

October 2011

SAVANNAH RIVER NUCLEAR SOLUTIONS

SRNS Today



SRNS Habitat house welcomes its new family p3

Home Sweet Home



PAGE 6-7 ▲

SRNS celebrates
employees with
25-Year Banquets



PAGE 8 ▲

More than 4,000
visit SRS through
Tours Program

PAGE 5

SRNL collaborates
with Chernobyl Lab



Savannah River
NUCLEAR SOLUTIONSSM

FLUOR • NEWPORT NEWS NUCLEAR • HONEYWELL

www.savannahrivernuclearsolutions.com

Dwayne Wilson

SRNS President and CEO



Welcome to the October 2011 edition of "SRNS Today."

It has been a busy month, as I have assumed the leadership for Savannah River Nuclear Solutions. It has also been very rewarding and challenging, and I am pleased to have the opportunity to lead SRNS as we work to ensure that the current and future missions of SRS in national security and environmental management are accomplished with excellence. I am honored to be a part of this team and I am humbled by the warm reception by this community. I look forward to working to meet your expectations and thank you in advance for your continued support of our company.

I am also excited about working with Dr. Terry Michalske to further solidify the Savannah River National Laboratory's stature within the DOE complex and international arena as it becomes the engine of growth for our future. Please read more about SRNL's recent work and our researchers on Page 5.

I've been impressed with the generous nature of SRNS employees, especially those who volunteered numerous hours to complete a second SRNS-sponsored Habitat for Humanity house (see Page 3). Because of their dedication, a Warrentville, S.C., family will be able move into the house a month ahead of schedule, allowing them to spend the holiday season in their new home.

A first for me this month was the opportunity to participate in the annual 25-Year Banquets, a tradition that began in the late 1970s for current and retired employees with 25 or more years of service at SRS. Several thousand employees and retirees participated during three evenings and enjoyed the chance to catch up with their friends. I hope you enjoy the photos on Pages 6 and 7.

Tremendous opportunities await our company and our Site. I am eager to be a part of SRNS and this community and I look forward to working with you—our community leaders and key stakeholders—to achieve a strong and sustainable future for SRS.



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.



The keys to the castle

SRNS-sponsored Habitat for Humanity house welcomes its new family

Mix nine crews of volunteers, a large portion of dedication and one deserving family, and what do you get? A home for the holidays—and beyond.

SRNS and Aiken County's Habitat for Humanity held a ribbon-cutting ceremony on October 30, celebrating the completion of a new Habitat for Humanity house for a Warrentville, S.C., family.

This is the second SRNS-sponsored Habitat for Humanity home. SRNS donated \$50,000 to the project, which paid for all of the building materials used to construct the three-bedroom, 1,100 square-foot home. Located on St. Johns Place, in the Warrentville Ridge subdivision, the structure took 12 weeks to complete, a month ahead of schedule, using an all-volunteer workforce.

Nine crews, consisting of approximately 400 SRNS employees, worked long hours to ensure that Qiana Johnson and sons Shemar (9) and Braylen (3) would move into a soundly built, high quality home. Other volunteers for Habitat, many of whom are retired SRS employees, helped build the house as well.

"It's hard for me to put into words how much this new house means to us," said Johnson. "I'm so grateful to all the SRNS volunteers and to the Habitat for Humanity organization. Today, this house has become a much loved home."

Johnson is an assistant manager at Kangaroo Express, and has lived with her mother in Windsor, S.C., for the last nine years. "I truly enjoyed helping the various teams build our new home," added Johnson. "I had no idea how much work is involved, and how many skilled people are needed to build a house."

"I'm so proud of our employee volunteers," said Fred Dohse, SRNS Executive Vice President. "This house was built with strong hands and, more importantly, big hearts. Many of the volunteers put in long hours of hard work, frequently in temperatures reaching well into the 90s. Their dedication towards helping Qiana and her family is truly moving."

"One might think that building all these Habitat houses over the years would become a matter of routine," said Richard Church, Habitat for Humanity Executive Director for Aiken County. "However, each ribbon-cutting ceremony is special to me, because they reconfirm the life changing role that Habitat plays in our community. It is great to be a part of the Habitat's Christian mission of providing homeownership opportunities to low-income families in need of decent and affordable housing. The SRNS sponsorship exemplifies its commitment to work together with Habitat to build a better community in which we live and work."

