

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 24, 2002

**TO:** K. Fortenberry, Technical Director  
**FROM:** M. Sautman, Hanford Site Representative  
**SUBJ:** Activity Report for the Week Ending May 24, 2002

David Grover was on annual leave this week.

Waste Treatment Plant (WTP): The Board Vice Chairman, technical staff, and outside experts conducted a civil/structural review of the High Level Waste (HLW) and Low Activity Waste (LAW) Facilities.

In response to a recent staff review of design basis event (DBE) calculations that identified a number of errors, Bechtel National Inc. (BNI) performed a Management Assessment of selected HLW and LAW DBE calculations. BNI also found a number of errors although none has resulted in a change to the controls so far. Based on these results, BNI decided to conduct an independent review of all HLW and LAW calculations and selected Pretreatment Facility calculations. (I-C)

Tank Farms: Recently, Department of Energy-Headquarters directed Hanford to start performing Readiness Assessments (RA) prior to commencing saltwell pumping operations at new tanks. This week, the Site Rep observed portions of a RA for starting saltwell pumping at Tank U-111. This RA was a graded RA and was to be the basis for further reducing the scope of future saltwell pumping RA's. After 1½ days, the Site Rep contacted the CH2M Hill Hanford Group (CHG) Vice President of Environmental, Safety, Health and Quality because of concerns with the degree of preparedness of the RA team members and the depth and breadth of the review. For example, the interview with the Operations Engineer, who is responsible for supervising the transfer and ensuring it is performed in accordance with safety requirements, consisted of 3 questions: list range of duties and specific activities and is "clear" the same as "normal" in procedures. The team member doing a system walkdown with the operators did not appear to be very familiar with the procedure or equipment, and did not bring diagrams of the equipment although he was to verify that the procedure diagrams matched the field conditions. The Site Rep also encouraged CHG to meet with the facility representatives who had similar observations. The saltwell facility representative identified that the RA team member did not recognize that the operators had misidentified a couple of pieces of equipment during the walkdown. After the Site Rep met with the managers in charge of readiness reviews, CHG management temporarily suspended the RA while they met with the team members and explained to them their expectations. It was reported that team members were better prepared during the walkdown that was repeated and that subsequent level of knowledge interviews were more thorough and verified that operators understood how the equipment should perform, recognized indications of a problem, and could respond correctly to an upset condition. (III-A)

Plutonium Finishing Plant (PFP): In response to staff concerns, PFP overpacked a drum containing jars of highly viscous organic plutonium solution in order to bring it into compliance with the Interim Safe Storage Criteria. Repackaging of sand, slag and crucible residues is now 4 months ahead of schedule. (III-A)

cc: Board Members