

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 3, 2010

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending September 3, 2010

Tank Farms: The Office of River Protection (ORP) completed a review of the contractor's Integrated Safety Management System (ISMS) and identified seven findings, 18 observations, and six good practices at the outbrief. The review team members, none of whom work for ORP, focused on work control, radiological control, corrective action management, emergency preparedness, commercial grade dedication, and environmental protection. They noted that the contractor was implementing significant changes to the ISMS. Many of the changes are a result of problems noted by the Board, ORP, and internal reviews. The team observed the changes are not mature, but noted some improvements in work planning and radiological controls. The team concluded that the ISMS is adequate only when evaluated with respect to the ongoing and planned compensatory actions. The team recommended that ORP and the contractor establish a set of compensatory actions until clear criteria, not yet specified, are met.

During the pre-job brief, a facility representative (FR) identified problems with the proposed controls for removing a contaminated jumper from a pit in AP farm. A jumper was being moved from a high contamination area (HCA) to a contamination area (CA) without first ensuring the jumper would not make the CA a HCA. After the FR questioned the plan, a manager assigned to observe the work, one of the compensatory controls for prior poor radiological performance, concurred that the plan was inadequate and insisted that the work package and radiological work permit be revised to make the laydown area an HCA and upgrade worker PPE.

Workers failed to comply with the compensatory actions for a justification for continued operations that was implemented to ensure raw water did not over-pressurize waste transfer piping (see Activity Report 8/2/10). The contractor concluded that the actual pressure at the waste transfer piping did not exceed the allowable pressure when an unauthorized second pump was started during a leak tightness test. A number of weaknesses were identified during the critique, including ambiguities and apparent errors in the work package and the personnel were not adequately familiar with the work package and its controls before they began the work.

Waste Retrieval Project (WRP): The site reps completed a walkdown of the Trench Face Retrieval and Characterization System with contractor management and staff. Much of the equipment has been installed and the contractor expects to perform a Readiness Assessment in October. Prior to this the contractor expects to complete a corporate ISMS review and DOE verification of ISMS as the Waste Retrieval Project (see Activity Report 3/5/10). The contractor described how a small percentage of the drums that are remote-handled TRU will be retrieved, overpacked, and loaded in to a concrete container, surveyed, and vented. The site reps questioned if the radiological controls for hand-digging near the remote-handled TRU as well as fire protection inside the mobile processing facilities were adequate.

River Corridor Closure Project: The Richland Operations Office issued their report for the effectiveness review of the corrective actions for the worker who fell in Building 336 (see Activity Report 8/7/09). The team noted significant improvements in the contractor's work control processes but two of the corrective actions were not fully effective.