SRS Resumes Plutonium Downblend

AIKEN, S.C. (June 23, 2020) - Savannah River Nuclear Solutions employees in the Savannah River Site’s K Area recently resumed plutonium downblend after an outage for extensive upgrades that, combined with other ongoing initiatives, will lead to the expedited removal of plutonium from South Carolina.

“Despite facing challenges resulting from COVID-19, our team was able to meet the commitment date to restart plutonium downblend in the KIS glovebox,” said Savannah River Nuclear Solutions President and CEO Stuart MacVean. “They accomplished an extensive amount of work in a short amount of time to ensure we could expedite the Department of Energy’s missions and remove plutonium from the state. All of this work has been and will continue to be performed safely, by employees with the know-how and dedication to make it happen.”

SRNS employees began downblending plutonium in K Area in 2017. Downblend operations were paused in 2019 to complete an extensive outage to make improvements to processing capabilities and infrastructure. These improvements will allow K Area to expedite downblending and better meet the mission’s needs.

“The efficiencies introduced through the K Area outage will aid in the Department’s mission to expedite plutonium downblend and removal from South Carolina,” said DOE-Environmental Management (EM) nuclear materials senior technical adviser Maxcine Maxted.

Along with the restart of downblend operations, SRNS is also working to increase staffing from two- to four-shift operations, which also requires expanded training and resources.

“Combining current and future planned missions at SRS will result in the need for more efficient plutonium processing,” said Virginia Kay, director, National Nuclear Security Administration (NNSA) Office of Material Disposition (NA-233). “NNSA thanks the SRNS project team and the facility support personnel for their hard work and dedication in helping us achieve this important nonproliferation mission. This is yet another example of NNSA missions being completed in DOE-Environmental Management facilities and the partnership that is needed to execute this critical mission.”

Plutonium downblending is the process of mixing plutonium oxide with a multicomponent adulterant. After downblending, the plutonium will be shipped to the Waste Isolation Pilot Plant in New Mexico for disposal.