

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 4, 2012

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending May 4, 2012

W. Linzau was off-site this week.

Central Plateau Contractor: The contractor completed their first no-notice Emergency Preparedness (EP) drill and concluded that the response did not meet some drill objectives. Areas of needed improvement noted during the drill at the 100 K West Basin included inadequate evacuation notifications and execution coupled with a number of radiological control practice issues. The contractor plans to run additional no-notice EP drills at their other facilities.

The contractor's Nuclear Safety Performance Evaluation Board (NSPEB) completed an assessment of the Waste and Fuels Management Project. At the outbrief, the NSPEB team identified a number of areas of needed improvement, including many related to weaknesses with facilities that are in a Surveillance and Maintenance status, such as PUREX and B Plant. They also noted: neither Engineering nor Nuclear Safety reviewed changes that could have impacted the fire protection system at the T-Plant complex, the rigor applied to the work planning process required management attention, some infrequently used procedures were improperly classified as "reference use," a number of managers did not routinely observe the performance of field work, and some EP drills were graded as adequate when they did not meet all drill objectives.

Tank Farms: The contractor concluded that they will once again revise the Justification for Continued Operation (JCO) related to freezing and precipitation of solids in safety-significant (SS) waste transfer system piping and components (see Activity Report 10/21/11). The first reason for the revision is similar to the series of inadequate technical evaluations last fall that led to revisions of the JCO. The contractor identified an uninsulated relief valve, which is more limiting than the other analyzed conditions. In addition, the JCO is being revised because it did not contain any basis for the planned use of the highly concentrated caustic solution that could freeze at temperatures above 32° F. The site rep questioned if this problem should be called a Potential Inadequacy in the Safety Analysis. The Office of River Protection (ORP) determined that they would direct the contractor to revise the evaluation that concluded the issue was an Unreviewed Safety Question as well as the occurrence report to reflect the new information.

The contractor told ORP that they will request an extension of this JCO, which expires on August 31, 2012, and another JCO related to water hammer events in the SS waste transfer system, which expires on August 1, 2012. The reason for the request is to allow the completion of ongoing retrieval operations without stopping to implement required system upgrades.

This week, the contractor required operators to use placekeeping in three transfer procedures. For the past few years, the Board's staff has suggested to both ORP and the contractor that they use this technique as a means to reduce the possibility of missing steps.

Plutonium Finishing Plant (PFP): The contractor completed inspections of one of the two exhaust fans in which they had identified cracks (see Activity Report 9/9/11). They plan to complete weld repairs to the fan and repeat the process on the other exhaust fan with cracks.