

# ECA Update: January 22, 2016

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As noted in UCOR's mostly flattering performance review for the final half of FY 2015, there was a waste problem that shut down waste shipments from Oak Ridge to the Nevada National Security Site for about a month.

Asked for more detailed information, Mike Koentop of the Department of Energy's Office of Environmental Management said URS-CH2M Oak Ridge had "experienced some deficiencies" in its waste transportation program, the most serious of which caused the Oak Ridge cleanup contractor to suspend off-site shipments.

In an email response, Koentop said:

"More specifically, during a June assessment of the UCOR Transportation Program, the Oak Ridge Office of Environmental Management identified two containers on one shipment that were scheduled to be shipped as DOT Non-Regulated, when they should

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## Calendar

**FY17 Budget Request**  
February 9th, 2016

**Save the Date:**  
DOE National Cleanup  
Workshop  
September 14-15, 2016  
Hilton Alexandria Mark  
Center  
Alexandria, VA

have been classified as Radioactive Material Class 7 Surface Contaminated Objects (SCO)-I.

“The shipment information was corrected and the shipment was dispatched compliantly.”

He added:

“UCOR took immediate action and suspended all off-site shipments until they could review their procedures and understand why the shipment was misclassified. UCOR reviewed all the paperwork from past shipments, and discovered two additional shipments where the incorrect Proper Shipping Name was selected. UCOR updated its procedures and instituted more rigorous internal oversight to ensure all offsite shipments are properly classified.

” In total, off-site shipments were suspended for approximately 4 weeks.”

### **Lawmakers tour of Savannah River Site fuel facility**

Augusta Chronicle

January 19, 2016

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U.S. Rep. Rick Allen recognizes that the ongoing construction of the mixed-oxide fuel fabrication facility at Savannah River Site is pricey, but not as costly as it would be to mothball the project.

The MOX facility currently has funding – about \$340 million – to continue through year’s end, but during a tour of the construction site Tuesday along with three other U.S. House members, Allen said he was told by contractors that halting the project could cost as much as \$500 million.

“They also indicated to me that if it were shut down that it very likely couldn’t reopen,” said Rep. Joe Wilson, R-S.C., who joined Allen and Reps. Mick Mulvaney, R-S.C., and Donald Norcross, D-N.J., on the tour.

The National Nuclear Security Administration and the Department of Energy last week denied a request from The Augusta Chronicle to join the tour.

The purpose of the tour was simple, Allen said.

“We want to make sure the taxpayers are getting their bang for the

buck,” he said.

The MOX project, which broke ground in 2007, has been plagued with delays and cost overruns, and it has been criticized by some who say it exemplifies government mismanagement and wasteful spending.

In April, The Augusta Chronicle reported the total cost to build and operate the facility, which is about 68 percent complete, to be about \$47.5 billion, which Wilson said is overstated.

During the tour, the lawmakers were able to question contractors and were educated on another option for plutonium disposition, downblending, which could be performed at the site’s K-area.

“I did express my desire that we need to get into the nuclear fuel reprocessing business in this country,” Allen said. “If we’re going to have new nuclear plants, then we’ve got to have something to do with that fuel, and I think reprocessing like the French do is the way to go.”

Wilson remarked that as the group climbed the steps at the MOX facility, they could look out across the Savannah River and see steam plumes rising from Plant Vogtle’s cooling towers. The Waynesboro, Ga., plant is building two more reactors and is storing fuel that could be processed at the MOX facility, Allen said.

Wilson, who was pleased to have a bipartisan delegation tour the site, said he visits the MOX facility annually and was surprised to see that it has grown to be more than a “rebar jungle.”

Wilson said he has not yet heard from Energy Secretary Ernest Moniz regarding South Carolina Gov. Nikki Haley’s threat to collect \$1 million daily from the Department of Energy for failing to meet an agreed-upon deadline.

He expects to speak with Haley and South Carolina Attorney General Alan Wilson, his son, about the issue.

### **Grouting begins for Tank 12 at Savannah River Site**

Aiken Standard

January 20, 2016

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Workers have begun grouting another Savannah River Site liquid waste tank, adding to the overall goal of ridding the area of more than 30 million gallons of liquid waste.

The site announced Tuesday that it began pouring a cement-like grout into Tank 12, marking the beginning of a three-month process to fill the nearly one million gallon tank.

Savannah River Remediation, or SRR, is the site's liquid waste contractor and is performing the work. Contractor President Stuart MacVean said the importance of grouting the tank is not lost on SRR employees.

"Our workers perform their jobs well, and I'm pleased with their dedication," MacVean said. "They continue to be innovative and take pride in their achievements."

Tank 12 is a Type I waste tank and was constructed between 1951 and 1953, according to a SRS news release. The tank was placed into service in 1956, has a storage capacity of approximately 750,000 gallons and is 75 feet in diameter.

Tank 12 underwent extensive removal activities for the past several years that included waste material being pumped out, cleaning with specialized mechanical and chemical processes, and isolating the tanks from all systems, according to SRS.

The upcoming closure of Tank 12 follows disputes among the Department of Energy, the S.C. Department of Health and Environmental Control, or SCDHEC, and the Environmental Protection Agency.

The Energy Department recognized last year that it would miss an initial agreement to grout Tank 12 by September 2015. The department requested more time and was denied a 15-month extension. Eventually, the parties settled on a May 2016 deadline. The Energy Department is expected to finish grouting the tank well before the deadline.

