DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 8, 2000

TO: J. K. Fortenberry, Technical Director **FROM:** D. F. Owen, RFETS Site Representative

SUBJECT: RFETS Activity Report for the Week Ending December 8, 2000

Building 771 Uptakes Follow-up. As reported last week, initial bio-assay results indicated that uptakes were received by 10 of the 11 individuals associated with mechanical disassembly and size reduction operations on contaminated components in a containment tent in Room 186. Based on negative lung counts of three individuals with the highest potential exposure, it is believed that the highest possible dose is about 1 rem. Additional bio-assay data are being obtained prior to assigning doses to these individuals; this data is expected in late December.

The site rep. and staff followed RFETS actions on this issue and held technical discussions with DOE-RFFO and Kaiser-Hill management regarding these actions this week. Operations in Building 771 have been suspended and a number of actions are underway to determine the cause of the uptakes and determine/implement additional improvements in radiological work practices. The investigation is being done building-wide as it is not clear that the source of the uptakes is the Room 186 operations. Extensive surveys and air monitor checks have not revealed any probable sources for the uptakes to date or any inadequate air monitoring. Kaiser-Hill intends to obtain bio-assay data of individuals representative of the various work groups within Building 771 to help determine the extent of this problem.

Kaiser-Hill management has stated that until this issue is resolved all work in contaminated areas of Building 771 will be performed using respiratory protection. (3-B)

Plutonium Stabilization and Packaging System (PuSPS). Combined packaging and stabilization system operability testing using surrogate ingots and surrogate oxide material resumed this week following an interruption last week (see last week's report). Three ingot cans were successfully run through the system and packaged into DOE STD-3013 containers. Five trays with surrogate oxide were run through the stabilization system (including samples run through the loss-on-ignition furnace), but only one can of oxide was successfully packaged. On the second tray of oxide, the elevator in the Tip/Dispense/Fill glovebox failed and packaging for the remaining oxide was not completed. PuSPS project personnel were attempting to fix the elevator (believed to be a motor control problem) and complete this run by the weekend. (3-A)

Public Interaction. The site rep. presented an update on Board and site rep. activities to the Rocky Flats Citizens Advisory Board. Topics discussed included progress on Recommendation 94-1 and Recommendation 2000-2, development of engineered safety controls for glovebox size reduction, and efforts to improve activity-level work planning and work control. Also noted was the Board and staff follow of the recent Building 771 uptakes. The site rep. answered questions relating to the Building 771 uptakes.

cc: Board Members