

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 10, 1999

**TO:** G. W. Cunningham, Technical Director

**FROM:** R. Arcaro, Hanford Site Representative  
M. Sautman, Hanford Site Representative

**SUBJ:** Activity Report for the Week Ending December 10, 1999

A. Board Visit: The full Board toured K-West Basins and reviewed recent issues associated with tank waste vitrification, the Plutonium Finishing Plant (PFP), and 233-S. Kent Fortenberry, the Deputy Technical Director, also toured PFP, 224-T, 233-S and SY tank farms. (3-A, B)

B. 224-T Bulk Reduction Facility: 224-T has two unconnected sections - a process cell section and the former Transuranic Storage and Assay Facility. After plutonium concentration operations ceased in 1956, the process cells were sealed and isolated from the rest of the building. Issues associated with the process cells include an unknown inventory of plutonium and chemicals; no inspections, surveillances, or maintenance for 20+ years; minimal coverage by an authorization basis; and an unknown ventilation system configuration. Using information provided by DOE personnel, the Board staff has been showing interest in 224-T in order to spur characterization efforts that had been languishing. FDH recently installed a differential pressure gauge and performed smoke tests that indicate that the vessel vent system is providing some ventilation for the process cells. In addition, an Unreviewed Safety Question Evaluation analyzed the safety basis implications of the vessel vent system for 224-T and T-Plant due to this previously unrecognized connection between their ventilation systems. FDH is preparing an authorization basis document to allow entry into the cells to conduct an investigative survey later this year. (3-B)

C. Tank Farms Safety Stand-down: As reported last week, Lockheed Martin Hanford Corp. (LMHC) imposed a one-day safety stand-down because of an increased number of occurrences in recent weeks. As a result of these occurrences, DOE-ORP enacted the Conditional Payment of Fee clause in the LMHC contract and reduced the overall fee pool by \$25,000. (1-C)

C. Tank 101-SY: LMHC declared readiness for the transfer of waste out of 101-SY on December 9, 1999. LMHC completed corrective actions following last month's failed Readiness Assessment and performed a simulated transfer. DOE-ORP will re-perform its Readiness Assessment beginning next week. A simulation of the transfer is scheduled for December 14 and will be observed by Mr. Arcaro. The actual transfer is expected to occur before the end of the year. (3-A)

cc: Board members