

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 6, 2013

**TO:** S. A. Stokes, Technical Director  
**FROM:** M. T. Sautman, Site Representative  
**SUBJECT:** Savannah River Site Weekly Report for Week Ending September 6, 2013

**HB-Line:** In order to clarify the qualification status of core and non-core operators with regards to plutonium processing, the core operators are now provisionally qualified and will become “qualified” once senior supervisors observe satisfactory hot operations of each task. Meanwhile, the non-core control room operators were disqualified for the watchbill and will have to satisfactorily complete a defined list of procedures under instruction before being allowed to stand watch in Phase II. In addition, SRNS resumed their operational drill program (e.g., alarm response, process upsets) after a multi-year hiatus. Finally, engineers temporarily installed equipment to measure the actual flow rates being achieved by the alternate purge method. The staff had expressed concerns that the modeled flow rates had not been verified in the field. Preliminary data indicates that the required flow rates were measured at all measured locations.

**Training:** The site rep met with SRNS training managers to discuss a change that would allow facility management to decide whether to conduct an oral board or a one-on-one oral examination for certified and other operations positions. The program description will be changed to define a minimum list of positions (e.g., shift operations managers, shift technical engineers, certain first line managers) that will require an oral board.

**H-Canyon:** SRNS has developed a plan to reduce the volume of high-level waste generated to ~100,000 gallons, the volume that SRR expects to be able to receive in Tank 39. The plan requires the use of the acid recovery unit, operation of H-Canyon evaporators, and reusing HB-Line column raffinate in lieu of clean nitric acid in H-Canyon. The latter will require revisions to safety documents to account for the presence of small concentrations of americium and plutonium in the raffinate.

In 2011, a robot crawler examined portions of the process air exhaust tunnel, finding areas with concrete degradation and exposed rebar. SRNS recently inserted a video camera on a stick into several locations of the tunnel and checked a concrete coupon inserted last year. While additional areas of concrete degradation and exposed rebar were visible, the observed degradation was consistent with the assumptions engineers made in a structural analysis. Furthermore, SRNS reported that the coupon was not degraded and they saw no additional degradation when they compared the current condition with earlier photos of the same spots. SRNS is purchasing a new robot crawler for additional inspections.

**Defense Waste Processing Facility:** SRR assessed the procedures used for implementing limiting conditions for operation required actions and surveillance requirements. The review identified a few cases where procedures or round sheets included the incorrect data range, formula, or note. Some of these mistakes reflected earlier versions of the requirements that had not been updated.

**Tank Farms:** The site rep reviewed plans and procedures for pumping waste out of a tank annulus or making a contingency transfer from a leaking tank. The site rep is now reviewing the actual readiness of the procedures, equipment, and operators to perform these actions if needed. Grouting of tanks 5 and 6 is ongoing.

**F/H Laboratory:** SRNS is relooking at their contamination controls and workers’ self-monitoring techniques after contamination was found on a technician’s lab coat after he handled a sample and conducted a self-frisk.