DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 18, 1997

TO: G.W. Cunningham, Technical Director
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FROM: R.F. Warther, M.T. Sautman

SUBJ: RFETS Activity Report for Week Ending July 18, 1997

Waste Management. The Site Reps observed portions of the Carlsbad Area Office audit of the RFETS characterization, transportation, and certification programs for TRU waste, including a dry run of TRUPACT-II loading operations. The CAO auditors found 18 *Conditions Adverse to Quality*, made five *Recommendations*, and noted several deficiencies. They evaluated RFETS readiness in three broad areas: (1) adequacy of procedures; (2) implementation of procedures; and (3) effectiveness of implementation. The overall summary was: (1) the adequacy of RFETS procedures was indeterminate; (2) implementation of procedures was marginal; and (3) effectiveness of the procedures and program was satisfactory. On a positive note, CAO noted that the head space gas sampling program and procedures were very effective, and the Acceptable Knowledge program to determine pyrophoricity and reactivity is very good.

Recommendation 94-1. Equipment problems identified during testing make it nearly impossible for RFETS to make the August 1997 milestone to begin pyro-oxidation of salts. The cooling water flow for furnaces in all three gloveboxes is below design requirements. Larger tubes and a new tap into the water distribution piping will be installed to bypass possible blockage in the lines. Additionally, the stirrer shafts and furnace lid assemblies in one glovebox will have to be shortened because the stirrer shaft is too long. The RA is not expected to start for at least another six or seven weeks.

Crimp and Seal Crimp and seal of pits at RFETS was stopped twice over the past week for two reasons. In the first, case, LANL called to inform RFETS that the backfill gas being used was not adequate for reliable long term storage. As a result, K-H and SSOC personnel had to change the gas mixture to proceed. The change was made and the process continued. This issue was discussed in more detail with the Technical Director. In the second case, a crit violation occurred when a pit not meeting the requirements of the glovebox NMSL was introduced. The procedure to verify gloveboxes are in a condition ready for work (NMSL 3.12) was somewhat ambiguous, and the supervisor admitted that operator error was also a root cause. The operators admitted that they were under some pressure to complete a performance measure, but this was not a direct cause of the error.

Hazardous Chemical Management. In response to the Hanford chemical explosion, RFFO conducted an assessment of the RFETS response to the incident, the status of the 1994 Chemical Safety Vulnerabilites, and management of hazardous chemicals. The 105 gallons of HAN in B771 was disposed off-site in June, but another gallon of HAN was found in B559 and is now being discarded. Although strong oxidizers and acids remain at RFETS, no safety concerns were identified. Findings addressed the lack of a response plan to the Chemical Vulnerability Assessment, procedural non-compliances, and the site-wide management of chemicals.

cc: Board Members