

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 1, 2000

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

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

**SUBJ:** Activity Report for the Week Ending September 1, 2000

Plutonium Finishing Plant (PFP): The Department of Energy (DOE) completed the field portion of the Operational Readiness Review (ORR) for the magnesium hydroxide precipitation process (MHPP). Likely prestart findings address procedure validation, conduct of operations, and occupational safety issues. The ORR team identified several significant procedure errors, likely due to multiple, last-minute procedure changes. Another finding will address the emergency drill program because of the marginal radiological control performance during the drill. The team is still pursuing some concerns they have with the completeness of PFP's manageable list of open items. Fluor Hanford (FH) also showed that they learned nothing from last week because they proposed again that the filtrate transfer system be addressed with just a standard startup review. Thankfully, DOE quickly rejected this proposal and ensured that this process would be reviewed by FH and DOE with the same rigor as the rest of the MHPP. Earlier PFP predictions of multi-week delays (the main reason for trying to exclude it from the ORR) did not materialize and PFP now expects the system to be ready for review early next week.

Despite a change in vendor that resulted in an acceleration in the delivery of the outer can welder, PFP predicts that they will not have all the plutonium metal in compliance with the 3013 standard until August 2001. The current milestone is March 2001. (3-A)

Spent Nuclear Fuel Project: FH announced on 8/31/00 that they intend to begin the FH readiness assessment for Phase 3/4 testing of the Integrated Water Treatment System/Fuel Retrieval System (IWTS/FRS) on 9/5/00. This declaration is being made with known prestart items as a result of ongoing mechanical/control problems with the IWTS booster pump. The booster pump has been a continual source of problems, e.g., leaks, failure to start, etc., and the latest issue involves serious control issues. Specifically, during trouble shooting and repair activities this week the pump ran with the on/off switch in the off position. Due to the seriousness of this, the pump was de-energized and pump power physically disconnected from its source. The Basin Test Director, currently the system owner, has established a reasonable set of expectations regarding re-energizing the pump prior to resuming its testing. The impact to safety of the IWTS/FRS in conducting training and/or mock-operations with dummy fuel are negligible since no sludge is generated during these activities and testing to date has demonstrated that sufficient flow exists throughout the entire IWTS. That being said, conducting hot operations without full operability of the booster pump could result in impacts to safety of this system. The RA will be completed on or before 9/18/00. (1-C)

cc: Board Members