DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 8, 2000

TO: J. K. Fortenberry, Technical Director

FROM: D. F. Owen, D. J. Grover, RFETS Site Representatives

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

Plutonium Stabilization and Packaging System (PuSPS). The site reps. reviewed the procedures for metal handling, oxide stabilization, and packaging. This review identified certain issues primarily with the manner in which verification of mass limits for criticality safety is conducted and documented in the procedures. In addition, an issue with the proximity of glovebox gloves to open stabilization furnaces at potentially elevated temperatures was identified. These issues were discussed with DOE-RFFO and Kaiser-Hill personnel. Additional review of the implementation of safety controls in the procedures will be conducted once activity hazard analyses are modified to properly identify hazards and controls for basic job steps (see last week's site rep. report). (3-A)

Work Control/Conduct of Operations. DOE-RFFO has responded to DOE-Headquarters requests regarding actions at RFETS to improve work planning and control and conduct of operations. This included responses to (1) DOE-EM on their concerns with a breakdown in conduct of operations (see site rep. report of June 30, 2000) and with ineffectiveness of corrective actions to improve work planning and control, and (2) to the Secretary of Energy on his July 2000 request to address issues from the Plutonium-238 intake at Los Alamos National Laboratory that included identifying actions to apply Integrated Safety Management to all potentially hazardous work, including routine activities.

In each of their responses, DOE-RFFO identified the need for improving the RFETS work planning and control processes, but did not directly address the need for on-the-job mentoring of work planning personnel to improve implementation (a staff observation in the Board's letter of April 25, 2000 on work planning at RFETS). The site reps. discussed this issue with DOE-RFFO management who reaffirmed their recognition of the need for such mentoring and their intention to pursue this issue with Kaiser-Hill. (1-C)

Use of Robotics for Glovebox Size Reduction. Use of robotics to perform glovebox size reduction is currently under development by Oceaneering International and a team of subcontractors. As we noted on July 21, 2000, Kaiser-Hill is revisiting the cost-benefit analysis for use of the robotics system as had been planned in Building 776. While no final decision has been made, Kaiser-Hill has recently focused their evaluation on use of the system in Building 707, Modules F and G. A full system demonstration at a sub-contractor in Minnesota is planned for the late September to early October timeframe. (3-B)