

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 23, 2000

TO: J. K. Fortenberry, Technical Director

FROM: D. F. Owen, D. J. Grover, RFETS Site Representatives

SUBJECT: RFETS Activity Report for the Week Ending June 23, 2000

Recommendation 94-1. Late last week, Building 771 completed draining of a 14th actinide piping system, substantially ahead of the Recommendation 94-1 interim milestone of September 2000. To date, 27 of 38 actinide and reagent piping systems have been drained in support of the milestone for complete removal of all liquids in Building 771 by December 2001. (3-A)

Plutonium Stabilization and Packaging System (PuSPS). RFETS completed installation of the five stabilization furnaces and the loss-on-ignition testing furnace this week. Work is ongoing to relocate electrical penetrations that caused an interference with cartridge filters in the stabilization glovebox and then to seal the glovebox. This work is expected to be complete by Monday, allowing leak-testing to begin next week. By performing this testing ahead of furnace testing the project has accelerated the expected startup date to October 26, 2000. (3-A)

Emergency Preparedness. The site reps. observed the RFETS annual emergency preparedness exercise, "READY 2000," conducted on June 21, 2000. The exercise involved a fire due to welding operations in a transuranic waste storage area of Building 374 resulting in worker injuries and an on-site radiological release. RFETS incident command personnel appropriately positioned personnel near the scene to avoid areas with the potential for airborne contamination despite light winds that repeatedly shifted direction. Poor positioning of personnel in airborne contamination areas was a problem identified during "READY 99" (see site rep. report of May 21, 1999) Initial radiological dose estimates, appropriate site sheltering actions, and follow-up radiological field sampling were accomplished in a timely manner. Some issues with slow radiological response and characterization at the incident scene, fire department possession of facility keys for independent access, and the degree of challenge provided by the scenario was noted by RFETS personnel. (1-C)

Work Planning. A staff observation on the RFETS work planning process as forwarded by the Board's letter of April 25, 2000, was that the process of hazard identification and analysis needs to be conducted by questioning individuals. A good example of a proper questioning attitude during work planning occurred this week. During a job planning walkdown to remove fume hoods in Building 776/777, personnel noticed chemical containers and questioned if picric acid (a shock sensitive compound in crystalline form) had been historically used in those hoods. Former operations personnel with experience in this area agreed that picric acid may have been used in the fume hoods. RFETS issued an occurrence report and will obtain additional subject matter expertise to confirm whether the hazard is present. (1-C)

cc: Board Members