

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 14, 2002

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending June 14, 2002

Tank Farms: The Site Reps and Mr. Troan reviewed issues associated with tank integrity, Recommendation 2000-2 assessments, waste feed delivery, and the safety issues corrective action plan. In addition, the staff walked down the Cold Test Facility, which will be used for performing cold testing of waste retrieval technologies. The Site Rep also visited a local vendor's warehouse and inspected the transfer system that will be used for transferring solutions from tanks in the 244-AR Vault. This project continues to make good use of mockups and operator input in the development of the design and procedures. The Site Rep also encouraged DOE to have their readiness review team members take advantage of this opportunity to familiarize themselves with the system before it is installed in the canyon. (III-B)

Waste Treatment Plant: An Office of River Protection Quality Assurance (QA) surveillance on the use of computer spreadsheets in structural engineering calculations had findings related to the lack of documentation of formulas embedded in cells, lack of retention of test cases, and the configuration control for worksheets that were distributed to other engineers. There reportedly are some differences of opinion regarding the actual QA requirements for this application. (I-C)

Spent Nuclear Fuel Project (SNFP): The project is performing validation testing of Mark IV fuel assemblies. This validation testing is to demonstrate that the fuel washing system removes sufficient particulate to meet Office of Civilian Radioactive Waste Management and Authorization Basis requirements. This testing will permit the processing of the fuel currently stored in the K-East Basin once the Fuel Transfer System is operational. (III-A)

T-Plant: The contractor Operational Readiness Review (ORR) for T-Plant increase in facility hazard classification and removal of spent fuel. The review team has identified issues with the level of knowledge and training in the authorization basis for individuals responsible for performing USQ screenings. There are also issues with the implementation of cleanliness and material compatibility requirements associated with the fuel container and shipping cask. These problems have probably been responsible for unacceptable degradation of the cask closure bolts during readiness preparations. The site rep. has also identified issues related to the rigor of the fuel canister closure process relative to the SNFP closure process. This includes the lack of an inspection of the canister sealing surface and lower allowable forces exerted by the hydraulic ram used to set the primary canister seal. There has been a level of involvement by contractor line management that is not typically seen during an ORR. This has included managers sitting in on the ORR team interviews with their subordinates, during an interview with the operations manager the facility manager was observed nodding in response to one question and interrupted the interview to ask for clarification on the issue the team was evaluating. The facility manager was also observed sitting in on the emergency preparedness drill prebriefing and later interacting with facility personnel during the drill (typically personnel attending the prebrief act as observers and are required not to interact with players). The facility also failed an operation drill due to a lack of command and control at the event scene and the first responders not establishing a safe route of entry to the event scene. (III-A)