

## **ECA Update April 22, 2016**

*In this update:*

**Piketon cleanup hits next milestone**

Chillicothe Gazette

**Senate approves energy bill; INL benefits with nuclear research**

AP: Local 8 News

**Demolition moving quickly at historic K-27 uranium site**

Knoxville News Sentinel

**Piketon cleanup hits next milestone**

Chillicothe Gazette

April 21, 2016

[LINK](#)

PIKETON - A significant milestone in removing contaminants and moving toward demolition of one of three large process buildings at the former Portsmouth Gaseous Diffusion Plant site was recently reached.

According to lead site contractor Fluor-BWXT Portsmouth, the final component of process gas equipment has been removed from the cell floor of the X-326 facility —

## **Upcoming Events**

**April 2016**

**27**

House Armed Services  
Committee mark up  
of NDAA

**May 2016**

**11**

EMAB Meeting  
Aiken County, SC

**May 2016**

**12-13**

ECA Peer Exchange: Environmental  
Management Issues  
Washington, D.C.  
For information contact:  
[lvana@energyca.org](mailto:lvana@energyca.org)

**August 2016**

one of three, 30-plus acre buildings that were used to enrich uranium when the Cold War-era plant was in operation.

“There have been many challenges, all of which were met, while safely performing this difficult and hazardous work,” said Joel Bradburne, site lead for the Department of Energy.

“The Fluor-BWXT X-326 deactivation team has removed the largest sources of contamination and safely shipped these components offsite for disposal.”

Fluor-BWXT finished removing the more than 7,000 components involved in late March. The components were part of a complex system containing 2,340 “stages,” each consisting of a compressor, a converter, a cooler, and miles of interconnecting piping. The converters weighed almost five tons each.

Work to carefully remove components of this system was being done while portions of the system were still operating to reduce uranium “hold-up” material, or residues, inside the enrichment cascade. As many as 300 employees and support staff were given the task, with work going on around the clock seven days a week. Specialized training, rigorous radiological controls and strict conduct of operations compliance were needed to ensure these workers, who were cutting out components, removing them from the system and installing metal caps, could do so safely from a radiological, industrial hygiene and safety perspective.

This deactivation work involved the typical hazards associated with uranium hexafluoride processing systems and equipment, including chemical hazards like hydrofluoric acid and radiological contamination issues. It also involved hoisting and rigging, welding and torch cutting and work in confined spaces.

The X-326 deactivation work now continues with characterizing auxiliary systems and removing held-up uranium and hazardous materials in those systems. “Our plan is to have the X-326 ‘cold and dark’ and ready for demolition by June of 2017,” Bradburne said.

# 11

Third Annual  
Intermountain  
Energy Summit  
Idaho Falls, ID  
[Visit website.](#)

September 2016

# 14-15

2016 National Cleanup Workshop  
Hilton Alexandria Mark Center  
Alexandria, VA  
Visit [cleanupworkshop.com](#)

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The Department recently approved a 30-month contract option for Fluor-BWXT to finalize X-326 deactivation, fully mobilize deactivation efforts in the X-333 building, and finish design and begin construction on an On-site Waste Disposal Facility to safely dispose of building debris and contaminated soils from plant demolition.

### **Senate approves energy bill; INL benefits with nuclear research**

AP: Local 8 News

April 20, 2016

[LINK](#)

The Senate has approved a wide-ranging energy bill that would promote a variety of energy sources and speed federal approval of projects to export liquefied natural gas to Europe and Asia.

Senators backed the measure, 85 to 12, the first ambitious energy bill approved by the Senate in nearly a decade.

The bill would boost renewables such as solar and wind power, as well as natural gas, hydropower and geothermal energy. It also would update building codes to increase efficiency, strengthen electric-grid safety standards and reauthorize a half-billion dollar conservation fund that protects parks and other public lands.

A media release from Senator Mike Crapo said the bill will allow new public-private nuclear research partnerships at the INL.

It will allow the U.S. Department of Energy to partner with private innovators to test advanced reactor technologies.

Crapo said the bill also directs the DOE and Nuclear Regulatory Commission to establish the National Nuclear Innovation Center, to be based at the INL.

It now must be reconciled with a House-passed bill that boosts fossil fuels such as oil, coal and natural gas. President Barack Obama has threatened to veto the House measure.

### **Demolition moving quickly at historic K-27 uranium site**

Knoxville News Sentinel

April 20, 2016

[LINK](#)

OAK RIDGE — On a chilly morning in early February, workers maneuvered their heavy equipment to take a ceremonial "first bite" out of K-27 — a four-story, 383,000-square-foot industrial facility that once processed uranium for the nation's Cold War nuclear arsenal and helped fuel early generations of power reactors.

A small group of onlookers applauded the moment.

In the 10 weeks since then, the demolition project has progressed mightily, thanks to an experienced workforce and an unusual run of good weather in East Tennessee.

The project is already approaching the halfway point, and it looks like the U.S. Department of Energy's cleanup contractor — URS-CH2M Oak Ridge — will have no trouble meeting its year-end completion goal.

During a visit to the site earlier this week, demolition activities were going full bore. Bricks and mortar cascaded to the ground, accompanied by shreds of steel and other structural remnants. The work formed small mountains of contaminated debris.

Demolition was coordinated with battalion of dump trucks, waiting in line to be loaded with waste. The trucks were then covered with tarps to prepare for the trip to a DOE landfill, which is approved for radioactive and hazardous materials generated by Oak Ridge cleanup projects.

Since the K-27 demolition project began earlier this year, more than 1,500 truckloads of waste have been shipped to disposal sites, Smith said.

About 90 percent of the debris is bound for an Oak Ridge landfill known officially as the Environmental Management Waste Management Facility.

The other 10 percent, which is either too radioactive or contains pollutants not allowed at the Oak Ridge landfill, is shipped off-site for disposal — mostly to a desert burial ground at DOE's Nevada National Security Site.

K-27 is a big deal in the government's Oak Ridge cleanup campaign that has already invested billions of taxpayer dollars.

It is the last of five gaseous diffusion plants at the sprawling site that once formed the nation's largest uranium-enrichment complex. Demolition of K-25, the mile-long, U-shaped building originally constructed for the World War II Manhattan Project, was completed a couple of years ago at a cost exceeding \$1 billion.

The takedown projects are not simple, requiring years of preparation before the actual demolition begins.

K-27, like its sister K-25 plant, contained a lot of deposits of enriched uranium in its miles of processing equipment. The fissionable material had to be removed in advance or fixed in place to prevent the uranium from creating a "criticality" accident — an uncontrolled nuclear chain reaction with release of radiation — during the actual demolition.

Demolition of K-27 is the final milestone of DOE's "Vision 2016," and it will make the conversion of the site to a private industrial park more realistic visually and perhaps help attract new tenants.

After the old uranium-processing plants are removed, DOE contractors will focus on other cleanup tasks at the sprawling site known as the East Tennessee Technology Park.

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Among the future projects will be removal of what's left of DOE's toxic waste incinerator, which was shut down in late 2009 after burning more than 35 million pounds of toxic waste over two decades, and a large facility that once manufactured highly classified "barrier" materials used in the separation of U-235 for atomic bombs and nuclear reactors.

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