

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 8, 2011

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending July 8, 2011

R. Quirk was out of the office most of this week.

TRU Retrievals: Senior contractor management lifted the stop work for high risk TRU retrievals that was put in place after a series of events occurred last week at the 12B burial ground (see Activity Report 7/1/11). As part of the corrective actions from the dropped drum event, an inspection of the drum was performed to determine why the lifting sling released. The inspection revealed a rock affixed to the locking ring near the lifting sling attachment point, which could have prevented adequate engagement of the hooks on the sling. A management directive was generated that directs workers to ensure drum locking rings are free of dirt, rocks, and other debris before overpacking the drums during retrieval. In addition, the project now anticipates encountering potential spills during trench retrieval operations due to the use of water for dust suppression and they are revising their procedures to include specific response and recovery actions.

Plateau Remediation Contractor: Contractor management halted the effectiveness review of corrective actions from the recurring lock-out/tag-out events reported in December. The review has been replaced with a review of the recent events (see Activity Report 6/17/11) looking for commonalities with the events reported in December. This new review will be completed, along with a determination of the need for additional corrective actions, by September.

Waste Treatment Plant (WTP): The Office of River Protection (ORP) held a Senior Review Board for a contractor-requested amendment to the PDSA on the confinement strategy for spills in the black cells of the Pretreatment facility. The current strategy credits the concrete walls, ventilation system, and the slope of the floors that directs spills away from exterior walls. The as-constructed floors in the black cells do not slope away from the exterior walls and the contractor is requesting to credit the stainless steel liner as a safety-significant design feature for confinement. ORP did not immediately approve the amendment because they first want to understand how the liner will be qualified to withstand seismic events and know the corrosion allowance for the embedded carbon steel plates to which the stainless steel liners will be welded.

Building 324 D&D: Last week, the project successfully took a second soil sample under B Cell. It had been unclear if the project would be able to get this second sample because they were initially unable to drive the cone penetrometer far enough under the building to reach the highly contaminated regions (see Activity Report 6/23/11). The sample was retrieved without incident and radiation readings from the sample were consistent with the previous characterization data collected. The high radiation readings are a positive indication that the sample is representative of conditions that will be encountered during future D&D. This sample, like the previous sample, was placed in a shielded container and shipped to Building 324 for analysis by PNNL.