DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 5, 2001

TO: J. K. Fortenberry, Technical Director **FROM:** D. F. Owen, RFETS Site Representative

SUBJECT: RFETS Activity Report for the Week Ending January 5, 2001

Criticality Safety/Conduct of Operations. An additional violation of a posted criticality mass limit in Building 707 was discovered at the end of last week, this time in a 55-gallon transuranic waste drum. The posted limit of 200 grams fissionable material was violated when several waste items with a combined fissionable gram recorded value of 294 grams were packed into the drum. The drum packing occurred on December 6th but the violation was not discovered until drum movement preparations on December 29th.

At the follow-up "fact finding" meeting on Tuesday, it was determined that workers were aware that the combined recorded gram values of the items to be packed would be greater than the 200 gram limit but had interpreted supervisory/management direction to package all the items into one drum. As with the criticality mass limit violation in packing 10-gallon drums (see last week's site rep report), there appears to be a failure of operations personnel to follow basic criticality safety training and ensure compliance with applicable posted limits. Additionally, as with initial fact-finding on the 10-gallon drum occurrence, review of governing procedures and hazard analysis at this meeting was not sufficiently detailed to clearly determine what should have been done versus what actually happened.

The site rep. and staff discussed these violations, including deficiencies with fact-finding, with DOE-RFFO management. As a result of the violations in Building 707, Kaiser-Hill has suspended certain material packing and handling operations at RFETS. (1-C)

DOE-RFFO Follow-up Action. In follow-up discussions with the site rep. and staff, DOE-RFFO management stated that the violations noted above combined with a series of work control violations and conduct of operations problems during the past several months (see site rep. reports of November 3rd and September 15th) cause concern in certain key areas related to safety. Specifically, that these violations and problems indicate that Kaiser-Hill is not providing adequate: management and supervision to control work; improvement actions on occurrences to preclude recurrence; reinforcement of safety roles and responsibilities of operations personnel; and independent safety oversight.

On Friday, the DOE-RFFO Manager outlined these issues in a letter to Kaiser-Hill noting her expectation that Kaiser-Hill develop a comprehensive corrective action plan and that the plan be reviewed and concurred in by the DOE-RFFO Manager. Those actions needing to be done prior to resuming suspended operations are to be reviewed for completion by DOE-RFFO prior to resumption. (1-C)

cc: Board Members