

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 31, 2008

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending October 31, 2008

R. Quirk was out of the office this week.

Waste Treatment Plant (WTP): The Office of River Protection (ORP) is evaluating the viability of reducing the material at risk (MAR) used in assessing the radiological consequences of accidents at WTP. ORP believes that a re-evaluation of the tank waste characterization data and the process flowsheets could lower the bounding inventories of the WTP facilities. Their goal is to reduce the number of Technical Safety Requirements that are envisioned for the facilities. In addition, the number of credited engineering controls could also be reduced or their functional classifications relaxed. ORP plans to instruct the contractor to investigate the viability of reducing the anticipated MAR. ORP has not shared the basis of their belief with the site rep, but it is surprising that the project would consider relaxing the safety posture at this point in the design and construction of WTP and it is unclear if the change is defensible.

The DOE Office of Independent Oversight completed two weeks of on-site inspection of the WTP safety systems, contractor's work controls, and ORP oversight. The preliminary findings included: insufficient application of controls to protect safety systems from volcanic ashfall events; the inability of the safety-related service air system to meet single-failure criteria; and weaknesses in job hazard analysis of construction activities and poor integration of the controls into work instructions. The team found no problems with construction quality. The findings will go through additional review and verification cycles during the next few months.

ORP was briefed by the contractor on the results of the Broad Based Review. The contractor is binning issues into categories: documentation gaps and inconsistencies, incorrect requirements, and incorrect final design products. DOE expressed concern that the grouping of issues may mask the true causes and prohibit effective corrective actions. The final report is due this year.

River Corridor Closure Project: The contractor briefed personnel from the Richland Operations Office (RL) on the plans for Decontamination and Demolition (D&D) of Building 324. RL asked for the meeting to understand why the D&D activities for this HC-2 nuclear facility were not on the most recent Startup Notification Report (SNR) and to understand the level of readiness review the contractor is planning. The contractor committed to include this activity and the justification for the type of readiness review in the next SNR.

K Basins Closure (KBC): The contractor declared an Unreviewed Safety Question due to unclear requirements in the FSAR concerning the spacing of knockout pot (KOP) containers stored in the basins. The KOP have a metal spacer ring on the top and bottom to prevent surface-to-surface contact. The question arose because a KOP was inadvertently tipped over, but review of an existing analysis of surface-to-surface contact bounds this upset condition. The FSAR will maintain the one-inch spacing requirement but will be revised to address this upset condition.

Office of River Protection: J. Dowell has assumed the position of Manager of Engineering and Nuclear Safety at ORP.