SRS Completes Canadian TRM Campaign

AIKEN, S.C. (Jan. 12, 2021) – EM Operations at the Department of Energy’s (DOE) Savannah River Site has completed a four-year campaign to receive and process liquid highly enriched uranium (HEU), called Target Residue Material (TRM), from Chalk River Laboratories in Ontario, Canada.

The Canadian TRM was the liquid that remained after HEU targets were irradiated in the National Research Universal (NRU) research reactor and processed to recover molybdenum-99, an important medical isotope. The material was received and processed in the Site’s H Canyon, the nation’s only large scale nuclear chemical processing facility.

“The TRM HEU was unique in that it was received already dissolved and in liquid form,” said Savannah River Nuclear Solutions TRM Program Manager Bill Giddings. “Most of the HEU H Canyon receives comes in the form of spent nuclear fuel rods that need to be dissolved before we can process the resulting solution. To process TRM, we needed to do some facility modifications and creative problem solving to ensure we maintained the safety of our employees and facility, while staying on schedule and in budget.”

During the TRM campaign, H Canyon received 115 truck shipments of liquid HEU, equaling over 6,000 gallons.

“We appreciate the work done by SRNS to complete this important mission,” said DOE-Savannah River Nuclear Materials Senior Technical Advisor, Maxcine Maxted. “The SRNS team maintained the schedule set by Canada and processed all the material safely and without a contamination case despite the high-hazard potential of the material.”

The purified TRM solution will be managed as part of the ongoing program in H Canyon.