

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 27, 2001

**TO:** J. K. Fortenberry, Technical Director  
**FROM:** D. F. Owen, RFETS Site Representative  
**SUBJECT:** RFETS Activity Report for the Week Ending July 27, 2001

**Plutonium Stabilization and Packaging System (PuSPS).** Operations to package plutonium metal into DOE-STD-3013 containers continued; however, processing of plutonium oxide has still not yet resumed since stoppage about two weeks ago due to failure of the weighing scale for the Loss-on-Ignition test. A second replacement scale was being installed at week's end. Preparations and reviews for adding a second PuSPS operations shift were completed and second shift PuSPS operations were started late this week. (3-A)

**Building 776 Deactivation.** The site rep. performed a walk-down of Building 776 with a DOE-RFFO Facility Representative (FR). During the walk-down, a work crew was observed performing cutting and removal of (drained) liquid system piping under a glovebox being deactivated. The DOE FR noticed that the workers were not wearing the type of outer garment material (Seranex) he had understood to be required when breaching liquid piping systems. The DOE FR questioned the work crew supervisor about the apparent violation. The supervisor debated the DOE FR on this question, believing "process knowledge" of the drained system was justification for not wearing the Seranex outer garment. The DOE FR asked to see the work instructions and/or the radiological work permit that would contain such a control. The work crew had no such work instructions/permit at or near the job site. Despite this debate (even with a DOE FR), the supervisor did not contact the Building 776 Technical Response Team set up to provide assistance for work crews when such questions or unusual/unexpected conditions arise.

Follow-up by the DOE FR with Building 776 management on this issue resulted in confirmation that a Seranex outer garment was required for this work and that the work instructions/permits should be at the job site. Piping removal activities in Building 776 were suspended, pending corrective actions. The site rep. discussed this latest failure to use the Technical Response Team with senior Kaiser-Hill and DOE-RFFO management (see site rep. reports of March 23<sup>rd</sup>, March 30<sup>th</sup>, and July 13<sup>th</sup>). (3-B)

**Unreviewed Safety Question (USQ) Process Implementation.** As reported last week, the site rep. and staff questioned the result of a nuclear safety screen regarding movement of plutonium oxides from vaults to PuSPS. Potentially larger quantities of oxide outside of vaults at a given time were being considered than had been originally envisioned for PuSPS and assumed in the Building 371 Basis for Interim Operation (BIO). The staff believed the screen should have been positive and result in further evaluation per the USQ process. This week, Kaiser-Hill management reviewed the screen and informed the site rep. that an appropriately conservative review of the proposed activity against the BIO would have resulted in a positive screen and further USQ evaluation. As a result, Kaiser-Hill management plans to develop a "lessons learned" for distribution to personnel involved with the USQ process and review the content of USQ training for any needed improvements. (1-C)