

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 24, 2008

**TO:** T. J. Dwyer, Technical Director

**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives

**SUBJECT:** Hanford Activity Report for the Week Ending December 26, 2008

R. Quirk was out of the office this week.

Tank Farms: The contractor declared a Potential Inadequacy in the Safety Analysis (PISA) due to the discovery that condensate had frozen and plugged passive ventilation systems piping in SX Farm. Contractor management determined that the as-found condition in SX Farm represents a PISA because single-shell tanks (SSTs) B-203 and B-204 have the same radial filters, but B-203/204 have a Limiting Condition of Operation (LCO) requiring the ventilation isolation valve to remain open to prevent exceeding 25 percent of the lower flammability limit (LFL). The time to LFL is significantly longer in all other SSTs. The LCO required actions for tanks B-203/204 were carried out, including verifying the tank head space was less than 25 percent of LFL. The contractor also increased the frequency of the surveillance that checks the flammable gas concentration in B-203/204 from every 121 days to 30 days. An existing calculation that supports the safety basis indicates the time to reach 25 percent of the LFL for SSTs B-203 and B-204 is 34 days and 37 days, respectively.

River Corridor Closure Project: The contractor submitted its Quarterly Startup Notification Report (SNR) that indicates it is planning to start decontamination and demolition (D&D) activities of contaminated portions of Building 324 in January 2009, but proposes that neither an Operational Readiness Review nor Readiness Assessment is required. Building 324 is a hazard category (HC)-2 nuclear facility, which contains hot cells with high levels of contamination (B Cell has approximately 41,000 curies). The contractor's D&D plan includes drilling holes into the hot cell walls, pumping grout in to stabilize the contaminants, and then demolishing the rest of the building around the cells. The plan also includes using wire saws to cut up the grouted cells and transporting the cut segments to the on-site low-level landfill, but these activities are not covered in this SNR. The Board's staff raised a number of questions about the technical justification of statements in the SNR and the site rep asked if DOE agrees with the contractor proposed plan to ensure readiness to start these activities. These D&D activities were not listed in previous SNRs (see Activity Report 10/31/08).

Adverse Weather Conditions: The site delayed opening on Monday due to significant snowfall accumulations. The continuing snowfall and sub-freezing temperatures that have persisted for the last 10 days have hampered outdoor work activities.