

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 23, 2003

TO: K. Fortenberry, Technical Director
FROM: M. Sautman, Hanford Site Representative
SUBJ: Activity Report for the Week Ending May 23, 2003

Mr. Grover was on annual leave this week.

Tank Farms: Messrs. Piccarreta, Robinson, Sautman, Shackelford, and Troan conducted a review of the tank farms documented safety analysis (DSA), waste supplemental treatment technologies, and high-level waste retrieval/storage issues. The staff questioned the safety classification of some of the tank farm instrumentation. For example, the DSA has a Limiting Condition of Operation and a Surveillance Requirement to monitor the supernatant temperature in AY and AZ tank farms in order to prevent a tank bump. Although this system is currently classified as safety significant, the DSA relies instead on an Instrumentation Administrative Control. Since CH2M Hill Hanford Group (CHG) believes they can use a variety of equipment to perform this measurement, they would prefer just to have a program for performing functional tests and calibrations. The staff questioned whether the use of an administrative control is equivalent to a safety significant designation which invokes various procurement and quality assurance requirements for the equipment. An alternative approach would be similar to that being used for the double shell tank ventilation system where portable exhausters can be used in lieu of the installed system, but both systems are classified as safety significant.

CHG also informed the staff of their intention to perform a Readiness Assessment for the single-shell tank dry retrieval system. Earlier this year, conversations with CHG and Office of River Protection personnel had led the Site Rep to believe an agreement had been reached to perform an Operational Readiness Review for the initial use of the retrieval system. The Site Rep does not believe it is appropriate to try to take credit for the testing that has been performed with this system at the Cold Test Facility since that effort is part of the process of achieving readiness, not evaluating it. Furthermore, the articulating mast system, in-tank vehicle, transfer system, de-watering system, and decontamination station are new systems. Finally, both tank closure and transfers to a transuranic waste drumming facility are new activities and possible transfers into another single-shell tank have not been performed for years. (I-C, III-A)

Plutonium Finishing Plant: Plutonium stabilization activities have resumed. Chloride washing commenced this week although it is taking more wash cycles than expected. For instance, it took three wash cycles to reduce the solution conductivity to the level which surrogate and hot testing had indicated a single wash cycle would achieve. (III-A)

cc: Board Members