

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 28, 2010

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending May 28, 2010

Plutonium Finishing Plant (PFP): The contractor conducted a Joint Evaluation Team (JET) meeting to reach a consensus on the appropriate level of readiness review for the start of pencil tank removal. The project plans to remove pencil tanks from the Plutonium Reclamation Facility by cutting them into sections, packaging them, and passing them through a port (see Activity Report 3/12/10). The project used a score sheet evaluation to determine that the appropriate readiness review would be a level-3 Readiness Assessment (RA), but the senior manager leading the JET proposed that a higher level review, level-2 RA, is required. While both level-2 and -3 RAs have the contractor as the approval authority with DOE oversight, the level-3 RA uses a checklist to verify readiness activities are completed. A level-2 RA is more rigorous and has the review team follow a plan of action and implementation plan with specific lines of inquiry to confirm readiness. The decision to upgrade to a level-2 RA was most likely influenced by a letter sent from the Richland Operations Office (RL) that instructed that the score sheet be used only as a guide and that overall project safety performance should be considered. The contractor's goal is to start the readiness review in the latter part of June 2010.

Competent Person: RL has noted weaknesses in the identification, qualification, and use of a "competent person" for ensuring worker safety during D&D activities several times within the past year, such as in the Type B Accident Investigation for a worker injured in a fall and during the plateau remediation contractor ISMS verification reviews. The Worker Safety and Health Program Rule, 10CFR851, requires the contractor to identify a competent person to inspect the workplace. The term "competent worker" is defined in 29CFR1926.32 as "one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them." The RL contractors have improved their competent person programs by indentifying specific training and qualification requirements. Nevertheless, RL is still identifying problems, such as one contractor inappropriately identifying some workers as "competent persons" without meeting all the requirements.

Groundwater Remediation: The plateau remediation contractor revised the initial hazard categorization for new facilities they are building to treat groundwater. Previously, the analysis indicated one facility was close to requiring additional controls as a hazard category (HC)-3 nuclear facility. That analysis indicated that the sum of fractions (SOF) for the threshold quantity of a HC-3 nuclear facility was conservatively estimated at 0.98. The new analysis clearly indicates the facility can continue being classified as a radiological facility and not require a Documented Safety Analysis. The large facilities are being designed and built with American Recovery and Reinvestment Act funds to remove radioactive contaminants, specifically uranium and technetium, as well as other chemical contaminants, such as carbon tetrachloride and nitrates, from the groundwater.

Waste Treatment Plant (WTP): DOE named Dale Knutson as the new WTP Federal Project Director, replacing Guy Girard who was acting in that position for almost a year.