

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 15, 2001

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending June 15, 2001

Staff members Paul Hanna and Jonathan Malen were at RFETS this week reviewing the designs for the newest generation Inner Tent Chambers being installed in Buildings 771 and 776/777, and reviewing the upgrades being completed in Building 440 supporting radioactive waste storage, including the new drum re-packing capability. The staff will report to the Board on these reviews.

Plutonium Stabilization and Packaging System (PuSPS) Startup. Following startup authorization from DOE-RFFO late last week, the first PuSPS operation with plutonium was conducted on Thursday of this week. Kaiser-Hill packaged plutonium metal into a DOE-STD-3013 container following metal brushing operations in the Material Preparation glovebox. The loaded DOE-STD-3013 container passed helium leak checks, inner and outer can contamination checks, and the visual examination of the outer can weld.

The site rep. and staff members Hanna and Malen observed this initial plutonium operation in PuSPS. This operation completes the milestone in DOE's Implementation Plan for Recommendations 94-1/2000-1 to start packaging plutonium metal or oxide into DOE-STD-3013 containers. Further operations under the approved PuSPS Startup Plan will continue during the week of June 18th. (3-A)

Building 707 Ventilation Controls. The Building 707 Basis for Interim Operation (BIO) and associated Technical Safety Requirements (TSR) call for a surveillance (every 18 months) of ventilation system equipment between the HEPA filters and the exhaust fans to detect visible signs of leakage bypassing the filters. This surveillance is conducted using smoke generators to provide visible evidence of bypass leakage. Visible evidence of bypass leakage was observed in a certain area of the ventilation system during conduct of the surveillance on June 6th. Required actions per the TSR to suspend operations within 4 hours in affected areas were not taken, however, until June 12th. Following discussions with a DOE-RFFO Facility Representative and DOE-RFFO management personnel, Kaiser-Hill declared a TSR violation on June 15th. Fact-finding and evaluation of this issue by Kaiser-Hill and DOE-RFFO is planned for the week of June 18th. (3-B)

New Building 771/774 Authorization Basis Document. DOE-RFFO approved a new "Decommissioning Basis for Interim Operation" for Building 771/774 and issued their Safety Evaluation Report supporting this action. This new BIO will cover all decontamination and deactivation (D&D) activities as well as demolition activities planned for Building 771/774. The new 771/774 BIO defines a process to step out of (or eliminate) individual TSR-level controls as the risk of activities in various areas are reduced/eliminated through D&D progress. Efforts to implement the new 771/774 BIO will occur over the next few months and be confirmed by Kaiser-Hill through an independent Implementation Validation Review. Kaiser-Hill plans that the new 771/774 BIO will provide a template for other nuclear buildings undergoing D&D. (3-B)