

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 18, 2000

TO: G. W. Cunningham, Technical Director
J. K. Fortenberry, Deputy Technical Director

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

SUBJECT: RFETS Activity Report for the Week Ending February 18, 2000

Criticality Safety. In addition to the criticality safety requirement violation discussed in the site rep. report of February 11, 2000, several criticality safety requirement deficiencies have been identified in the last few weeks in Buildings 371, 707, and the 776/777 Complex. These deficiencies include violations of spacing requirements, mass limits, and volume limits as well as failures to properly secure storage and transportation containers. These deficiencies continue to indicate weaknesses with conduct of operations and with the level of technical vigilance by supervision and management for these activities at RFETS. The site reps. will continue to follow this issue closely. (3-A, 3-B)

Plutonium Stabilization and Packaging System (PuSPS). The Integrated Hazard Assessment for the PuSPS metal packaging activity does not identify radiological contamination of the inner containers in the outer container processing area as a potential hazard. Contamination could arise from improper welding of the inner container. In addition, there is a potential for some contamination during cutting of the inner container weld area (see Board letter of August 27, 1999). RFETS is planning to check for such contamination during initial phases of PuSPS operation. Inadequate consideration of this potential hazard could result in insufficient radiological controls for PuSPS. The site reps. will be discussing this issue with RFETS management. (3-A)

Robotics Technology for Size Reduction. The project to apply robotics technology to size reduction of gloveboxes and related equipment in the Building 776/777 Complex is progressing with a projected startup of late summer 2000. Representatives of Oceaneering International, the lead contractor for design and construction, were at RFETS this week to discuss design issues and the overall path to project completion. The design is in the late stages and while hazards have been individually considered and design provisions developed to address a number of the hazards, the required formal hazard analysis of the integrated system and process has yet to be completed. In a discussion with the site reps., Kaiser-Hill project personnel indicated that the contract established in the spring of 1999 with Oceaneering International did not require the hazard analysis to be submitted at an appropriately early stage of design. Kaiser-Hill has directed that the hazard analysis be completed in the near future so as to be incorporated at the "90%" design review to be conducted in March 2000. (3-B)

cc:
Board Members