



**Department of Energy**  
**National Nuclear Security Administration**  
Washington, DC 20585

September 23, 2003

The Honorable John T. Conway  
Chairman  
Defense Nuclear Facilities Safety Board  
625 Indiana Avenue, NW  
Suite 700  
Washington, D.C. 20004-2901

Dear Mr. Chairman:

This is an update to a Defense Nuclear Facilities Safety Board (DNFSB/Board) briefing conducted by the Y-12 National Security Complex, Y-12 Site Office and BWXT Y-12 in August 2002. The briefing addressed the DNFSB letter of May 13, 2002, which noted continuing concerns related to Fire Protection in the Wet Chemistry area of Building 9212 (B-1 Wing) at Y-12. During that presentation Y-12 identified the near term B-1 Wing improvements to fire protection already taken, the follow-on actions that had been approved and a commitment to further evaluate the installation of a B-1 Wing fire suppression system.

The current combination of administrative and engineered controls is considered an adequate interim measure during limited operations to reduce the excess quantities of organic solvent in the inactive columns and for near-term operations. In response to the National Nuclear Security Administration, BWXT Y-12 conducted comparative risk and cost analysis of eight fire protection options for B-1 Wing ranging from full sprinkler installation to continuation of the current engineered and administrative controls. NNSA accepted the near-term B-1 Wing fire protection improvement option which upgrades egress in accordance with National Fire Protection Administration 101 (Life Safety Code), pull station installation by exit doors to initiate audible evacuation alarms, removing/repairing deficient existing equipment and addressing hazards associated with processing. This option was briefed to the Board in August 2002 and is currently being implemented with an estimated completion in 2 to 3 years. A systems thinking review conducted in July/August 2002 suggested that fire suppression capability could be provided for the Wet Chemistry operations.

Clearly, the long-term solution to this issue and continued mission assurance is to provide a new capability in a facility meeting modern facility safety codes and standards. Planning for the replacement capability has begun. We anticipate that NNSA will approve a CD-0 decision early in calendar year 2004.

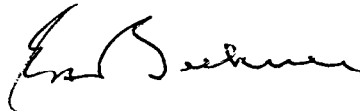
Options that would mitigate the fire risk in B-1 wing for the interim period until the long-term solution is implemented are being evaluated. One such option is a strategy developed by BWXT Y-12 to shroud the active columns in B-1 wing to funnel combustibles to the first floor of B-1 wing where they can be doused by sprinklers. BWXT is planning to prototype the shrouds on inactive columns presently in B-1 Wing, and once installation is completed, the shrouding system will be evaluated for implementation on the active columns.



In addition, Y-12 is conducting a Performance Based Fire Analysis to ensure all risks are properly identified and addressed by this approach. Given a favorable safety assessment of the approach, current plans are to have the prototype shrouds in place by the end of 2003. Evaluation of the various options will proceed in parallel to allow for selecting option(s) and proceeding with timely implementation and still allowing for the opportunity to place a request for a capital line-item in the FY 2006 budget request, if necessary.

If you have any questions concerning our response, please contact me or have your staff contact Mr. David E. Beck at (202) 586-4879 or Mr. Bill Brumley at (865) 576-0752.

Sincerely,

A handwritten signature in black ink, appearing to read "Everet H. Beckner". The signature is fluid and cursive, with the first name being the most prominent.

Everet H. Beckner  
Deputy Administrator  
for Defense Programs

cc:

M. Whitaker, DR-1