DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 7, 2003

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: W. White, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending February 7, 2003

DNFSB Activity Summary: W. White was on site on Monday. D. Nichols, A. Matteucci, and Outside Experts L. McGrew and J. King were on site all week.

W62 Step 2 NESS and RA: The DOE Readiness Assessment (RA) and the DOE Nuclear Explosive Safety Study (NESS) for the restart of the W62 Disassembly and Inspection process held their first round of meetings this week. The RA is being conducted in parallel with the NESS, and will observe the same bay and cell demonstrations that will be conducted in training facilities. Presentations to the NESS included the characteristics and hazards of the W62, details of the authorization basis, the results of the contractor's readiness assessment, and the differences between the training facilities in which demonstrations will be held and the bays and cells in which work will be performed.

The eight members of the RA team, who focused on document review and interviews with Pantex personnel, may not be present for the duration of the RA. Substitute members were placed on the RA team during this first week. Seven members will be available for the second week, and only two members will be present for the third week. The effectiveness of the RA is weakened when all team members are not present to discuss their areas of responsibility with the team. [II.A]

Building 12-60 Hoist Reliability: On Thursday, BWXT met with PXSO to address unanswered questions regarding the reliability of the 12-60 hoists to maintain control during nuclear explosive operations. After completion of a failure modes and effect analysis of the 12-60 hoist pendant and brake system, BWXT indicates that the root cause of the failure of the hoist to stop the lowering of a W88 unit remains with the brake system's inability to activate due to brake dust. BWXT also stated that manufacturer's suggested preventive maintenance of the brake system was not being preformed on the 12-60 hoist which included cleaning and replacing parts as required and lubricating the brake spring washers every six months. In 2000, although not formally analyzed and documented, BWXT determined that, in lieu of the manufacturer's preventative maintenance, a substitute static load brake test in conjunction with the daily per-operational check was adequate to maintain reliability of the 12-60 hoists.

Current preventative maintenance procedures and manufacturer's recommended preventative maintenance for all hoists preforming critical lifts are being reassessed by BWXT. BWXT will also provide a plan to perform further analyses to determine if additional failure modes of hoisting systems exist. [II.A]

Fire Protection Readiness Assessment (RA): In a February 4, 2003 letter, PXSO stated that the RA team, which conducted their assessment in December 2002, was unable to conclude that the BWXT contractor had successfully implemented the Fire Protection *Basis for Interim Operations (BIO)* controls for Phases II and III. The inability to conclude that controls were successfully implemented is due to the numerous issues identified during the limited sampling of ongoing programs. The letter also directs BWXT to resolve the pre-start findings, develop a corrective action plan for the post-start findings, and identify appropriate lessons learned from the programs that have satisfactorily implemented Fire Protection BIO controls. Although the scope and scheduling of additional reviews has not been established, PXSO intends to perform additional reviews of the adequacy of implementation of Fire Protection BIO controls. [II.A]