

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 31, 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 31, 2000

Building 371 Ventilation Systems. During the quarterly load test for the emergency generator, the supply fans for both ventilation systems providing confinement to the operational areas of Building 371 failed to start properly. In one system, the procedure called for the supply fan to be placed in manual mode at a high air-flow rate to avoid activating the high differential pressure cut-off switch mentioned in last week's site rep report. However, this led to excessive air flow into the system, activating the low differential pressure cut-off switch. In the other system, there appears to have been a malfunction of the supply fan in service at the time. This supply fan has been declared inoperable and taken out of service for repair. The building is evaluating corrective actions to resolve this issue to allow the test of the emergency generator to be performed. During the aforementioned problems, the ventilation system exhaust fans remained operational, providing the required confinement for the building. (3-A)

Recommendation 94-1. Kaiser-Hill has proposed to DOE-RFFO to stop salt residue and dry residue repackaging operations in Building 707 in April and December 2000, respectively, as well as combine the six remaining Recommendation 94-1 residue milestones into a single December 2002 completion milestone. This is to allow for the accelerated deactivation of Building 707 and to provide additional operational flexibility to support site closure. The site reps. met with DOE-RFFO personnel to emphasize the need to discuss any changes to the Recommendation 94-1 Implementation Plan with the Board prior to RFETS implementing the proposal. (3-A)

Radiation Susceptibility of Emergency Radios. RFETS was informed by Sandia National Laboratories that RFETS emergency radios failed radiation hardness tests. The radios were subjected to 10^{17} total fissions (simulating a bare metal criticality) at a distance of 10 ft from the Sandia Pulse Reactor-III. These radios are used to notify workers of a criticality accident in areas where the buildings' criticality accident alarm systems (CAAS) are inaudible. As a result, the site has issued a standing order suspending the use of radios for this function and requiring that other approved compensatory measures for CAAS inaudible areas be used instead. RFETS personnel presented this information during a DOE conference on nuclear criticality issues held in Albuquerque this week. (3-A, 3-B)

Public Interaction. The site reps. discussed criteria for plutonium oxide stabilization and on residue processing and packaging with a member of the Rocky Flats Citizens Advisory Board.

cc: Board Members