

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 1, 2002

**TO:** J. K. Fortenberry, Technical Director  
**FROM:** D. F. Owen, RFETS Site Representative  
**SUBJECT:** RFETS Activity Report for the Week Ending November 1, 2002

**Plutonium Stabilization and Packaging System (PuSPS).** In a letter dated October 18<sup>th</sup>, DOE-RFFO informed the DOE Office of Environmental Management that the projected completion date of January 2003 for repackaging metal and oxides will be missed. DOE-RFFO now projects completion of the planned campaign by Summer 2003; however, the date may be as late as October 2003 based on a pending decision to package 163 plutonium composite items to be size reduced (see below) into DOE-STD-3013 containers. The DOE-RFFO letter also stated that the projected dates assume a pending decision is made to repackage approximately 970 kg of plutonium oxides (containing about 180 kg plutonium) to meet the Interim Safe Storage Criteria (ISSC) and dispose of that material at WIPP. DOE-RFFO proposed changes to the DOE Implementation Plan for Recommendation 2000-1/94-1 reflecting this information including a new milestone for repackaging the 970 kg of oxides to meet ISSC by July 2003.

Preparations to perform thermal pretreatment on those oxides that may contain organics continues by Kaiser-Hill (see September 13<sup>th</sup> site rep. report). The Kaiser-Hill Readiness Assessment (RA) for this modification to PuSPS operations is now expected to start on November 11<sup>th</sup>. (3-A)

**Planned Size Reduction Activity.** The Kaiser-Hill RA for a campaign to size reduce plutonium composite parts was completed this week. Size reduction is needed in order to use the 9975 shipping container. The size reduction activity includes compaction and shear operations accomplished by two hydraulic rams. The Plan-of-Action for this RA states that hand tools will also be used for certain parts; however, Kaiser-Hill management stated to the site rep. that hand tool use is not planned but may be needed in the future. The site rep. observed the performance demonstrations conducted for the RA using the hydraulic rams (no hand tool operations were demonstrated). The RA team concluded that the demonstrations and overall preparations for this activity were generally satisfactory. A few findings were identified in areas that include: knowledge level for certain operators in criticality safety controls and radiological controls; content of the startup plan (particularly to address any introduction of hand tools for size reduction); and operating procedure clarity. Size reduction operations are expected to start during the week of November 4<sup>th</sup>. (3-A)

**Conduct of Operations.** Site rep. reports of October 11<sup>th</sup>, September 27<sup>th</sup> and September 20<sup>th</sup> had noted events involving failure to perform procedural steps containing criticality safety requirements in loading transuranic waste items into drums/boxes in Buildings 707 and in moving a tank in Building 771. These events indicated a lack of formal, deliberate conduct of these tasks. Corrective actions had been taken in these buildings. The site rep. had discussed these events and the lack of disciplined conduct of operations with DOE-RFFO and Kaiser-Hill management. Last week, the Kaiser-Hill President distributed a briefing to be given by all project managers to their workers emphasizing procedural compliance and formal conduct of operations. (1-C)