

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 22, 2002

**TO:** K. Fortenberry, Technical Director  
**FROM:** D. Grover and M. Sautman, Hanford Site Representatives  
**SUBJ:** Activity Report for the Week Ending November 22, 2002

Tank Farms: Last week, a water truck entered the dome exclusion zone for a catch tank which had an allowable load margin of 0 lbs. The Site Rep disagreed with CH2M Hill Hanford Group's (CHG) decision this week to downgrade this event from a Technical Safety Requirement (TSR) violation to a procedure noncompliance. CHG believed that this single event did not constitute a noncompliance with the administrative control (AC) to have a dome loading program. However, exceeding a dome load limit a single time can directly initiate an accident since there are no remaining controls to prevent a possible dome collapse. Furthermore, although a subsequent calculation showed that the truck load did not place the tank at risk, the Site Rep believes this does not change the fact that the limit in effect at the time of the event was still exceeded. The Site Rep discussed this issue with both Office of River Protection (ORP) and CHG management. While ORP does not believe this event was a TSR violation either, they are having CHG review this and previous dome load events collectively to see if the dome load program is satisfying the AC. This only partially addresses the Site Rep's concerns. (I-C)

Waste Treatment Plant: The Effluent Contingency Storage Vessel can receive both Cs concentrate (8 M HNO<sub>3</sub>, 50° C) and Tc concentrate (pH 13, 71°C) at the same time during off-normal operations. While the Cooling Duty Specification calculated the amount of cooling needed to remove the total decay and neutralization heat in a 72 hour period, it did not calculate the peak temperature that could be reached while mixing the acidic and basic concentrates. Bechtel National Inc. took this as an action item after the Site Rep identified this issue. (I-C)

Spent Nuclear Fuel Project (SNFP): The DOE Operational Readiness Review (ORR) for the Fuel Transfer System (FTS) concluded this week. DOE line management has reviewed the disposition of the ORR findings and authorized startup of the FTS. (III-A)

The Site Rep attended the initial job hazard analysis (JHA) development sessions for the Sludge Water System operating procedures. Substantial improvement in determining an appropriate scope of work for conducting the JHA was observed compared to the JHAs for FTS procedures. However, several problems were noted. There was no representation by Nuclear Safety for the entire meeting and Radiological Control for over half of the meeting. In several cases the hazards may not have been appropriately identified. The controls identified are typically general categories of controls, e.g., engineered controls, or instructions to perform additional hazard analyses, e.g., ALARA Job Review or Fire Hazards Analysis, rather than documenting the specific control necessary for the hazard. This feedback was provided to the SNFP. The Site Reps and staff will evaluate the final JHAs for adequacy. (I-C)

cc: Board Members