SRS’s HB Line Placed in Safe Shutdown Status

AIKEN, S.C. (June 24, 2020) – Savannah River Nuclear Solutions (SRNS) employees at the Department of Energy’s (DOE) Savannah River Site (SRS) recently completed placing the HB Line facility in a reversible Safe Shutdown status, which will result in a cost avoidance of approximately $40 million a year starting in 2021, compared to 2016 during peak plutonium feedstock mission operations.

In February 2018, SRNS received a letter of direction from DOE directing the contractor to proceed with placing HB Line in Safe Shutdown status while preserving its capabilities for future use.

“The principal scope of the Layup Plan involved three key tasks: de-inventorying and flushing facility product and cold chemical lines, which included anion exchange column resin removal, a complex task; dispositioning legacy plutonium and uranium materials stored and previously used within the facility; and laying-up support systems no longer needed,” said HB Line Facility Manager Nick Miller.

Additional scope in the multi-year long effort included: altering the security posture of the facility to include Human Reliability Program de-enrollment and reduction in the amount of protective force personnel needed; implementing a revision to the facility’s technical safety requirements to reduce facility minimum staffing requirements; and assimilating the H Canyon (chemical processing facility
located underneath HB Line) and HB Line organizations, all of which were reflective of the current plant conditions and aimed at reducing the future overall facility cost through the reduction in expenses related to maintenance, surveillance and utilities.

“More so than any commitment delivery or cost reduction, I am most proud of the courage and resilience of this team to deliver against the uncertainty and adversity that comes along with a mission change such as this,” said Miller. “I have always maintained shutting down a plant is twice as hard as starting one up, mainly because you have to keep the plant running safely in the meantime. The team executed this work all in-house, safely, without having to bring on any additional resources.”

“The Department’s direction to preserve the capabilities of HB Line will allow us to ensure the facility is ready for use in the case that it is needed again,” said SRNS Senior Vice President of Environmental Management Operations Wyatt Clark. “The missions performed in HB Line over the years have a lasting impact on the site and the nation, and we are appreciative that some of the extensive experience of its employees can now be utilized in sister facilities across the site. Thank you to the employees who worked to ensure a smooth transition and safe layup.”

SRS’s HB Line, a Hazard Category II facility, was built in the early 1980s to support the production of plutonium-238 (Pu-238), which is a power source for the nation’s deep space exploration program, and to recover legacy materials stored in H Canyon. HB Line has been used more recently to make plutonium oxide, a non-weapons usable form of plutonium.