

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 6, 2000

**TO:** K. Fortenberry, Technical Director

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

**SUBJ:** Activity Report for the Week Ending October 6, 2000

Chairman Conway and Board member Dr. Mansfield toured the spent nuclear fuel project facilities and the Plutonium Finishing Plant this week. David Grover began his transition as a Hanford site representative.

Plutonium Finishing Plant (PFP): PFP began operating the bagless transfer system last Saturday. Two cans were packed this week. Some of the items going through thermal stabilization recently have been found to have gains on ignition. Analysis of these items with the new supercritical fluid extraction process will provide more accurate results and may find them to be acceptable. Magnesium hydroxide precipitation has encountered some minor operational issues. The large volume of precipitate cake from a batch of relatively impure solutions filled up all of the available boat storage spaces. As a result, some solution had to be left in the columns overnight until space could be freed up. The precipitate clogged up the drain lines, which had to be rodded the next day. The filtrate solution from this batch also had to be recycled since its residual plutonium concentration exceeded allowable limits. (3-A)

Spent Nuclear Fuel Project: The contractor operational readiness review (ORR) of the K-West Basin, Canister Storage Building (CSB), and Cask Transportation System (CTS) continued this week. The K-West Basin fuel cleaning, post fuel cleaning and integrated water treatment system (including operation of the booster pump) were satisfactorily demonstrated. Additionally, the CSB operations were also demonstrated satisfactorily. Correction of equipment malfunctions and training of operators have delayed the demonstration of the multi-canister overpack loading system (MLS) which was a pre-start punch list item. This demonstration is currently scheduled for October 9, 2000 pending qualification of operators over the weekend. Programmatic reviews, interviews and operations demonstrations have identified some weaknesses in the areas of operator proficiency and training, qualification of CTS drivers, radcon personnel level of knowledge of the physical plant, and some equipment deficiencies. Overall, the ORR has proceeded without major issues however, it is apparent that additional operator training would have benefitted the project's overall performance. The contractor ORR for the cold Vacuum Drying Facility (CVDF) is scheduled to begin the week of October 9, 2000. (3-C)

cc: Board Members