

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 14, 2010

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending May 14, 2010

Board staff members S. Lewis, J. MacSleyne, and J. Shackelford were on-site reviewing the recently implemented changes to the tank farms safety basis.

Plutonium Finishing Plant (PFP): Contractor management declared a safety stand-down due to a series of radiological events and an observed decrease in the rigor of conduct of operations. There were four events in two days, and the last event, the most significant, was a puncture wound during load-out work from a glovebox. The other events involve workers entering an airborne radiation area without the respiratory protection and workers exiting a contamination area into a radiological buffer area without conducting the required radiological surveys. None of the events had initial indications of personnel contamination or spread of contamination, but contractor management determined that work planned for the weekend (except activities related to maintaining safe conditions) should be suspended until briefings to the workforce could be conducted and additional corrective actions could be developed and implemented.

The contractor held a Plant Review Committee meeting to approve of changes to the facilities safety basis. The committee reviewed the documentation for DSA/TSR changes to close out the justification for continued operation (JCO) for aged HEPA filters and the adequacy of a JCO that addresses the revised plutonium solubility assumptions. The project conducted a management assessment and an implementation validation review prior to implementing the changes. The committee approved the changes, which should be effective next week.

The site rep observed a hazard review board (HRB) for removal of a glovebox from the Plutonium Reclamation Facility. The function of the HRB is to review final complex and higher risk work packages with a goal of ensuring the work package meets management expectations for safety. The leader of the HRB rejected the package because required documents were not included and configuration control of the draft package was inadequate. It appeared that there was an inadequate review of the package prior to submittal to the HRB.

Waste Treatment Plant: The site rep met with Office of River Protection (ORP) management to discuss the reclassification of components previously classified as Additional Protection Class, as noted in the Activity Report from April 16, 2010. The site rep's concerns about the adequacy of the component reclassification process were reinforced because the downgraded gamma monitor was originally credited in the safety basis to address an ORP condition of approval.

Waste Retrieval Project: The contractor completed the corrective action plan required for restart of burial ground retrieval work. In addition to other corrective actions (see Activity Reports 4/9/10 and 4/23/10), the contractor completed a trench-specific retrieval plan. The plan contains information on the hazards for that trench, including maps and radiological and chemical characterization data. The contractor envisions this plan to be a living document that will be updated as conditions change and provide a quick reference during upset conditions. The contractor stopped trench retrieval activities in February after weaknesses were identified, but they anticipate restarting work in the trenches next week.