

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



July 20, 1994

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

Dear Secretary O'Leary:

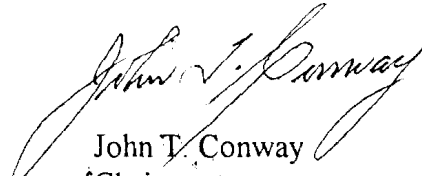
The Board wishes to call your attention to staffing deficiencies at the Amarillo Area Office (AAO) that are adversely affecting the performance of safety-related functions assigned that office.

The current pace of dismantlement activities, coupled with the necessary enhanced emphasis on nuclear safety requirements, appear to exceed the existing capability of the AAO staff. Observations by members of the Board's Staff, as noted in the enclosure, indicate that this situation has resulted in delays in implementing nuclear safety requirements, as well as an inability by the Department of Energy (DOE) to ensure the contractor's readiness to proceed safely with new activities. Members of the Board have discussed with senior DOE officials on several occasions over the last year the inadequate staffing situation at the AAO. In addition, the Board's letter of May 27, 1994, stated that the current overall DOE technical staffing situation is already *"below a level which the Board believes to be necessary for continued safety."*

The Board recognizes that efforts are currently underway to fill vacant senior manager positions and several engineering positions at the AAO. However, this effort appears to be laboring under the current hiring process and the limited actions taken to expedite filling these positions. Even with these positions filled, it is not evident that sufficient technical and management competence in middle management and staff at the AAO will be available to support the pace of activities at the site. Staffing the AAO with an adequate number of personnel of sufficient technical competence should receive high priority within the Department.

This matter is referred to you for appropriate Headquarters action. The Board wishes to be advised of follow-up actions taken.

Sincerely,



John T. Conway  
Chairman

c: The Honorable Victor H. Reis, DOE DP-1  
The Honorable Archer L. Durham, DOE HR-1  
Mr. Mark Whitaker, Acting EH-6

Enclosure

## STAFF OBSERVATIONS

### 1. Closure of Zone 4 ORR Findings

During the week of June 27, 1994, Defense Nuclear Facilities Safety Board (DNFSB) Staff observed DOE's efforts to verify closure of pre-start findings from the Pantex Zone 4 Operational Readiness Review (ORR). Major observations of this effort follow:

- a. One of the Zone 4 ORR pre-start findings was the AAO's failure to implement DOE Order 5480.31, *Startup and Restart of Nuclear Facilities*. The ORR team emphasized that the Order requirements for closure of findings needed to be implemented. Neither the AAO nor Mason & Hanger have closely followed these requirements in the closure of pre-start findings. As described in the following observations, the Staff considers that DOE verification efforts were impeded due to this inadequate response to the ORR finding.
- b. Corrective action plans were not developed and approved in a manner consistent with the applicable requirements in DOE Order 5480.31 and the related DOE ORR Standard, DOE-STD-3006-93. Many of the corrective action plans did not include a root cause analysis. Some of the closure packages identified actions which were not scheduled to be completed until after the verification effort. DOE approval was not sought or obtained for the proposed corrective action plans prior to arrival of the DOE verification team.
- c. Because the DOE Order 5480.31 requirements regarding development and DOE approval of corrective action plans were not closely followed, the DOE verification team performed the function of review and approval. The verification team identified additional corrective actions for several of the findings. As a result, the team could not verify satisfactory completion of all required corrective actions, and these findings could not be closed during the period of the review.

### 2. Conduct of Operations Implementation & Training and Qualification Upgrade

The DNFSB Staff have followed the implementation of conduct of operations and the upgrades to training and qualification at Pantex. Some Staff observations follow:

- a. The AAO's lack of progress toward conduct of operations implementation has been attributed to the manpower diverted to support the DOE validation effort during the maintenance mode. Therefore, the AAO commitments to the Board regarding conduct of operations implementation are not being met.

- b. The AAO has fallen further behind in its commitments to the Board regarding training and qualification of Federal employees. This delay is purported to be due to the AAO organization changes and vacant senior manager positions.
- c. The AAO managers have expressed little understanding or ownership of Federal employee training. A general training and qualification procedure was approved on October 22, 1993, but has not been implemented. Additionally, the AAO's training and qualification program lacks specific guidance in the areas of minimum qualifications, formal qualification process, and the use of training performance as an input to performance evaluations.
- d. DOE has not developed a formal plan to provide oversight of the contractor's training and qualification program as required by DOE Order 5480.20 Section 8.e. This discrepancy was specifically noted in the Board's letter to DOE on July 6, 1993.
- e. The schedule to complete the training and qualification of five AAO Facility Representatives (FRs) continues to slip. Completion of qualification for four FRs has slipped to September 1994. One FR's qualification has slipped to October 1994, pending development of additional training material.

### 3. Safety Envelope Review

During the week of June 27, 1994, DNFSB Staff reviewed the Pantex authorization basis documentation and programs put in place to control the safety envelope defined by this documentation. The following are the Staff's major observations:

- a. The Basis for Interim Operation (BIO) acts as the current umbrella authorization basis document at the Pantex site. A site's authorization basis includes those aspects of the facility design basis and operational requirements relied on by DOE to authorize operation. There still appears to be disagreement and confusion on what constitutes the authorization basis for Pantex, in part because some documents have been approved and others have not. The BIO, which was originally submitted to DOE in February 1993 and is the integrated authorization basis for several Pantex facilities, has not been approved. In addition, many documents referenced by the BIO also have not been approved by DOE. It is imperative to safety that the contractor knows explicitly what constitutes the authorization basis of a facility.
- b. The Pantex BIO does not identify the Critical Safety Systems Manual (MNL-1101) and its addenda as authorization basis documents. The BIO for Building 12-84 does not identify the W79 SAR Addendum as an authorization basis

document. These are examples of documents that define the safety envelope for the Pantex facilities, yet are not included in the BIO listing of authorization basis documents.

- c. DOE Order 5480.21, *Unreviewed Safety Questions*, (USQ), provides contractors with the flexibility to make changes, while requiring that changes with a potential impact on the authorization basis be brought to the attention of DOE. Because of confusion on what constitutes the authorization basis for facilities at Pantex, changes have been made to authorization basis documents without performing the required USQ screenings or safety evaluations. Examples include changes made to Building Standards, the Critical Safety Systems Manual (MNL-1101), and Pre-Operational Checklists.