

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 15, 2000

TO: K. Fortenberry, Technical Director

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

SUBJ: Activity Report for the Week Ending September 15, 2000

Plutonium Finishing Plant (PFP): Observations by the Site Rep continue to raise questions about the adequacy of PFP's Management Self-Assessment (MSA) and standard startup review processes. During a dry run of the filtrate waste disposal process for the independent contractor review, operators stopped referring to the step-by-step procedure and were observed skipping steps and doing others concurrently. It was only when the supervisor was unable to answer questions about where they were in the procedure did they realize they were violating the procedure and the dry run was shut down. The MSA's adequacy is questionable since none of the practice dry runs were performed in accordance with the procedure, no managers other than the direct supervisors had observed this part of the practice dry runs, and the 2 crews did separate dry runs and had not practiced how they would interact. The Site Rep later observed ash residues being repacked into pipe overpack containers during the first shift of hot operations. The operator in charge of tracking the glovebox plutonium inventory did not understand how to show that fissile material had been transferred between 2 containers. Despite extensive assistance from other operators, the operator calculated the current inventory wrong and it required intervention by the facility and site representatives to identify and correct this error and to instruct the operator how to correctly perform this transaction. The Site Rep later met with the PFP Director and Deputy Director because these observations were unacceptable for activities that had been declared ready or had already been approved for hot operations. Sharing similar concerns, they stated that they will not declare readiness until they have personally observed a satisfactory dry run. In addition, a senior manager will be present during the first few weeks of operations for all new processes. Improvements were observed when the filtrate transfer dry run was repeated later and in the preparations for the bagless transfer system review. The Site Reps discussed PFP and spent fuel readiness review issues with Keith Klein. (3-A)

Spent Nuclear Fuel Project (SNFP): The Phase III testing contractor readiness assessment (RA) was completed this week. The two prestart items, radiation control technician familiarization with the fuel retrieval (FRS) and integrated water treatment systems (IWTS) and the complete demonstration of FRS/IWTS operations, should be resolved next week. These findings suggest that incomplete preparation of support staff and procedures contributed to this outcome. This was discussed with senior Fluor Hanford Management in the context of the upcoming SNFP operational readiness reviews (focusing on operator proficiency training and quality of procedures). Pending the results of the Department of Energy RA and completion of other prestart items, spent fuel movement is anticipated to begin in 7-10 days. (1-C)

cc: Board Members