Photos: (Above) On hand for ribbon-cutting were (from left) Aiken County Habitat for Humanity Executive Director Richard Church; Habitat Family Support Committee member Julie Carleton; SRNS Executive Vice President Fred Dohse; homeowner Qiana Johnson and her sons Shemar and Braylen; Habitat Board of Directors President Richard Harmon; Aiken County Council Chairman Ronnie Young; and S.C. Representative Roland Smith. (Below) Fred Dohse presents photos of the house-building process to the new homeowners.



TRIM-ming costs and footprint: Tritium closes historic control room

SRNS in the community



LEAP at the Miracle Mile Walk

SRNS was a corporate sponsor of University Health Care Foundation's 11th Annual Miracle Mile Walk on October 15. Among the SRNS participants were (left to right, back row) were the "Leaders Emerging Among Professionals" (LEAP) sponsor/breast cancer survivor, Candice Dermody, and LEAP members Matt Coffin, Lakendra Eubanks, Julie Bankston, Nick Morse, Carmen Lorenzo-Perez and Melissa Fleming, as well as (front row) Rebecca Butler, Perry Levin, Katy Middleton and Connie Yung. Susie Ferrara (not pictured) of SRNS Public Affairs served on the Miracle Mile Committee. More than 7,000 people participated in the three-mile walk at the Augusta Commons and raised more than \$300,000 to benefit University Hospital's Breast Health Center and the Mobile Mammography Unit, which visits the Savannah River Site on a monthly basis.

After nearly 50 years of around-the-clock operations, a once-critical Tritium Facilities control room in the H Area Old Manufacturing (HAOM) facility was closed, marking the first 24-hour period where no crew reported there for duty.

This milestone is a significant step in a plan to reduce operating costs and the operational footprint within SRS Tritium Programs.

To reduce annual operating costs by \$20 million and the operational footprint by 44 percent, the Tritium Responsive Infrastructure Modifications (TRIM) plan calls for the deactivation of several facilities.

"Instead of having a facility-based control structure with redundant capabilities in each building, we will implement a centralized control structure for all operations within any of the Tritium facilities," said Program Manager Rich Izard. "This consolidation will result in a smaller operational area and will reduce costs by moving missions out of the older, more costly facilities. While the HAOM facility will remain operational for several years, consolidating the control room functions into the New Manufacturing facility is an important first step."

The HAOM began processing tritium in 1958. Over the years, the facility has expanded twice to accommodate the needs of the tritium mission and has subsequently grown to over 61,000 square feet. With the most recent expansion in 1984, the control room was relocated to the center of the building, where it has since served as the daily center of operations. For the next several years, the facility will continue to house aspects of tritium operations, but the alarms and system status will be monitored from the New Manufacturing facility. The HAOM will be fully deactivated by the end of the project, scheduled for 2021.

"These changes are important. In the long run, they will allow us to provide greater value to our customer," said Tritium Programs Integrated Supply Chain Director Lee Schifer. "Centralizing these control rooms will help us better plan and execute our work, so that safety performance, conduct of operations and product quality remain the central priorities."

Photograph: With the closing of a historic control room in the H Area Old Manufacturing facility, tritium operations (pictured) alarms and systems status will be monitored from the New Manufacturing facility.



Health Physics Journal edition features work by SRNL, Chernobyl lab collaborators

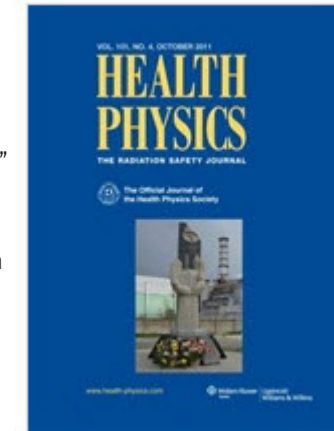
Collaborative work between the Savannah River National Laboratory and the Chernobyl Center's International Radioecology Laboratory (IRL) has led to a special issue of the Health Physics Journal entitled, "Radiation Monitoring and Radioecology Research in the Chernobyl Exclusion Zone – 25 Years After the Accident."

Under the auspices of the DOE Office of Environmental Management's (EM) International Program, SRNL and the Ukraine's IRL have collaborated on various research projects, making use of the wealth of knowledge to be gained from research in the region impacted by the 1986 accident at the Chernobyl Nuclear Power Plant. Researchers at IRL use the area around Chernobyl as an extensive laboratory for studying the effects of radioactive contamination and methods of decontamination. DOE-EM sponsored the collaboration both to assist in the Ukrainians' research efforts and to gain valuable information on subjects of mutual interest. One of the key objectives of the collaborators is to make the knowledge gained through this partnership widely available.

