

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 26, 2010

**TO:** T. J. Dwyer, Technical Director  
**FROM:** W. Linzau and R. Quirk, Hanford Site Representatives  
**SUBJECT:** Hanford Activity Report for the Week Ending February 26, 2010

W. Linzau was off-site this week. Board staff member S. Lewis was on-site to discuss the status of projects in the tank farms.

Dose Conversion Factor Errors: Site contractors determined that the Potential Inadequacies in the Safety Analysis (PISAs) for using incorrect dose conversion factors (see Activity Report 2/12/10) are unreviewed safety questions (USQs) at the Radiochemical Processing Laboratory (RPL), Plutonium Finishing Plant, PUREX, REDOX, U Plant, and 224-T and 224-B Facilities. They established compensatory controls to minimize the impact of upsets in these facilities. The most significant impact of the error is at the RPL, where a preliminary analysis leads to the conclusion that the unmitigated dose to the public significantly exceeds the level where safety-class controls will have to be considered (see Activity Report 9/11/09). The contractor at the RPL is evaluating if some of the conservatism in the accident analysis can be reduced.

Plateau Remediation Contractor: This week, the contractor received from the Richland Operations Office (RL) a letter that notes the ISMS processes and procedures were satisfactorily implemented at the company level but not at the Waste Retrieval Project (WRP) (see Activity Report 2/12/10). RL is requiring the contractor to provide a recovery plan as well as brief senior management on the issues, causal factors, compensatory measures, and corrective actions for the events at trench 11 of the 4B burial ground. Additionally, RL will re-evaluate implementation of ISMS at WRP after the contractor re-submits their declaration that ISMS is implemented there.

An outside expert reviewed the set of TSR controls specified for the Solid Waste Operations Complex (SWOC) and concluded that the control set should be significantly changed so that only the most important safety controls are retained as TSR controls, and other controls that are currently TSRs should be addressed by safety management programs. The goal of the review was to identify an appropriate strategy to improve TSR compliance at the SWOC facilities.

Site Boundary: The site rep recently met with RL managers to discuss how access to the public roads would be controlled during a radiological emergency (see Activity Report 1/8/10). The current approach is to request the state police to restrict access to these roads, but the RL managers noted they have the contractual authority to direct their contractors to perform this task if needed. The managers also acknowledged they have never exercised their ability to use their contractors to control access during site emergency drills. This week DOE Headquarters released an assessment of this practice and recommended that RL and its contractors, not the state police, should initially restrict access to these roads during an emergency. Other recommendations from the assessment team include: the roads should be swept to ensure all members of the public have evacuated, and drills or exercises should be conducted to demonstrate that the roads can be closed after an emergency is declared. RL and their contractor are changing their emergency response procedures to resolve these issues.

Tank Farms: The DOE authorized technology development funding for the Aluminum Removal Facility (see Activity Report 9/11/09). The goal is to have CD-0 approval in 2013.