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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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October 3, 1996

The Honorable Alvin L. Alm
Assistant Secretary for Environmental Management
Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0113

Dear Mr. Alm:

The Defense Nuclear Facilities Safety Board (Board) staff has reviewed the Department of Energy's (DOE) Plutonium Ventilation System Study of March 15, 1996, and the subsequent Corrective Actions Status Report of July 16, 1996. In responding to the Board's ventilation concerns expressed in Technical Report, DNFSB/TECH-3, DOE based its ventilation study on the requirements of DOE Order 420.1, revisions to Order 420.1, and some guidance in DOE Order 6430.1A.

The Board understands that upgrades to ventilation systems and the applicable Orders and Guides will require some time. The Board will continue to monitor these actions. The Board also understands that DOE, working jointly with the Board staff is establishing a working group of engineering practitioners from M&O contractors, Field Offices and Headquarters who will define the scope and content of a technical design guide that will serve the needs of DOE nonreactor nuclear applications. Some of the ventilation system topics for consideration by the working group, which are of interest to the Board, should include the following:

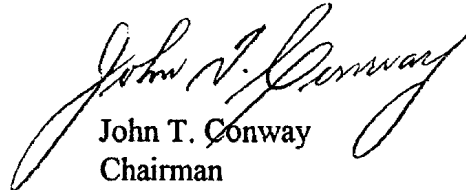
- Maintaining a negative pressure that will ensure adequate treatment of the exhaust.
- Identifying, treating, and filtering the effluents—including leakage.
- Maintaining and appropriately testing for long-term degradation.
- Protecting the public by appropriately assessing discharges during accident scenarios.
- Providing an adequate capacity for complex-wide, high-efficiency particulate air (HEPA) testing and maintaining the Qualified Product List Program for HEPA filters.

In addition to the above, the following topics related to ventilation systems, are also of interest to the Board:

- Considering the public (at the point of nearest access) and workers in accident analyses.
- Designing and constructing mechanical and electrical systems with the reliability and redundancy required by the safety analysis (per paragraph 5.0 of the Implementation Guide for DOE Order 420.1).

For its part, the Board staff will continue to ensure that these matters are addressed in their review of DOE's proposed corrective actions supporting DOE's ventilation study and considered in the development of DOE's technical design guide.

Sincerely,



John T. Conway
Chairman

c: Mr. Mark B. Whitaker, Jr.