

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 22, 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 July 22, 2011

**SRR Activities:** Below is an update on some items of interest:

- Isolation of tanks 5 and 6 is field complete.
- To reduce worker doses during an outage, SRR flushed and de-inventoried the Modular Caustic Side Solvent Extraction Unit equipment. This flush material and atypical operating conditions in the strip effluent decanter resulted in a 572 ppm (includes analytical uncertainty) concentration of Isopar™ L (normal is < 87 ppm) in the last strip effluent hold tank batch. Per the new Specific Administrative Control, the Defense Waste Processing Facility will add diluent to their strip effluent feed tank before receiving high Isopar™ L solution.
- Due to the extent of pluggage in the Saltstone leachate piping, grouting may not resume until mid-August (see 7/2/11 report).

**Loss of Power:** During a thunderstorm, F-Tank Farm lost power, which resulted in the shutdown of an evaporator and the interruption of a waste transfer. F/H Laboratory also issued a Remain Indoors order for all of F-Area until they could determine that a high-activity stack alarm was false. A related lightning strike also caused a total loss of utility power to the building housing the 235-F fan.

**Site Rep Activities:** Some of the site rep activities included:

- Walked down the Waste Solidification Building. The roof is complete, and nearly all of the process vessels and gloveboxes are installed.
- Observed operator rounds at H-Tank Farms and a valve lineup for a waste transfer. The Site Rep shared radiological posting and housekeeping observations with facility management.
- Observed transuranic (TRU) waste box receipt and the remediation of a TRU waste box and drum at F-Canyon.
- Along with headquarters staff, walked down L-Basin and discussed issues related to long-term storage of spent fuel with facility and Savannah River National Laboratory personnel.
- Observed H-Canyon Lean meetings related to nuclear and criticality safety, design authority engineering, and other topics to better understand the initiatives SRNS is considering to reduce operating costs by 30%.
- Observed first line manager oral board in L-area. SRNS conducted the board skillfully and the first line manager successfully passed the exam.
- Discussed ways of improving radiological controls with the first line manager in E-area. The topics included high radiation controls, posting a multiple use area, and briefing radiological work permits to the work force.

**Solid Waste Management Facility (SWMF):** When transferring a steel container of waste (>32,000 lbs) into a waste trench, SRNS personnel dropped the container (see 7/15/11 report). Following the event, they placed general restrictions on rigging. SRNS decided that the primary cause was that riggers incorrectly ran this handling gear across a sharp edge of the hook. SRNS placed restrictions on the use of these slings at a meeting among the riggers. They then verbally relayed a release of the general restrictions and allowed riggers to go back to work. At least one facility incorrectly interpreted the verbal release as releasing all restrictions. DOE is addressing the informality of communications that was used to restrict and release work.

Larry Zull and Ari Frankel observed a readiness assessment (RA) for the loading of TruPact III waste containers. The SRNS RA team completed their observations and interviews and closed out their observations with SWMF management. There were two prestart findings relating to engineering calculations that were not adhered to and a failure to fully identify the roles and responsibilities of the team leadership.