DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 3, 2006

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending March 3, 2006

Tank Farms: During maintenance activities at the 242-A Evaporator, operators inadvertently drained 300 gallons of process condensate water to the AW-102 Tank. The event occurred during work to replace leaky vent valves on two condensate filters. The condensate water flowed from the evaporator catch tank through one of two vent valves that were replaced and left in the open position. The valve positions were to be confirmed during the post-job maintenance but not before the lock-out/tag-out (LO/TO) was cleared. The clearing of the LO/TO ensured that the valves used for isolation were in the normal position, but because the new vent valves were not on the LO/TO, their positions were not checked. This event demonstrates a weakness in the coordination between completing the work, clearing the LO/TO, and conducting post-job maintenance valve line-ups.

K Basin Closure Project (KBC): Last week KBC declared that the planned debris removal campaign in K East (KE) Basin was completed. The site reps observed this week that there was still significant debris in the basin, including abandoned hoses and other items located where debris was collected for washing before removal. KBC management stated that the basis for claiming success is that they believe they can complete bulk sludge removal with the remaining debris in the basin. Plans are being formulated for the remaining debris and options include removal of the debris or grouting in the North Load Out Pit. The initial vacuuming of sludge in the KE Basin center bay was completed this week. It is very likely that more debris will be found when vacuuming the other bays.

At the suggestion of the DOE Office of Licensing (EM-24), the Richland Field Office (RL) will review the Sludge Treatment Project to validate that the engineering designs have been evaluated by nuclear safety to the point that the required safety functions have been identified and that the safety functions have been incorporated in the functional design criteria and then in the design. The review team has also been directed to attempt to identify areas where "excessive conservatism" in the process may warrant pursuit of either requesting exemptions from DOE orders and standards or acceptance of additional risk by DOE.

At the direction of RL, KBC initiated a conduct of operations improvement program several months ago. Progress on developing corrective actions and then implementing them has been slow. As a means to improve this effort, two contractors were hired this week to be conduct of operations mentors.

Waste Treatment and Immobilization Plant (WTP): The site rep observed a workshop for Bechtel National, Inc. senior management on their nuclear safety and quality imperative. The goal of the workshop was to define critical success factors, barriers, attributes, and behaviors that are associated with the development of a strong nuclear safety culture.