

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 8, 2001

TO: J. K. Fortenberry, Technical Director

FROM: D. F. Owen, RFETS Site Representative

SUBJECT: RFETS Activity Report for the Week Ending June 8, 2001

Staff member Paul Hanna was at RFETS this week.

Plutonium Stabilization and Packaging System (PuSPS). The site rep. and staff completed review of resolution and closure of the DOE Operational Readiness Review (ORR) pre-start findings. In response to site rep. and staff questions on the ORR finding regarding contamination control, Kaiser-Hill will be implementing additional contamination control techniques and training for operations personnel to minimize contamination on the metal/oxide convenience cans being transferred from the stabilization system to the packaging system. A contamination check of a just-welded DOE-STD-3013 inner can will be performed in the welding fume cabinet each shift to confirm adequate contamination control. As reported on April 27th, following inquiry by the site rep. and staff, DOE-RFFO and Kaiser-Hill had decided to lower the temperature for oxidizing small metal pieces from 600 °C to about 500 °C. Further evaluation of this issue through the Unreviewed Safety Question Determination process (the Building 371 Authorization Basis had allowed 600 °C) also led to the decision to change the oxidizing crucible/tray material from tantalum to Inconel (nickel/chromium/iron alloy) due to concerns with tantalum's resistance to high temperature oxidation.

Following ORR pre-start finding closure and receipt of the Board's June 7th letter regarding the Board's determination on the safety of PuSPS operations, DOE-RFFO management authorized startup of the PuSPS. Kaiser-Hill management has indicated that the first PuSPS operations with plutonium should occur during the week of June 11th, following a few days of additional dry runs (for operator proficiency purposes) with surrogate material. (3-A)

cc

Board Members