

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 4, 2001

**TO:** J. K. Fortenberry, Technical Director  
**FROM:** D. F. Owen, RFETS Site Representative  
**SUBJECT:** RFETS Activity Report for the Week Ending May 4, 2001

Staff members Kasdorf and Grover were onsite to observe the DOE Operational Readiness Review (ORR) for the Plutonium Stabilization and Packaging System in Building 371.

**Plutonium Stabilization and Packaging System (PuSPS).** The DOE ORR was started this week. While the demonstrations of the PuSPS packaging and stabilization operations were generally satisfactory, a number of issues are being identified by the ORR team such as:

- inadequate level of knowledge by some operations and support personnel, in particular for operations personnel in knowledge and experience in recognizing anomalous oxide material;
- inadequate abnormal event drill demonstration in areas such as ability to decontaminate personnel, limiting and controlling contamination spread, and proper fire response (the drill simulated a plutonium metal pyrophoric reaction and glove-box breach - inadequate drill demonstration was a pre-start finding by the Kaiser-Hill ORR);
- lack of a developed continuing training program for PuSPS operations personnel; and
- various weaknesses in radiological control program implementation during PuSPS demonstrations

The site rep. and staff discussed certain observations with DOE-RFFO management including:

- a criticality posting in the area where just-completed DOE-STD-3013 containers are temporarily held that could not be complied with for the planned operations;
- the PuSPS Start-up Plan requiring a "senior supervisory watch" for the first week where only limited operations are projected, but not necessarily as full, simultaneous (oxide and metal) processing operations are achieved;
- improper contamination control techniques during filling of oxide convenience cans and improper welding fume cabinet and DOE-STD-3013 inner can contamination checks; and
- lack of causal evaluation for certain pre-start findings from the Kaiser-Hill ORR.

The ORR team is continuing its review and expects to present the results of the ORR to RFETS management by about Wednesday, May 9<sup>th</sup>. (3-A)

**Work Planning and Control.** One of the areas of emphasis in the Kaiser-Hill Site Safety Improvement Plan (see the April 20<sup>th</sup> site rep. report) is to improve implementation of work planning and control at RFETS. A related action is to clarify and streamline the requirements and guidance for performing activity-level hazard analysis (i.e., job hazard analysis) by line management. Following review of the recently revised requirements and guidance, the site rep. and staff discussed an inconsistency in the guidance with RFETS personnel. This inconsistency involved the concept that such hazard analysis should result in identification of the safety control(s) for a hazard and not merely a reference to an implementing document. Following this discussion, the guidance is being revised to resolve the inconsistency. (1-C)