

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 16, 2009

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending January 16, 2009

Staff members J. Abrefah, B. Heshmatpour, and J. Troan were on-site reviewing Richland Operations Office projects, including the Plutonium Finishing Plant, 100 K Area Deactivation and Demolition (D&D), and D&D plans for Building 324.

Tank Farms: The contractor concluded that generic issues in the Commercial Grade Item Dedication (CGID) process may be applicable to any safety-significant (SS) system (see Activity Report 1/2/09). The contractor submitted a Justification of Continued Operation (JCO) that addresses inadequacies in CGID of all tank farm SS systems and components. If approved by Office of River Protection (ORP), the JCO would remain in effect until either all CGID documents are updated to meet engineering and quality assurance program requirements or September 30, 2009. According to the JCO, there is no additional risk associated with the CGID problems and no compensatory measures are required while the JCO is in effect. The Manager of ORP suggested that if there is no additional risk, then there is no value in the extensive effort to revise the CGID documents, and existing SS items should be grandfathered by a change to the Documented Safety Analysis (DSA). If the Manager's recommended approach is implemented, then there is no assurance that existing SS components in the Tank Farms have the quality pedigree normally required for equipment relied upon for safety. If the DSA is revised, the normal authorization basis change process would be used but it would delay the waste transfer planned for early next week. It is likely that ORP will approve the JCO this weekend.

ORP completed a surveillance of the contractor's emergency preparedness that resulted in six findings and one concern. The findings discussed at the outbrief focused on poor conduct of operations and radiological practices during responses to abnormal conditions. One of the findings dealt with the inadequate response to a spill (see Activity Report 12/19/08) and another was poor response to contamination spread found at 222-S Lab. The concern was based on the cumulative evidence that the contractor management team did not implement approved procedures following indications of abnormal conditions. The team stated they raised this concern to prevent recurrence of deficient response actions similar to previous tank farm events and to prevent unplanned employee exposure to tank vapors, tank waste, or other unsafe conditions. A concern differs from a finding in that it requires a formal root cause analysis. The contractor is evaluating if compensatory actions are required before the upcoming waste transfer.

K Basins Closure Project: An unusual soil depression was discovered 75 feet north of K West Basin. The depression was roughly three feet wide and six feet deep and appeared to be caused by subsurface erosion. Project engineers have determined that the depression will not adversely affect nearby structures and no water source has been readily identified as the cause, but the depression could be associated with the runoff from the melting snow from recent storms.

Canister Storage Building: The project declared a violation of the Technical Safety Requirements (TSR) due to a failure to conduct a Surveillance Requirement (SR) within the required periodicity. The SR was to check calibration of a load cell on the Multi-Canister Overpack Handling Machine once per year. The SR was missed due to a human error in entering the next required completion date into the surveillance tracking system.