

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 2, 2001

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending March 2, 2001

Thermal Stabilization in Building 707. As reported last week, the site rep. became aware (on February 20th) that unusual glovebox pressure fluctuations were observed during two successive thermal stabilization runs on “oily” material during the prior week in the J-25 furnace. The site rep. had inquired with DOE-RFFO and Kaiser-Hill management as to what laboratory sampling and characterization had been done on this material (protocols to perform sampling/characterization for reactive materials were established in 1993 during Building 707 resumption). No such sampling/characterization had been performed. Kaiser-Hill management had placed a temporary hold on planned thermal stabilization activities due to inability to fully address the site rep. inquiry.

As also reported last week, the site rep. and staff (on February 22nd) discussed the coverage of thermal stabilization in the Building 707 Basis for Interim Operation (BIO) with several DOE-RFFO and Kaiser-Hill personnel. Specifically discussed was the BIO identification of the furnace overpressure/explosion hazard and a safety control in the BIO Technical Safety Requirements (TSR) calling for sampling/characterization to identify the presence of reactive materials. It was not clear how this control was being implemented for these furnace operations.

During the weekend, Kaiser-Hill performed laboratory sampling/characterization for the remaining material to be stabilized in Building 707 and results were reviewed by subject matter experts. New thermal hold points were recommended to allow combustible material to burn off at lower temperatures. The new thermal hold points were implemented and the remaining material was safely stabilized with no unusual glovebox pressure fluctuations.

By Wednesday of this week, there had been no determination whether the prior thermal stabilization operations had been conducted in violation of the TSR. The site rep. raised this issue with senior DOE-RFFO management. On Thursday, DOE-RFFO asked Kaiser-Hill about the failure to perform sampling/characterization for the prior operations as required by the TSR. Kaiser-Hill subsequently declared a TSR violation and indicated that an investigation would be performed. The site rep. will continue to follow this issue. (3-B)

Public Interaction. Last week, DOE-RFFO held their Annual “State of the Flats” meeting, a public forum to discuss progress and issues concerning RFETS. The site rep. provided a short discussion of Board perspective on RFETS during the past year. Issues addressed included plutonium stabilization under DNFSB Recommendation 94-1, Integrated Safety Management under Recommendation 95-2, and use of engineered safety controls for decommissioning activities. This week, the site rep. presented an update on Board and site rep. activities to the RFETS Citizens Advisory Board. The site rep. answered questions related to RFETS progress in applying engineered safety controls for decommissioning activities.