Papers published in Health Physics in 2010 covering the first few studies led to interest in the special issue, which is sponsored by DOE-EM's International Program and SRNL. The current issue includes 10 papers and an overview, all co-authored by personnel from SRNL and IRL, along with an introduction by SRNL's Dr. Eduardo Farfan, who, along with SRNL's Tim Jannik, were the editors for the special issue.

Under a 2010 agreement, SRNL and IRL continue to collaborate on radiation ecology research.

"Even though Chernobyl is fundamentally different from any U.S. nuclear site, there is much we can learn in the surrounding area," said Dr. Farfan, co-principal SRNL investigator for interactions with IRL. "As a result of the accident, the nearby area has become a unique laboratory where we can observe how the environment changes and how animals and plants change over time following contamination. The scientists at IRL have unique knowledge since they work with this landscape every day," he added.



'Innovation' magazine features SRNL researchers

"Innovation, America's Journal of Technology Commercialization," spotlights two SRNL researchers in its annual "Innovators" issue. Among the 11 scientists and engineers from across the DOE Complex are SRNL's Joe Cordaro and Lucile Teague.

While his home base is SRNL, Cordaro is a man who keeps his suitcase nearby and his passport up to date. His travels take him not just from continent to continent but from industry to industry. Cordaro is recognized across the DOE complex and internationally as an expert in nuclear instrumentation, process control and high speed data acquisition.

For Dr. Teague, seeing is believing and is the basis for creating. She uses scanning Kelvin probe microscopy to map charge transport in thin film semiconducting materials. Her examination is contributing to an understanding of how thin films of small organic and polymeric semiconductors work. That understanding is the key for creating new electronics technologies.

Honors and accolades



Neutrino Commemoration

Walt Joseph (left), Executive Director of the SRS Heritage Foundation, presents a plaque celebrating the detection of the neutrino at SRS to Dr. Terry Michalske, SRNL Director. The plaque is a replica of the original presented to SRS by the Atomic Energy Commission in 1956 to commemorate the historic experiment in P Reactor. Detection of the neutrino confirmed results of calculations performed 30 years earlier and resulted in a Nobel Prize for one of the discoverers.

Calloway elected AIChE Fellow

Bond Calloway, Alternative Energy Research Manager with SRNL, was elected as a Fellow of the American Institute of Chemical Engineering (AIChE). The grade of Fellow recognizes outstanding contributions made to the engineering profession and significant accomplishments in chemical engineering. Calloway was recognized both for his achievements in nuclear waste process development and for his leadership in the field of energy research as it relates to the chemical engineering profession.



Bond Calloway



Dee Adkins, Brenda Landrum



Major Thompson and Don Orth



Irene Bush



Gerald Owen and Vivian McDuffie



Gloria Bell and TC Bowman

Good to see you, too!

The annual SRS 25-Year Banquets, held Oct. 17, 19 and 20 in Augusta, gave SRNS employees and retirees a chance to catch up with their friends and co-workers, and learn about the current work at the Site. More than 1,800 attended the event, which was coordinated by SRNS.



Icy Welcher and Ava Hawkins



Rodney McTeer



Pete Gray, Happy Parker and Marilyn Buffett



Mona Galloway and Dennis Adams

SAVANNAH RIVER SITE 25 Year Banquets

October 17, 19, 20, 2011 at the Augusta Marriott

Banquet Chair: Will Davis
Master of Ceremonies: Cliff Webb (Monday, Thursday), Dean Campbell (Wednesday)
Welcome • Invocation • Dinner
Speakers
 Monday: Fred Dohse, SRNS Executive Vice President and Chief Operating Officer
 Dave Moody, DOE-SR Operations Office Manager
 Ron Elmlinger, Cold War Patriots Organization Vice President for Outreach
 Dave Olson, SRR President and Project Manager
 Wednesday: Dave Olson, Dave Moody, Ron Elmlinger, Fred Dohse
 Thursday: Dwayne Wilson, SRNS President and Chief Executive Officer
 Dave Moody, Ron Elmlinger, Dave Olson
Closing remarks
 Flickr.com (keyword is SRNS).

SRS tours draw more than 4,000 visitors from across the country

More than 4,000 visitors participated in 272 mission-related and public tours of the Savannah River Site in fiscal year 2011. The tours are conducted by the SRNS Tours Program.

