

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 31, 1998

**TO:** G. W. Cunningham, Technical Director

**FROM:** D. G. Ogg, Hanford Site Representative

**SUBJ:** Activity Report for Week Ending July 31, 1998

A. Fire Suppression Systems: In response to the fatality at the Idaho National Environmental Engineering Laboratory on July 29, DOE-RL and Flour Daniel Hanford have initiated a survey of all fire suppression systems on site. So far, only one CO<sub>2</sub> suppression system has been identified: in a ventilation system in the 320 Building at the Pacific Northwest National Laboratory. This system does not appear to present a threat to workers since it does not provide suppression to occupied spaces. The 320 Building supports work with radiation sources and instrument calibration. Results of the full survey will be forwarded when available.

B. Spent Nuclear Fuel Project (SNFP): On July 27, SNFP management forwarded, to DOE-RL, a letter from Roger Reedy Engineering, Inc. concerning the code compliance issue on the multi-canister overpack (MCO). In summary, Reedy recommends that the MCOs be designed and fabricated to the requirements of ASME Section III, for Class 1 pressure vessels, except for the application of an ASME Code Symbol Stamp. However, he adds that the MCOs should be treated as though they will be Code Stamped, which implies that the Design Specification and the Design Report will be certified by a Registered Professional Engineer, the fabricator must have the qualifications for an ASME Section III or Section VIII, Division 2 Code Stamp and that all fabrication activities be monitored by Code Authorized Inspectors. The Reedy report was also sent to D.C. (Wille) on July 30.

SNFP management has closed three of six significant technical issues. The three closed issues include oxygen gettering in the MCOs, CVD water removal and a question of the allowable number of scrap baskets per MCO. Issues still open include uranium oxidation rates, aluminum hydroxide coating on the fuel, and establishing an MCO monitoring plan. In-basin measurements of aluminum hydroxide coatings reveal larger thicknesses than expected (almost 5 mils vs. 1-2 mils) but lower than allowed for in the safety analysis, which allows several mm.

C. Operational Readiness Reviews (ORR): On July 31, Lockheed Martin Hanford Co. (LMHC) completed its ORR for the W-320 project (C-106 sluicing). LMHC will take approximately three weeks to finalize the ORR report, and close pre-start items before issuing its "readiness to proceed" letter. DOE-RL plans to start its ORR on August 24. The staff plans to follow the conduct of the DOE ORR.

cc: Board members