

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 1, 2000

TO: J. K. Fortenberry, Technical Director

FROM: D. F. Owen, RFETS Site Representative

SUBJECT: RFETS Activity Report for the Week Ending December 1, 2000

Building 771 Uptakes. Room 186 in Building 771 is used for mechanical disassembly and size reduction operations on contaminated components in a containment tent. In mid-October 2000, a DOE-RFFO Facility Representative discovered that two air samplers in Room 186 were out-of-calibration. He inquired as to how this could be since calibration information was to be recorded as part of the air sample data records. This inquiry led to the determination that air sample data was not being recorded for these operations for several weeks prior to this discovery. In response, Kaiser-Hill performed special bio-assays of 11 individuals associated with the Room 186 operations. Initial bio-assay results received early this week indicated that uptakes were received by 10 of the 11 individuals. Additional bio-assay data are being obtained prior to assigning doses to these individuals.

As a result of this development, Building 771 management required additional personnel monitoring (lapel air samplers on selected individuals) throughout the facility. One individual's lapel air sampler this week indicated an unexpected, slightly elevated airborne contamination level during deactivation operations in Room 149. DOE-RFFO management indicated to the site rep. that additional Kaiser-Hill and DOE-RFFO resources are being brought to bear to determine the cause(s) of these unexpected elevated airborne levels including evaluation of air monitoring equipment. (3-B)

Plutonium Stabilization and Packaging System (PuSPS). Combined packaging and stabilization system operability testing using surrogate oxide material was started last week but was quickly interrupted due to an electrical short of the feed circuit to a pass-through drive motor in the packaging system. Nearly simultaneously, the PuSPS Data Management System software had a fault and stopped surrogate oxide tray movements into the packaging system. This week, a new electrical feed was installed and the software was being reprogrammed. Kaiser-Hill was attempting to resume the PuSPS operability testing in Building 371 by the weekend.

In order to ensure that adequate air is available in the stabilization furnaces for complete material oxidation, Kaiser-Hill will be performing adjustments on all the stabilization furnaces to ensure the furnace doors have consistent air gaps. This work has started and will be completed during the next few weeks. Kaiser-Hill believes these adjustments should not impact the ability of the furnaces to maintain the required stabilization temperature (nominal 1,000 deg. C). (3-A)

cc:

Board Members