

# SRS UPDATE

NEWS FROM THE SAVANNAH RIVER SITE • JULY-AUGUST 2003

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## A message from Bob Pedde

*President  
Westinghouse  
Savannah River Company*

out of the state of South Carolina, and helps clarify what the “end states” are for many of our facilities and sets the site up for new missions.

We also continue as a candidate for a potential new facility, a Modern (plutonium) Pit Facility.

Several hundred site stakeholders, representing various points of view, testified at a DOE Environmental Impact Statement hearing in North Augusta early in the month. There was an excellent show of support for the work of the site, and I’m grateful for that. Personally, I think SRS is the logical site for such a facility – it’s consistent with our traditional national security mission, and it builds on our plutonium expertise. The selection process is certainly competitive, though, and we’ll need to continue to make a sustained case for this long-term project.

There’s much more going on – in fact, it’s a busy time at SRS, and our people are accomplishing great things. We look forward to letting you know, in these pages, some of what we’re up to.

Welcome to the “new” SRS News.

As I write this, in late July, there are a number of news items at the Savannah River Site that are worth noting.

**First and foremost**, our Operations personnel recently completed more than 14 million hours of work without a day lost due to injury. That number is larger than most people’s normal frame of reference, yet it’s what our people have accomplished, and we’re extremely proud to have passed that particular milestone again.

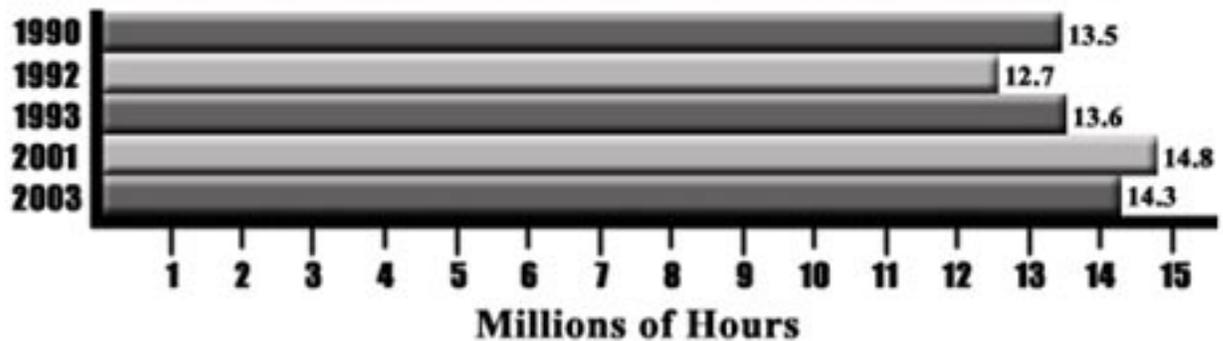
**Also, in late June**, we signed a significant contract modification with our DOE customer. That modification affects the work we perform for DOE’s Office of Environmental Management (the majority of the site’s current mission) between now and the end of Fiscal Year 2006.

In short, we’ve aligned the contract to meet DOE’s expectations to accelerate the cleanup missions of the site. That is the right thing to do. Acceleration helps speed the reduction of risk, helps move waste

## SRS MILESTONES

### Top Five Years of Safe Work at SRS

Consecutive strings of safe hours worked at SRS, since 1990, without an employee missing a day of work due to a job-related injury.



*Note: Even though the above chart displays an important achievement, it does not reflect that SRS employees have achieved over 10 million hours of safe work without a lost time injury the last three years in a row (2001, 2002, 2003).*

## NNSA headquarters recognizes SRS employees



*SRS and NNSA officials tour the TEF project.*

Dr. Everet Beckner, the National Nuclear Security Administration's deputy administrator for Defense Programs, congratulated more than 200 Savannah River Site craftsmen and other personnel in June. These were the people who fabricated and installed the internals of the first two "gloveboxes" of the Site's new Tritium Extraction Facility, or TEF. This important work was accomplished three months ahead of schedule and 15 percent under budget.

