

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 5, 1997

TO: G. W. Cunningham, Technical Director
FROM: R. F. Warther, M. T. Sautman
SUBJ: RFETS Activity Report for Week Ending December 5, 1997

Residues. The last few containers of ion exchange resins were neutralized this week. All resin residues are now neutralized, moist, and are expected to be cemented by the end of FY98.

RFFO conducted their readiness assessment for salt pyro-oxidation this week. Some of the likely findings will address the Material at Risk tracking procedure and Shift Manager/Shift Technical Advisor knowledge of the process. Several findings address weaknesses that had also been identified by the Board staff and site reps, especially SM/STA weaknesses across the site. K-H hopes to start pyro-oxidation late next week.

RFETS is pursuing various alternatives to performing distillation at RFETS because of salt distillation problems. These include repacking moderate and low risk salts into pipe overpack containers, Pu separation at LANL with and without oxidation at RFETS, or simply adding something to the salt during repacking that will make the plutonium harder to recover.

The site reps have been encouraging the site to use segregation to avoid treating stable residues. SSOC believes that approximately 40% of the 18,000 kg of combustible residues might be stable. First, combustibles would not be processed if they were generated in process lines that did not involve the use of nitric acid and organic solvents. Second, plastic would be segregated from cellulosic material in acid-contaminated combustibles. Only cellulosic material would be treated. Based on experimental data and how the combustibles were generated, the site reps believe further reductions are possible for acid-contaminated combustibles.

Personnel uptake. K-H reported an uptake with a temporarily assigned dose of 6 Rem CEDE to an individual this week. The dose assignment was based on a bioassay sample taken on August 14, 1996. Several factors affected the long period of time to verify this dose, including: (1) requirements to submit additional samples following results above the threshold level, (2) requirements to take a lung count, (3) movement of internal dosimetry from B123 to B112 to decommission B123, and (d) delays in submission of samples by the employee. K-H will continue to monitor this individual and determine if the uptake resulted from Y or W Class Pu. The 6 Rem dose was assigned based on the assumption of Y Class. If the uptake is determined to be a result of a W Class uptake, the assigned dose will be roughly halved. K-H also is reviewing methods to further accelerate the bioassay process. The site reps will continue to investigate the bioassay program.

B771. B771 personnel continue to reduce risk from fire scenarios identified in the B771 BFO. First, K-H has moved 61/172 drums from the B771 Annex to B776. Second, B771 personnel continue to remove benelex from the gloveboxes.

Meetings with the Public. The site reps attended a meeting of the Citizen's Advisory Board on Thursday night. Most of the discussion centered around K-H's performance measures, including a review of FY96 and 97 performance measures. RFFO is negotiating the FY98 performance measures with K-H.

cc: Board Members