

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 7, 2014

TO: S. A. Stokes, Technical Director
FROM: M. T. Sautman and D. L. Burnfield, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending March 7, 2014

Tank Farms: Last week, SRR entered into deliberate operations because of a violation of the technical safety requirements for minimum staffing of the control room. This week, SRR continued in deliberate operations while they planned three high-risk tasks. They successfully replaced the old sleeve on the submersible mixing pump that has been suspended in Tank 8 for more than a year. The sleeve serves as a contamination barrier and they can now attempt to remove the pump and place it in a box. They are clearing nonconformance reports for several as-found conditions on F-Pump Pit 1 prior to replacing the transfer pump. In H-Tank Farm, they replaced the electrical jumper for the H-Pump Tank 7 transfer pump but damage was found on the insulation of the transfer pump nozzle and repair plans are being developed.

H-Canyon/L-Area: While loading fuel bundles into a cask in L-Area, a first line manager noticed a 1" X 2" label (similar to a license plate sticker) affixed to a bundle. Later, workers at H-Canyon noted that some fuel bundles they were preparing for dissolution also had these labels, which list purchase order and serial numbers. When H-Canyon personnel reviewed the video of the previous dissolver charge, they could not rule out that a previously dissolved bundle may have had a label too. Work at both H-Canyon and L-Area was paused until engineers and SRNL scientists can evaluate the potential impacts (e.g., criticality, equipment plugging) of an undissolved plastic label in the dissolver and are performing experiments to determine if a normal dissolution cycle would dissolve the label. Meanwhile, they developed a tool to scrape off the label and are testing the use of steam to remotely remove it.

HB-Line: The site rep observed workers sample a tank and perform dual ion exchange column operations as the SRNS Independent Assessment entered its third week. The facility temporarily suspended column operations when a connection started to drip.

Saltstone: SRR's second attempt to conduct a hydrostatic test of the grout line failed when one of the couplings started to leak.

K-Area: SRNS performed a camera inspection of the electric firewater pumping system. While they found no clear obstruction, a small binder clip was seen inside the system. SRNS installed a revised lockout on the system to allow them to retrieve this piece of loose debris. After maintenance failed to remove the debris, they closed the system up and began the weekly test of the diesel firewater pump. During this testing, the diesel pump shut down because of high water temperature internal to the pump. Troubleshooting continues on the cause of this failure. SRNS put compensatory procedures in place to reduce the probability of a fire while both firewater pumps are out of service.