



OPERATED BY SAVANNAH RIVER NUCLEAR SOLUTIONS
Office of Communications

MEDIA CONTACT

Christian Harris

803-725-5819

christian.harris@srnl.doe.gov

FOR IMMEDIATE RELEASE

Paragon Signs License Agreement for SRNL Packaging Innovation

AIKEN, S.C. and GRAND RAPIDS, MI. (Sept. 1, 2020) –The U.S. Department of Energy’s Savannah River National Laboratory (SRNL) has executed an exclusive license on its patented Stepped Integral Liner Drum Assembly (SILDA) to Paragon D&E (Paragon).

The SILDA 9979/9981 container has an external outer package that holds a 30-gallon payload volume. This, along with its robust design that supports radioactive material content shipments exceeding 60 percent of the package’s gross weight, makes it very attractive for maximizing waste shipment.

The technology optimizes the use of commercially available drums and comprises a novel use of polyurethane foam and ceramic fiber insulation to enhance the structural and thermal characteristics of the design.

“The container’s efficient design makes them easy to handle, load, and close, which are attributes preferred by rad operations personnel,” said Paul Blanton, SRNL Advisory Engineer and SILDA Patent Co-Inventor.

The agreement gives Paragon the right to use SRNL’s SILDA technology for government or commercial packaging projects and will improve responsiveness to customer needs by streamlining procurements for nuclear materials transport packaging. It stems from a five-year procurement contract between the two entities, which expired in early 2020, under which Paragon fabricated more than 5,000 packages based on the SILDA patent.

“We currently have a variety of packages in market including the dual certified 9979 DOE/NRC authorized for nuclear waste and nuclear fuel, the DOE 9981 Heavy Payload, upgraded for transport

We put science to work.™

of Low Enriched Uranium (LEU) with trace quantities of plutonium, americium, neptunium, and most recently, bringing the all new DOT ViTAL Package to market for low-level liquid waste,” said Casey Pike, Paragon D&E Sales of Nuclear Containment Systems. “Moving forward, we are pursuing additional cost-effective Type B packages with SRNL.”

SRNL and Paragon D&E have worked together over the past 10 years as strategic partners to design, test, and manufacture advanced nuclear waste packages based on the SILDA technology for the shipment of fissile and non-fissile radioactive materials.

SILDA technology encompasses the 9979, 9981, and Vial Type A Liquid (ViTAL) radioactive material shipping packages approved for use by the Department of Energy (DOE), the Nuclear Regulatory Commission (NRC), and the Department of Transportation (DOT). The 9979 and 9981 packages are designed for solid waste, whereas, the ViTAL package is designed for liquid waste contents.

Paragon is a Michigan-based company, providing full-service tooling, machining, design, and build capabilities for the automotive, aerospace, defense, marine, and nuclear industries.

The United States Department of Energy (DOE) Savannah River National Laboratory (SRNL) is a multi-program research and development center that puts science to work to protect the nation by providing practical, cost-effective solutions to the nation’s environmental, nuclear security, nuclear materials management, and energy manufacturing challenges. SRNL is managed for DOE by Savannah River Nuclear Solutions, a Fluor-led company whose members are Fluor Federal Services, Newport News Nuclear and Honeywell.

We put science to work.™



SILDA licensed 9979 packaging staged for shipment at the Paragon D&E, Grand Rapids, Michigan facility.

Links:

- <http://srnl.doe.gov>
- www.facebook.com/SavannahRiverNationalLab/
- www.twitter.com/SRNLab
- www.linkedin.com/company/savannah-river-national-laboratory/
- www.instagram.com/savannah_river_national_lab/

We put science to work.™