# WSRC News

Washington Savannah River Company, Savannah River Site

January 18, 2007

Message from Bob Pedde

### An Interesting Year—Past and Present

Now that we've embarked on a new year, I'd like to review in brief a few important and timely items with you.

#### Safety

As I mentioned in a company-wide memo, in 2006, we had the fewest injuries in every category we track since WSRC assumed the SRS contract in 1989. There were 45 recordable injuries, the fewest ever. The last injury requiring time missed from work was April 12, 2006. Operations finished the year with more than 11 million safe hours. Construction finished with well over 19 million.

We also recorded more Behavior Based Safety observations than ever before. I encourage everyone to make use of observations and all the other tools available to keep safety in the forefront of every job you do.

All of you should take pride in these accomplishments – not because of the "statistics," but rather the direct connection between safety (both on and off the job) and quality of life for you and your family.

Unfortunately, we have experienced three recordable injuries already this year. These injuries reemphasize the need for each of us to remain diligent in keeping focused during even the most routine activities.

#### **Lion Awards**

We recently announced that the window for nominating individuals and teams for Washington Group International's 2006 Lion Awards is open, and will be through the end of February. Lion Award winners are the best of the best in our business, and I'm sure you know some people or teams who are worthy of such recognition. Making a nomination will be an excellent way to have these achievements acknowledged at all levels of the corporation.

#### **Annual Report**

WSRC recently issued its annual report for 2006, and I encourage you to read it just to be more familiar with the great work all of our fellow employees accomplished. It's really an excellent record of service to our customer and to our neighboring communities, and an excellent record of what a valuable regional and national asset SRS is.

You can find the report by doing a quick search for "annual report" in ShRINE.

### Budget

Toward the end of this month the President will send his fiscal year 2008 budget to Congress. As is often the case, this initial budget is not expected to contain a lot of good news for SRS. On the other hand, this is just the first step in a long and complicated process that will ultimately determine our funding for the next year. For now, the best thing we can do is to keep our attention focused on safely executing the scope of work we have.

#### **Request for Proposals**

As of this writing, a final RFP for the SRS Management and Operation contract (not the Liquid Waste Operations piece) had not been issued, and therefore I have no updated information to share. DOE expects to move quickly on the RFP once it's on the street, however, and I will keep you as up to date on developments as I can. As you may know, the comment period expired on Dec. 22; many stakeholders offered their comments. It will be interesting to all of us to see what adjustments DOE has made as a result of public and employee input.

Keep your focus on safety, and have a wonderful new year!

### IT Group Hits Safety Mark

The Site's **Information Technology Department** recently recognized having attained over 4.2 million hours without an injury requiring someone to miss time from the job.

Some might argue that an organization of mainly office workers could achieve of such a record with ease.

"I don't think anything could be further from the truth," said Kevin Smith, Manager, WSRC Industrial Safety Programs. "Office workers have been injured much more frequently than most people realize. In this organization specifically, many folks are at risk for repetitive motion and other ergonomic injuries. These types of injuries are not minor and may require medical treatment or even surgery, so the potential is certainly there."

The Site's IT organization has 319 members. WSRC Executive Vice President Bill Poulson believes their accomplishment is significant and represents a great deal of initiative and focus.

### What Counts?

- 2,540 Units donated by SRS employees in Site blood drives in 2006, exceeding 2005 by 192
- 7.5 Square feet, in millions, of facilities SRS expects to D&D by 2025
- 86,888 Low-level waste disposed of at SRS as of the end of FY 2006, in cubic meters
- 2,640 Par Pond's area, in acres

# 235-F Team Reaches Deinventory Milestone



235-F Team prepares to load final shipment

The final shipment of special nuclear material left 235-F on Nov. 30 and an era of material handling has come to an end.

The decision to consolidate nuclear materials into the K Area Complex triggered the 19-month deinventory effort. Thorough analysis of disposition options and careful planning was

needed since some of the items were unique and others had been stored for decades.

During 2006, 160 drums of plutonium and uranium materials were dispositioned along with an additional 67 miscellaneous items.

"This is truly a remarkable accomplishment," says Larry Davis, Area Project Manager, Nuclear Materials Management. "Our team reached this major milestone in a very short time to meet the threshold requirements for deinventory through innovation and a dedication of purpose. We are very proud of this team."

In recent years, 235-F was best known for its storage and container surveillance capability. Built in the 1950s, 235-F was originally used to fabricate aluminum-clad billets made from neptunium oxide, which were eventually formed into reactor targets. Final deinventory did not include the Pu-238 holdup and the facility has been handed over to F Area Closure Projects for long term surveillance activities.

## Mixed Low-Level Shipments Complete

SRS marked another milestone late last year when the last shipment of low-level mixed waste was sent to the Nevada Test Site.

LLMW is waste that has low levels of radioactivity as well as some chemical constituents.

Getting waste drums off the Site is a major focus at SRS, and LLMW has long been an issue. For as long as the Site has been operational, drums of transuranic (TRU) waste have been accumulating on pads, covered over with dirt, awaiting final disposition. The waste includes such items as protective clothing, empty containers, broken up concrete, and piping.

According to plan, workers began uncovering the drums and "characterizing" them—determining their exact contents. In some cases, they discovered that the waste wasn't TRU, as it didn't contain the necessary radionuclides. Unless waste has some or all of those constituents, explains Waste Management Area Project



Mixed waste leaves SRS

Operations Manager James Harris, it doesn't meet the acceptance criteria necessary for shipment to the Waste Isolation Pilot Plant in New Mexico. So the drums were set aside until a disposition path was available. To dispose of it as low level would mean a substantial cost savings.

