

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 23, 2011

**TO:** T. J. Dwyer, Technical Director  
**FROM:** M. T. Sautman and D. L. Burnfield, Site Representatives  
**SUBJECT:** Savannah River Site Weekly Report for Week Ending December 23, 2011

**2011 Year in Review Part One:** SRNS's accomplishments this year included the following:

- H-Canyon completed the highly enriched uranium (HEU) unirradiated metals blend down campaign, shipping 21 trailers of low enriched uranium offsite. The enriched uranium storage tank and all other outside uranium storage tanks were emptied to tank heel.
- HB-Line dissolved 25 kgs of plutonium (Pu) oxide, filled 83 pipe over pack containers with Pu waste, and completed three vacuum salt distillation runs.
- L-Area received 171 fuel assemblies from four domestic sites and two foreign countries and completed a major upgrade of the 85-ton crane.
- K-Area conducted 12 non-destructive examination and 12 destructive examinations of DOE-STD-3013 Pu cans and received surplus Pu and HEU shipments from three DOE sites.
- E-Area completed 126 TRUPACT-II shipments and 4 TRUPACT-III shipments to WIPP, comprising 870 cubic meters of legacy transuranic (TRU) waste.
- E-Area removed all culverts from Pad 1 and processed 139 boxes of TRU waste.
- F-Canyon processed 994 drums and 145 boxes of TRU waste.
- H-Canyon processed 31 steel boxes and 10 casks of TRU waste.
- Shipped 10,195 drums of depleted uranium offsite.
- Completed decommissioning of the Heavy Water Components Test Reactor as well as P and R Reactor buildings.
- SRNL was the safest national laboratory for the 7th consecutive year.
- Extracted tritium from the cycle 9B target rods and received the cycle 10A and 10B target rods.
- Completed the Reservoir Acceleration Project – a 350% increase in reservoir shipments.
- Construction is 65% complete at the Waste Solidification Building with the concrete walls and roof complete. Major equipment installed includes many tanks, evaporators, filters, air handling units, the electrical substation, the diesel generator, and the cooling tower.

**Conduct of Operations Improvement Plan:** SRNS conducted an analysis of events and the Site Tracking, Analysis and Reporting (STAR) database and determined that there had been a degradation of conduct of operations over the past year. In order to combat that trend, the SRNS managers prepared a Conduct of Operations Improvement Plan. The staff is reviewing how well the plan addresses the identified weaknesses and will monitor how effectively SRNS implements their plan.

**Unreviewed Safety Question (USQ) Training:** The Department of Energy (DOE) Office of Health, Safety and Security (HSS) conducted training on DOE Guide 424.1-1B, *Implementation Guide for Use in Addressing Unreviewed Safety Question Requirements*. DOE-SR and the contractors identified several discrepancies amongst the guide, the training course, and the site's USQ manual. DOE-SR has provided comments to HSS for those discrepancies where they consider the training could be made clearer and is reviewing those inconsistencies where they consider the site manual could be improved.