

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 12, 2002

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending April 12, 2002

Spent Nuclear Fuel Project (SNFP): Messrs. Boyd, Grover, Moury, Rosen, and Shackelford reviewed the SNFP maintenance program this week. While observing maintenance activities on ion exchange modules, Mr. Boyd identified that a procedure violation occurred. When questioned, the field worker supervisor halted work. A critique was conducted which identified serious problems with the command and control of the maintenance activity. Mr. Grover observed portions of a TSR surveillance of the discharge chute barrier door inspection and leak test. Mr. Grover observed engineering and quality control personnel performing detailed visual inspections of the doors while workers installed a plug in the overflow opening of one door. After the plug was installed, the procedure was examined and it was identified that the procedure prerequisites had not been completed including a Quality Control hold point. These observations were discussed with facility management. Field observations also identified numerous problems with work package development including incorporation of lessons learned, revising hazards and controls analysis when field conditions changed, and adequacy of package validation to ensure procedures reflect the manner in which work is to be performed. During reviews of planned work packages, Mr. Grover identified an error in the critical lift plan for the robotic manipulator replacement and notified SNFP engineering. A rough calculation by the project showed that the critical lift plan could allow a lifting configuration that was near or exceeded the rated capacity of the required rigging equipment. The critical lift procedure and rigging configuration did not fully comply with the recommended practices of the site Hoisting and Rigging Manual. Due in part to the identification of this problem, the manipulator replacement was removed from the current outage schedule. (III-A)

Recommendation 95-2: The Secretary of Energy's 1/25/02 response to the Board's reporting requirement indicated that the Department of Energy-Richland (DOE-RL) satisfied the annual Integrated Safety Management (ISM) review by conducting approximately 290 contractor surveillances, assessments or oversight of contractor self-assessments. Mr. Sautman reviewed the 321 (actual number) reviews conducted in FY2001 and found that 92% were facility representative surveillances, 3% environmental compliance assessments, and the rest various programmatic reviews. While many of the assessments indirectly addressed ISM, few of the assessments directly evaluated the implementation of the core functions. By relying heavily on facility representative surveillances, there was a lack of crosscutting reviews that examined programmatic performance. There has been some improvement in the overall DOE-RL assessment program, but the absolute number of assessments performed by DOE-RL staff located downtown and their breadth of topics still need improvement. DOE is aware of these issues and is working to address them. (I-C)

Recommendation 2000-2: The Phase II Assessment of the Plutonium Finishing Plant's (PFP) Vital Safety Systems (VSS) and Confinement Ventilation Systems identified that there were not Limiting Conditions for Operations to ensure operability of some Safety Significant (SS) VSS and that some Safety Class and SS equipment did not have functionality tests identified. In addition, several problems were identified with the safety equipment list. The DOE Engineering Assistant Manager is requiring that these issues get addressed before the final report is issued. (I-C)

cc: Board Members