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FOR IMMEDIATE RELEASE

Innovative Infrastructure Improvements Save Dollars and Environment at SRS

AIKEN, S.C. (October 15, 2018) – Recently, thousands of tons of pavement were mechanically-removed from cracked and worn highways at the Savannah River Site (SRS) and used to resurface gravel roads. This innovative process improves the quality of gravel roads at SRS while avoiding the high costs of paving. Repurposing the decades old asphalt, known as millings, saves space in landfills as well. The 310-square-mile, Federally-owned site has over 2,000 miles of roads. Workers with Savannah River Nuclear Solutions (SRNS), the site’s management and operations contractor, recently milled asphalt from two of the site’s most traveled roads and repaved them. The first roads of significant length to be resurfaced at SRS since the 1990s.

In milling, crews use special heavy machinery to remove a layer of deteriorating asphalt to ensure a good foundation for the new surface. The milled asphalt is granular in consistency, moving directly from the milling machine to a temporarily attached dump truck.

“I always compare asphalt millings to gold,” said SRNS Engineer Richard Swygert. “What first appears to be waste material can serve a valuable purpose elsewhere.”

He explained that milled asphalt costs about \$25 a ton while new asphalt can cost as much as \$110 a ton.

“Repurposing the milled asphalt versus paving secondary roads on site is highly cost effective,” he said.

Resurfacing a new layer of asphalt directly onto the milled surface of roads frequently results in the cracks found within the remaining asphalt eventually moving up through the new pavement. Industry standards prevent this problem by placing a specially developed fabric between the old and new layers. This is an effective, yet expensive solution.

“Discussions with our local con-



Wayne Cadden, SRNS Subcontract Technical Representative, monitors the progress of a new, highly cost-effective method to resurface cracked, aging roads found at several locations across the Savannah River Site.

tractor about this cost issue resulted in a cost avoidance of \$68,000 by placing an open-graded layer of asphalt between the old and new pavement instead of the geosynthetic fabric,” Swygert said. “This coarse, granular asphalt creates a surprisingly strong, yet flexible, long-term buffer, serving as a much less expensive and highly effective way to protect our new road surface.”

Orangeburg County, South Carolina received 7,000 tons of SRS millings created due to the recent road-work; miles of roads can be upgraded with this recycled material. This was accomplished through the partnership between SRNS, the Department of Energy and the SRS Community Reuse Organization.

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.

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