

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 17, 2004

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending September 17, 2004

Tank Farms: Last week's report discussed staff concerns with the Office of River Protection's (ORP) position not to require a Preliminary Documented Safety Analysis (PDSA) for the Contact-Handled Transuranic Mixed Waste Treatment, Packaging, and Storage Facility. This week the ORP issued direction that this is a new facility and that a PDSA would be required. The contractor is not authorized to initiate any new procurements for this facility until the PDSA is approved although existing procurement activities are allowed to continue. (IV)

The contractor completed their root cause analysis of the 244-CR thermocouple extremity exposure event. The analysis identified 3 root causes: 1) the radiological hazard identification process failed to identify the magnitude of the hazards and account for data uncertainty to support the thermocouple removal, 2) management has not ensured that conduct of operations attributes applicable to field work activities have been implemented, and 3) management has not established the correct standard and process for what constitutes "placing the plant in a safe condition." The development and review of work packages are continuing slowly due to differing expectations, confusion among the staff on how to implement the new expectations, and the maturity of the work package submitted for Enhanced Work Planning and Joint Review Groups. Management is taking steps to try to address these issues. The Site Rep has encouraged the contractor to go beyond defining action/safe condition/void limits and contingency plans, which tend to be reactive and mitigative, and also analyze hazards to identify preventive controls. (IV)

CH2M Hill Hanford Group temporarily restricted the work of two subcontractors after a shift manager identified that an air compressor was isolated at the wrong location (but still de-energized) and the safe-to-work check was not documented. (II)

Sludge Retrieval and Disposition Project (SRDP): The project brought in flocculent experts to review the consolidation design. Based on their input the design for flocculent preparation, injection, and mixing with sludge is being substantially changed. This redesign is being completed and system testing is expected to resume this weekend. These design problems have led to substantial delays putting the Recommendation 94-1/2000-1 Implementation Plan commitment for completion of sludge consolidation by December 31, 2004, at risk. DOE has issued a letter requesting Fluor Hanford to develop corrective actions to recover the schedule delay in meeting the commitment and to prevent recurrence for remaining project activities. A similar focus on schedule in the past has resulted in insufficient preparation by the operations and supporting organizations and premature declarations of readiness by the K Basin projects. This commitment is an interim milestone and the final commitment to complete removal of all sludge from both basins may be better achieved by focusing efforts on the corrective actions associated with preventing recurrence of the problems and developing measures of effectiveness for the corrective actions. These problems were also the subject of the corrective actions following the sludge retrieval operational readiness review failure. (II)