DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 23, 1998

TO: G. W. Cunningham, Technical Director

FROM: M. T. Sautman

SUBJECT: RFETS Activity Report for Week Ending October 23, 1998

Recommendation 94-3. Seven of the 21 BIO upgrades will not be completed by October 31, 1998 as committed. K-H expects these to be completed by February 24, 1998.

Recommendation 94-1. Two strategy changes are being considered for the solution program. Currently in B771, the process piping is removed after the system has been completely drained. SSOC is investigating the possibility of removing the process piping immediately after each section of a piping system is drained. This may avoid having to do the same activities like valve lineups or purges twice—once for draining and again for piping removal. In addition, RFFO has requested that K-H conduct an evaluation to determine if pipe stripout should be performed in B371 immediately following pipe draining like B771 is doing. The current plan is to remove the piping in a few years as part of building deactivation. The Site Rep believes both ideas are worth investigating.

K-H wants to extend several milestones even before the last proposed dates have been approved by the Board. K-H wants to extend the completion date for cementing ion exchange resin residues by 3 months since B774 has been shut down for several months because of fire barrier and other authorization basis issues. As discussed in the 9/11/98 weekly report, the June 1999 milestone for completing tapping and draining in B371 will likely be missed because K-H did not hire and train operators as their scheduled required. Finally, in the last draft of the Implementation Plan, the milestone for completing shipment of SS&C residues to SRS has slipped 11 months to 11/00. This is partly due to delays in issuing the EIS ROD (now expected to be November 9) and certifying shipping containers.

Recommendation 97-2. Many of the recent criticality infractions resulted from not performing or inadequately performing the inspection used to verify that a planned activity can be performed without violating any criticality safety controls. In order to address past problems, the inspection procedure has been revised. The Site Rep reviewed the new procedure and attended operator training on the revision. The revised process is much simpler and puts more responsibility on the supervisor. Other changes place an increased emphasis on defining the scope of the activity and clarifying that the inspection ensures compliance with controls before, during, and after the activity The one area of concern is that the determination of how long the surveillance remains valid relies very much on the supervisor's judgement.

Work Control. A B371 facility representative discovered that a vendor had disassembled part of the

B371 emergency generator (EGEN) without locking/tagging it out (LO/TO) as required. A subsequent investigation found that the EGEN had not been LO/TO'ed during some trouble shooting and repair (TS&R) work performed 2 weeks earlier either. Communication problems led the facility manager, shift technical advisor, and the engineer to believe that it had been LO/TO'ed for both jobs. In addition, parts of the work package were not followed and some of the steps performed had not been documented. A hold was placed on all B371 TS&R work packages until they were reviewed. Other corrective actions have been identified and are being implemented.

Enriched Uranium (eU) Shell Decontamination. Enriched uranium shells are being treated with electrolytic decontamination to remove surface plutonium contamination before they are shipped to Y-12. B83 shells, however, have enough plutonium (but still < 0.5 g Pu) on them that electrolytic decontamination, brushing, and vinegar washes cannot clean them to meet Y-12's acceptance criteria. K-H is evaluating a variety of options for removing the plutonium: machining, acid etch, controlled oxidation, and plastic film removal. If it is decided to ship the shells without cleaning, there are shipping container and receiver site issues that would need to be addressed.

cc: Board members