

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 18, 2012

TO: T. J. Dwyer, Technical Director
FROM: M. T. Sautman, Site Representative
SUBJECT: Savannah River Site Weekly Report for Week Ending May 18, 2012

Dan Burnfield was on leave this week.

Readiness Assessments (RA): The site rep questioned the RA Plan of Action (POA) for the receipt, handling, and storage of 9977s containers in K-Area because the actual receipt may not take place within 12 months of the RA. In addition, the actual Shipper Receiver Agreement (SRA) is not available and DOE has not approved the 9977 Safety Analysis Report for Packaging (SARP). SRNS revised the POA to state that if this initial receipt does not occur within 12 months, they will use DOE O 425.1D to determine the need for further readiness reviews. Furthermore, the prerequisites require the K-Area Documented Safety Analysis to be approved before the RA commences and the Authorization Agreement will prohibit the receipt of 9977s until the SARP is approved by DOE. The RA demonstrations will use procedures based on typical SRA requirements and the POA now references the process that will be used to incorporate future SRA requirements as they are approved.

The site rep also reviewed the proposed tasks to be demonstrated during the upcoming used nuclear fuel processing RAs at H-Canyon in light of ongoing operations and the quarterly cold runs. The site rep stressed the need to have independent conduct of operations oversight during the upcoming cold runs. This oversight should be comparable to that performed during a RA and would be documented. Furthermore, the contractor needs to ensure that each of the shifts has participated in the cold runs and that the cold runs will use the final procedures. The site rep also questioned the lack of a DOE RA and the proposed startup authorization authority since more than 12 months have elapsed since SRNS and DOE conducted the original RAs.

Nuclear Safety: The site rep and other staff expressed concerns with a SRNS proposal to increase the release duration for a HB-Line fire scenario to two hours. Without this change, the unmitigated dose consequences would drive safety class controls for the upcoming plutonium processing mission.

The site rep also reviewed the draft Justification for Continued Operations for the fire water supply system at SRNL. The site rep questioned why it would be prudent to allow hot work and work involving class 1 flammable liquids during the 48 hours between the unplanned loss of the credited fire water supply system and the establishment of an alternate water supply (see 4/20/12 report).

235-F: The site rep observed SRNS implement their response plan to allow troubleshooting activities on inoperable (as defined in the Technical Safety Requirements) exhaust fan #2 (see 4/20/12 and 5/4/12 reports). When the operator swapped from fan #1 to #2, the damper for fan #1 did not close. This caused air to be sucked through fan #1. Building vacuum dropped, but not enough to set off the alarm. Fan #1 continued to rotate backwards for several hours while SRNS identified the cause of the damper failure and replaced the failed control relay. SRNS resumed troubleshooting of fan #2 later in the week.