JUNE 2022

SAVANNAH RIVER NUCLEAR SOLUTIONS

SRISTOday



This month

Summer safety ● Excess rescue truck donated to City of Aiken ● Paid Nuclear Operator apprenticeships



Stuart MacVean SRNS President and CEO

On the cover

SRNS IT employee Nicole Arnold interviews one of nearly 300 job candidates who attended a recent IT recruitment fair held in North Augusta, South Carolina.

Welcome

to the June 2022 edition of

SRNS Today

As Bob Dylan sang, "The Times They Are A-Changin'." It's as true at SRNS as it is across the country. We are facing a lot of challenges in light of changing missions, a changing generation of workers and a changing economy. However, we stand committed and ready to face these challenges head on. I am confident that they will not slow us down; on the contrary, our creative and dedicated workforce is finding ways — every day — to overcome these challenges and exceed the expectations of our customer.

The SRNS Information Technology, Workforce Services and Compensation organizations recently held a job fair to further enhance recruiting for IT personnel, in a time when many government agencies have lost these highly skilled employees to private companies. The fair was attended by nearly 300 people and included 38 innovative on-the-spot contingent offers for qualified employees.

Creativity by the SRNS Environmental Compliance and Area Completion Projects (EC&ACP) team has led to using crushed marble (calcium carbonate) to raise the pH levels of groundwater in D Area to decrease the acidity of the water. This largescale experimental process involves working closely with our regulators and is just another example of how EC&ACP uses ingenuity to provide passive treatments for our challenging environmental hazards.

SRS also continued its commitment to community giving, with the donation of a heavy rescue truck to the City of Aiken Fire Department and sponsorship of Habitat for Humanity.

I hope you enjoy this month's edition of SRNS Today.

Savannah River Nuclear Solutions, LLC, is a Fluor-led company whose members are Fluor Federal Services, Newport News Nuclear and Honeywell. Since August 2008, SRNS has been the management and operating contractor for the Savannah River Site, a Department of Energyowned site near Aiken, South Carolina. The SRNS corporate and community offices are located in the renovated 1912 "Old Post Office" building in Aiken. 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 employees and other stakeholders of the company's operational- and community-related activities. If you have questions or comments, please contact us at 803.952.6131 or visit our website.

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COMMON ACRONYMS Savannah River Nuclear Solutions (SRNS) • Savannah River Site (SRS) Department of Energy (DOE) • National Nuclear Security Administration (NNSA)

Passive energy process cleans up groundwater

y using crushed marble (calcium carbonate) to raise the pH levels of groundwater at the former coal-fired power plant in D Area at SRS, SRNS has decreased the acidity of the water.

Using a scale of zero to 14, pH is a measure of how acidic or basic water is, with seven being neutral. Levels of less than seven indicate acidity, whereas a pH of greater than seven indicates a base.

"Decades of storing coal on the ground surface, in D Area, has drastically lowered the pH of the groundwater due to rainwater leaching down through the contaminated soil," said Kelsey Holcomb, Project Manager for SRNS Area Completion Projects. "D Area groundwater pH levels are monitored and average around 3.5, which can be harmful to the environment. We're taking action to eliminate this potential issue with an innovative, passive solution that will save millions of dollars versus using traditional cleanup methods, such as pump and treat."

The SRNS environmental cleanup group, Environmental Compliance and Area Completion Projects (EC&ACP), has repeatedly introduced successful new environmentally friendly, low cost and highly effective restoration methods that often harness the forces of nature.

"We're working closely with our regulators on what is, in essence, a large scale experimental study with this new project in D Area," said Holcomb. "After extensive research, we're testing our hypothesis and continually analyzing the results. Scientist Ashley Shulland and Design Authority Engineer Eric Schiefer collect and evaluate data to determine system effectiveness and recommend process improvements. Area Completion Projects also conducts the operation of the system, providing the efficiency of real time feedback."

Holcomb explained that there are different phases within this project to raise groundwater pH levels to normal for this section of SRS.



"We're taking action to eliminate this potential issue with an innovative, passive solution that will save millions of dollars versus using traditional cleanup methods, such as pump and treat."

Kelsev Holcomb. **Project Manager for SRNS Area Completion Projects**



First, water flowing up and out of a nearby artesian well acts like a tapped spring deep in the Earth; it pushes clean water into a series of injection wells stretched out in a line on the eastern edge of the underground pool of low pH water. The fresh water pushes the affected water westward, where it will naturally surface into a large canal.

