DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 6, 2002

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending September 6, 2002

Plutonium Stabilization and Packaging System (PuSPS). As reported last week, small metal pieces being prepared for furnace oxidation were placed in a furnace tray while a loaded ingot can was present in the glovebox in violation of a procedural criticality safety requirement. Fact-finding revealed a breakdown in the "reader/performer" protocol established for PuSPS operations in April (see April 26th site rep. report). The operator assumed that the supervisor was reading procedural instructions directing him to place the metal pieces in the tray (the supervisor was not in direct line of sight of the operator). The supervisor was not reading from the procedure and missed the procedural check to ensure that a loaded ingot can was not in the glovebox. Corrective actions include reemphasis/training for PuSPS operations personnel on reader/performer expectations and on supervisor roles including proper command/control of multiple tasks. (3-A)

Feedback and Improvement/Work Planning. One of the actions in the DOE response to the Board's March 19th letter dealing with activity-level work planning at RFETS is for DOE-RFFO to conduct detailed follow and assessment of an activity work planning effort on at least a quarterly basis. The first of these DOE-RFFO assessments was completed in late July on a glovebox filter change-out activity in Building 371. The assessment identified findings and observations such as: failure to include the entire job scope in the Job Hazard Analysis (JHA); lack of incorporation of a criticality control in the JHA; and several observations pointing to a lack of understanding of the JHA process by the work planning team.

DOE-RFFO transmitted the assessment report to Kaiser-Hill in late July. The DOE-RFFO transmittal letter stated that the findings had been resolved for the filter change-out activity and that no response was required. The site rep. and staff subsequently inquired with DOE-RFFO management on whether the issues raised by the assessment had potential broader implications to conduct of work planning at RFETS. In response, DOE-RFFO rescinded their prior transmittal and re-transmitted the assessment to Kaiser-Hill management late last week. DOE-RFFO requested that Kaiser-Hill review the issues raised in the report for generic implications to work planning. The site rep. will continue to follow the actions in response to the DOE-RFFO assessment. (1-C)

Nitric Acid Spill in Building 371 - Followup/Work Planning/Feedback and Improvement. As reported last week, during removal of an air-operator from a valve in a nitric acid system, a small amount of nitric acid spilled and nearby personnel reported symptoms of nausea. The work procedure did not provide specific instructions for properly removing the air-operator (and avoiding a system breach). The site rep. did not consider that a site-wide lessons-learned disseminated on Tuesday placed sufficient emphasis on the work planning deficiencies evident in this event nor discussed the similarity of this event with a prior inadvertent steam system breach (see the December 21, 2001 site rep. report). Following inquiry with RFETS management, the lessons-learned was revised and reissued addressing the site rep.'s observation. (1-C)