

May 3, 2002

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending May 3, 2002

Recommendation 94-1/2000-1. DOE's Implementation Plan for Recommendations 94-1 and 2000-1 calls for the repackaging of about 106 metric tons of plutonium residues at RFETS by May 2002. Site rep. reports during the past three years have noted completion of various categories of RFETS residues (e.g., salts, sand/slag/crucibles, and most recently ash). This week, Kaiser-Hill announced that the last wet combustible and dry residues were repackaged and that RFETS has completed this major 94-1/2000-1 plutonium residue milestone. (3-A)

Plutonium Stabilization and Packaging System (PuSPS). As reported on March 28th, DOE-RFFO had approved a Building 371 Basis for Interim Operation (BIO) change to allow stabilization of a sub-population of oxides containing less than 80% plutonium. Based on process knowledge/history, Kaiser-Hill did not believe that these oxides would contain organics. Organics could create a potentially explosive environment if present during the stabilization process, particularly during heat-up. The Board's staff had previously inquired about the potential for less-than-80% plutonium oxides with small (i.e., not readily visually detectable) amounts of organics being inadvertently introduced into a stabilization furnace. As part of their approval of the BIO change, DOE-RFFO had requested Kaiser-Hill to address applying more conservative heat-up profiles for this sub-population of oxides. This week, the site rep. and staff discussed with RFETS personnel the Kaiser-Hill estimates of airflow through the PuSPS stabilization furnaces and other issues related to the DOE-RFFO approval request. Kaiser-Hill intends to address these issues by late May. Stabilization of these oxides is not expected to start until late June, at the earliest. (3-A)

Conduct of Operations/Work Planning. There were two events this week in Building 776 where there was lack of proper implementation of safety controls. In the first event, a worker received a laceration requiring sutures to a finger as part of a task to cut and remove a cylinder on a large compactor machine. Fortunately, the radiological survey of the wound was negative. The injured worker was assisting another worker performing the cut with a portable band saw and received the laceration when the saw blade went beyond the cutting area following the cut. While the worker performing the cut was wearing cut-resistant gloves, the injured worker was not wearing cut-resistant gloves, as required by the work package. In the second event, very high airborne levels (about 24,000 DAC) occurred as a result of cutting (drained) machining coolant piping. Prior to the event, the intended "score and snap" method for pipe cutting did not work. The work crew did not stop and obtain evaluation as expected, but proceeded with an alternative cutting method using a power saw. The crew did not properly tape/seal the bagged containment around the saw and did not have the bagged containment verified by radiological controls personnel as required by the work instructions.

Fact finding on these events identified additional conduct of operations and work planning issues. The site rep. and staff will follow-up on corrective actions being developed by RFETS. (1-C)