DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 20, 2009

TO: T. J. Dwyer, Technical Director

FROM: D. L. Burnfield and M. T. Sautman, Site Representatives

SUBJECT: Savannah River Site Weekly Report for Week Ending November 20, 2009

Transuranic Waste: Transuranic waste remediation resumed at F-Canyon and the Site Rep observed the repacking of the first two drums. Unfortunately, when the contents of the first drum were put into a new drum, several cubic feet of waste extended above the top of the drum. When a worker could not easily compact the waste with a tool, two workers then repeatedly pushed down simultaneously with the tool, but still could not get the waste to fit in the drum. After the bagout was cut and taped, it finally took three workers pushing down on the lid to get the drum ring attached. The procedure had provisions to fill a second drum, but these were ignored. Because of the potential to pop the plastic bag or compromise the taped seal and release plutonium contamination, the Site Rep and Facility Representative discussed their concerns with management. The workers were briefed the next day and later drums that were known to be full were packed into two drums. The Site Rep and Facility Representative also questioned whether a first line manager who is supposed to be supervising the work per a Management Control Plan should be performing hands on work (i.e., making bag cuts and putting on drum lids). The Site Rep observed the receipt of drums from the Solid Waste Management Facility. The procedure reader paraphrased some steps, skipping a key caveat, for inspecting dented drums.

The Site Rep also observed a mockup of how riggers will open large steel boxes in H-Canyon and remove plywood waste boxes. The contents of some of these will require size reduction.

Radiological Protection: At Saltstone, two workers driving a truck inside a Radiation Area ended up driving into a Contamination Area (CA) wearing only street clothes. They purposely took down a yellow and magenta rope and moved a stanchion to make room for their truck, but did not bother checking the radiological posting that was clearly visible. They only realized their mistake when they drove to the other end of the CA and saw a step off pad and bins for used anti-contamination clothing. Luckily, neither the workers nor the truck were contaminated. At F/H Laboratory, contamination was found on the personal shoes of three workers this week. Two of them were inside Radiological Buffer Areas while the third had just exited a CA. Extensive surveys of the RBAs did not identify the source of contamination.

Saltstone: After several failed attempts to resume processing, the Site Rep observed operators start Saltstone, process approximately 4000 gallons of waste, and shut the system down without any problems. The contractor is planning to start processing Tank 50 waste next week.

Safety: Six weeks ago SRNS implemented the Safety Improvement Compensatory Actions and Measures (SICAM) process (see October 9, 2009 report). Phase 1 included work package screenings and reviews and work release by authorized individuals. Operations and safety managers also emphasized activity scope, procedure steps, hazards, and controls with work crews. This week SRNS prepared to implement phases 2 and 3 of the SICAM process. Phase 2 focuses on increased senior management presence in the field observing work, mentoring, and gathering worker feedback. Phase 3 uses the feedback and improvement process to institutionalize relevant elements of the SICAM process.