Department of Energy



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Washington, DC 20585 MAY 1 5 1994

The Honorable John T. Conway Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, N.W. Suite 700 Washington, D.C. 20004

Dear Mr. Chairman:

This letter serves as a formal notification of the Department of Energy's (DOE) closure of Recommendation Number 4 under the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-4 Implementation Plan. Specifically, Recommendation Number 4 states: "DOE Headquarters complete an independent review of the recent incidents at Fernald, identifying the root causes for those incidents and the corrective actions required to remedy the underlying problems and translate the Fernald findings into lessons learned applicable to other facilities."

The recent incidents at Fernald to which the Board refers to include the inadvertent transfer of Uranyl Nitrate Hexahydrate (UNH) solution between Plant 2/3 and Plant 8 on April 27, 1993, and a spill of an estimated 30 gallons of UNH solution that occurred during recovery operations from the inadvertent transfer on April 28, 1993. As a result of these incidents, the Board expressed their concerns relative to the adequacy of the communications, management support, and direction from both the DOE/Fernald Field Office and the Fernald Environmental Restoration Management Corporation (FERMCO) organizations. Finally, concerns were raised over the lack of a proper maintenance program and insufficient implementation of the FERMCO Remedial Support Operations roles, responsibilities, and authority.

The approved DNFSB Recommendation 93-4 Implementation Plan lists the following five separate actions as the course of action to be taken in response to Action Number 4:

- 1. The Office of Environment, Safety and Health will complete its review of the Type B Investigation;
- The Deputy Director, Office of Eastern Area Programs, Office of Environmental Restoration, will lead the independent assessment;
- 3. The Fernald site will be assessed on how it is addressing the corrective actions recommended in the Type B Investigation;



- 4. The assessment and recommendations for Fernald will be documented; and
- 5. The corrective action plan will be developed and monitored.

All of these actions have been completed. On February 4, 1994, we submitted to your office the "Independent Headquarters Assessment of Corrective Actions at Fernald" and the "Root Cause Analysis Uranyl Nitrate Hexahydrate Incidents at Fernald, Ohio, Site, April 27 and 28, 1993." The independent Headquarters assessment found a number of deficiencies in the implementation of the corrective actions resulting from the Type B investigation. Several examples of these deficiencies have been cited in the Independent Headquarters Assessment Report. However, no additional corrective actions were needed beyond those already identified on the basis of the Type B investigation. The independent root cause analysis confirmed that all causes contributing to the Uranyl Nitrate Hexahydrate incidents had been previously identified in the Type B investigation report.

Therefore, all the corrective actions required have been adequately identified in order to remedy the underlying problems. We are monitoring the implementation of these corrective actions to ensure their orderly and systematic completion.

In addition, lessons learned taken from the UNH incidents and the findings of the Type B investigation were provided to the Fernald workers through training and briefings. Lessons learned were also made available to the DOE offices through the DOE Occurrence Reporting System. The objective of the lessons learned was to provide direction and guidance on prevention of such incidents in the future.

We take the Board's recommendations very seriously and afford them the highest priority for resolution.

Sincerely. Thomas P. Grumb/19 Assistant Secretary for Environmental Management