To date, over 7.3 million gallons of artesian water have been injected.

Next, taking advantage of natural topography, in lieu of mechanical assistance, the low pH water flows down a canal where it is intercepted by two 40-feet long reactive structures. The structures are made of marble stone chips locally purchased in Georgia. When the canal water contacts the marble, a chemical reaction raises the low pH water to an acceptable level.

"DOE and our environmental regulators, the South Carolina Department of Health and Environmental Control, and the Environmental Protection Agency have been extremely supportive." said Holcomb. "We greatly value their teamwork, partnering to implement new and innovative solutions to protect the environment at the Savannah River Site."



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Upgrades extend life of SRTE equipment

A collaborative effort between Savannah River Tritium Enterprise (SRTE) and Savannah River National Laboratory (SRNL) has successfully returned the Tritium Extraction Facility (TEF) Mass Spectrometer 3 (Mass Spec 3) to service with upgraded electronics that will increase its operational longevity.

"This shows the power of collaboration with SRNL and SRNS to establish reliability and effectiveness in meeting national security requirements," said J.C. Epting, Acting SRNS Senior Vice President – NNSA Operations and Programs.



The Mass Spectrometer 3 is returned to service with upgraded electronics (center).

The TEF relies on its mass spectrometers to analyze process gas in support of extraction activities. These are important analytical tools; however, they are getting older. Although there are plans to replace them, it will be several years before that can be accomplished.

There is a limited number of spare electronic components for the mass spectrometers to use as replacements when needed. These specialty components have become obsolete and are no longer supported by the vendor.

SRNL reverse-engineered the electronics in Mass Spec 3, designing a package that combines off-the-shelf commercially available components with SRNL custom electronic chassis unique to high resolution mass spectrometers. The use of these, rather than obsolete or outsourced components, greatly increases available spare parts, should they be needed. It also frees up the limited stock of the original hardware, along with the electronics removed from Mass Spec 3, to be available for use in SRTE's other mass spectrometers of the same model.

The upgrades were a multiyear effort. SRNL developed a software package to work with the reverse-engineered electronics, creating a user interface virtually identical to the current system to minimize training and ensure a smooth transition to operations, SRNL also extensively tested the electronics and software on a research and development mass spectrometer in the lab. Once the viability of the system was proven and a large enough operational window

was identified, the upgraded electronics were moved to the TEF and installed on Mass Spec 3. The electronics then underwent extensive acceptance testing, including: three iterations of an integrated acceptance test, numerous randomized Quality Assurance samples, and process samples to verify appropriate operation and accurate

Successful completion of the effort required extensive collaboration between SRNL Advanced Engineering, SRNL's Reservoir Systems Laboratory Mass Spectrometer Scientists, SRTE Tritium Facilities Laboratory, Tritium Engineering, Tritium Maintenance Organization, and Tritium Operations, among other support groups, SRTE personnel collaborated with their SRNL partners on integrated test development, in addition to developing the work package and coordinating the scheduling and operations. SRTE's lab technicians ran the Quality Assurance and process tank samples.

"This was no small task," Epting said. "The hours were long, and the commitment was unvielding in delivering this capability."

Modernization organizations recently observed a celebration-worthy safety milestone: one million safe hours worked without a single medical treatment case. It is a remarkable feat for two relatively new organizations with

The combined SRNS NNSA Capital Projects (NCP) and Plutonium (Pu)

varied scopes that include planning for major construction projects while planning for nuclear operations in a yet-to-be-built facility. The complexity of the projects requires detailed operational planning. NCP is responsible for three current NNSA capital projects: Savannah River Plutonium Processing Facility (SRPPF), Tritium Finishing Facility and the Surplus Plutonium Disposition Project. Pu Modernization is responsible for planning how SRPPF will be used to produce plutonium pits for the nation's nuclear deterrent.

"These organizations have brought an influx of new-to-the-Site employees," said NCP Environmental, Security, Safety, Health and Quality Assurance Director Mary Flora. "They work alongside longer-tenured

employees who have shared the Site's safety culture with their new colleagues, but they are also finding that they all can learn from each other about keeping themselves and their co-workers safe."

