

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 23, 2001

**TO:** K. Fortenberry, Technical Director  
**FROM:** D. Grover and M. Sautman, Hanford Site Representatives  
**SUBJ:** Activity Report for the Week Ending March 23, 2001

242-A Evaporator: Mr. Sautman identified that operations personnel did not respond in accordance with their procedures when the antifoaming agent pump failed last week. The Shift Manager decided to continue operations with no antifoaming agent. Although changes to the Evaporator Campaign Process Memo require the cognizant engineer to approve the change and red-line the memo, the Shift Manager did not notify engineering of this change until 4 hours later during shift turnover. The lack of antifoaming agent may have contributed to a later high-high differential pressure alarm. This triggered an interlock which shut down the evaporator. (1-C)

Tank Farms: Mr. Sautman met with Harry Boston to discuss staff concerns with the Office of River Protection (ORP). The Site Rep strongly disagrees that the development of corrective actions to address the findings in the ORP Integrated Safety Management System Self-Assessment (completed in December) can continue to be delayed until ORP gets more staff resources. Mr. Sautman also reiterated the need for ORP to develop a path forward for addressing the safety issues with decanting flammable gas watchlist tanks. (1-C)

Spent Nuclear Fuel Project (SNFP): While removing the process port connections from 5<sup>th</sup> Multi-Canister Overpack (MCO), water was discovered in port 3. SNFP determined that the water was trapped in equipment while recovering from the process upsets the following week. The presence of water indicated the possibility that water had been reintroduced in the MCO, prompting SNFP management to reperform the drying operation to alleviate concerns with the quality of the finished product. A one-time use pen and ink change was made to the operating procedure to perform this rework. While performing this procedure operators made two procedure compliance errors, primarily due to the confusing nature of the pen and ink change which did not comply with several requirements for format specifications. One error resulted in the activation of a safety class instrumentation control (SCIC) low flow alarm. Operations management hastily developed a sequence of actions to recover from this flow alarm. These actions isolated the MCO from the required purge activating the SCIC isolation and purge, placing the MCO in a safe condition. This condition was corrected and the procedure repeated in accordance with the pen and ink change. However, the change as written started pressurizing the MCO causing yet another SCIC isolation and purge activation. The potential for this to occur was not recognized in developing the one time change to the procedure. This coupled with other problems experienced processing this MCO raise concerns with the project's knowledge of the Cold Vacuum Drying systems and the project's process used to develop recovery actions as well as the continuing conduct of operations problems.

cc: Board members