

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 12, 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 December 12, 2014

Board Staff members R. Kazban, P. Meyer, and P. Migliorini were onsite to discuss Waste Treatment Plant technical issues. E. Gibson was onsite to attend the closeout briefing to DOE personnel for the update to the site Probabilistic Seismic Hazard Analysis. Site Representative R. Quirk was at Idaho National Laboratory observing the integrated operations review of the Integrated Waste Treatment Unit.

Tank Farms. The contractor conducted an Event Investigation meeting to evaluate the recent TSR violation involving NEMA enclosures in safety-significant temperature monitoring systems (see Activity Report 12/5/2014). Following the meeting, which uncovered substantial weaknesses in configuration control, the contractor issued a new Management Directive that requires inspection of Safety Instrumented Systems to verify compliance with design requirements prior to conducting operations that involve use of those systems.

Contractor senior management released restrictions imposed on waste transfers following a recent TSR violation (see Activity Report 11/14/2014) after completing a review of compensatory action implementation. These actions will remain in place until a root cause analysis and longer term corrective actions for conduct of operations problems are completed. The contractor resumed retrieval operations in Tank C-102.

REDOX Plant. The contractor completed re-planning remaining REDOX surveillance entries as high hazard activities (see Activity Report 12/5/2014). They subsequently completed surveillances in the material storage gallery and the sample galleries. As noted during previous annual surveillances, water is leaking into the facility, most likely from roof leaks and migration of the water through expansion joints. Several joints were noted to have active leaks. Three bags that were put in place in the late 1990's to contain valve leakage remain intact.

Waste Treatment Plant (WTP). The site representatives and members of the headquarters staff walked down areas of the WTP construction site. In the Low Activity Waste Facility, the team noted that many of the covers that protect installed equipment from damage while construction and installation activities continue are degrading.

The contractor paused control selection for the High Level Waste Facility (see Activity Report 12/5/2014) due to management concerns with the quality of the process.

Plutonium Finishing Plant. The bridge drive for the canyon crane in the Plutonium Reclamation Facility canyon crane malfunctioned. The contractor is preparing to perform canyon entries to troubleshoot the problem.

Emergency Operations. A chlorine alarm at the 283W Water Treatment Plant led to a take cover in 200W area and a partial staffing of the Emergency Operations Center per the Emergency Management Plan. The contractor determined that the cause was an alarm malfunction and there was no release of hazardous material.