

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 28, 2012

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending September 28, 2012

R. Quirk was off-site this week and D. Gutowski was on-site providing site rep support. Staff members J. Meszaros, D. Shretha, and J. Troan were on-site discussing various topics associated with the Richland Operations Office.

Canister Storage Building (CSB): During the implementation of the recovery plan from the unexpected venting of the cask containing the last multi-canister overpack (MCO) (see Activity Report 9/21/12), workers discovered that the cap vent screw was missing. The vent screw is part of the cask confinement boundary and is classified as safety-class during shipping and safety-significant when inside the CSB. When workers discovered that the screw was missing, they stopped the recovery activities. The screw was then found at the Cold Vacuum Drying Facility (CVDF) still attached to the vent tool used during preparations to ship the MCO to the CSB. On Thursday, the contractor held a critique to discover how this could have occurred. The quality control (QC) inspector said that during the cask lid preparations in CVDF, he rationalized that he did not need to inspect the screw, the reinforced O-ring (known as a “stat-o-seal”), or verify the torque as directed in the procedure. Workers questioned if they were missing a step and were instructed by QC inspector to proceed. The procedure included instructions (specifically shaded to provide emphasis) that these inspection steps were part of a TSR control and if they could not be performed, management notifications were immediately required.

222-S Laboratory: Facility management held a meeting to investigate anomalous conditions discovered in one of their vent hoods. A technician was preparing to start work in the hood on Monday morning and noticed a large dark stained area in the back of the hood. In addition, there were unidentified yellow crystals in the funnel of the hood’s liquid waste receptacle. Because these anomalies were not present last Thursday, the technician called his supervisor and a radiological control technician commenced additional surveys of the hood. The swipe of the dark stained area revealed high beta contamination and the hood was posted high contamination and the room was secured. During the investigation meeting, no clear source of the stain was revealed, but management plans to have the material sampled and characterized.

Waste Encapsulation Storage Facility (WESF): The staff observed a coached, table-top drill of a beyond design basis event scenario in which a large earthquake damages the cell pools. As expected, this coached drill did not proceed smoothly, but it appeared to be a valuable training activity.

Waste Treatment Plant (WTP): The staff attended a meeting of the Startup Joint Test Group (JTG). As a part of the turnover from the construction to startup organizations, the JTG reviews and approves startup test procedures and approval of test results for all safety systems and any other systems they add to their scope. The group is currently performing their first evaluation on the startup of the systems in an electrical switchgear building.