Flora said another contributor to their success is the active Positively Influencing Team Safety (PITS) Crew Local Safety Improvement Team (LSIT), which helps to drive the focus on safety.

As a result, this mix of employees from different work backgrounds (industrial, manufacturing and nuclear) are able to work together toward

"We have had some obstacles, from COVID-19 restrictions to extreme heat, but they did not keep us from reaching this milestone," said Natasha McCants, Chair of the PITS Crew LSIT.

To celebrate, NCP and Pu Modernization management treated employees to a biscuit breakfast, while employees recommitted themselves to their safety goals.

Brigadier General Stacy Jo Huser visits



Brigadier General Stacy Jo Huser, NNSA Principal Assistant Deputy Administrator for Military Application, speaks at the NNSA Capital Projects and Plutonium Programs and Operations joint All Hands Meeting on May 24. She visited SRS earlier this past February for a tour of the Savannah River Tritium Enterprise.



'Make Your Next Choice the Safe Choice'

SRNS recently kicked off their summer safety campaign, "Make Your Next Choice the Safe Choice." This campaign coincides with the 100 Critical Days of Summer, a window of time between Memorial Day and Labor Day, which presents heightened safety risks for employees.

"Distraction is high during the summer months with the onset of summer vacation, high temperatures, and increased recreation, so there can be a general lack of situational awareness and increased complacency. These too often lead to injuries and other safety events," said Kristin Creed, SRNS Health and Safety.

"If employees are focused on the task at-hand and actively participate in safe work practices, then they will make choices that positively affect their safety," Creed continued. "By encouraging employees to develop a habit of making the safe choice every single time, we can safely and enjoyably make it through these summer months."

The SRNS Local Safety Improvement Teams (LSITs) will implement several engagement activities over the next several months, including:

• Parking Lots Blitzes: Employee feedback from monthly culture

surveys revealed that driving safety is the most at-risk behavior employees see both on-and-off-site. The LSITs will conduct parking lot awareness campaigns in their unique areas to address this concern.

- Housekeeping Days: Employees are encouraged to set aside one day over the course of the campaign timeframe to focus on housekeeping in their work area.
- Behavior-Based Safety (BBS) Summer Safety Template: A new BBS observation template has been developed to address trending at-risk safety behaviors. Employees are encouraged to complete one BBS observation using this template over the course of the campaign.
- LSIT Refocus Days: The LSITs will conduct refocus meetings to recap the engagement initiatives, demonstrate that safety engagement is more than just a BBS observation, and educate the workforce on LSIT membership, roles and responsibilities.



WE WANT YOU

Multiple on-the-spot offers made at SRNS Information Technology Recruitment Fair



"...we have more than doubled our success rate for a typical 90-day period regarding job offers to qualified computer engineering candidates."

Francine Burroughs, **Senior Vice President of SRNS Workforce Services**



IT Recruitment Fair applicants

> On-the-spot offers

NOW SEEKING

cybersecurity, software. network and system engineers



Senior Vice President of SRNS Workforce Services Francine Burroughs and SRNS Chief Information Officer Jeff Krohn were among the recruiters and staff members who met job eekers at the SRNS IT Recruitment Fair.

Ithough many government agencies have lost highly skilled employees to private corporations due to lucrative offers, SRNS is striving to fill recent losses and attract new job seekers to SRS. The SRNS Information Technology (IT), Workforce Services and Compensation organizations recently held a job fair to further enhance recruiting for IT personnel, including innovative on-the-spot offers.

Senior Vice President of SRNS Workforce Services Francine Burroughs explained that the fair was also used to search for qualified engineers. "During the recruitment fair and several days directly following the event, we have more than doubled our success rate for a typical 90-day period regarding job offers to qualified computer engineering candidates. We are exceptionally pleased with the IT and engineering candidates discovered through this highly successful initiative," she said.

Nearly 300 people attended the one-day event in North Augusta. South Carolina. Their resumes were quickly analyzed, and applicants whose skills matched job needs were encouraged to complete their applications using SRS laptop computers provided at the event. As a result, 38 qualified candidates (27 IT full-service, 6 IT apprentice,

5 engineering) received contingent on-the-spot job offers. Ronald Stroman, a graduate of South Carolina State University, received the first.

"We were very impressed with Mr. Stroman's qualifications and his enthusiasm," said SRNS Workforce Services professional Anna Gordon. "His interview went well, and we immediately offered him a contingent position with our IT department."

