DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 21, 2000

TO: K. Fortenberry, Technical Director

FROM: M. Sautman and S. Stokes, Hanford Site Representatives

SUBJ: Activity Report for the Week Ending April 21, 2000

A. Plutonium Finishing Plant (PFP): PFP completed weighing 100% of their plutonium metal inventory ahead of schedule. Mr. Sautman observed radiography of the remaining items that had weight gains greater than 5 grams. The innermost can of 1 item was very bulged in the radial direction and likely has been breached due to oxide growth. This item had a 37.5 g weight gain and was packaged in 4 cans. PFP moved this item into a glovebox as a safety precaution. Oxide growth on another item appears to be causing a slight bulge on the inner can's side. (3-A)

B. Rec. 95-2: As committed in their response to the Board's 233-S reporting requirement, Bechtel Hanford Inc. (BHI) held a multi-disciplinary workshop to discuss ways to improve the way they identify, analyze, and communicate hazards. The workshop participants included hourly workers, engineers, and senior managers. The frank discussion resulted in a number of recommendations that included: 1) increasing the formality of walkdowns, 2) increasing the specificity of activity hazards analysis, 3) increased use of preliminary hazards analyses in work package development, 4) improving the effectiveness of pre-job briefs, and 5) improving the authorization basis transition process for deactivated facilities. The participants felt that radiological, industrial safety, and industrial hygiene controls needed to be better integrated. Combining these controls into a hazardous work permit was one idea that looks promising.(1-C)

C. Readiness Assessments (RA): Mr. Sautman met with BHI to discuss concerns with the RA Plan of Action for stabilization of the REDOX Plutonium Loadout Hood. The Site Rep questioned their ability to independently verify the accuracy and adequacy of procedures, training, hazard identification, emergency response, conduct of operations, and configuration control when no walkdowns, dry runs, mock-ups, or drills were to be performed. BHI later revised their plans to include a walkdown to validate the task instructions and to observe a mock-up of some of the stabilization activities. (3-B)

D. Project W-314, Tank Farm Restoration and Safety Upgrades: CH2MHIll Hanford Group (CHG) expects to complete its corrective actions related to the welding quality assurance issues by April 24, 2000 and lift their self-imposed work restrictions on safety class/significant equipment and systems. The primary actions that remained to be completed this week were the final review and sign-off of revised quality assurance plans and other internal project documents. Discussions with the W-314 Project Manager and Department of Energy - Office of River Protection Project Lead indicate that implementation of these changes is ongoing and will be completed over the next several weeks. However, complete correction of the problems that lead

to the welding issue remains a significant challenge for CHG and Fluor Federal Services since the root cause goes well beyond repair of documentation. CHG management has acted aggressively to address this issue as well. (1-C)

cc: Board members