

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 13, 2009

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending February 13, 2009

Tank Farms: The Office of River Protection (ORP) completed the assessment of the contractor's maintenance program and determined that maintenance of safety equipment is performed at a minimally acceptable level, but this was because of the experience and knowledge level of the maintenance staff rather than an adequate maintenance program. The assessment was performed after the September 2008 Board letter noted that the DOE Order 433.1A required assessment had not been performed. The assessment identified numerous maintenance program deficiencies including an inadequate Maintenance Implementation Plan. Problems identified in the training program, such as no formal continuing or on-the-job training, were significant enough to warrant a stand-alone training assessment at a later date. The results from the review of the commercial grade item dedication process were so significant that it became a finding in a stand-alone surveillance report issued before the report for the rest of the assessment. The maintenance program had been identified as an area needing improvement during the due diligence review prior to contract transition.

The contractor determined that the hydroxide ion concentration in the supernatant in double-shell tank AN-106 was out-of-specification (OOS) low after the transfer of waste from single-shell tank C-110. Nitrate and nitrite concentrations were within limits. The chemistry specification is a Technical Safety Requirements (TSR) administrative control to minimize corrosion. This week the contractor wrote and ORP approved a recovery plan so retrievals from C-110 could continue without restoring chemistry to TSR specifications. The OOS condition could have existed since retrieval from tank C-110 began in September 2008. Without determining the precise cause for the OOS condition, ORP approved the continuation of the waste retrieval with subsequent actions to restore the chemistry to specification by September 30, 2009. The contractor also requested an exemption from a TSR control to verify that the post-waste transfer state of the receiving tank will be within chemistry limits. ORP did not address this request for a TSR exemption prior to allowing the contractor to restart the waste transfer to the OOS tank.

Waste Treatment Plant: ORP sent a letter to the contractor noting that three senior managers had been assigned full-time oversight responsibilities in three areas of the project – engineering, procurement, and construction. The purpose of this action is to expedite the resolution of legacy technical and other project issues.

Plutonium Finishing Plant: The site rep discussed with RL the proposed revision to the Justification for Continued Operation for the older HEPA filters (see Activity Report 11/21/08). The revision proposed reducing the safety posture and elimination of Limiting Conditions of Operation (LCOs) and Surveillance Requirements (SRs). RL confirmed that their Safety Evaluation Report will require maintaining the safety posture, applicable LCOs and SRs, and other actions that ensure adequate confinement.

TRU Retrievals: The site rep observed the contractor's attempt to drag a 44-ton concrete waste box onto a support frame to allow it to be retrieved from the burial ground. The box failed to slide onto the frame when it jammed against support cribbing. The facility representative noted that workers did not stand 50 feet away during the evolution as required by the work instruction.