Gloveboxes are large glass-enclosed and sealed cases that allow operators to manipulate controls and equipment from outside, thereby avoiding potential contact with radioactive or hazardous material. In this case, the gloveboxes are used in processes for purifying tritium, a radioactive form of hydrogen necessary for nuclear weapons to operate as designed.

"These craftsmen are off to a tremendous start," Dr. Beckner said. "In addition, work on the remaining seven gloveboxes is going well. I am pleased with all of the construction progress that I have seen today. I look forward to continued success from this project as it is a vital part of our Nation's defense."

**"I look forward to continued success from this project as it is a vital part of our Nation's defense."**  
*- Dr. Everet Beckner, National Nuclear Security Administration*

TEF is part of NNSA's Commercial Light Water Reactor Program for manufacturing tritium. TEF is more than 50 percent complete and scheduled to begin normal operations in 2007. The two gloveboxes were originally budgeted at \$ 1.4 million. The cost for all nine was expected to be about \$12 million, out of the total budget for the project of \$506 million.

## More waste in each DWPF can means huge savings

Three years of research came to fruition recently when DWPF implemented "increased waste loading," which means more waste can be put in fewer canisters, reducing future operations by as much as 25 percent, or 1,000 canisters.

A 1,000-canister reduction means saving as much as \$1 billion in repository costs and a shorter overall program, says Jeff Barnes, DWPF facility manager.

In DWPF, high-level waste from the tanks is mixed with a sand-like substance, called frit, and melted to produce glass. Increased waste loading means the mixture will consist of more waste and less frit.

Two things make increased waste loading possible: Increasing the fill height, and improving the glass formula.

Increased waste loading is part of WSRC's overall objectives to complete EM missions more quickly than originally planned.



## SRS advances “weapons into plowshares”

DOE’s National Nuclear Security Administration and SRS have begun a new era of converting “weapons into plowshares” with the first shipment of low-enriched uranium (LEU) from SRS to Tennessee, where it will be adapted to help supply the nation’s energy needs. The shipment is a major milestone in the Highly Enriched Uranium (HEU) Blend Down Program, which was honored earlier this year by the Secretary of Energy for excellent project management.

“Today marks a big step in our nation’s nonproliferation efforts,” Secretary of Energy Spencer Abraham said about the first LEU shipment. “We have taken material that was left over from the Cold War and turned it into something that is unattractive for use in weapons. Not only that, but we’ve turned it into a material that has an important peacetime use, producing electricity.”

The HEU Blend Down Program converts the site’s HEU, a weapons-usable form of uranium, into LEU, which cannot be used in weapons. The LEU is



*SRS employees review final paperwork in preparation for the departure of the first shipment of low-enriched uranium to Tennessee, where it will be converted for use as a fuel to help supply the nation’s energy needs.*

shipped to NFS in Erwin, Tenn., who will prepare it for fabrication into a fuel for use in TVA’s reactors. Considerable facility construction and modification was undertaken at SRS to be able to purify and blend down the uranium and prepare the material for shipment. The blending down and shipping of LEU will continue through 2007.



## Shipments of transuranic waste to WIPP have increased

The Savannah River Site’s shipments of transuranic waste to the Waste Isolation Pilot Plant (WIPP), in Carlsbad, New Mexico, have skyrocketed from one per month two years ago to 16 per month, meaning that all the currently stored transuranic (TRU) waste is expected to be disposed at WIPP 20 years ahead of the originally planned completion date of 2034, at a savings of approximately \$700 million. There are plans to increase the shipping rate even more by this fall.



cubic meters of TRU waste, but it lacks facilities to prepare this waste for WIPP.

Rather than duplicate the capabilities already in place at SRS, and delay the closure, Mound is sending its waste to SRS for interim storage and preparation for shipment to WIPP, saving taxpayers millions of dollars.

Under an agreement, SRS ships twice the volume of waste to WIPP that is received from Mound, so that SRS continues to decrease its inventory.

