

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 22, 2007

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending June 22, 2007

R. Quirk was off-site this week.

Demonstration Bulk Vitrification System (DBVS): This week an External Independent Review was conducted to validate the project's performance baseline to fulfill critical decision-2 requirements. Preliminary results were presented during the exit briefing, but it did not appear that any of the concerns were safety-related. A draft report is expected July 9, 2007.

Tank Farms: The occurrence report on the lack of an administrative lock on a waste pump (see Hanford Activity Report 6/15/07) was reclassified to a management concern from a violation of a Technical Safety Requirement (TSR). The contractor determined and the Office of River Protection (ORP) agreed that the pump was inactive and therefore not a TSR violation because it couldn't be started locally or remotely without an engineering change. Contractor management confirmed that the corrective actions would not change.

The contractor has implemented a requirement to use video cameras to check the position of valves with gear-driven remote operators after each valve operation. The requirement is a corrective action from the discovery of an open valve that was supposed to be locked shut (see Hanford Activity Report 6/8/07).

Ultrasonic testing of double-shell tank AY-101 showed the steel in one area in the vapor space is about 20 percent less thick than nominal thickness. The contractor is assembling a team to investigate if this indication is due to degradation or an as-constructed condition.

ORP finished an assessment of the contractor's software quality assurance program. A number of preliminary issues were identified, including poor compliance with procedures and lack of management assessments. A report is expected in a few weeks.

New Solid Waste Processing Capabilities: Fluor Hanford started a hazard assessment (HA) of the alternatives to acquire additional capabilities to process solid waste. A number of options are being considered to process about 10,000 m³ of large-package waste and mixed low-level and transuranic waste (including contact- and remote-handled waste containers). The HA is being conducted to support the alternative selection process. Two options were being considered during the HA: modifications to T Plant and a completely new facility (the green field option).

K Basins Closure (KBC): The project found a piece of fuel in a debris basket in the K East Basin. The potential for fuel being present in the baskets was known and this piece was found during confirmatory checks. The fuel transfer system will have to be used again to transfer this fuel to the K West Basin.