

# News from the Savannah River Site

U S DEPARTMENT OF ENERGY • AIKEN • SC 29808

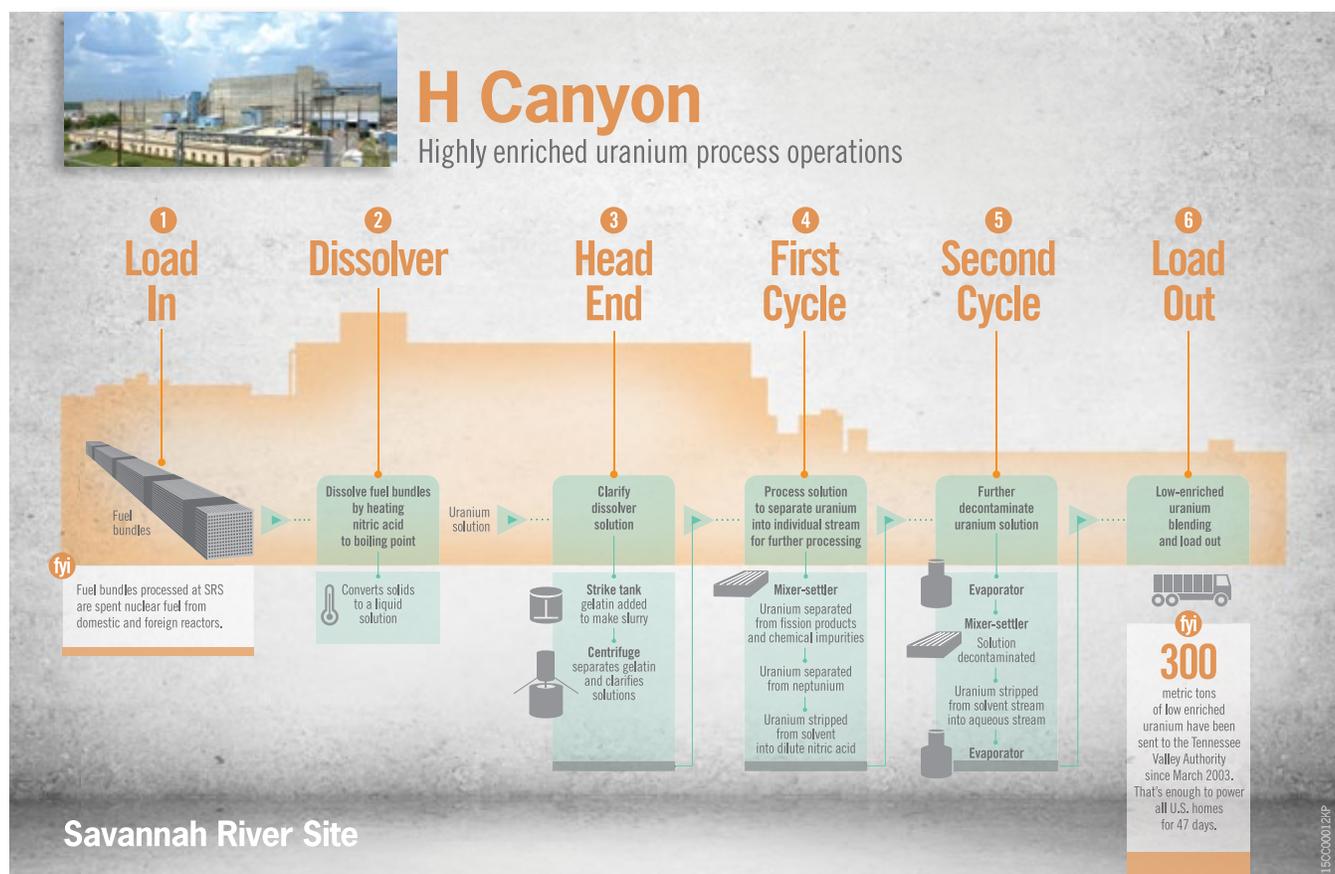
Principal Media Contact: Lindsey MonBarren  
Savannah River Nuclear Solutions, LLC  
803.952.8053  
[lindsey.monbarren@srs.gov](mailto:lindsey.monbarren@srs.gov)

DOE Media Contact: Susan Clizbe  
803.952.8281  
[susan.clizbe@srs.gov](mailto:susan.clizbe@srs.gov)

**FOR IMMEDIATE RELEASE**

## Savannah River Site resumes key process at H-Canyon

AIKEN, S.C. (Feb. 23, 2016) - The Department of Energy's Savannah River Site this month resumed a key step in the Environmental Management mission for H-Canyon, a major facility at SRS managed and operated by primary contractor Savannah River Nuclear Solutions (SRNS). The second uranium cycle is the third and finishing processing step in H-Canyon's spent fuel processing campaign, and had not been run in three years.



This diagram explains the steps taken through H-Canyon to turn spent nuclear fuel bundles into low enriched uranium that can be used to make fuel for commercial nuclear power reactors.

H-Canyon is the only operating production-scale nuclear chemical separation facility in the U.S. It was originally constructed to produce nuclear materials in support of our nation's defense weapons systems. Today, it continues to play an important role in the efforts to safely eliminate or minimize nuclear materials through stabilization and/or out-of-state disposition of DOE's nuclear materials.

"We are really excited to be back in operation," said Stephanie Hudlow, SRNS H-Canyon Operations Manager. "The Operations team did an excellent job with procedure execution and recognizing the need for slow and deliberate operations since it has been so long since this equipment has run."

In the spent-fuel campaign, low-enriched uranium (LEU) is formed by blending highly enriched uranium (HEU) with natural uranium. This blended material can be used to make fuel for commercial nuclear power reactors. SRS will provide the LEU to the Tennessee Valley Authority (TVA) for the manufacture of commercial reactor fuel for use in its reactors. Between 2003 and 2011, H-Canyon provided approximately 300 metric tons of low-enriched uranium to the TVA.

"That quantity of uranium resulting from approximately 300 metric tons of LEU, would provide enough power for every house in the U.S. for approximately 47 days," said Patrick McGuire, DOE Assistant Manager for Nuclear Material Stabilization. "It's important to note that this process recycles spent fuel for another beneficial use, rather than disposing of it."

In the current process, H-Canyon is working with bundles of Material Test Reactor fuel rods. The HEU is run through three process operations in H-Canyon, with each stage further purifying the uranium to meet TVA specifications. The last cycle, which has just begun, is the second uranium process. This process involves two evaporators and two mixer-settler banks to separate impurities from the uranium solution.

"This campaign is important because it removes spent nuclear fuel from the state of South Carolina," said Mike Swain, SRNS Director, EM Programs. "It also supports nuclear non-proliferation and provides a service to the TVA and a return to the taxpayer."

*Savannah River Nuclear Solutions is a Fluor-led company whose members are Fluor Federal Services, Newport News Nuclear and Honeywell, responsible for the management and operations of the Department of Energy's Savannah River Site, including the Savannah River National Laboratory, located near Aiken, South Carolina.*

Visit us on the web at [www.savannahrivernuclearsolutions.com](http://www.savannahrivernuclearsolutions.com)

SRNS- 2016 – 432