

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 30, 2009

TO: T. J. Dwyer, Technical Director
FROM: M. P. Duncan and M. T. Sautman, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending January 30, 2009

Salt Waste Processing Facility: A fire occurred at the construction site. It started inside of a tent built out of non-flammable blankets to control the temperature of a recent concrete placement. Propane heaters inside of the tent appear to have been placed too close to the wooden form supports and bracing. Damage occurred over roughly 70 square feet. Contrary to requirements, the two workers assigned fire watch duties were in their break tent 100 yards away when their supervisor observed smoke and flames upon leaving his trailer. The fire was put out with fire extinguishers and a water hose within 30 minutes of discovery. The fire department was not called until roughly 30 minutes after that. The contractor appears to be taking appropriate corrective actions and is reviewing whether any significant damage was done to the concrete, rebar, or piping. DOE initiated an informal accident investigation.

Tank Farms: The Site Rep observed the startup of the Modular Caustic Side Solvent Extraction Unit, which had been shut down for a few months to make modifications. No problems were encountered with the new receipt tank siphon break and the Decontaminated Salt Solution coalescer. In F-Tank Farm, start-up of the Tank 18 mechanical waste removal system was delayed twice by a small leak located on a rupture disc for the ultra high pressure pump.

Facility Representatives: The Site Rep observed a NNSA facility representative oral board. Extensive feedback was provided.

K Area: The line management assessment finished last week. There were 5 findings and 73 opportunities for improvement. The portions of the review that the Site Rep observed were thorough and effective. In addition to the conduct of operations issues noted in the 1/16/09 report, an assessor pointed out additional examples indicating the need for improvement. The Site Rep attended a conduct of operations briefing to shift personnel during a several-day operational pause period. Facility management gave a good presentation to the workforce on the issues observed during the assessment and used them as examples to reiterate their expectations.

F/H Laboratory: Installation of a safety-significant glovebox HEPA filter halted when workers discovered that the filter sleeve assembly's outer dimensions precluded installation. Although the procurement documentation had the correct dimensions, engineers did not request verification by the vendor nor were Central Shops receipt inspection personnel asked to inspect the dimensions. Furthermore, F/H laboratory personnel did not check the dimensions beforehand. There have been other recent cases involving safety-related procurements across the site. For example, a replacement HB-Line dissolver had dimensions that made it impossible to install without repairs and a gas mixture specification used for calibrating oxygen monitors was incorrect (12/5/08 report).

Integrated Facility Aging Management: The contractor's review of the first H-Canyon system (process cooling water) concluded that the system should be reliable through 2019. The review reinforced the need to replace switchgear and purchase spare valves. Furthermore, it identified additions to the Structural Integrity Program, inaccessible components with no maintenance history, approaching obsolescence of some devices, and inadequate spare part inventories.