

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 5, 2012

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 October 5, 2012

HB-Line: The Board's staff conducted a review of the draft Documented Safety Analysis, Technical Safety Requirements, and Fire Hazards Analysis. These revisions are intended to finally bring HB-Line's authorization basis into compliance with DOE-STD-3009 and support the upcoming plutonium oxide production mission. The review focused heavily on fire and explosion controls, facility worker protection, and the reliance on administrative controls. The staff will brief the Board on the results of this review.

Savannah River National Laboratory: SRNL implements their Radionuclide Inventory Control, a specific administrative control, by using a software program to track room radionuclides and verify that the accident consequence values remain below those listed in the Documented Safety Analysis. While the program calculated the consequences from a single room fire using all the radioisotopes present, it determined which room was bounding by focusing on the room with the largest consequences from a single radioisotope rather than the room with the largest total consequences. Although this software program is subject to the highest SRS quality assurance requirements, this is the second error discovered in it.

F-Canyon: The site rep observed workers drill into a pipe found inside a waste box with contact external dose readings up to 4 rem/hr. SRNS has been remediating several drums with very high fissile-gram-equivalents. SRNS expects to complete operations at their transuranic waste drum line next week.

235-F: The site rep performed a field observation of Building 235-F with the new SRNS 235-F project manager. SRNS has made additional progress in removing combustible materials. However, in some cases, required asbestos abatement techniques and other problems may significantly hinder the removal of flammable materials. For those cases, the site is looking at alternative approaches to removal including encapsulating the walls with more flame resistant materials and prohibiting entrance to the area using locks and administrative controls. The site is setting up a telephone conference with the Board's staff to discuss these alternatives.

Training: The site rep met with the new training manager to discuss his assignment. As reported last week, SRNS is taking personnel actions in response to likely FY13 budget shortfalls and smaller carryovers. These actions include dramatically reducing staff augmentation support and voluntary separations for SRNS staff. SRNS anticipates the training staff will lose approximately ~20% of their staff. While some of these positions may be filled by experienced operations personnel, they will likely have little training experience.

Tank Farms: The site rep sat in on a discussion regarding further problems with the in-tank high level conductivity probes. In order to allow SRR to exit Limited Conditions of Operations, tank farms engineering used a database to compare measurements of certain key parameters against the actual length of the conductivity probe. The database had not been verified or validated as safety software even though it should have been safety software in accordance with the DOE directives.

SRR is preparing to replace the demister basket in the 2F Evaporator. This task involves placing at least one person inside the evaporator cell, which is a confined space and may have high levels of mercury vapor. The site rep observed a Facility Radiological Action Team (FRAT) review of the planning for this task. The Facility Manager determined that additional planning was required to complete the job and determined that the FRAT would be reconvened at a later date.