

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 27, 2011

TO: T. J. Dwyer, Technical Director
FROM: D. L. Burnfield, Site Representative
SUBJECT: Savannah River Site Weekly Report for Week Ending May 27, 2011

DNFSB staff members Emily Gibson, David Gutowski, and Sanjoy Sicar were on site this week. They reviewed the status of SRR's Small Column Ion Exchange and Enhanced Chemical Cleaning projects and attended parts of the alternatives analysis for the Tank 48 project.

HB-Line: While facility personnel were attempting to change the alignment of the room exhaust fans, the safety class building vacuum interlock activated and properly shut down the room air supply fans. During this evolution, the initial condition was that room exhaust fan #1 was running and the # 2 exhaust fan was in standby. Facility personnel first energized the second fan thus both fans were running. They then shut down room exhaust fan #1 in accordance with the local procedure. Once they shut down fan #1, the building vacuum immediately decreased and the interlock activated. The operators attempted to maintain the vacuum but were unsuccessful. The building vacuum was restored immediately after the interlock shut down the supply fans. The Shift Operation Manager secured the evolution and held a fact-finding meeting. At the fact-finding meeting, the facility staff agreed that the building was in a safe condition and developed a plan of action. However, the meeting lacked the formality that is required by the site procedures and at the end of the meeting the site rep discussed the course of action that facility personnel had agreed should be taken with facility management. After reviewing that action, facility management determined that the action would not accomplish the troubleshooting of the system that they desired and another course of action was developed. This is the third time similar ventilation occurrences have occurred at the facility within the last year. Facility personnel are currently evaluating the best long-term course of action.

H-Canyon TRU Waste: SRNS conducted a review to determine the readiness to proceed with the next phase of TRU waste handling in H-Canyon. In this phase, the H-Canyon personnel conduct the waste repackaging and resizing in essentially the same manner as the previous phase but the facility has implemented additional controls to account for higher concentrations of contamination and fissile material. The site rep reviewed the procedures that were provided and attended key discussions and evolutions. The review was conducted by a professional team who was experienced in performing readiness assessments. While the final determinations are still being made it is expected that several minor prestart findings will be able to be resolved rapidly.

Hot Tap Procedure: Following a 64% nitric acid spill during deactivation and decommissioning activities at F-Canyon (see August 28, 2009 report), SRNS personnel reviewed the procedures and actions of the workers. SRNS personnel determined that the hot tap that they installed on the piping to provide a drain path was not installed in accordance with the vendor's instructions. The site rep reviewed the procedure that SRNS currently uses and found that differences still exist between the site procedure and the vendor's instructions. Specifically the specified torque values are lower (10 ft-lbs in lieu of 25 ft-lbs.) The site rep discussed this difference with SRNS personnel who stated that the primary reason that the reduced torque was acceptable was that the site procedure limited the application to non-pressurized systems vice the moderate pressure systems (200 PSI) allowed by the vendor's instructions.