

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 1, 2005

**TO:** K. Fortenberry, Technical Director  
**FROM:** D. Grover and M. Sautman, Hanford Site Representatives  
**SUBJ:** Activity Report for the Week Ending April 1, 2005

The Board visited Hanford this week and reviewed various topics related to the Waste Treatment Plant, tank farms, K Basins, Plutonium Finishing Plant, and waste management.

Waste Treatment Plant: Bechtel is encountering problems with their suppliers' quality assurance programs, weld quality, and the ability of fabricated PUREX connectors to meet specifications.

Tank Farms: Retrieval of tank C-203 is complete.

K Basins Closure Project: During the conduct of hazards analyses for deactivation and decontamination activities in the K Basins, 2 safety issues were raised with current operations. The first was the adequacy of the existing controls for a potential side impact loads on the basin drain valves which was determined to be a negative Potential Inadequacy in the Safety Analysis (PISA). A review of the historical analyses on impacts to the basin drain valves and supporting safety documentation identified that this situation was evaluated and the current controls were determined to be acceptable. The evaluation of controls for the future work, e.g., hydrolazing the basin walls is still underway. The second involves whether live loads on the monorails or grating were adequately considered by the seismic analysis which was determined to be a PISA. The review of the documentation identified that the loads were not adequately analyzed and the integrity of the basin superstructure has not been demonstrated to maintain structural integrity following the design basis seismic event. No restrictions have been applied to ongoing activities, however, the project is working to develop controls to evaluate the safety of future activities.

The project also declared a positive Unreviewed Safety Question (USQ) involving fuel trucks in the K Basin area. The K Basin hazards analysis (HA) and fire hazards analysis (FHA) did not specify or bound all conditions associated with these vehicles.

Cc: Board Members