

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 3, 1999

TO: G. W. Cunningham, Technical Director
K. Fortenberry, Deputy Technical Director
FROM: D. F. Owen, D. J. Grover, RFETS Site Representatives
SUBJECT: RFETS Activity Report for the Week Ending September 3, 1999

Dave Grover reported for duty this week as RFETS Site Representative.

Building 771 Deactivation. Size reduction operations using the new Inner Tent Chamber continued this week on the first post-startup glovebox. Operations included window removal and some frame cutting. RFETS has been collecting airborne radiological data for this glovebox and the glovebox size-reduced during the size reduction readiness review. So far, the highest general area airborne level has been 151 DAC during cutting on the readiness review glovebox. While somewhat promising at this stage, much more size reduction experience is required before any decision can be made on reducing the level of personnel protective equipment. (III-B.1.a)

Recommendation 94-1 - Residues and Solutions. As noted in last week's Site Rep. report, RFETS is planning on shipping sand, slag and crucible (SS&C) to WIPP for disposal in lieu of SRS for canyon processing as currently stated in the DOE Implementation Plan for Recommendation 94-1. DOE-RFFO is requesting formal plans and resource estimates from Kaiser-Hill regarding this change. Radiation exposure estimates for the SS&C repackaging operations required for WIPP disposal will be developed by Kaiser-Hill. Extrapolation of prior SS&C operational exposure data provided by DOE-RFFO would indicate radiation exposure of about 7 man-rem assuming all 3000 kg of SS&C is to be repacked in vented containers (such repackaging may not be needed depending on potential future revision of the TRUPACT-II SARP).

RFETS completed draining of System 18 in Building 771. This completes the 94-1 milestone to drain six actinide systems in Building 771 by September 1999. (III-A.1.a).

Recommendation 94-1 - Metal and Oxides. The Plutonium Stabilization and Packaging System (PuSPS) installation in Building 371 is continuing to the revised baseline program which will repackage metal (December 1999 startup) while the oxide stabilization system is being installed (June 2000 startup). System operational testing and outer container welding process tests are in progress, with inner container process testing to begin next week. Certain issues are still outstanding, however. Container shipments are behind schedule (though the first 30 outer containers have been received). Inner container dimensional tolerance problems have resulted in fabrication delays. Finally, RFETS is reviewing the Board's letter of August 27, 1999 providing observations on the PuSPS. DOE-RFFO considers that relaxation of the DOE-STD-3013 requirement regarding contamination of the inner container outer surface is necessary for RFETS to meet the 94-1 milestone for packaging metal and oxide by May 2002. DOE-RFFO is working to develop a case for relaxing that requirement. (III-A.1.a).

cc: Board Members