By mid-May, the SRS had completed enough shipments to WIPP to allow receipt of the entire TRU inventory from Mound. The final waste from Mound is scheduled to be received in September.

## Plans nearly complete to demolish 247-F complex

Preparations are being made to level the 247-F Fuel Material Facility, an operation once vital to the nation's naval fleet. In this F Area building, materials were made to power United States Naval vessels.

The 247-F facility took uranium feed stock and converted it to a form suitable for naval fuel. The facility operated from 1985-1989 and was shut down because its services were no longer needed. In 2003, the 247-F Project, managed by WSRC's Jim Tisaranni, assumed ownership.

Now, final plans are being made to level the entire complex – 97,600 square feet – down to the slab by November of 2006.

Workers face many challenges, such as standing water from leaky roof spots, industrial hygiene concerns in the form of visible mold colonies and trace amounts of uranium-235.



*(Interior) 247-F*

Planning work is nearly complete, and continued deactivation work is expected to begin this fall.



*Building 247-F*

## First electronic regulatory environmental reports submitted to EPA



The Toxic Release Inventory Reports (known as the Form R) for SRS and WSRC have been electronically certified and submitted to the U.S. Environmental Protection Agency's (EPA) Central Data Exchange Web site via the Internet.

The electronic submittal of this regulatory environmental data is a productivity improvement in the site's ability to meet regulatory deadlines, and to ensure the data is accurately imported into the regulator's databases.

WSRC Environmental Services Section personnel will be working with the regulatory community to identify the protocols necessary to make all report submittals completely paperless transactions.

A Six Sigma process is also underway to identify further efficiency improvements to be gained by performing electronic submittals for a wide variety of reporting documents.

More information on the EPA's Toxic Release Inventory Reports Program can be found at the following Web site:

<http://www.epa.gov/tri/>

## WSRC Family Scholarships awarded

Fifteen students have won \$3,000 Westinghouse Savannah River Company Family Scholarships. These winners are sons and daughters of WSRC and Westinghouse Safety Management Solutions employees.



### Scholarship Winners

**Front row, from left:** Samantha Hayford, daughter of Gordon Hayford, Operations Business Unit; Armanda Sloan, daughter of Wesley Sloan, Field Support Services Business Unit; Teresa Chow, daughter of Adela Chow, Field Support Services Business Unit, and Mike Chow, Operations Business Unit; Elizabeth Mastromonico, daughter of Charles Mastromonico, Field Support Services Business Unit; Andrea Stokes, daughter of Mitchell W. Stokes, Savannah River Technology Center; Artemis Flouras, daughter of Nick Flouras, Closure Business Unit.

**Back row, from left:** Charles Harrison, son of Janet Harrison, Field Support Services Business Unit; Jason Moore, son of Deborah Moore-Shedrow, Savannah River Technology Center, and Blake Moore, Operations Business Unit; David Balser, son of Jim Balser, Savannah River Technology Center; Mark Pittman, son of Jay Pittman, Internal Oversight Division; Rajib Bhattacharjea, son of Sudhamoy Bhattacharjea, Field Support Services Business Unit; Joshua Inouye, son of Mark Inouye, Closure Business Unit.

**Not pictured:** Trevor Jones, son of Kevin Jones, Closure Business Unit; Meenah Paik, daughter of Ingle Paik, Westinghouse Safety Management Solutions; Vered Rainisch, daughter of Reuben Rainisch, Operations Business Unit.

## Pearlean Frances named quarter's Office Professional

Pearlean Frances, WSRC Technical Services, has been selected as the second quarter Office Professional. Frances' nominator, Bob Hottel, praised her for the outstanding service she provided the Operations Planning Department during the six weeks she filled in for the department's secretary, who was on medical leave.

Hottel was impressed with Frances' positive attitude, extensive skills and ability to quickly become a highly valuable member of the team.

Frances will join this year's other quarterly winners for possible honors as a President Award winner.



