

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 23, 2005

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending December 23, 2005

Plutonium Finishing Plant (PFP): The site reps walked-down areas of the facility that had degraded concrete flooring due to water damage from condensate leaks in the supply air ventilation system. The leaks are from drip trays that are significantly damaged due to rust. The underside of the floor, which forms the ceiling of another area, had indications of water intrusion through cracks in the concrete. Concrete spalling was noted and corroded steel reinforcement bars were exposed in several areas. The site reps also noted corrosion of fire protection piping in the same area. These sections of the facility house the ventilation system and are not used to store, handle, or process radioactive material. PFP management is aware of the problems and the degraded concrete is one of the issues being evaluated for the extended PFP lay-up.

Tank Farm: Samples from waste remaining in the single-shell tank C-202 had U-235 concentrations that exceed criteria established for criticality control. The samples were taken as part of the final characterization of residual waste in the tank. Prompt notifications were made to the tank farm shift offices per the recently issued standing order. The standing order was a result of the recent tank farm criticality safety program assessment (see site rep weekly of 12-9-05). No compensatory actions were necessary but tank farm procedures require that a criticality safety representative determine if an actual nonconformance has occurred.

The tank farm contractor plans to operate the 242-A evaporator with non-radioactive feed (a cold run) in January 2006. The cold run will be used to train new operators as well as maintain the proficiency of other operators. DOE Order 425.1 requires that an Operational Readiness Review (ORR) be performed after extended shutdowns (12 months for a hazard category 2 nuclear facility). The last evaporator run was in March 2005. Tank farm management stated that this cold run will fulfill the requirements of the order. The next planned operation of the evaporator with radioactive waste would occur after the cross-site transfer in May 2005.

Mr. Mark Spears, currently the Chief Operating Officer, will replace Mr. Ed Aromi as the President and Chief Executive Officer of CH2M Hill Hanford Group, Inc.

K Basins: The project completed its plan for removal of fuel racks from KE Basin on December 20, 2005. Six racks will remain in the basin and will be grouted in-place.

T Plant: The first of three large diameter containers (LDC) of KE Basin North Loadout Pit sludge has been emptied and the sludge has been stabilized in drums. The project is preparing to begin retrieval and processing from the second LDC in the near future.

cc: Board Members