

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 14, 1998

TO: G. W. Cunningham, Technical Director

FROM: M. T. Sautman, R. F. Warther

SUBJECT: RFETS Activity Report for Week Ending August 14, 1998

B707 Material at Risk (MAR). K-H completed their Readiness Assessment of the B707 MAR control process. There were four pre-start findings and four post-start findings. The pre-starts addressed several revisions needed for the MAR procedure, its links to other procedures, and a declaration of readiness before conducting training on the latest revision of the work instructions. A graded startup of nuclear operations began late in the week. The Am-241 issue identified by the Site Reps (last week's report) was incorporated into a pre-start finding. After conducting a more extensive review of the data, SSOC added an Am-241 multiplier for Impure Salt From Cell Cleanout (average container dose rate 174 ± 117 mrem/hr). This multiplier increased the Pu-equivalent MAR for this material by 87% and raised the current building MAR inventory by 13.6 kg. Free Calcium Containing Spent Salt also had consistently high Am-241 contents, but so far it appears that all these containers already have a listed Am-241 content. The Site Reps will continue to examine container dose rates for pulverized incinerator ash and ash heel since their average dose rates are 118 ± 141 and 141 ± 111 mrem/hr.

Recommendation 94-1. Five weeks after it began, the dry residue repack management review resumed and completed the dry run. However, the dry run had to be canceled twice because of last minute revisions to procedures and operators who needed training. The Site Reps expressed concern with a cutting saw that sent a shower of sparks through gaps in the welding curtain onto a bag port bag. Since this plastic bag provides containment for the glovebox, it should be shielded as required by the Activity Control Envelope. The Site Reps also pointed out concerns with how sharp objects were handled inside the glovebox and an appendix whose wording could cause problems with certifying the residue as TRU waste.

PuSPS. BNFL stopped their demonstration of the plutonium packaging system after problems developed with the laser's power source, the wrong cover gas was used for the cans, and other issues.

Salts. The current throughput for salts is three runs per day. If RFETS had to process all the salts, 20 to 25 pyro-oxidation runs per day would be required to meet the July 2000 milestone. K-H formed a salt stabilization process improvement team. The team presented 27 recommendations that address scheduling, charge preparation, furnace operations, procedures and other topics. None of these recommendations address the assaying concern. Assays of the material likely will be a bottleneck, even if the salts are just repacked.

B779 BIO IVR. The Independent Validation Review (IVR) team completed its review of B779's implementation of their new BIO this week. A new BIO was required to decommission the facility because the existing FSAR did not provide sufficient latitude to allow a relaxation of engineered controls once the hazards are removed from this facility. The IVR team had several findings. On the positive side, the IVR team noted strong performance by Configuration Control Authorities, good use of BIO and related procedures during exercises, and safety management programs that are well integrated into the work culture. Three important issues were noted: (1) implementation of the administrative control for combustibles was inadequate, (2) building personnel level of knowledge regarding the BIO control set was weak and (3) the surveillance program has not determined the baseline condition of the building. Six findings were noted that require correction before the BIO can be implemented, and several other findings require correction within 30 days.

EPA and CDPHE Meeting. The Site Reps attended a meeting among DOE, EPA, CDPHE and K-H to discuss several issues, including implementation of the Rocky Flats Cleanup Agreement (RFCA) and the Memorandum of Understanding (MOU). Implementation of the MOU was a concern registered during the biennial review of the RFCA. The focus of the MOU comment relates to deactivation and decommissioning activities. The meeting ended prior to complete resolution. Discussions on this topic will be resumed on September 29.

cc: Board members