

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 26, 2014

TO: S. A. Stokes, Technical Director
FROM: P. Fox, D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending September 26, 2014

Board staff members B. Caleca and Z. McCabe were onsite to perform structural walkdowns.

Waste Treatment Plant (WTP). The contractor initiated criticality hazards assessment meetings for the Pretreatment Facility using the proposed standard vessel design.

The contractor's Performance Improvement Review Board met to discuss their common cause evaluation and corrective actions for design analysis process issues identified during the Reliability Validation Process (see Activity Report 10/26/2012). They concluded that the corrective actions will address the identified common causes behind the issues.

One System. The Nuclear Safety Steering Committee (NSSC) met to finalize proposed nuclear safety methodologies (see Activity Report 2/14/2014) for use by both the Tank Farms and WTP contractors. This was the first NSSC meeting under the new One System Charter which includes an objective to facilitate nuclear safety integration. The NSSC was unable to reach agreement on the methodologies as the WTP representatives stated that, because of recent organizational changes, previous agreements were no longer valid and the proposed methodologies were unacceptable. They further stated that no new methodologies would be accepted unless they resulted in tangible benefits in the form of reduced numbers of safety systems or controls. Additionally, any agreement would be contingent on the approval of necessary contract and technical direction changes. The ORP representative stated that ORP does not see a need to revise contract or technical direction provided to either contractor. The NSSC agreed to meet again to move forward on the many concerns that came up during this meeting.

Plutonium Finishing Plant. Last week, the contractor determined they had significantly underestimated the amount of plutonium in a glovebox. In 2006, analysts had assumed a pipe was wrapped in asbestos even though a drawing showed lead. After reanalysis, the contractor concluded that the glovebox met the limits of the current criticality prevention specification (CPS). The contractor reviewed the CPSs used until earlier this year and concluded that this new estimate of holdup would have resulted in a non-compliance with the earlier CPSs.

Last month, the contractor determined that they had not been performing ventilation maintenance required by an RL Safety Evaluation Report. The maintenance was subsequently performed. Outside organizations prompted the contractor to formally report both occurrences.

Tank Farms. In response to preliminary feedback from the Tank Vapor Assessment Team (see Activity Report 8/22/2014), the contractor implemented a new standing order that requires a minimum of a half-face respirator for all entries into single-shell tank farms. Respiratory requirements in double-shell tank farms will continue to follow the general hazards analysis controls implemented earlier this year (see Activity Report 5/9/2014).

618-10 Burial Ground. The contractor identified three pre-start findings during a checklist Readiness Assessment of activities related to the identification of vertical pipe unit variants.