DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 21, 2000

TO: G. W. Cunningham, Technical Director

FROM: R. Arcaro, Hanford Site Representative
M. Sautman, Hanford Site Representative

SUBJ: Activity Report for the Weeks Ending January 14 and 21, 2000

A. Integrated Water Treatment System (IWTS) Welds: The Spent Nuclear Fuel Project had determined that an initial system leak test rather than a complete system hydrostatic pressure test would be acceptable for the IWTS because only three welds within the system were not pressure tested. Additionally, these welds had undergone supplementary inspections and non-destructive evaluation. Mr. Arcaro met with IWTS project management to review the test and inspection records that reportedly justified the chosen path forward. Some of the records were not immediately available and, upon closer inspection by the project, it was discovered that approximately 16 welds had in fact not been hydrostatically tested. Additionally, of the three previously identified welds, only two had been subject to the additional inspections. As of the end of this week, the project has proposed to DOE that a thorough review of the system be performed and that hydrostatic tests be performed on those welds not yet tested. A full system hydrostatic test is not planned. (1-C)

B. Tank Farms Occurrences: The tank farms have experienced highly visible successes such as the transfer of waste out of tanks C-106 and SY-101. However, deteriorating tank farm conditions and failures in more routine operations pose challenges to continued safe operations and require significantly improved diligence on the part of tank farms management. Two occurrences this past week illustrate this need: 1) During a pre-transfer pressure test of a line in U tank farm, the line failed. Interim stabilization of U farm tanks will now be delayed until the installation of a temporary overground transfer line is installed. 2) Serious work planning deficiencies were identified when a tank farm job was commenced without completing the prerequisite flammable gas monitoring. Further investigation revealed a work package requiring the monitoring had been drafted but not approved. The work was authorized and performed without the use of any package or procedure. (3-A)

C. Plutonium Finishing Plant (PFP): The Site Reps met with the new Westinghouse Safety Management Solutions (WSMS) management team for PFP to discuss Board concerns with Recommendation 94-1 progress, safety issues, and their initiatives. The team was responsive to the issues discussed, especially the timely repacking of a number of plutonium metal items at PFP that radiography indicates may be in direct contact with plastic or are stored in the same air space as plastic. (3-A)

The review team concluded that PFP passed Phase I of the Integrated Safety Management System Verification Review. However, DOE is considering whether to delay Phase II in light of the recent contractor change and identified Phase I concerns. (1-C)

D. DOE Office of Safety Regulation (Reg Unit): The Site Reps met with the director of the Reg Unit to discuss safety standards selected by BNFL and approved by the Reg Unit for the design and operation of the privatized waste treatment facilities. In preparation for potential licensing by NRC, BNFL has chosen to use a similar standard for protecting collocated workers as that used to protect the public. The Reg Unit director intends to discuss this issue with the Board during a visit to DNFSB Headquarters in February. (1-A)

cc: Board members