

Principal Media Contact: Lindsey MonBarren  
Savannah River Nuclear Solutions, LLC  
803.645.5455  
[lindsey.monbarren@srs.gov](mailto:lindsey.monbarren@srs.gov)

DOE Media Contact: Monte Volk  
U.S. Department of Energy  
803.952.8283  
[monte.volk@srs.gov](mailto:monte.volk@srs.gov)

**FOR IMMEDIATE RELEASE**

## SRS Strengthens Use of HPI Tools to Aid in Human Error Reduction

AIKEN, S.C. (June 1, 2021) – The Savannah River Site (SRS) has recently taken steps to strengthen the use of Human Performance Improvement (HPI) error reduction tools to aid personnel in reducing the chance and/or severity of an error while performing their activities.

Human performance is generally recognized as a series of behaviors carried out to accomplish specific tasks. Human performance improvement principles provide a systematic approach to improving individual and organizational performance.

“SRS began using HPI tools approximately 15 years ago, and while we have continued their use, the emphasis on their importance in everyday activities had become stale over time,” Conduct of Operations (CONOPS) Program Manager for Savannah River Nuclear Solutions, the managing and operating contractor of SRS, Daryl Smoldt said. “HPI tools provide workers with methods to help anticipate, prevent, or catch errors and we want to make sure they are top of mind and accessible for all employees. To do this, we took a fresh look at how we taught and reinforced these tools and looked at ways to make them better.”

Some of the recent HPI efforts include developing short HPI videos that are accessible to all employees; integrating HPI more closely with CONOPS principles; developing an HPI Sustainability plan; and establishing an HPI Lab, that is home to two HuPerT® Trainers, electronic devices that react in real-time to participants who are following directions in a procedure.

“The HPI Lab is accessible to all Site employees and uses Dynamic



*Production Operator Apprentice Brandon Richardson participates in a Dynamic Learning Activity during training, supervised by CONOPS Program Manager Daryl Smoldt*

Learning Activities to help participants understand HPI tools by using them in a fun and hands-on way,” said Smoldt. “For example, one of our activities has one participant describing a specific structure built from Legos®, while another participant tries to assemble the structure without being able to see each other. This activity shows participants the hazards of imprecise communication habits, interpretation requirements, and assumptions and emphasizes the error-reduction tools of a questioning attitude, three-way communications and pre-job briefing to name a few.”

HPI error reduction tools include self-checking, peer-checking, timeouts, use of the phonetic alphabet, procedure use and adherence, flagging, task preview/job site review, pre-job briefings, having a questioning attitude, use of three-way communications, and place-keeping. HPI tools are most commonly used by those in operations but can also be used by employees in administrative and support roles.

[Click here to check out a video of the Lego® Dynamic Learning Activity.](#)

*Savannah River Nuclear Solutions, a Fluor-led company with Newport News Nuclear and Honeywell, is 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-2021-1024