

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 21, 2003

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** W. White, Pantex Site Representative  
**SUBJECT:** Pantex Plant Activity Report for Week Ending March 21, 2003

**DNFSB Activity Summary:** W. White was on site all the week. A. Matteucci was on site Monday through Thursday.

**B83 Weapon Safety Specification (WSS):** Disassembly and inspection operations for the B83 program are being updated in accordance with the seamless safety (SS-21) process to identify all hazards, eliminate them where possible, and develop necessary engineered controls. During discussions with BWXT, the DNFSB staff was presented with documentation that defines the system and its associated hazards. This documentation resides in various design agency data packages that are more than ten years old. An adequate understanding and current knowledge of the hazards associated with the B83 system is essential to successful completion of the SS-21 process.

In Recommendation 93-6, *Maintaining Access to Nuclear Weapons Expertise in the Defense Nuclear Facilities Complex*, the Board asked DOE to identify a process to capture the knowledge necessary to “develop or verify safe dismantlement or modification procedures specific to all remaining types of U.S. nuclear weapons.” In its implementation plan for the Recommendation, DOE committed to utilizing the WSS as a single-source document for safety-related information. Technical Business Practice 901, Issue B, *Integrated Safety Process for Nuclear Weapons Operations and Facilities*, requires that the WSS be “an evolving document that is required to identify and describe the hazardous materials/components in the weapon system and the designed safety and/or Use-Control features.”

The B83 WSS does not clearly describe hazards associated with all B83 components. Although all B83 components appear to be listed in the current version of the WSS, the hazardous materials and potential personnel hazards associated with components that are at a different classification level are not specifically detailed in the current version of the WSS nor are they planned to be included in the upcoming version, Issue C, of the B83 WSS. In order to capture all hazards in WSS documentation, other weapon systems that have hazards associated with components that are at a different classification level provide an addendum to the WSS at the appropriate classification level. [II.A]

**W88 Tooling Concern:** BWXT continued its investigation this week of the recent component failure for W88 tooling. The suspected cause of the problem is a manufacturing flaw by the vendor of the component. Replacement components ordered from the same vendor did not pass inspection testing done by BWXT. A replacement vendor was chosen, and components ordered from the new vendor passed destructive testing requirements. Components from the new vendor are available for use, and BWXT expects to resume operations on all affected programs. A comprehensive root cause analysis of the incident is still underway. [II.A]

**Training for Production Section Managers:** BWXT has initiated a self-study training program on an immediate basis to ensure production section managers are familiar with the safety basis for the programs they supervise. This training is concluded by an interview in which the PSM’s supervisor determines the adequacy of the self-study effort. All PSMs are required to complete this training by next Tuesday. BWXT is developing a more comprehensive action plan to address short-term and long-term actions to provide more comprehensive training on specific weapon programs for the personnel who supervise the technicians on those programs. [II.A]