

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 18, 2000

TO: K. Fortenberry, Technical Director

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

SUBJ: Activity Report for the Week Ending May 18, 2000

A. Spent Nuclear Fuel Program (SNFP) Quality Assurance: The Department of Energy-Richland Operations (DOE-RL) directed Fluor Hanford, Incorporated (FHI) to address several quality assurance issues prior to their declaration of readiness which will occur later this year. Among the issues are the quality of the testing program for systems, structures, and components important to safety, quality of procurement activities, and quality of activities performed by Fluor Federal Services (FFS). DOE-RL anticipates that FHI will respond quickly to these issues and can satisfactorily address them however, it is not yet clear that all of the issues raised by DOE-RL can be completely resolved prior to the project's existing fuel movement schedule. (1-C)

B. Spent Nuclear Fuel Program (SNFP) Phased Start-up Initiative (PSI): The readiness assessment (RA) for the PSI was delayed again to allow for correcting new problems with the Integrated Water Treatment System (a discharge line separated from one of three submersible pumps and corrective actions involve potential redesign of the hose/pump coupling and tethering of the underwater flexible piping). The RA is now scheduled for June 5, 2000. Due to the extended delays in beginning the final phases of the PSI, a much shorter period now exists for its completion. Moreover, if more delays occur, the SNFP will eventually have to reevaluate its testing plans, possibly shortening the testing period, or risk having this activity become the project's critical path. (1-C)

C. Tank SY-101 Surface Level Rise: SY-101 has been under observation for the past several weeks following cessation of mixer pump runs and is continuing to behave within expectations. The tank is releasing hydrogen gas at a steady rate with little variability and displaying no indications that gas is being retained. Settling of solids has progressed to the point where convective and conductive heat transfer zones are clearly recognizable due to changes in waste temperature profiles with the upper boundary of the conductive zone now at approximately 100 inches from the tank bottom. Observations will continue over the next several weeks and barring any changes in tank behavior, CH2MHill Hanford Group (CHG) would be in a position to recommend removal of SY-101 from the flammable gas watch. (1-C)

D. Meeting with Fluor Federal Services (FFS): Mr. Stokes met with FFS's Directors for Environment, Safety, Security, Health, and Quality and River Protection Projects to discuss their actions regarding the W-314 project quality assurance issues. (1-C)

cc: Board members