

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 6, 1997

**TO:** G. W. Cunningham, Technical Director  
**FROM:** R.F. Warther, M.T. Sautman  
**SUBJECT:** RFETS Activity Report for Week Ending June 6, 1997

Mark Sautman participated in both the salt stabilization startup and Recommendation 94-3 videoconferences this week. Bob Warther attended the annual facility representatives conference. A separate contact report will discuss the conference.

**Building 707.** Last year, it was discovered that the B707 Material at Risk (MAR) was not being tracked as had been committed to the Board by DOE-HQ during a B707 resumption meeting. An Operations Order was implemented afterwards to track the MAR. However, the Site Reps found out this week that only the MAR in Modules A - H was being tracked. The basis for this is that the design basis earthquake (DBE) in the 1987 Final Safety Analysis Report only caused Modules A - H to collapse, not the entire building. A total building collapse was considered a beyond DBE. The technical staff, however, believes that a seismic collapse involving the hardened parts of B707 (Modules J and K, autoclave vaults in Module H) is a credible accident. This is important because the inventory in B707 could increase as three residue lines and the plutonium stabilization and packaging system (SPS) start operations in the next year. In addition, RFETS plans to store approximately 160 residue drums, especially the high plutonium and americium ones, in the hardened parts of B707. This material would be excluded from the B707 MAR. The technical staff believes B707 is an acceptable location for processing and repackaging residues into pipe overpack containers because it reduces the site risk compared with continued drum storage in B771 and 776/777. However, the staff believes that the MAR should reflect the entire B707 special nuclear material (SNM) inventory and that this inventory needs be tracked as previously committed. The contractor has initiated a review to evaluate the increased risk associated with higher MAR levels during residue processing and plutonium SPS operations in B707.

**Recommendation 94-1.** Just in the last two weeks, expected completion dates for several construction projects to support salt stabilization have been delayed up to four weeks. As a result, the August 1997 milestone to begin salt stabilization is at risk. The site reps plan to follow preparations to ensure that the quality of testing, training, and the readiness assessment are not compromised in order to meet performance measures. In response to technical staff concerns and recent problems with the startup of the enriched uranium decontamination project, RFFO has indicated that they plan to take back approval authority from K-H for starting salt stabilization.

**Waste Management.** Building 440 commenced operations this week. This building can store approximately 8000 drums of transuranic and low-level radioactive waste. Consolidating waste drums in this building will allow waste drums to be removed from the protected area.

cc: Board Members