

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 21, 2001

**TO:** J. K. Fortenberry, Technical Director  
**FROM:** D. F. Owen, RFETS Site Representative  
**SUBJECT:** RFETS Activity Report for the Week Ending September 21, 2001

**Plutonium Stabilization and Packaging System (PuSPS).** As of this report, Kaiser-Hill has completed approximately 85 DOE-STD-3013 containers since startup in June (not counting containers that are currently in a reject/rework status).

Following completion of a DOE-STD-3013 container with oxide on Thursday, nuclear material assay indicated that the material was 75% plutonium instead of the 80% historical assay value noted on the feed containers. For current PuSPS operations, the Building 371 Basis for Interim Operation (BIO) restricts oxide feed to that in containers with equal to or greater than 80% plutonium assay (a BIO change is planned to allow processing lower purity oxides). The historical assay value is used in implementing this restriction on feed material. As of this report, Kaiser-Hill was taking action to report this event and screen the issue under the Unreviewed Safety Question process.

The lids of oxide feed cans are typically heavily taped and often require the tape to be cut to remove the can lid. During attempts to cut the tape on a feed can lid using a hand-held knife, the site rep. observed that the operator had to strain to see the cutting being done due to the operator's height (despite using the available stool). Only after several minutes of unsuccessful cutting attempts did another (taller) operator take over and complete the task. The site rep. noted this observation to DOE-RFFO and Kaiser-Hill personnel; actions are being taken to accommodate shorter operators and provide new cutting tooling to reduce the hazard of an inadvertent glovebox glove cut during this task. (3-A)

**Recommendation 94-1.** DOE-RFFO informed the site rep. that Building 771 has completed draining of the last remaining liquid (actinide and reagent) process system in support of the December 2001 milestone to remove all liquids from Building 771. (3-A)

**Safety System Damage During Deactivation.** While cutting into a wall as part of wall removal in Building 707, a reference line to a differential pressure sensor was inadvertently cut. This reference line supports monitoring of ventilation system differential pressure requirements per the Building 707 BIO. Fact finding and determination of corrective actions are being completed. The site rep. and staff will follow RFETS actions on this occurrence. (3-B)

**Response to the Board Letter of March 23, 2001.** The site rep. and staff discussed with RFETS personnel the recent progress and current completion schedules for the actions provided in DOE's August 7<sup>th</sup> response to the Board. As noted on September 7<sup>th</sup>, DOE-RFFO and Kaiser-Hill were going to revisit the "Lessons Learned" actions that had been completed to document any breakdowns in safety management processes during the event and incorporate those lessons learned into training and procedures. Kaiser-Hill stated that revisions to the Lessons Learned have been completed and relevant documentation is to be provided to the staff. (1-C)