

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 7, 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 7, 2001

DNFSB Activity Summary: H. Waugh and W. White were on site all week. A. Matteucci and D. Nichols were on site to observe the W78 Nuclear Explosive Safety Study (NESS).

W78 NESS: NNSA continued its NESS for the W78 disassembly, inspection and repair operations. The NESS group discussed a variety of issues which had arisen over the past three weeks with respect to the safety of proposed operations. Issues discussed during the week included the lack of analysis on the potential impacts of hydraulic forces applied to the nuclear explosive during disassembly and the lack of adequate analysis to support multi-unit staging for W78 operations. Deliberations are expected to conclude next week. [II.A]

W80 Command Disablement Testing: On Monday, the Office of Amarillo Site Operations (OASO - renamed for the second time in as many weeks) briefed the Pantex contractor on findings from the recent NNSA readiness assessment for W80 command disablement testing. There were two pre-start findings and three post-start findings. One of the pre-start findings noted weaknesses observed during the performance of the process that resulted in procedure adherence deficiencies. The other pre-start finding addressed inadequacies in the procedure itself. Inadequacies in the procedures were also noted during the BWXT readiness verification and during the BWXT contractor readiness assessment. The post start findings included the following: an effective feedback and improvement process has been developed but is not being used, additional procedure adequacy issues exist, but they did not result in unsafe conduct of the operations, and the identification of procedure steps as critical steps was inconsistent. [II.A]

Material Movement Occurrence: On Thursday BWXT personnel moved an explosive component from one facility in Zone 12 to another without the proper authorization. The component was moved as radioactive material without explosive movement coordination. The person initiating the move noticed an orange card indicating a radioactive material, but failed to notice the labeling on the card and on the container identifying the part as an explosive component. The movement occurred outside the explosive move window and appears to be a violation of a specific administrative control (5.6.22.1) in the *Pantex Technical Safety Requirements* which requires "Movements of explosives . . . in the Zone 12 MAA ramps or loading docks will be coordinated such that they do not occur during [nuclear explosive] transportation in the ramps or loading docks." Fortuitously, no movement of nuclear explosives was in progress at the time the explosive component was moved.

The failure to coordinate the original move as an explosives move was compounded when personnel involved in the move decided to immediately return the explosive components from the receiving facility to the originating facility without obtaining the appropriate authorization for the second move. The second move, however, was conducted during the explosive move window. During followup efforts to clarify the paperwork associated with the move, personnel accepted custody of weapon components they did not have and initiated paperwork for moves that had already occurred.

The failure to coordinate and approve explosive and nuclear material movements according to Pantex Plant procedures appears to be a continuing problem despite numerous corrective actions taken over the past year to streamline and simplify the process for coordinating and authorizing material movements. More comprehensive, longer-term corrective actions were initiated after previous occurrences, but are not yet implemented. [II.A]