

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 9, 2000

TO: K. Fortenberry, Technical Director

FROM: M. Sautman and S. Stokes, Hanford Site Representatives

SUBJ: Activity Report for the Week Ending June 9, 2000

DNFSB staff member Ajit Gwal was onsite this week reviewing electrical safety issues at the Cold Vacuum Drying Facility and K-East and West Basins.

A. Interactions with the Unions. Mr. Sautman met with both the Hanford Atomic Metal Trades Council (HAMTC) and Building Trades Safety Representative Directors as well as the HAMTC safety representatives for CH2M Hill Hanford Group, Bechtel Hanford Inc., and Pacific Northwest National Laboratory. The purposes of the introductory meeting were to provide background information on the Board, explain the types of information of interest to the Board, and establish plans for future interactions. (1-C)

B. Spent Nuclear Fuel Project. Testing of the Integrated Water Treatment system (IWTS) was interrupted again this week due to a repeat failure of the IWTS rupture disk. After successfully completing repair of the ion exchange module outlet hose leak, the IWTS valve alignment was modified to perform a leak test. This test was successfully performed on Friday, 6/2/00. On Monday, 6/5/00, prior to resumption of testing activities, the Operations Test Director incorrectly determined that the plant was configured properly for continuing IWTS testing in manual mode (no valve line-up verification was performed). Two valves, downstream of the rupture disk, remained closed as a result of the leak test configuration thereby preventing flow within the system. Almost immediately after starting the IWTS submersible pumps, pressure within the IWTS piping rose above the rupture disk's burst pressure, and it ruptured. Operators quickly recognized this condition and shutdown the system. No release of radioactivity was observed within the basin. Since the direct cause of this failure was poor conduct of operations, lessons learned, developed during a critique held on 6/5/00 and implemented on 6/7/00, address modification of procedures to ensure that operators correctly configure and verify that the plant is ready for testing following any interruption. Testing was successfully resumed on 6/8/00 and is continuing. This incident also emphasized the potential for schedule pressure to adversely impact operations during this period of the project. Mr. Stokes discussed this with the Fluor Hanford Chief Operating Officer and Manager, Richland Operations Office. (1-C)

C. Spent Nuclear Fuel Project. The readiness assessment for IWTS Phase 3 and 4 testing has been delayed beyond its currently scheduled start date of 6/19/00. No date has been set for rescheduling this activity. (1-C)

cc: Board members