

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 24, 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 March 24, 2000

Building 371 Ventilation Systems. This week Building 371 formally declared an inadequacy in the design function for the ventilation system high differential pressure interlocks. These interlocks were put into place to eliminate the potential for pressurization of the facility during an earthquake. However, the presence of the interlocks has resulted in numerous air-flow reversals, some resulting in the spread of radiological contamination. Building 371 management is proposing three corrective measures for this inadequacy: 1) redirect flow from the plenum that has been involved in the most flow reversals, 2) isolate the interlocks during activities likely to produce an air-flow reversal, and 3) revisit the Building 371 Basis for Interim Operation accident analysis and evaluate eliminating the interlocks. In addition, the building has implemented procedures to remove personnel from potentially affected areas while performing those activities likely to produce an air-flow reversal. (3-A)

Work Planning and Control. A site rep. observed a contractor readiness review for dismantlement and size reduction of two drained, contaminated tanks (Tanks T1 and T2) and one glovebox (FL1) in the Building 776/777 Complex. This is the first set of tanks and related equipment to be dismantled and size reduced using the controls and programs required under the new Building 776/777 Complex Basis for Interim Operation. While noting certain positive attributes of the operation, the readiness review team identified several pre-start findings including findings related to poor implementation of the RFETS Integrated Work Control Program (IWCP). Specifically, implementation of the Job Hazard Analysis (JHA) process was deficient in that basic work steps had not been defined (and therefore not analyzed for hazards and controls) in accordance with IWCP requirements. Related to this issue, the work procedure lacked work step detail and controls for certain hazards (e.g., non-sparking tools for potential hydrogen gas). Additionally, work planning personnel had not been adequately trained on the JHA process and had not been aware of lessons learned on the JHA process by Building 771 personnel over the past year. The site reps. will follow resolution of these pre-start findings.

These issues are consistent with prior Board staff observations on deficient implementation of IWCP requirements for JHAs and work procedures, as well as inadequate IWCP knowledge by work planning personnel (see Site Rep. reports of March 10, 2000 and December 30, 1999). The site reps. will continue to monitor RFETS efforts to implement site-wide IWCP changes intended to address these issues that become effective in early April 2000. (1-C)

Kaiser-Hill Restructuring and Subcontract Changes. Kaiser-Hill has completed efforts to assume direct supervision of operation of nuclear facilities, including direct responsibility for safety. Kaiser-Hill management personnel have moved to the major Buildings and contracts with the two major subcontractors have been revised consistent with this restructuring.

cc: Board Members