

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 14, 2001

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** H. Waugh and W. White, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Activity Report for Week Ending December 14, 2001

**DNFSB Activity Summary:** H. Waugh was on site all week. W. White was on leave Wednesday and was on site for the remainder of the week.

**W78 Nuclear Explosive Safety Study (NESS):** NNSA completed deliberations this week on its NESS for the W78 disassembly, inspection and repair operations. The NESS group identified four pre-start findings and ten post-start findings. The pre-start findings were as follows:

- C It has not been demonstrated that (during nuclear explosive operations) any units can be staged in the disassembly bay or more than one unit staged in the cell, without adversely impacting NES controls.
- C Staging units during nuclear explosive operations in the mechanical bay and cell has not been adequately analyzed or controls implemented, for certain phenomena.
- C The presence of stress risers in the bare HE process work and the potential for impacts on bare HE create an HEVR threat.
- C It has not been demonstrated that the existing (aged and worn) covering on the assembly stand adequately protects the HE components if they are accidently dropped. [II.A]

**Fire Protection Basis for Interim Operations:** BWXT completed its contractor readiness assessment last week for the first phase of implementation of controls in the *Fire Protection Basis for Interim Operations*. The first phase focused on the implementation of site-wide administrative controls. The readiness assessment team identified six pre-start findings and one post-start finding. On a positive note, the readiness team found that the technical assist completed by line management prior to declaring readiness was thorough and well-documented (in contrast to many past technical assist efforts) and that few problems existed in those functional areas covered by the technical assist. The pre-start findings addressed closure of conditions of approval, errors in the safety basis database (a finding in almost all recent BWXT and NNSA readiness assessments at Pantex), inconsistencies between implementing documents and the technical safety requirements, inadequacies in the implementation of the training process, inadequate implementation of a control in plant standards, and inconsistent application and understanding of a procedure implementing one of the controls. The next phase of the readiness assessment effort will focus on the implementation of controls for specific weapon programs. [II.A]

**Safety Work Permit (SWP) Assessment:** On Friday, BWXT concluded its internal assessment of the SWP process at Pantex. The findings identified were significant:

- C Work control activities are not consistently performed in accordance with QC-1 or DOE Order 440.1A.
- C Instances were noted where the job hazards were not consistently being analyzed and documented, especially those hazards associated with routine or non-explosive activities.
- C The SWP process, as currently structured, is not always sufficient to address the review and approval issues of activities in bays and cells where a nuclear explosive is located.
- C The SWP program does not adequately flow down requirements contained in the OSH S/RID to plant documents in regard to the analysis and documentation of hazards.

In general, the review concluded that the Pantex SWP process does not consistently meet the requirements in DOE Order 440.1A to identify workplace hazards, evaluate the risk, or implement a hazard prevention process. [II.A]