

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 22, 1999

TO: G. W. Cunningham, Technical Director

FROM: R. Arcaro, & D. G. Ogg, Hanford Site Representatives

SUBJ: Activity Report for the Week Ending January 22, 1999

A. Plutonium Finishing Plant (PFP): Stabilization of plutonium oxide began late last week. During the heat-up of the furnace for the first charge, a deviation alarm was received when the temperature of the furnace exceeded the programmed temperature. During recovery from this alarm, it was discovered that the alarm response procedure did not allow for recovery from the particular heat-up program in use. The resulting evaluation of the event revealed the following: 1) The heat-up program was selected in error by Process Engineering, 2) the heat-up program was never verified during cold runs, and 3) the heat-up program would have caused final stabilization to occur at 950 degrees rather than the required 1000 degrees. These events indicate deficiencies in the conduct of engineering and in the start-up preparations at PFP. Immediate corrective actions have been taken and stabilization has resumed. The site reps will continue close review of PFP operations.

B. Spent Nuclear Fuel Project (SNFP): Senior executives from DOE, Fluor Daniel and Duke plan further discussions, on February 4, concerning the renewal of the contract for Duke Engineering & Services Hanford. In the meantime, the Duke contract is being extended on a month-by-month basis and the basic contractual structure remains unchanged. However, SNFP management issued a new organization chart on January 14 that includes a new senior operations advisor and a new project engineering manager. The operations organization now includes at least 4 levels of supervision, and this complexity may lead to confusion about roles and responsibilities at the basins.

C. Tank Waste Remediation System Sampling Prioritization: Mr. Arcaro observed a workshop designed to identify and prioritize sampling needs for input to the annual revision to the Sampling Technical Basis. This document was originally developed in response to Recommendation 93-5 and documents the sampling requirements for the TWRS. The workshop revealed the following:

- 1) Sampling requirements for Phase 2 of the Privatization of the TWRS are not well defined.
- 2) Interpreting regulatory requirements in terms of project sampling needs is weak.
- 3) Sampling for non-TWRS facilities was not considered during the workshop and therefore receives a low priority. This effect has been noted for the sampling of Tank Z-361 at PFP.

D. Meeting With the Site Manager: On January 22, the site representatives met with Mr. Jim Hall, the acting Site Manager. Discussions focused on DNFSB and DOE priorities, personnel changes, and lessons learned from noted failures and successes at Hanford. Particular attention was paid to the Spent Nuclear Fuel Project and PFP. The site representatives will continue to meet with Mr. Hall on a regular basis.

cc: Board members