DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 27, 2002

TO: J. K. Fortenberry, Technical Director
FROM: D. F. Owen, RFETS Site Representative
SUBJECT: RFETS Activity Report for the Week Ending November 29, 2002

The site rep. will be out of the office on Thursday and Friday.

Work Planning/Falling Object Near Miss - Followup. As reported last week, an individual was struck on the shoulder by a 4 ft long channel bar (weighing about 10 lbs) that had fallen about 18 ft after being cut by a worker in the overhead in Building 776. The individual was assigned to monitor/assist the worker in the overhead and he had moved under the scissor lift to move a power cord without considering that overhead cutting was in progress. The following factors contributed to this occurrence:
- complicated by use of headsets to receive emergency/criticality alarms in the room, these workers did not employ an effective means of communication.
- the bar had been cut by the worker without use of an appropriate method to capture the cut item (e.g., tie-off or a second person holding the item), the work package had no explicit requirement for capturing cut items when working in the overhead (skill-of-the-craft/training was being relied on for this control);
- head protection beyond a "bump cap" was not required or in use, however, the work package did specify that "work areas shall be evaluated for head protection by industrial health and safety;" the work crew supervisor did not obtain this required evaluation (site-wide requirements call for hard hats in areas of overhead work).

Corrective actions being specified by Buildings 776/707 management did not appear to fully address the factor regarding use of controls calling for on-the-job evaluations. Other controls calling for such evaluations after work planning (e.g., evaluate the need to cordon off work areas) were also specified in the work package. The site rep. inquired with DOE-RFFO and Kaiser-Hill management about specifying such controls versus performing the evaluations as part of work planning and specifying definitive controls where practical. In response, Kaiser-Hill management indicated that the review of work packages in Buildings 776/707 and a site-wide lessons-learned to be issued on this event will address reducing/eliminating such on-the-job evaluations and specifying more definitive controls where practical. (1-C)

Tank Cleanout - Spread of Contamination. As RFETS reported late last week, a spill of mixed waste from the 231A Tank (a tank south of Building 371/374) occurred with highest levels of contamination being 600 dpm/100 cm^2. The 231A Tank (capacity of 250,000 gallons) is categorized as a radiological facility and was historically used for storing low-level liquid wastes (e.g., laundry wastes). The spill occurred during a compressed-air blow-down of the 4-inch hose line between the pump and centrifuge following sludge pumping operations. The purpose of the blow-down (performed many times during the past year) is to empty the line of sludge prior to freezing weather. The 4-inch line separated from its connection near the centrifuge. This activity was being performed by a sub-contractor. DOE-RFFO personnel questions during Kaiser-Hill's fact-finding revealed that the blow-down task was not addressed by procedure. Design, procedural, and Kaiser-Hill oversight improvement actions are in development. (3-B)