

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 6, 2003

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending March 7, 2003

The site rep will be out of the office on Friday.

Size Reduction Activities in Building 371. As reported in November, Kaiser-Hill had begun a campaign to size reduce plutonium composite items. Size reduction of the composite items is needed in order to use the 9975 shipping container. The size reduction activity includes compaction and shear operations accomplished by two hydraulic rams, but also has incorporated use of hand tools for certain items. Since November, more than 100 items have been processed with no significant anomalies or events. This campaign on the composites is expected to be completed in the next week. This campaign is to be immediately followed by an effort to size reduce 12 special items using hand tooling developed and demonstrated for these items at Lawrence Livermore National Laboratory (LLNL). As with the composite items, size reduction of these items is necessary to allow the use of the 9975 shipping container. This week, the site rep. observed a DOE-RFFO review of Kaiser-Hill work controls and hand tools to be used for this effort. Kaiser-Hill expects to install the tooling and complete this effort by late March. (3-A)

Conduct of Operations. During decontamination of a line of connected gloveboxes in Building 559, personnel violated a posted criticality safety requirement to remove all fissile solutions from a glovebox prior to introducing fissile solutions from other gloveboxes. Three containers of used decontamination solutions from three adjacent gloveboxes were consolidated into one glovebox and combined into two containers. Kaiser-Hill fact-finding revealed that the work crew had been briefed on this posted criticality safety requirement. Prior decontamination efforts did not involve multiple, adjacent gloveboxes at one time. The work crew foreman had contacted the criticality safety engineer by phone to discuss combining the contents of the bottles but had not made it clear that the bottles were to be from adjacent gloveboxes (nor did the criticality safety engineer ask about the bottles' locations). Corrective actions include reinforcement training on proper follow of procedures/postings and a new requirement that such criticality-related questions not be addressed remotely (i.e., require on-scene presence). The site rep. inquired with Kaiser-Hill management on use of the Building 559 Technical Response Team (a multi-disciplined team set up to provide quick guidance to work crews with such questions or when encountering unusual/unexpected conditions). The site rep. was informed that the team had not been contacted in this instance. The site rep. noted to RFETS management the apparent opportunity to emphasize use of these teams in such situations. (1-C)

Building 771 Decommissioning. The site rep. observed decommissioning activities in Building 771. All gloveboxes have been removed for some time and substantial progress is being made in strip-out of other equipment. Decontamination of floors and walls on the west side of the Building 771, including the tunnel connected with Building 776, is expected begin in the next week. Decontamination of ventilation system filter plenums is in progress and is the major effort left involving high levels of contamination and holdup in Building 771. (3-B)