DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 28, 2001

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

SUBJECT: RFETS Activity Report for the Week Ending December 28, 2001

Work Control/Conduct of Operations. As reported on October 12th, a Building 776 evacuation was conducted when a chemical odor was detected and several personnel noted symptoms including nausea and coughing. Initial fact-finding revealed that cylinders containing organic compounds had been vented in the mass spectrometry lab being cleaned out by Building 559 personnel in preparation for deactivation and decontamination. The venting was being done without work/safety planning in place nor Building 776 operations authorization being obtained.

Kaiser-Hill investigation of this event has been completed and a report was issued late last week. In addition to the main root cause of failure to have proper work planning and Building 776 operations authorization, the report notes numerous contributing causes and other aspects of this event, such as:

- The scope of the lab clean-out effort was based on informal, infrequent discussions between Building 559 and Building 776 senior management and no description of the activities or end point definition had been developed;
- clear roles and responsibilities were not defined as to who had control of operations in the lab;
- supervision by Building 776 and Building 559 management on the lab clean-out effort was deficient and the effort was considered covered by the Building 776 Plan-of-the-Day under "general houskeeping;"
- while not in the facility operations/shift management organization, certain Building 776 personnel were aware that the cylinder venting was on-going or planned but had only assumed (i.e., not checked) that the venting would be done to an approved procedure;
- Building 559 and 776 personnel did not implement several RFETS Chemical Management Program requirements regarding accumulation, tracking, physical inventory and disposition of such chemicals in this lab.

Corrective actions are under development by Kaiser-Hill. DOE-RFFO expects to complete their review of the Kaiser-Hill report and their investigation of this event in early January. (1-C)

Emergency Preparedness. Site rep. review of RFETS plans for conducting emergency preparedness exercises in FY 2002 indicated that none of the site-wide exercises involved a nuclear incident scenario in a major nuclear facility. The first FY 2002 exercise conducted in November simulated a propane fire in a low level waste (LLW) storage tent but with no LLW container breach (see site rep. report of November 16th). Other site-wide exercises planned for FY 2002 are a wildland fire exercise and two exercises involving transportation accidents.

The site rep. discussed this issue with DOE-RFFO management. In response, DOE-RFFO management stated that Kaiser-Hill will be requested to perform at least one site-wide exercise in FY 2002 that involves a nuclear incident scenario in a major nuclear facility. (1-C)