

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 10, 2001

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending August 10, 2001

Plutonium Stabilization and Packaging System (PuSPS). No stabilization and packaging operations were conducted this week due to continued power and alignment problems with the laser welder that performs the DOE-STD-3013 inner can weld (see last week's report). Actions to fix the inner can laser welder and complete a satisfactory test were continuing at week's end.

Regarding moisture measurement of stabilized oxides containing less than 80% plutonium (planned to start late this year/early next year), DOE-RFFO has formally notified Kaiser-Hill that use of Super-Critical Fluid Extraction (SFE) is no longer approved, pending further evaluation. DOE-RFFO has authorized Kaiser-Hill to develop Thermogravimetric Analysis with Fourier Transform Infrared Spectroscopy (TGA/FTIR) as an alternative to SFE. DOE-RFFO noted in authorizing this parallel path that approval to use TGA/FTIR must be obtained from the Technical Review Board for DOE-STD-3013.

Recommendation 94-1. Building 771 has completed draining of 37 of 38 liquid process systems under Recommendation 94-1. The remaining system, the House Vacuum System, contains several thousand feet of piping and numerous low-point traps to be drained. Kaiser-Hill projects that draining of this last process system will be completed ahead of the December 2001 DOE Recommendation 94-1 Implementation Plan milestone. (3-A)

Building 707 Authorization Basis Implementation. As reported on June 20th, required actions to suspend operations upon identification of a failed Technical Safety Requirements (TSR) surveillance of ventilation system equipment were not taken until several days following the surveillance. It was identified that surveillance team personnel had reportedly informed on-duty shift management personnel of the failed surveillance on June 6th, however, there was no logging nor recollection of that communication by personnel in the shift management office. Evaluation of this event has been completed by DOE-RFFO and Kaiser-Hill. Corrective actions included counseling personnel, additional training/briefings and "written direction" to management of personnel involved in TSR surveillances on expectations for conducting/responding to TSR surveillances.

The RFETS Conduct of Operations Manual contains a requirement to immediately notify the on-duty shift manager upon identification of a TSR surveillance failure. Site rep. review of several Building 707 TSR surveillance procedures indicates, however, that this notification requirement is not clearly implemented in some of the procedures, including the ventilation system surveillance procedure noted above. The site rep. discussed this issue with DOE-RFFO and Building 707 management. In response, Building 707 will review/revise the TSR surveillance procedures to ensure clear, consistent implementation of the notification requirement. (1-C)

cc: Board Members