*Pearlean Francis*

### Dr. Ken Crase honored by Health Physics Society

Dr. Ken Crase, Radiological Protection Services, has been selected as a Fellow Member of the Health Physics Society. This designation is “to honor senior members of the Society who have made significant administrative, educational, and/or scientific contributions

to the profession of health physics.” Ken is the fourth site employee to receive this honor in the 48-year history of the Health Physics Society, and is the only active site employee to hold this designation.

### Design Services certifies new Six Sigma Champions

Six Sigma Champion certificates were recently presented to five WSRC employees: Jim Wright, Brant Morowski, Gary Abell, George Kan and Tony Giordano. The certificates are for completion of the training.

Over the last two years, 113 employees have completed the three-day Six Sigma Champion training. Those employees become certified upon developing a business case for a Process Improvement project or Yellow Belt project.



### ALPES wins 2003 R&D 100 Award

The Aerosol-to-Liquid Particle Extraction System (ALPES) has been awarded a 2003 R&D 100 Award. Developed by the Savannah River Technology Center’s Cliff Carlson, Jeff DeGange and Justin Halverson, ALPES is a highly efficient, portable device that collects airborne particles, including chemical agents and microorganisms, and concentrates them into a liquid for scientific analysis.

ALPES is able to collect any aerosol, including chemical agents; radioactive particles; microorganisms (such as spores, bacteria, and fungi); residual substances from explosives; and by-products of manufacturing processes (such as lead in a battery factory). An array of units, deployed throughout a public or private facility, could be a vital part of an anti-terrorism alert system. This system could quickly notify authorities of the existence of harmful biological, chemical or explosive materials in the area.

Each year, R&D Magazine honors the 100 most technologically significant new products and processes of the year. The R&D 100 Awards were established in 1963.

## SERVICE ANNIVERSARIES

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**50 Years:** Robert Woodward.

**35 Years:** Gary Allen and Joseph Goodman.

**30 Years:** Claudia Jenkins, James Lovekamp, Robert Manz, Daniel O’Connell, Clyde Smith and George Wicks.

**25 Years:** Myles Anderson, Bruce Beheler, Corlin Birdsall, James Breland, Kenneth Burkhart, Ronald Campbell, Mark Connelly, Janice Daniels, Terri Lynn Dickson, Bruce Drew, Catherine Faulkner, Gary

Feenstra, Lynn Ferguson, Dennis Gibson, Dennis Glover, Stanley Godwin, Berley Green, Joel Hicks, Joyce Johnson, James Jones, Marcus Lowe, James Mays, Aquila Miller, Margaret Murphy, Jerald Newton, Nancy Padgett, Shirley Priester, Randy Ray, Ethel Robinson, Leon Robinson, Donato Salvador, Dennis Scherer, Henry Sessions, Roy Shaw, Wallace Smith, George Staley, Barbara Steed, Barbara Steiner, Ronald Thibault, David Usry and Clarence Ward.

**Retirements:** Brenda Bell, Patricia Edey, Gloria Hansen, Monte Hawkins, Daniel Hayward, Cubby Heath, Wallace McCluggage, William Morgan, Gary Mullis, Teresa Quarles and Joanne Waldrop, and Marcia Hall.

## SRS's 2003 Safety Conference "Family Night" draws crowd of 1,000

This year's SRS Safety Conference Family Night recently drew a crowd of about 1,000 people. The open house featured informational exhibits on off-the-job safety, child safety and community emergency response, plus kid favorites such as Smokey Bear, Andy Ambulance and SRS's safety mascot, Top Dog. Other special exhibits were hunting safety, foul weather safety, SRS fire trucks and emergency response vehicles, and demonstrations by Wackenhut Services Inc.'s K-9 unit.

Representatives from Pepperidge Farm, South Carolina Department of Transportation, CSX Railroad and other companies also participated.



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If you have questions or comments about any of the articles, please call 803.725.0193.  
Or visit our Web site at [www.srs.gov](http://www.srs.gov).

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