

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 19, 2009

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending June 19, 2009

Board staff member T. Hunt and outside expert D. Boyd were on-site to assist in observing activities in the Plutonium Finishing Plant (PFP).

Waste Treatment Plant (WTP): The project held their third Safety Input Review Committee meeting that covered the draft PDSA addendum associated with reducing MAR. During the meeting ORP expressed concerns that the changes in safety classification of components include reductions to less than safety-significant (SS). This is counter to ORP's expectations for the scope of these changes (see Activity Report 5/15/09). ORP expressed that additional considerations have to be evaluated, such as if the components are a significant contributor to defense-in-depth. The addendum no longer credits the piping in the Pretreatment Facility hot cell as the primary confinement boundary, but would only rely on the ventilation system for confinement. ORP considered this an unaccepted change in the safety strategy. The contractor agreed to revise the addendum to remove all reclassification to less than SS and delete changes that remove piping as the primary confinement barrier. The meeting was effective and a follow-up meeting is being planned after revisions to the addendum are made.

Plutonium Finishing Plant: The site rep, a staff member, and outside expert observed a variety of activities at PFP with the goal of evaluating the state of conduct of operations (con ops). The site reps have noted concerns with the adequacy of con ops (see Activity Reports 6/5/09, 5/1/09, 3/13/09). The review team noted some positive aspects, including: workers clearly understand the need to stop and obtain additional guidance when unexpected conditions arise and the contractor recently hired an experienced manager who has been tasked with improving con ops. The contractor implemented a Technical Response Team process where appropriate resources are rallied to respond to unexpected conditions. The team also noted problems, such as inconsistent application of the continuous-use procedure requirements; weaknesses in operating procedures and work instructions; and some emergency response procedures that need to be reevaluated for use in the current D&D environment.

The site rep performed a walkdown of the Plutonium Reclamation Facility with a facility representative and a field work supervisor. The contractor is preparing to repair the canyon crane, which will require worker entry into a highly contaminated area. The workers will wear multiple layers of protective clothing and the highest levels of respiratory protection. The site rep questioned if the Hanford Fire Department had been involved with the emergency planning. The contractor scheduled a walkdown with emergency response personnel to ensure the responders are familiar with the physical and radiological constraints associated with this job.

Tank Farms: Water used to flush lines after caustic was added to AN-106 (see Activity Report 6/12/09) was contaminated with foreign material (fine gravel). The source of the material is believed to be the rented water truck. The site reps asked the contractor what quality control requirements are in place to prevent foreign material from being pumped into DSTs.

U Plant: The contractor declared a PISA due to discovery of more fissile material in a tank located in a cell.