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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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July 31, 2003

The Honorable Jessie Hill Roberson
Assistant Secretary for Environmental Management
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0113

Dear Ms. Roberson:

On May 6, 2003, a fire occurred in the basement of Building 371 at the Rocky Flats Environmental Technology Site (RFETS) as workers were preparing to remove Glovebox 8 from the facility. Glovebox 8 was configured as a dumbwaiter, with two gloveboxes (Gloveboxes 9 and 10) attached. About six months ago, Gloveboxes 9 and 10 were decontaminated and removed. The fire broke out after operators began cutting a hole near the top of Glovebox 8 to establish a ventilation path for the glovebox.

The Department of Energy's (DOE) Rocky Flats Field Office (RFFO) stated that the potential for serious harm together with concerns regarding the work planning for this operation led them to conduct a review to determine the cause of the fire and how to prevent a recurrence of such an event. The DOE-RFFO review team's report, issued on June 23, 2003, concluded that contributing causes for the fire included the presence of a significant quantity of combustibles in Glovebox 8 and the inappropriate use of a standard work package which did not identify this fire hazard or the atypical configuration of the glovebox. The DOE-RFFO review team did not determine the cause of the fire—the team's report states that the contractor's fire department was continuing to investigate the cause.

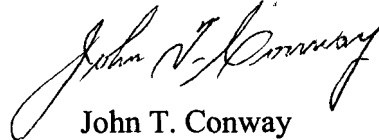
On July 7–10, 2003, the Defense Nuclear Facilities Safety Board's (Board) staff visited RFETS to evaluate the work leading up to the fire, the cause of the fire, the response to the fire by the contractor and DOE, and whether appropriate corrective actions are being implemented. This review is continuing, and the contractor's review of the cause of the fire has yet to be completed. It is clear, however, that aggressive action is needed to ensure the approximately 400 gloveboxes which remain to be removed at RFETS do not contain unacceptable amounts of combustibles, and to ensure that decontamination activities do not result in further accumulation of excessive combustibles in gloveboxes. Moreover, it appears that the use of cerium nitrate for decontamination of gloveboxes could initiate a fire if towels, disposable wipes, and other materials used in the process are not neutralized as specified in the contractor's procedure. This places utmost importance on neutralizing cerium nitrate in used towels and wipes. In addition, debris removed from the site of the fire should be analyzed to assist in the fire investigation.

Therefore, pursuant to 42 U.S.C. § 2286b(d), the Board requests that DOE provide a report within 15 days of the receipt of this letter providing the following information:

- how DOE has assured that the gloveboxes remaining at RFETS do not contain unacceptable amounts of combustibles,
- how the future accumulation of excessive combustibles will be prevented,
- how it is assured that materials used in the cerium nitrate decontamination process are neutralized and disposed of properly, and
- measures taken to ensure that all material and debris from Glovebox 8 are thoroughly analyzed to support the fire investigation and then verified to be properly neutralized for final disposition.

The Board and its staff are continuing to review the causes and implications of the fire at RFETS. The Board intends to provide further comments to DOE once this review is complete.

Sincerely,



John T. Conway
Chairman

c: The Honorable Robert Gordon Card
Mr. Eugene Schmitt
Mr. Mark B. Whitaker, Jr.