Approximately 3,000 visitors participated in 242 mission-related tours. Visitors included members of Congress and their staff, stakeholders, corporate executives, community leaders and DOE representatives from across the DOE complex-wide.

“People are always surprised by the enormous size of the Site. They are also amazed by the complicated work that SRS is doing on behalf of the nation.”

Laurie Posey
SRNS Tours Program Coordinator

In addition to the mission-related tours, 30 SRS public tours were conducted for over 1,100 members of the public. These tours are provided to inform the public about the Site’s history, current activities, capabilities and future missions. Each tour lasts four hours and includes an SRS overview, general Site driving tour, and a live animal demonstration at the Savannah River Ecology Laboratory. During 2011, visitors came from as far away as California and New York to participate in the public tour.

“People are always surprised by the enormous size of the Site,” said SRS Tours Program Coordinator Laurie Posey. “They are also amazed by the complicated work that SRS is doing on behalf of the nation.”

SRS will once again offer 30 public tours in 2012. The tour dates will be publicized in mid-December in South Carolina and Georgia newspapers.

SRS Tours: By the Numbers

- 4,100 visitors, 272 tours in fiscal year 2011
- 3,000 visitors in 242 mission-related tours
- 1,100 visitors in 30 public tours



Janet Griffin (in blue) of the SRNS Tours Programs shares information with a tour participant.

Environmental Report 2010: SRS continues exemplary performance

The Savannah River Site maintained its record of environmental excellence during 2010—a year in which Site operations continued to result in minimal impact to the offsite public.

Data on the Site’s performance is contained in the SRS Environmental Report for 2010, which has been posted on www.srs.gov. Printed copies and accompanying CDs of the document are scheduled to be available in the next few weeks.

SRS environmental reports have been produced for more than 50 years. Copies are distributed to government officials, universities, public libraries, civic groups, news media, SRS employees and various interested individuals.

“The report speaks for itself and confirms the Savannah River Site’s continual commitment to environmental compliance, safety and health best practices,” said Ben Terry, Manager, Environmental Monitoring Services, Savannah River Nuclear Solutions, LLC. “Reflected in the report is the fact that the Site’s radioactive and chemical discharges to air and water were again below regulatory standards for environmental protection and public health protection during 2010. It also shows that the Site’s air and water quality met appropriate standards, and the radiation dose caused by SRS discharges was smaller than natural background doses or safety-based dose standards.”

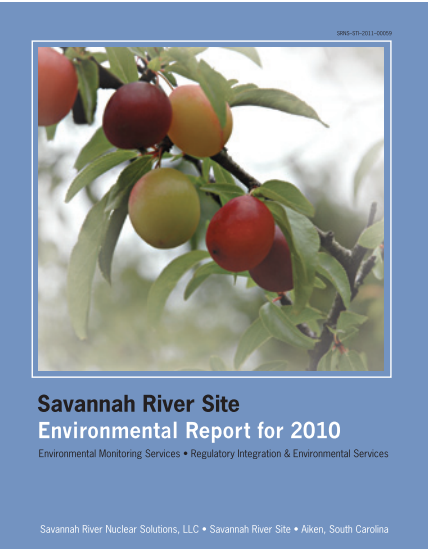
A key element in each year’s environmental report is a calculation of estimated radiation dose to a hypothetical “maximally exposed individual.” (The “maximally exposed individual” would be someone living at the SRS boundary 365 days per year; consuming milk, meat, and vegetables produced at that location; and consuming both untreated water and large amounts of fish from the Savannah River.)

The calculated radiation dose to such an individual for 2010 is 0.11 millirem, less than 2009, and less than 0.2 percent of the 100-millirem-per-year DOE standard. (A millirem is a standard unit of measure for radiation exposure.) By contrast, natural background radiation averages about 600 millirem per year to persons in the United States.

The environmental report includes graphics-depicted historical trends in SRS air and water monitoring that reflect the continuing reduction in releases as older facilities have been removed from service, and newer, more modern operations have come on line.

The report also documents SRS compliance with key environmental regulations that range from air and water protection to endangered species and historic preservation acts.

SRS personnel conduct extensive environmental monitoring within a 2,000 square-mile network extending 25 miles from SRS, with some monitoring performed as far as 100 miles from the Site. This area includes neighboring cities, towns, and counties in South Carolina and Georgia. Thousands of samples of air, rainwater, surface water, drinking water, groundwater, food products, wildlife, soil, sediment and vegetation are collected by SRS and state authorities, and are analyzed for the presence of radioactive and nonradioactive contaminants.