According to Gordon, other existing SRNS programs also successfully attracted new IT employees to SRS.

"We have extensive summer internships and year-round apprenticeships - all paid - that are providing experience at a nuclear facility. We're offering a very broad range of opportunities in occupational fields that are difficult to find across the country," said Gordon. "Our pleasant yearround climate, close proximity to the beach and mountains, and relatively low cost of living make the Aiken-Augusta area a wonderful place to live and raise a family."

"Time and again, we hear our IT employees say they greatly enjoy working at SRS," said Len Bowers, Manager, Information Technology, Enterprise Solutions. "We have a strategic plan in place, that we will continue to develop and expand, to meet our hiring objectives. Working with the U.S. Department of Energy, I'm confident we will reach those goals. The recent recruitment fair was a great start."

The fair was held at the City of North Augusta Municipal Building. The event focused on IT disciplines, including cybersecurity, software, network and system engineers.

"Occupations for IT professionals at SRNS are extensive and provide a wide variety of options towards professional growth," said SRNS Talent Acquisition Manager Bryan Ortner. "Our IT professionals also play an important role regarding the Site's missions involving national security and nuclear defense – a worthy cause and an effort we applaud."





APPLY FOR JOB OPENINGS:

https://savannahrivernuclearsolutions.com and go to "Careers">"Apply Now"

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City of Aiken receives heavy rescue truck donation

SRS officials recently donated a heavy rescue truck worth over \$1 million, if purchased new, to the City of Aiken, South Carolina. The truck is designed to transport highly specialized equipment and specially trained personnel to locations where a technical rescue is required.

Technical rescues can include vehicle extrication, confined space rescue, rope rescue, trench rescue, structural collapse rescue, water rescue, and wilderness search and rescue.

These trucks often carry an assortment of supplies and equipment including electrical generators, the Jaws of Life, acetylene torches, winches, cranes, hi-lift jacks, ropes, pulleys and wooden support beams.

The City of Aiken's technical rescue unit is also equipped to rescue large animals, such as horses.

According to Mike Davenport, a volunteer participating within the City of Aiken Technical Rescue Team, coming to the aid of large animals is unusual for most fire and rescue organizations.

SRS emergency services personnel have a long history of supporting fire and rescue units in the counties near the DOE Site through mutual aid agreements.

"We have mutual aid agreements in place with local fire departments throughout Aiken County," said Rob Still, SRNS Chief, SRS Fire Department. "The resources available through these agreements creates an impressive, combined ability to take on and bring under control virtually any emergency response we may encounter."

City of Aiken Fire Department Lt. Daymon Spann said, "Unfortunately, the collapsing of buildings and trenches and other technical rescue challenges have and will continue to occur. But thanks to our partners at the Savannah River Site and the support we often provide for one another, the employees at SRS and area residents can be reassured we are well-equipped and ready to help in their time of need," he said. "The addition of this truck to our team will greatly reduce our response time and improve our capabilities to better serve our community."

The truck was available to local rescue, fire and public safety departments. The SRS Community Reuse organization managed this process through DOE-Savannah River.

SRNS supports HBCUs in South Carolina

SRNS has provided direct support to more than 200 students from eight Historically Black Colleges and Universities (HBCUs) throughout South Carolina since January 2020.

In addition to donating \$80,500 to South Carolina HBCUs, the following partnership activities have taken place:

- Hosted virtual workshops for an SRS internship program ranging from resume writing and interview preparation to professional branding.
- Provided virtual, one-on-one, resume writing session for students.
- Mentored Claffin University students in preparation for future internships.
- Donated laptop computers for Morris College students during the COVID-19 pandemic for off-campus study.
- Facilitated the Clinton College Capital Building Campaign initiative.

"COVID-19 could not quell our desire to strengthen relationships with South Carolina's HBCUs," said Sean Alford, SRNS Executive Vice President. "We rigorously pursued and assisted talented students from these storied schools, encouraging each to be a part of our rapidly growing workforce and missions."

