

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 22, 1999

**TO:** G. W. Cunningham, Technical Director  
**FROM:** R. E. Kasdorf, Acting Site Representative  
**SUBJECT:** RFETS Activity Report for Week Ending April 23, 1999

Roy Kasdorf, Don Owen and Joel Blackman were on site this week reviewing progress in completing safety upgrades to Building 371. Mark Sautman will return next week.

**Recommendation 94-3 Progress in Building 371.** The staff evaluated the status of Recommendation 94-3 including progress in completing safety upgrades in response to the recommendation. The upgrades (priority, BIO-driven and safety basis document) to Building 371 committed to in the Integrated Implementation Plan (IPP) have been satisfactorily completed. Validation of additional safety margin upgrades that would be accomplished if the site can not ship material off site has also been completed. The validation indicated that plutonium oxides should be moved to the sub-basement, the floor above this area should be reinforced and that plutonium holdup should be removed. Shipment of material off site is pending startup of the plutonium stabilization and packaging system, DOE issuance of the plutonium disposition Record of Decision and certification of the 9975 shipping container. The staff intends to prepare an issue report for this trip.

**Building 371 Plutonium Stabilization and Packaging System.** The plutonium stabilization and packing system (PuSPS) is being readied for stabilization and packaging of plutonium metal and oxides. The staff observed installation activities of the PuSPS equipment in Building 371. As the main glovebox floor anchors are relied on for glovebox seismic stability, the staff reviewed the floor anchors with particular attention to proper installation of the "Hilte" floor bolts. Staff observation of the floor anchors indicated that the anchors may not be properly installed, potentially reducing load capacity of the anchors. Review with RFETS engineering, construction management and crafts personnel indicated that "skill of the craft" was used for installation of the anchors; no written instructions were provided to crafts personnel to ensure the floor anchors were properly installed. RFETS personnel indicated that they will formally review installation of the floor anchors with Hilte to determine if the floor anchor load capacity has been degraded. Proper installation of Hilte design floor bolts was also an issue in seismic support upgrades for fire suppression systems in Building 371 last year. Lessons learned from those efforts do not appear to have been applied to the PuSPS project.

**Low Level Waste Shipping.** RFETS completed shipment of the last remaining "pondcrete" low level waste to disposal facilities in Utah this week. This effort involved approximately 9,200 cubic meters of pondcrete (equivalent to about 43,000 55-gallon drums) over the last several years.

cc: Board members