SRNS in the community



SRNS named as Workplace Diversity finalist

SRNS was selected as a finalist for the 2011 South Carolina Excellence in Workplace Diversity Award, in the large business category, by the South Carolina Chamber of Commerce. Willie Bell accepted the nomination award on behalf of SRNS at the award ceremony in Columbia, S.C., on October 18.

SRNS in the community

SRNS sponsors N.A. Chamber
‘State of the Region’ event

SRNS was the Presenting Sponsor of the North Augusta Chamber of Commerce’s State of the Region event. Ron Bartholomew of the DOE-SR Office of Safety, Security and Emergency Services, was one of the keynote speakers. This year’s meeting focused on identifying the CSRA’s regional assets and how to capitalize on the those strengths as a region. Other community leaders who participated included: Col. Robert A. Barker, Garrison Commander at Fort Gordon; Deke Copenhaver, Mayor of Augusta; Chairman of Columbia County Commission Ron Cross; Lark Jones, Mayor of North Augusta; and Chairman of Aiken County Council Chairman Ronnie Young.

SRNS awards \$16,000 in scholarships to CSRA College Night participants

Scholarships, each worth \$1,000, were awarded to 16 students attending the annual CSRA College Night, recently held in Augusta. More than 8,000 area high school students attended the event. CSRA College Night is sponsored by the U.S. Department of Energy-Savannah River Operations Office, Savannah River Nuclear Solutions, SRP Federal Credit Union and Clear Channel Radio/Power107; in partnership with WSI-SRS Team, Westminster Schools of Augusta, Aiken County Public Schools and Aiken Preparatory Day School.

- And the winners are...
- Kaitlynn Autery, Aiken High School, Aiken, SC
 - Kylie Elaine Amos, North Augusta High School, North Augusta, SC
 - Samatha Campbell, Fox Creek High School, North Augusta, SC
 - Khadeja Dubose, Lucy C. Laney High School, Augusta, GA
 - Sha’vona Dent, Glenn Hills High School, Augusta, GA
 - Megan Dixon, Strom Thurmond High School, North Augusta, SC
 - Breanna Fields, A.R. Johnson Magnet High School, Hephzibah, GA
 - Erin Garrett, John S. Davidson Fine Arts Magnet School, Augusta, GA
 - Taylor Griffin, Aiken High School, Aiken, SC
 - Jasmine Herrington, Hephzibah High School, Augusta, GA
 - Cameron Isabel, Greenbrier High School, Evans, GA
 - Airrick Jones, T. W. Josey High School, Hephzibah, GA
 - Ashley Lawrence, Strom Thurmond High School, Edgefield, SC
 - Adam Daniel Martin, Silver Bluff High School, Aiken, S.C.
 - Imanee McCay Meadows, Richmond Academy, Augusta, GA
 - Elise Milford, Thomson High School, Thomson, GA

L Area receives U.S.-origin highly-enriched uranium from South Africa

The National Nuclear Security Administration (NNSA) recently announced the return of 6.3 kilograms (13.8 pounds) of U.S.-origin highly enriched uranium (HEU) used fuel from the nuclear research facility in South Africa. The operation was completed in partnership with the South African Energy Corporation (Necsa).

In 2010, leaders from 47 countries committed to minimizing the use of HEU in civilian application, where technically and economically feasible, and to the timely removal and disposition of nuclear materials from facilities no longer using them.

SRS assists with initiatives such as this using the L Area Complex to store used nuclear fuel (UNF) assemblies. Underwater storage facilities, called disassembly basins, have been configured to safely handle and store UNF from off-site research reactors.

The shipment of U.S.-origin HEU used fuel from South Africa arrived in August. NNSA has worked with international partners to remove or assist with the disposition of 3,091 kilograms of HEU and plutonium.



Scenes
of SRNS

Incoming SRNS President and CEO Dwayne Wilson introduces a new focus on safety during his first meeting with SRNS managers in Aiken, S.C.. (Photograph by Bruce Boulineau)

Savannah River Nuclear Solutions



national security • clean energy • environmental stewardship

national security • clean energy • environmental stewardship

Our commitment is to create innovative, effective solutions for our country's most pressing initiatives.

Savannah River Nuclear Solutions offers in-depth nuclear knowledge for the nation and works to make the future of our country secure, energy independent and environmentally responsible.

For more information on Savannah River Nuclear Solutions, please visit our website: savannahrivernuclearsolutions.com.

