

A.J. Eggenberger, Chairman  
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# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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March 20, 2008

The Honorable Thomas P. D'Agostino  
Administrator  
National Nuclear Security Administration  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585-0701

Dear Mr. D'Agostino:

The Defense Nuclear Facilities Safety Board (Board) has been following closely the the National Nuclear Security Administration's (NNSA) plans and progress with regard to the dismantlement of the B53 weapon system. The results of onsite review activities by the Board's staff, as well as a review of correspondence between the Pantex Site Office and site contractor (B&W Pantex), indicate that the planning for the B53 system departs from conventional dismantlement strategy.

The proposed approach, which is not supported by the existing safety basis, involves the handling of uncased conventional high explosives (CHE) in a Pantex nuclear explosives bay, as opposed to a nuclear explosives cell. Handling of uncased CHE in a bay is currently prohibited by documented safety analyses at Pantex because of the significant differences between bays and cells in their ability to mitigate a high explosive violent reaction (HEVR). Although an HEVR involving a B53 weapon at Pantex would not pose a significant hazard to the public, the Board is concerned that the proposed approach could result in additional and unwarranted risk to collocated workers and operations outside the nuclear explosives bays.

The Board recognizes that the final dismantlement strategy for the B53 weapon system has not been formally approved; however, all ongoing planning is focused on the proposed approach involving the handling of uncased CHE in a bay. Minimal resources are being devoted to exploring the feasibility of employing the current typical dismantlement strategy, in which operations involving uncased CHE are performed in a cell. This prematurely eliminates an important alternative, which would be expensive and time consuming to establish at a later date should risks be confirmed to exist with the one approach being considered at the present time.

Therefore, pursuant to 42 U.S.C. § 2286b(d), the Board requests a briefing within 60 days of receipt of this letter describing the risks associated with each of the dismantlement strategies NNSA is considering for the B53 weapon system. This briefing should identify whether the proposed strategy poses additional or unique risks relative to the conventional strategy of a combination of bay and cell operations, or a strategy that uses only a cell. A formal analysis of the relative risks of activities should be provided to justify the proposed dismantlement strategy.

Sincerely,

A handwritten signature in black ink, appearing to read "A. J. Eggenberger". The signature is fluid and cursive, with a large initial "A" and "E".

A. J. Eggenberger  
Chairman

c: The Honorable William C. Ostendorff  
The Honorable Robert L. Smolen  
Mr. Steven C. Erhart  
Mr. Mark B. Whitaker, Jr.