DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 28, 2000

TO: G. W. Cunningham, Technical Director

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

SUBJ: Activity Report for the Week Ending January 28, 2000

A. Spent Nuclear Fuel Project (SNFP): Cost overruns and schedule delays have put the project in a position where there are insufficient funds to complete the project on time; specifically, K-East construction activities in FY2000 are impacting the schedule for K-West fuel removal. On January 26th, Ray Jones, Fluor Hanford Vice President for the SNFP, officially proposed to DOE a new strategy. In the new strategy, the start of fuel removal from K-East will be delayed 13 months. This delay will reportedly allow acceleration of fuel and sludge removal from K-West. K-East fuel removal will be integrated with sludge removal so that the overall project (ending when sludge is removed from the basins) will be completed a year early. Early completion of the project as well as early removal of sludge are attractive features of this proposal. However, it remains to be seen if delaying K-East operations can result in the promised acceleration in K-West. Similarly, the proposal's success rests heavily on the ability to simultaneously remove fuel and sludge from the K-East basins. It should be noted that K-East construction activities have already been curtailed due to lack of funds. (1-C)

B. Tank 101-SY Transfer: CH2M Hill completed the second transfer of waste out of Tank 101-SY the evening of January 27th. Over 240,000 gallons of waste was transferred to 102-SY. The transfer, observed periodically by the Site Reps was performed smoothly without incident. Ammonia release, a known concern before the transfer began, was limited to less than 2000 ppm in the exhaust stack. The project had established a limit of 3000 ppm. A top back dilution began early the morning of January 28th. A total of 75,000 gallons of water are planned to be added to the top of the waste. During the back dilution, small gas releases were detected, probably as portions of the crust dissolved and released their retained gas. The top back dilution is expected to complete the evening of January 28th. Next week, water will be added beneath the crust as the next step in ultimate remediation of gas retention issue in 101-SY. (3-A)

C. Tank Characterization: The Site Reps attended a workshop to determine fiscal year 2001 tank farm characterization priorities. The top priorities were samples taken to support interim stabilization, operations (e.g., 241-SY-101, transfers), and waste feed planning for the vitrification plant. As committed previously, extra samples would be taken from unscreened tanks to support safety screens if they were already to be sampled for other reasons. The bottom two priorities were inactive misc. underground storage tanks and misc. facilities (e.g., catch tanks, evaporators), some of which still have open Unreviewed Safety Questions. (3-A)
cc: Board members