

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 8, 2013

**TO:** S. A. Stokes, Acting Technical Director  
**FROM:** M. T. Sautman and D. L. Burnfield, Site Representatives  
**SUBJECT:** Savannah River Site Weekly Report for Week Ending March 8, 2013

**Sequestration Impacts:** SRNS announced that ~2000 employees will be placed on a 32-hour work schedule beginning April 1. An additional ~150 employees will be subject to full furloughs.

**H-Canyon:** Last weekend, H-Canyon made 5 shipments containing 14 radioactive samples to F/H Laboratory using procedures that implemented the wrong Onsite Safety Assessment (OSA). The Package Review Committee had updated the Radioactive Packaging Approval Log to include the procedure implementing the new OSA, but H-Canyon had not formally approved that procedure yet. As a result, H-Canyon did not notify the laboratory that they were shipping samples that could generate flammable gases.

**Spent Fuel:** SRNL completed analyzing the water samples that were drawn from 10 L bundles. These bundles contain fuel assemblies with U-Al cores and aluminum cladding. (The L bundles have small holes in the lid and bottom to allow some mixing with basin water). Nearly all the specific bundles chosen were those known to have pitting damage or are stored in the location with the highest "cobweb" severity (see 12/21/12 report). The pH, chloride, iron, copper, and mercury results were acceptable. Six of the bundle samples had Cs-137 concentrations in the 39.4 – 84.6 dpm/ml range compared to a basin average of 38.6 dpm/ml. Seven of the samples had alpha activity in the 17 – 20 dpm/ml range while the basin is kept below 1 dpm/ml. The bundles with elevated concentrations were from those known to be pitted. The bundle sampled from a location with high "cobweb" growth did not have increased radioactivity. While nearly all the samples had slightly elevated concentrations of total organic or inorganic carbon, all of them (including the cobweb one) had microbe concentrations more than an order of magnitude lower than the rest of the basin. DOE is currently not providing any more funds to implement the L Basin Augmented Monitoring and Condition Assessment (see 7/1/11 report).

**Recommendation 2012-1:** The site rep performed a walkdown of the facility to review the transient and fixed combustible controls as well as the proposed methods for deenergizing the unnecessary circuits in the facility. During this walkdown the site rep paid special attention to those composite walls that are scheduled to be removed or encapsulated to reduce the fire loading as well as the rooms that are to be locked and sealed.

**Tank Farms:** As a part of the removal of the salt from Tank 10, the site will do an above ground hose-in-hose transfer from Tank 10 to Tank 11. This involves construction preparing an elevated trough to carry the hose as well as the placement of temporary shielding and a high radiation area barrier. The site rep performed a field observation of the general vicinity as well as the hose-in-hose placement. The observation of this area also allowed the site rep to view the preparations for the chemical cleaning of tank 12.

SRR continues complete the work package for the submersible mixing pump that is suspended in Tank 8 (see 2/8 and 15/13 reports). The current plan is to attempt to lower the pump into the tank using its own weight as the motive force and if that does not succeed to remove the pump and place it into a waste box.