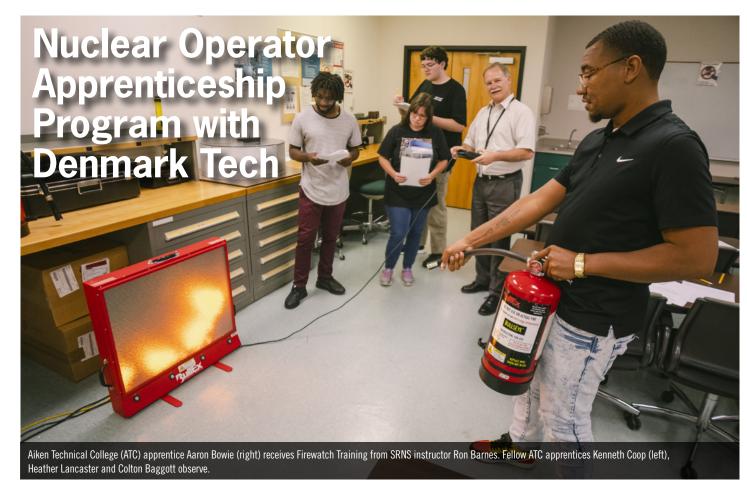
Alford also referred to SRNS facilitating the development of other initiatives that partnered with local HBCUs to include:

- A Plutonium Operations cohort of students from Morris College, and
- Radiation Control and Nuclear Fundamentals Programs at Denmark Technical College.

"The Memorandum of Understanding program with SRNS is valuable to our institution and students as it allows for a wide range of opportunities," said Karina Liles, Interim Chair and Associate Professor, Department of Mathematics and Computer Science at Claflin University. "It also offers additional pathways to explore for those attending Claflin, including careers they may not have realized existed. Further, it creates development and collaboration opportunities for our faculty and SRNS personnel."

In addition to formal programs and paid on-the-job training through internships and apprenticeships, SRNS personnel have also sponsored events that encourage casual conversations about professional development.





RNS is hiring area residents and students from local colleges and universities for apprenticeships involving nuclear operations, radiation control, maintenance and other positions that typically require a technical school certificate or bachelor's degree.

To date, a total of 139 apprentices have been registered across 15 occupations at SRNS. About 20% of these have already converted to full-service employees and about 10% are residents in counties typically served by Denmark Technical College (Denmark Tech) in Denmark, South Carolina.

"We're continually looking for new opportunities to expand this initiative," said Dorian Newton, SRNS Program Manager, Apprenticeship and Pipeline Training. "We're currently assisting the President of Denmark Technical College who has expressed a strong desire to partner with SRNS, to develop an apprenticeship program that will meet the needs of their students in the area of nuclear operations. This, of course, will help achieve one our company's most pressing objectives, creating a strong employee pipeline filled with qualified candidates possessing a wide variety of skills and talent who can begin their careers at SRS ready to productively contribute while requiring a minimum of additional training."

Denmark Tech is a two-year college that primarily serves residents within Bamberg, Barnwell and Allendale counties.

"We're establishing a program at Denmark Tech that mirrors the highly successful and robust program established at Aiken Technical College years ago. We want to pass on the benefits of that program to the students attending Denmark Tech as well," said Janéssa Smith, SRNS Human Resources. "Building this program at Denmark Tech is also highly desired because of the valuable resources Denmark Tech's students bring to our workforce."

She also added that each student, when not attending classes at Denmark Tech, is scheduled to work two days each week at SRS, earning a competitive starting salary.

"Financially, this is an optimum situation for participating students seeking apprenticeships as Nuclear Operators," said Newton. "They receive a paycheck from SRNS, while in many cases, much of their college-related expenses will be covered by grants through the school and other local resources — in partnership with the Lower Savannah Council of Governments — such as tuition, purchasing books and paying fees."

Smith also described other advantages for Denmark Tech apprentices. Each will experience the culture found at SRS while "test driving" the responsibilities related to a potential career with SRNS. "At the least, they will earn transferable credentials issued by the U.S. Department of Labor for graduating students of this program that are recognized by multiple organizations nationally," said Smith.

Initially, SRNS and Denmark Tech will work closely to develop students for the SRS Nuclear Operators Apprentice Program. In time, this concerted effort may expand to include several apprenticeship categories.

Denmark Tech officials are now accepting applications for the 2022 fall classes associated with the Nuclear Operators Certificate.

"Our desire is to hire everyone who completes this apprenticeship program," said Smith.

