DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 29, 2002

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending November 29, 2002

Mr. Sautman was on leave this week.

Spent Nuclear Fuel Project (SNFP): The first shipment of fuel was transferred from the K-East basin to the K-West basin this week. During the receipt at K-West a safety class interlock switch malfunctioned causing the facility to suspend operations until repairs were completed the next day. The extended time the contaminated shielded transfer cask was exposed to air increased the potential to result in airborne contamination. The facility correctly implemented contingency controls to protect the workers in the K-West basin by posting the basin as an airborne radioactivity area which requires respiratory protection for access. The adverse working conditions imposed by implementation of these controls caused a delay in processing fuel for shipment to the Cold Vacuum Drying Facility. The shipment of the fuel completes a portion of the November 30, 2002, Recommendation 94-1 Implementation Plan milestone to remove fuel from K-East basin and initiate containerization of sludge 5 days ahead of schedule. The startup of the Sludge Water System (SWS) which will provide the capacity to containerize sludge is currently scheduled to begin operations on April 7, 2003. Several open issues remain which could further delay the schedule. The process equipment was designed assuming that no sampling for safeguards and security would be required. Until this assumption is approved by DOE headquarters the potential need to add sampling capability to the SWS remains the major programmatic risk. The continuing problems with procurement and working in the contaminated environment of the basins represent the other major schedule risks. (III-A)

Recommendation 2000-2: The Phase II assessment of the T Plant confinement ventilation system was completed this week. Several issues were identified with the existing process including the lack of a HEPA filter service life program at T Plant, configuration management for the facility ventilation system drawings, and the training and qualification program for design authorities. The overall assessment of the ventilation system for its current general service safety classification was satisfactory. However, several areas were identified that needed improvement before the authorization basis update supporting K-Basin sludge storage, which was recently submitted to DOE for approval, could be adequately implemented. These issues associated with the future operations at T Plant included a lack of specificity and insufficient justification for the technical bases for the Limiting Condition for Operation and associated surveillance requirements for the ventilation system. Also identified were the need to improve the drawing configuration for the ventilation system and improve the instrumentation to support the surveillance requirements. The team suggested that the readiness activity for the sludge mission include an engineering review similar to the Phase II review to evaluate the implementation of the new requirements. (I-C)

cc: Board Members