"This waste had no path for disposal," says Harris.

Earlier in 2006, however, NTS became a candidate to receive this waste, and shipments began soon afterward. Now, 123 drums have been shipped, completing this campaign.

# New Process Used to Clean Evaporator

Savannah River National Laboratory personnel, working closely with Liquid Waste Operations engineers, have developed a new and improved chemical cleaning process to remove silica that typically builds up in the 2H Evaporator.

The new process, used recently during the evaporator's scheduled outage, eliminates the need for a separate tank previously used to neutralize the silica-removing acid. This proc-

ess improvement reduces the time it takes to set up for the cleaning process and the cleaning cost.

The evaporator is now up and running.

**Before** 



After

### Tall Tower Crane Finds Home at SRS

In late summer, DOE polled the complex for another user for one of the three large tower cranes at Hanford. The \$2 million, 186-foot-tall crane had been purchased in 2001 for construction of the Waste Treatment Plant and was no longer needed. In early October, MOX Services, the contractor responsible for building and operating the MOX facility, expressed interest. Infrastructure and Services - Rigging and Transportation (I&S-R&T) was asked to help with an estimate for transporting and setting up the crane so its acquisition could be evaluated.

In early November NNSA approved SRS acquisition of the crane for MOX construction, and MOX Services requested I&S-R&T to take the lead in transporting the crane to the MOX site.

R&T searched for the low cost/best value transporter, established interface contacts with Bechtel-Hanford, and coordinated the transfer of property in 22 truck-loads between government entities. R&T agreed to accommodate Bechtel-Hanford's request to coordinate the arrival of the trucks with the dismantlement of the crane to avoid double handling. By early December, the first fleet of trucks had arrived at Hanford and the transfer began.



A crane like this one at Hanford was dismantled and shipped to SRS on 22 truck loads to help with the construction of the MOX plant.

### **SRS** Restarts Saltsone

After months of process upgrades and extensive testing, Liquid Waste Operations' Saltstone facilities have restarted and are working to complete its mission to dispose of millions of gallons of decontaminated liquid waste in a solid and environmentally safe form.

The upgraded Saltstone is ready to do its job as one part of a new and integrated liquid radioactive waste processing system currently being deployed by WSRC.

The core need for this integrated approach involves the safe processing and disposition of radioactive salt contained within



Saltstone Facility in Z Area

many of the 49 active waste tanks at SRS.

For years, the Saltstone facilities have been used to immobilize liquid waste. The process mixes the decontaminated waste with cementitious materials to form a concrete-like grout. The grout is then pumped into large, engineered vaults for disposal, which is protective of area residents, workers and the environment. The new and improved Saltstone facilities are even safer and more efficient thanks to the installation of new equipment and up-graded process systems.

"All of the employees involved in this effort need to be commended for their dedication and hard work," said Dennis Thompson, manager, WSRC Saltstone Facilities. "During the conversion period, our employees worked long hours to make each phase of this process a complete success, be it designing, installing equipment, testing systems, or training."

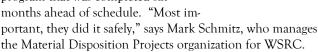
Saltstone is part of a three-phase, integrated salt processing system that was designed by WSRC Team personnel. Its aim is to safely process liquid radioactive waste at SRS; the first two phases of which, the Actinide Removal Project and the Modular Caustic Side Solvent Extraction Unit, will operate until the full-scale Salt Waste Processing Facility starts up in 2011.

Due to the recent modifications, the Saltstone facilities are now positioned to support the Defense Waste Processing Facility and Salt Waste Processing Facility for the long run.

## All SRS-Origin Fuels Now Blended and Shipped

With a recent shipment to Tennessee, WSRC has now blended and shipped all SRS-origin nuclear fuels out of South Carolina.

The preparation and shipping of this material has been accomplished safely and efficiently, resulting in a program that was completed six months ahead of schedule. "Most im



The final shipment was made Dec. 13, with a total of 213,000 kilograms of low-enriched uranium being shipped in 288 trailers over a period of three and a half years.

The shipments are part of the HEU Blend Down program,

in which highly enriched uranium is blended with other materials to make low-enriched uranium, rendering it unattractive to terrorists but at the same time usable in commercial reactors.

SRS uranium, once destined for use in national defense, is now being used in the Tennessee Valley Authority's Browns Ferry Nuclear Plant in Alabama to provide power for homes across the Southeast.

HEU Blend Down has converted 14.1 metric tons of HEU into 213 metric tons of LEU. The material was in the form of existing solutions and irradiated and unirradiated fuels. The Dec. 13 shipment, in addition to marking the end of SRS-origin HEU materials, marks the end of NNSA's initial commitment under an Interagency Agreement with TVA.

Planning is under way to next process nuclear materials from across the DOE complex and to process aluminum-based spent fuels currently in the L Area Basin and future receipts.







#### **Locomotive From SRS Now in Barnwell**

The Department of Energy and the Savannah River Site Community Reuse Organization (SRSCRO) donated an excess Savannah River Site locomotive to Kronotex USA in Barnwell, as part of the SRS Asset Transition Program. This program provides excess SRS property to businesses in the region to assist in job creation. The locomotive was once used at SRS to move materials around the Site. However, the 80-ton locomotive, 15 feet high and 37 feet long, has not been used by the Site in a dozen years, and had fallen into disrepair. In December, the locomotive was loaded onto a flatbed truck and shipped to Kronotex.



# Spotlight On Core Values

Safety Integrity Results Teamwork Use them ALL ... every day. The WSRC News is published by WSRC's Public and Employee Communications Department, Office of the President.

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