DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 24, 1999

TO: G. W. Cunningham, Technical Director
K. Fortenberry, Deputy Technical Director

FROM: M. T. Sautman

SUBJECT: RFETS Activity Report for Week Ending June 24, 1999

Wetted HEPA Filters. SSOC has completed changing out the credited HEPA filters in B707. These filters were potentially degraded due to past plenum deluge system testing. (III-A.1)

Building 771 Deactivation. RMRS completed the tracer gas test for the "birdcage" as well as size reducing a small, cold glovebox. In accordance with an industry standard, nitrous oxide gas was used to evaluate air currents in the "birdcage." As mentioned last week, background concentrations were slightly elevated due to the exhaust configuration. Nonetheless, all of the window configurations resulted in concentrations that were rated fair; none were rated poor or failed. Since some of the workers are new to size reduction, training was conducted on the use of supplied air and tools. Despite earlier concerns, the foremen and building managers are giving the workers time to practice and have been responsive to improvements suggested by the workers. Building managers hope to commence the management review next week after completing the material dispersion evaluation with fluorescent powder.

K-H is procuring a modular size reduction and waste packaging facility for B776/777 that uses semi-automated robotic operations. Contaminated gloveboxes and tanks are to be size reduced inside a hard enclosure using remote and/or automated equipment (e.g., mechanical, thermal, laser, or plasma arc). A review of the Request for Proposal's Statement of Work and Design Criteria found that it avoided some of the problems encountered with the "birdcage." For instance, it includes a summary of hazards to be encountered during size reduction and the conceptual criteria for their mitigation. The package also defines which decommissioning sets are to be handled by the system. (III-B.1.a)

Decommissioning Demonstrations. Demonstrations were conducted to evaluate two new decommissioning techniques. Fogging was used on nitric acid-contaminated raschig rings to see if it would fix contamination on the rings. Preliminary results indicate fogging may allow workers to remove rings from tanks wearing just respirators rather than supplied air. In addition, a vendor demonstrated the use of an oxy-gasoline torch for size reducing metal equipment. Although it cut through some metal items quickly with little smoke generation, it was not able to cut through stainless steel. Plasma arc torches are still being pursued for size reducing gloveboxes and other contaminated equipment. (III-B.1.a)

Interactions with the Public. The Site Rep answered questions from Mary Harlow about waste storage in B460 and contamination in B771. Ms. Harlow handles RFETS issues for the city of Westminster.

cc: Board members