

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 24, 2006

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending March 24, 2006

Tank Farms: The 242-A evaporator entered operation mode, using raw water for feed (a cold run), to maintain operator proficiency, validate equipment operability, and qualify new operators. The cold run is expected to last for about two weeks. The evaporator had been in shutdown mode for just under a year. Prior to approving the mode transition, the Waste Feed Operations Vice-President clearly expressed his expectations for the use of superior conduct of operations and close monitoring of all actions by trainees. The site reps also observed that the pre-job briefs and shift turnovers were adequate. Another entry into operation mode will be required before a hot run can be performed because the integrity of the normal slurry line to the tank farms could not be verified during this campaign.

The site rep attended training for the transition from the required use of supplied air respirators in the tank farms. Within a month, CH2M Hill Hanford Group plans to implement new respiratory protection controls for potentially hazardous vapors in the A- prefix tank farms. The new controls will permit personnel to enter these tank farms without wearing supplied air respirators under certain conditions.

Waste Treatment and Immobilization Plant (WTP): A recent assessment by Bechtel National, Inc. (BNI) revealed problems with the commercial grade dedication (CGD) program. The problems included a lack of positive identification of quality level materials, critical attributes not being verified, and improper application of CGD for items that were available with the proper quality pedigree. The Office of River Protection found similar problems during a review of a CGD package. Shipments of components procured using the CGD process have been put on hold and BNI is considering options to strengthen the program to prevent future discrepancies.

K Basins Closure (KBC) Project: A critique was held to understand problems found in the flocculent system at the K East Basin. The flocculent system is used to improve water clarity in the basin during sludge vacuuming by enhancing the settlement of suspended particles. In October 2005, a transposition of hoses between the "A" and "B" trains was discovered and corrected. Last week, leaks were noted in the system and it was shut down. It was discovered that an additional transposition between the two trains existed at the basin wall connection from the pumps. On the basin side of the wall, the connections for the "A" train pumps were supplying the "B" train lines and vice-versa. It is believed that this error occurred during construction and was not discovered because the cross-connect found in October 2005 masked the problem. During the critique, KBC management stressed the need for a thorough and detailed verification of system configurations during turnover from construction and how this will be particularly important during the upcoming turnover of the hose-in-hose system.