

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 28, 2001

TO: J. K. Fortenberry, Technical Director

FROM: D. F. Owen, RFETS Site Representative

SUBJECT: RFETS Activity Report for the Week Ending September 28, 2001

Plutonium Stabilization and Packaging System (PuSPS). As reported last week, following completion of a DOE-STD-3013 container with oxide, 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 (using the historical assay value). This week, Kaiser-Hill screened the issue under the Unreviewed Safety Question process and determined that there was no non-compliance with BIO requirements nor information indicating an inadequacy in the safety basis. This screening evaluation is being provided to the staff.

DOE-RFFO Facility Representative and Kaiser-Hill management observations of recent PuSPS operations (both day and evening shifts) have indicated some degradation in attention to detail and disciplined operations (e.g., improper logging of material movements) over the past few weeks. As a result, Kaiser-Hill has re-instituted the senior supervisory watch for PuSPS operations for the near term and plans to conduct management briefings to crews and other PuSPS support personnel on expectations for proper disciplined operations. (3-A)

Safety System Damage Follow-up. As reported last week, during removal of a wall 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.

The site rep. and staff discussed the event, causes and corrective actions with DOE-RFFO and Kaiser-Hill personnel. While engineering personnel identified the need for the adjacent differential pressure sensor to remain operable during the wall removal, engineering personnel did not identify that the reference line was in the wall either as part of the engineering design input or as part of review of the activity Job Hazard Analysis (JHA). Furthermore, due to layers of sheet metal on the wall, procedural safety controls to perform wall scans for locating any utility lines and to use a device that cuts off power to the cutting tool upon encountering metal were bypassed (determined to be "not applicable") during the operation. The crew did not stop when the procedure could not be completed as written and obtain review of the issue as required (e.g., revisit the JHA). Corrective actions include review of similar work packages for potential compromise of safety systems, and briefings for engineering and operations personnel on the engineering and work control problems identified for this event. (3-B)

cc: Board Members