SRS Manager Jack Craig said workers have safely removed the liquid waste from the tank and immobilized it.

"The DOE work ensures we continue to protect people and the environment from the risk of this waste," Craig said.

## **Hanford tank farm contractor rated ‘very good’ by Energy**

Tri-City Herald

January 19, 2016

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A Hanford tank farm contractor will receive 88 percent of the incentive pay possible for fiscal 2015, according to the Department of Energy.

The pay of \$13.7 million out of a possible \$15.6 million is in addition to the performance pay that Washington River Protection Solutions earned for the year that ended Sept. 30. It earned 100 percent of \$14.4 million available for completion or progress on specific projects, such as emptying waste from leak-prone single-shell tanks and evaporating liquid waste to create more space in double-shell tanks.

The \$13.7 million award is for subjective ratings by DOE about how well its contractor managed work, kept costs down and maintained safety, among other goals.

“We appreciate the Department of Energy’s recognition of our strong fiscal year 2015 performance,” said Mark Lindholm, Washington River Protection Solutions president.

### Improvements seen

Its performance was rated better than in fiscal 2014. Then it received 83 percent of the incentive award available, or \$10.5 million out of a possible \$12.6 million.

In fiscal 2015, the contractor “exceeded many of the significant award fee criteria and has met overall cost, schedule and technical performance requirements,” DOE said.

Washington River Protection Solutions was rated in eight areas, receiving an overall rating at the top of the range considered “very good.” It received ratings of very good in all categories, except two that were rated as “excellent.” They were management of the tank system, worth up to \$2.7 million, and nuclear safety, worth up to \$1.2 million.

The largest portion of the possible award, \$4.5 million, was available for cost performance, with the contractor ranked in the “very good” range. DOE released only a one-page fee determination scorecard on the pay award, which did not include

the amount awarded for each category.

DOE listed three key areas for improvement on the score card, all of which were ongoing issues identified before fiscal 2015. There were “challenges with work integration, command and control of nuclear operations, and ongoing equipment failures,” the scorecard said.

Safety issues reportedly have involved procedures to make sure electrical service is locked off before work proceeds on equipment. No injuries resulted in fiscal 2015.

The contractor also has struggled with equipment performance in the harsh environment within underground tanks holding a mix of hazardous chemical and high-level radioactive waste. The custom equipment has to withstand high heat, radiation and chemical corrosion, sometimes throughout heavy use.

#### Leadership cited

A year ago work had stopped with the Mobile Arm Retrieval System, or MARS, the contractor’s largest and most robust system for retrieving waste from underground tanks because progress was so slow using a vacuum attachment.

Although MARS was restarted, work with the system has stopped again because hoses failed due to heavy use.

DOE said the key successes for the year were the contractor’s leadership in taking over responsibilities for the Effluent Treatment Facility and implementing recommendations from an independent study to better protect workers from chemical vapors. DOE also praised efforts to integrate work among the tank farms, the vitrification plant being built to treat the waste and Pacific Northwest National Laboratories and other national labs conducting research on tank waste treatment.

The Effluent Treatment Facility and related waste water facilities were transferred from CH2M Hill Plateau Remediation Co. to Washington River Protection Solutions because they will be needed when treatment of tank waste starts. The tank farm contractor also plans to use it to support some tank farm work.

The independent study coordinated by Savannah River National Laboratory resulted in a phased plan to better protect workers from vapors with better monitoring, new technologies and investigations

of long-term health effects.

“Moving forward, we are actively addressing our opportunities for improvement, as well as vapors issues and equipment reliability,” Lindholm said. “We’re committed to improving our performance in fiscal 2016.”

Successes in fiscal 2015 included completing the retrieval of waste from a 14th leak-prone single-shell tank in Hanford’s C Tank Farm, he said.

### **Toshiba Unveils Robot Tasked to Clean-Up the Fukushima Power Plant**

Youth Health Mag

January 19, 2016

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There is no denying how the Fukushima Daiichi nuclear accident in 2011 is one of the most devastating nuclear occurrences in modern history. The incident is considered as the largest nuclear disaster following the Chernobyl disaster in 1986 and is only the second Level 7 event based on the International Nuclear Event Scale. Five years after the unfortunate incident, Japan is still in the midst of cleaning up the nuclear wreckage. Considering how the area is still highly radioactive, it is expected that it would take at least three to four decades before the plant is completely torn down. Thankfully, a new innovation from the builders of the reactors themselves might help speed the process up.

Last January 18, 2016, Toshiba unveiled their newest remote-controlled robot which is expected to aid in tearing down the third reactor damaged in the hydrogen explosion during the plant's meltdown in 2011. The robot is equipped with crane-like arms that would be used in removing fuel rods from inside the reactor. It would be a year before the machine is operational and it is expected that it would be able to extract 566 fuel rods from the reactor.

Previously, in the cleanup of reactor 4, human workers were tapped to recover fuel rods from the reactor's cooling pool. Reactor 4 is only plagued by low radiation levels, unlike the fatal doses in reactor 3, since the reactor had been shut down and refueled in the midst of the March 2011 tsunami.

Despite the relatively safe radiation levels, it has been reported that

several clean-up workers have developed diseases that was caused by their exposure. Just last year, a worker was finally awarded compensation after developing leukemia following months of being at the Fukushima site. The occasion was the first acknowledgement of the link between working at Fukushima and developing cancer.

