

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 8, 2002

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending November 8, 2002

Plutonium Stabilization and Packaging System (PuSPS). Kaiser-Hill declared readiness to perform thermal pretreatment operations on those oxides that may contain organics (see the September 13th site rep. report). The Kaiser-Hill Readiness Assessment (RA) for this modification to PuSPS operations is scheduled to start on November 11th. (3-A)

Size Reduction Startup. As reported last week, the Kaiser-Hill RA for a campaign to size reduce plutonium composite parts was completed. Size reduction is needed in order to use the 9975 shipping container. The size reduction activity includes compaction and shear operations accomplished by two hydraulic rams. The site rep. observed initial size reduction operations this week. The operations were generally accomplished to the procedure. During the shearing of compacted pieces, however, the shearing blade became jammed and an operator proceeded to repeatedly strike the shearing blade with a block of steel not intended for this purpose and without procedural coverage or authorization by the supervisor. The site rep. also observed that the steel mesh curtain around the compaction hydraulic ram has a gap that could allow a shattered piece to impact a glove-port during the compaction operation. The site rep. discussed these observations with a Building 371 DOE-RFFO Facility Representative and Building 371 management. Building 371 management reemphasized to the operations crew that all tasks are to be performed to the procedure using the reader/performer protocol. Building 371 management stated that the mesh screen will be modified to eliminate the gap. (3-A)

Hoisting and Rigging Operations. This week during an operation to hoist a glovebox section weighing about 500 lbs into a Standard Waste Box (SWB) in Building 707, the load and the portable hoist tipped over as the load was being positioned over the SWB. The glovebox dropped about four feet into the SWB and the portable hoist stand fell to the side of the SWB. Fact finding revealed that this design hoist stand was not the proper kind of stand for this lift as the boom did not have sufficient length to center the load vertically over the SWB. The work crew pushed the load by hand (tag lines should have been used) and created a high angle (much more than 10°) between the rigging chain and the vertical causing the tipping.

This event and a series of other recent hoisting/rigging events at RFETS were determined by Kaiser-Hill management to warrant site-wide action. A review of hoisting/rigging requirements and practices at RFETS has been started. In the interim, all hoisting and rigging evolutions above 100 lbs (except those covered by a “critical lift” plan) will require the approval of the applicable major project manager. (1-C)

Public Interaction. The site rep. presented an update to the RFETS Citizens Advisory Board. The site rep. discussed RFETS current plans for plutonium processing under Recommendations 2000-1/94-1 (see site rep. report of November 1st) and progress under the RFETS response to the Board’s letter of March 19th on work planning and cause determination.