

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 18, 2002

**TO:** J. K. Fortenberry, Technical Director  
**FROM:** D. F. Owen, RFETS Site Representative  
**SUBJECT:** RFETS Activity Report for the Week Ending October 18, 2002

**Plutonium Stabilization and Packaging System (PuSPS).** RFETS has completed approximately 1090 DOE-STD-3013 containers (not counting those in a reject/rework status). DOE-RFFO has informed the DOE Office of Environmental Management (EM) that the projected completion date of January 2003 for repackaging metal and oxide will be missed due to various factors including equipment reliability and conduct of operations issues. DOE-RFFO has been determining a new projected completion date. The new projected date will depend on a potential increase to the planned number of DOE-STD-3013 containers for RFETS metal/oxide. DOE-RFFO management noted that a decision is pending on packaging certain classified metal (to be size reduced, see below) into DOE-STD-3013 containers. More DOE-STD-3013 containers than planned may also be needed for packaging low purity, low density oxide. These factors could require up to 250 additional DOE-STD-3013 containers. DOE-RFFO intends to provide the new schedule information to DOE-EM and the Board in the next few weeks.

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 4<sup>th</sup>. (3-A)

**Planned Size Reduction Activity.** As reported on June 15<sup>th</sup>, preparations have been in progress to perform size reduction operations in Building 371 on more than 100 classified metal items containing special nuclear material to accommodate the DOE-EM decision to use a smaller shipping container. The Kaiser-Hill RA is currently planned to start on October 28<sup>th</sup>. (3-A)

**Potential Injection Dose During Decommissioning.** A worker received a small puncture wound to his right index finger while picking up a small component in order to place the item into a waste box during clean-out operations in the Building 776 Advanced Size Reduction Facility (ASRF). These ASRF operations require supplied air suits due to high airborne concentration levels. A small stub of wire on the component, not noticed by the worker in picking up the item, caused the puncture through a cut-resistant glove and 2 rubber anti-contamination gloves. Fact finding determined that this was the hand protection required by the work package. Following DOE-RFFO Facility Representative questions, it was also determined that the work package did not require taping of sharp/pointed areas on objects prior to handling.

Decontamination attempts on the worker's finger were unsuccessful. Wound counts following some skin removal indicate the presence of plutonium and americium in the finger. Special bioassay will be performed during the next several weeks to determine the injection dose. Corrective actions include retraining of decommissioning crews on puncture hazards and review of requirements/practices for taping sharp/pointed areas on objects prior to handling. (1-C)