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Williston DIG STEM Festival

Rural kids learn about global opportunities

his year's DIG (Dreams, Imagination and Gift) STEM Festival in Williston, South Carolina, recently brought 41 exhibitors together to provide a day of fascinating hands-on learning topics for approximately 2,500 visitors.

The event showcased a multitude of local exhibitors who provided engaging activities, live performances, interactive demonstrations and family-oriented science, technology, engineering and mathematics (STEM) entertainment featuring drone simulators, agriculture technology, video game design, cybersecurity and aeronautics.

Local children, teens and their families browsed through aisles and exhibits that featured high-tech machines and other intriguing devices in this science wonderland.

The day also featured a STEM-based competition, inflatable play equipment, games and live music.

Steven Brown, President and Founder of DIG, sees the success of a STEM festival in a rural area, like Barnwell County, as proof that his original vision is viable. DIG is a tax-exempt nonprofit. According to Brown, when rural children and youth are motivated, mentored, encouraged and enabled to excel, they can make their dreams and imaginations a reality.

"DIG aims to establish a sense of community pride and ownership by providing an organization that gives residents an opportunity to play a major role in developing their own youth. Statistics show that when a community is involved by volunteering, residents feel secure, personally invested and tend to do more for the well-being of the community," Brown said. "I am a firm believer that we are witnessing



"SRNS is our sole sponsor this year and has been supporting our programs and festival for several years now. We attribute much of the success we've had over those years to them."

Steven Brown,
President and Founder of DIG



a cultural shift in our communities that will help ensure a better future for our residents and youth."

"As a part of that cultural shift, we realize something big is happening in the rural communities we serve and SRNS is at the center of it," added Brown. "SRNS is our sole sponsor this year and has been supporting our programs and festival for several years now. We attribute much of the success we've had over those years to them. We are always glad to partner with SRNS for STEM-based outreach initiatives."

The list of exhibitors featured many well-known companies and organizations including AT&T, Boeing, Citizens for Nuclear Technology Awareness, Denmark Technical College, Dominion Energy, Edisto Research and Education Center, Palmetto Innovation Center, Pittsburgh Institute of Aeronautics, Ruth Patrick Science Education Center, Savannah River Archaeological Research Program, South Carolina Department of Health and Environmental Control, South Carolina Highway Patrol, Shaw Industries, Williston Fire Department and SRNS.





Kelsey Holcomb

AT SRNS: Project Manager for SRNS Area Completion Projects

IN THE COMMUNITY: Leadership Augusta Class of 2023

THE PEOPLE OF SRNS

Kelsey Holcomb is Project Manager for SRNS Area Completion Projects; he was recently selected to participate in the Leadership Augusta Class of 2023 for SRNS.

Affiliated with the Augusta Metro Chamber of Commerce, Leadership Augusta is a 10-month training program where citizens of all ages, professions and educational backgrounds have the opportunity each month to meet, learn and train to become informed community leaders.

"Kelsey has a natural leadership ability, intense focus, and sincere empathy towards others," said Rick Sprague, Senior Vice President of Environmental, Safety, Health and Quality. Holcomb manages the planning, engineering, procurement, construction and operations of environmental restoration projects as they pertain to the investigation and remediation of contaminated waste units. As a motivated leader, Holcomb approaches his work with a value-added mindset; driving progress with creative innovation and sustainable solutions.

Prior to employment at SRS, Holcomb served for six years in the U.S. Navy on the USS Theodore Roosevelt. In his off time, he enjoys exploring the outdoors with his wife Jennifer and daughter Daisy. They'll soon be embarking on adventures as a larger family, with daughter Charlie due June 2022.



Continued support for Aiken County Habitat for Humanity

In May, Aiken County Habitat for Humanity hit a rare milestone when they celebrated a dedication for one home followed the next day with a groundbreaking for another. Both houses are right next to each other on the east side of Aiken near Citizens Park.

SRNS has a long history of sponsoring the local Habitat for Humanity. Since 2010, SRNS has donated \$128.617.

Habitat for Humanity Executive Director Arie Murphy, Leland Adams from Bank of America, Habitat Shepherd Bonnie Anderson, homeowner Santana Gonzalez, Shawna Lloyd from SRNS and Pastor Reese Leroy from Vineyard Church of Augusta celebrate the dedication of a new home. INNOVATION • DEFENSE NONPROLIFERATION - ENVIRONMENT

Savannah River Nuclear Solutions We make the world safer.