director of NCoRE, addresses the attendees.

Radioecology is the study of the fate and transport and potential effects of radionuclides and associated contaminants in the environment. It provides information that can be used for cleanup activities and conducting risk assessments for the nuclear industry, uranium mining industry, naturally-occurring radionuclides (e.g., radon) and emergency responses to incidents involving radioactive contaminant releases (i.e., like at Chernobyl and Fukushima).

The objective of the two-day workshop, held at the Center for Hydrogen Research, was to address the current status of radioecology research programs in the U.S. In attendance were the NCoRE partners, DOE, state and federal agency scientists and university researchers.

## Dr. William Summers to receive Chemical Institute award

**Dr. William A. Summers of SRNL** has been named as the recipient this year's Robert E. Wilson Award at the American Institute of Chemical Engineers (AIChE) annual meeting in Pittsburgh, Oct. 28-Nov. 2.

The Robert E. Wilson award is made to an individual for outstanding chemical engineering contributions and achievements in the nuclear industry. The award is given in memory of Dr. Robert E. Wilson, a noted chemical engineer, long time member of AIChE, board chairman of Standard Oil of Indiana and member of the former U.S. Atomic Energy Commission (AEC).



Dr. William Summers

Dr. Summers is a Program Manager in the Clean Energy Directorate at SRNL. He serves as the manager for the nuclear fuel cycle R&D program at the laboratory, as well as providing senior leadership for the development and management of a wide range of other energy-related technology programs. Dr. Summers was instrumental in establishing the hydrogen energy program at SRNL, and he served as project manager for the development of the world's first hydrogen hybrid-electric transit bus.



## SRNL engineer named Fellow of ACerS

*Alex D. Cozzi, a fellow engineer with SRNL, has been elected as a Fellow of the American Ceramic Society (ACerS). Founded in 1898, the American Ceramic Society is an international membership society focusing on ceramic materials and applications.*



Alex Cozzi

*Dr. Cozzi's research has focused on cementitious waste forms for radioactive waste disposal. In addition to supporting the Savannah River Site's Saltstone Facility, he is contributing to the development of the cementitious waste form and process for the Department of Energy's Hanford Site. He also contributed to the development of the cementitious waste forms for the Waste Solidification Building currently under construction at SRS.*

*As a member of the American Ceramic Society, Alex is a member of the Nuclear and Environmental Technology Division, serving as the Division Chair in 2010/2011. He is also an active member of the National Institute of Ceramic Engineers and served as President in 2010/2011.*

## And the winners are...

Maitland Barton, Augusta Preparatory Day School

Shelby Calliham, Strom Thurmond High School

Ashlee Carr, Aquinas High School

Stephen Coleman, Cross Creek High School

Keylondria Crouch, Strom Thurmond High School

Justin Dunton, Midland Valley High School

Alicia Glover, Thompson High School

Aubrey Hadden, Evans High School

Endia Jones, Westside High School

Mclain Lambert, Greenbrier High School

Katrina Petersen, Academy of Richmond County

Makayla Watkins, Barnwell High School

Brandon Woodfin, A. R. Johnson Health Science and Engineering Magnet School

Chimere Yancey, Glenn Hills High School



Dwayne Wilson (center), SRNS President and CEO, stands with Stephen Coleman (left) of Cross Creek High School and Brandon Woodfin of the A.R. Johnson Health Science and Engineering Magnet School, two of the 14 scholarship winners from College Night.

## 6,000 area high school students attend SRNS-organized College Night

**More than 6,000** local high school students attended this year's CSRA College Night, held at the James Brown Arena in Augusta. College Night is an annual event hosted by SRNS, SRP Federal Credit Union, Clear Channel Media + Entertainment (Augusta), and DOE-Savannah River. The event is organized by SRNS's Education Outreach Programs.

Over 160 colleges and universities were in attendance to answer student's question and give free information about their schools. The event also featured seminars on financial aid, writing essays for college admission, and a Career Exploration area, where students explored their skills and interests in order to help them choose a career path based on their unique talents.

Students were also given the opportunity to win one of 14 \$1,000 scholarships.

"We are pleased with the continuing success of College Night," said Gladys Moore, Education Outreach Coordinator. "Our hope is that area students are now better informed about financial aid, the application process, essay writing, individual career interests and the opportunities available to them, and will use this information to choose the best college for them."





**Scenes  
of SRNS**

*A lone oak is wreathed in fog on a late summer's morning in M Area at the Savannah River Site. Once an operational area, M Area is now cleaned up, and home to the new SRS Curation Facility. (Photograph by Steve Ashe)*

# 10 million safe hours

**Congratulations to the employees of  
Savannah River Nuclear Solutions**  
on your outstanding achievement and demonstrated commitment  
to an unwavering culture of working safely.



**Dwayne Wilson**  
SRNS President  
and CEO



**Fred Dohse**  
SRNS Executive Vice President  
and Chief Operations Officer



**Terry Michalske**  
SRNS Executive Vice President  
and SRNL Director

