DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 25, 2004

TO: K. Fortenberry, Technical Director

FROM: D. Grover and M. Sautman, Hanford Site Representatives

SUBJ: Activity Report for the Week Ending June 25, 2004

Sludge Retrieval and Disposition Project (SRDP): The Site Rep observed North Load-Out Pit (NLOP) sludge retrieval several days this week. The Large Diameter Container (LDC) filtration system is performing well in removing visible sludge from the water, resulting in no noticeable sludge in the return water and good visibility in the NLOP. However, the filters have been clogging frequently resulting in little time actually retrieving sludge. The ability of the system to retrieve bulk sludge is still in question, despite removing what appears to be several cubic feet of sludge from the NLOP floor. The LDC level indication has not registered a corresponding expected increase in sludge content. This may be due to either level indicator problems or insufficient flow to carry sludge into the LDC. These were both aspects that were determined by FH to have been inadequately tested during reviews of the design basis last year. (II)

Waste Treatment Plant (WTP): There has been a series of near misses and accidents during the last 2 weeks at the construction site. These include a partial finger amputation, a partial collapse of a rebar curtain, dropping a 100 lb. concrete embed 40-45 feet, a worker falling after his ladder slid out from under him, and a worker falling inside a rebar wall and suffering a hernia. The Office of River Protection sent Bechtel a letter expressing concern with defective wall placement work planning and worker failure to safely perform assigned work and requested corrective actions. Senior Bechtel managers outlined their planned corrective actions during a meeting with the Site Rep. (IV)

<u>Tank Farms</u>: The Site Rep has been following CH2M Hill Hanford Group's attempts to investigate the highly contaminated waste leak at a clean out box during the evaporator campaign that occurred nearly 3 months ago. The first inspection was halted in May after a worker's anti-contamination clothing became highly contaminated. A sample of contaminated soil was collected during the second entry this week, but further work was prevented because avoidable delays caused the work to extend to the hotter portions of the day. A third entry was halted after contamination (6 rad/hr on contact) was found which exceeded the radiation work permit void limits again (although they had been significantly raised). A second in-process As Low As Reasonably Achievable Review was conducted. This one was much better than a previously observed one was. (II)

Due to a series of work control breakdowns, fire department personnel entered a tank farm to perform maintenance without wearing self-contained breathing apparatus, which is currently required due to uncertainties with nitrous oxide and vapor releases. Some of the problems include: use of a generic Hanford site job hazards analysis, performing a generic Hanford site pre-job briefing, shift office providing tank farm keys with no briefing of tank farm conditions, issuance of respiratory equipment without reading the applicable job hazards analysis, and personnel ignoring fence postings. (II)