

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 21, 2003

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending November 21, 2003

Waste Treatment Plant: In light of staff comments (see November 4 report), Office of River Protection management has decided that they will continue to require ORP approval of all potentially significant design changes before the contractor can implement these changes. This includes changes that create new design basis events (DBE), increase the frequency or consequences of analyzed DBEs, or affect how safety class/significant controls function. (I-C)

Bechtel concluded their root cause analysis for why 41 rebar dowels were not installed for 2 Pretreatment facility concrete placements and why this condition was not detected by subsequent inspections by field supervision, field engineering or quality control. The identified root causes were: 1) ineffective and inconsistent systematic approach to installation verification and inspection and 2) inadequate process to control and distribute rebar fabricator detail drawings. Contributing causes were the delta between management expectations for pre-job briefings and work package procedure, inconsistent understanding of expectations for pre-job briefings, and inadequate supervisory oversight. One finding was that the craft superintendent was not using drawings during final inspection or during monitoring of craft installations. (I-B)

Tank Farms: There were a number of Technical Safety Requirement violations this week. First, the AP-farm primary stack flow meter was being used although it cannot be calibrated in the field and had not passed a functional test. Although this was identified in July, there was a communication breakdown which resulted in operations not taking flammable gas measurements as required once the Documented Safety Analysis was implemented. The cross-site transfer was shut down because it was restarted while the AP flush pit pressure high alarm was inoperable (still in alarm after a flush). A subsequent extent of condition also identified that the AN-Farm Clean Out Box leak detectors were inoperable since a lockout installed between the time prerequisites were completed and the transfer initiated put them in alarm also. (I-C)

Transuranic Waste Retrieval: This week the contractor Readiness Assessment for the Transuranic Waste Retrieval project commenced. The operational demonstrations of the drum venting systems have been complicated by equipment problems despite requirements to confirm systems operability prior to declaring readiness. When equipment problems were noted with the in-field venting system, the engineer began troubleshooting the equipment without procedural authorization and exited the radiological area without performing required surveys. The site rep identified an issue with the radiological work permits having a void limit of 500 mrem/hr at 30 cm in a radiation area (RA); the 10CFR835 limit for a RA is 100mrem/hr at 30 cm. (III-A)

cc: Board members