

John T. Conway, Chairman  
 A.J. Eggenberger, Vice Chairman  
 John W. Crawford, Jr.  
 Joseph J. DiNunno  
 Herbert John Cecil Kouts

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004  
 (202) 208-6400



February 1, 1994

The Honorable Hazel R. O'Leary  
 Secretary of Energy  
 Washington, D.C. 20585

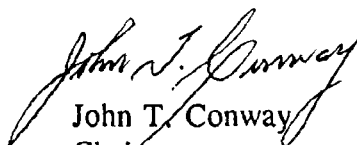
Dear Secretary O'Leary:

From November 30, 1993, through December 2, 1993, members of the Defense Nuclear Facilities Safety Board (DNFSB) Staff visited the Mound Plant in Miamisburg, Ohio. The purpose of this trip was to review compliance with safety-related Department of Energy (DOE) Orders by EG&G Mound Applied Technologies. It is a pleasure to note that the review observed significant progress at this site toward achieving the objectives of DNFSB Recommendation 90-2. The assessments by EG&G were rigorous and included non-mandatory requirements, Requests for DOE Action (RFAs) have been submitted for all identified non-compliances and, in general, the DOE Orders reviewed are being demonstrably adhered to in practice. Of particular note was the EG&G facility maintenance program that is run in a disciplined fashion and is well documented.

However, additional work needs to be done. Enclosed for your consideration are a number of observations from the DNFSB Staff members' review. They noted a number of deficiencies--most troubling are the long delays in DOE's handling of RFAs required to bring the contractor into literal compliance with DOE Orders. None of the RFAs have been approved by DOE despite delays of well over a year. This is an observation we have also made at other sites. Please inform the Board of DOE plans to correct these deficiencies, especially the long delays associated with disposition of contractor RFAs.

If you need additional information, please let me know.

Sincerely,

  
 John T. Conway  
 Chairman

c: The Honorable Tara O'Toole, EH-1  
 The Honorable Victor Reis, DP-1  
 Mr. Mark Whitaker, Acting EH-6  
 Mr. Dewain Eckman, Manager, DOE-DAO

Enclosure: DNFSB Staff Observations on Order Compliance at the Mound Plant

## DNFSB Staff Observations On Order Compliance at the Mound Plant

1. **Background:** During the period November 30, 1993 through December 2, 1993 DNFSB Staff members C. Martin, S. Krahn, J. DeLoach and outside expert A. Faramarzi conducted a review of EG&G Mound Applied Technologies compliance with safety-related DOE Orders. The intent of this review was an in-depth assessment of EG&G compliance with DOE Orders based on a sampling of ten DOE Orders: 4330.4A, *Maintenance Management Program*; 5000.3B, *Occurrence Reporting and Processing of Operations Information*; 5400.1, *General Environmental Protection Program*; 5400.2A, *Environmental Compliance Issue Coordination*; 5480.19, *Conduct of Operations Requirements for DOE Facilities*; 5480.20, *Personnel Selection, Qualification, Training, and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities*; 5480.21, *Unreviewed Safety Questions*; 5480.22, *Technical Safety Requirements*; 5480.23, *Nuclear Safety Analysis Reports*; and 5700.6C, *Quality Assurance*. The DOE Dayton Area Office and DOE HQ will be evaluated on subsequent reviews.
  
4. **Discussion:** DOE-DP procedure DP-AP-202, *Order Compliance Self-Assessment Instruction*, defines order compliance as existing when "applicable DOE Order statements (mandatory and non-mandatory) are included in appropriate documented policies, programs, procedures, and practices (*Administrative Compliance*) and these documented policies, programs, procedures and practices are demonstrably adhered to during office or facility activities (*Adherence Assessment*)."
  - a. **Status of Compliance:** The Staff's review indicated that a considerable amount of effort had been expended by the personnel at EG&G who conducted the assessments. The status of compliance with DOE Orders at EG&G appears to be generally satisfactory; in most cases, the intent of the subject Order is met from the standpoint of protecting public health and safety. At EG&G defense nuclear facilities, the orders (including non-mandatory requirements) are relied upon to execute the mission, RFAs have been submitted for all non-compliances identified by EG&G, and EG&G has a program to assess adherence to the orders. Nevertheless, a number of deficiencies exist.
  
  - b. **Administrative Compliance Deficiencies:** (1) The Request for DOE Action (RFA) for DOE Order 5700.6C, *Quality Assurance*, was inadequate technically. But more importantly, none of the RFAs (nor most Implementation Plans) have been approved by DOE despite delays of well over a year. Several cannot be fully implemented without additional funding which has yet to be identified by DOE. (2) Regarding DOE Order 5480.20, *Personnel Selection, Qualification, Training, and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities*, the latest draft Training Implementation Matrix (TIM) does not contain all the requirements in the Order and contains omissions. For example, it does not require Probabilistic

Risk Assessment (PRA) training for operations and technical support personnel despite work on and PRAs by EG&G Mound personnel. (3) With respect to DOE Order 5480.19, *Conduct of Operations Requirements for DOE Facilities*, there is no requirement in the *EG&G Mound Safety and Hygiene Manual*, MD-10286, Section M, "Lockout/Tagout Procedure", which requires that operations and maintenance personnel periodically review lockout/tagouts and associated documentation.

- c. Adherence Deficiencies: For many of the orders reviewed, there have been inadequate management and independent reviews, and it is not clear that line managers are being held accountable. Regarding DOE Order 5480.20, *Personnel Selection, Qualification, Training, and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities*, the information contained in the latest draft TIM was incomplete, very disorganized and did not adequately document the current status of the program. For this reason, it was impossible to evaluate the status of the training and qualification program at EG&G.

5. **Future Staff Actions**: The DNFSB Staff will return to the Mound Plant to conduct follow-up reviews of order compliance in March of 1994.