

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 5, 2003

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: W. White, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending December 5, 2003

DNFSB Activity Summary: W. White was on site all week. A. Matteucci, T. Hunt and D. Kupferer were on site Tuesday through Thursday to observe W78 startup activities.

Conduct of Operations (Part 1): On Tuesday, BWXT personnel moved a group of pits without the required authorization from the Move Right System. A series of errors by production personnel and material handlers led to the procedure violation. A production technician receiving a pit into the manufacturing database entered the wrong facility number for the location of the pit. He later attempted to move this pit, along with four others, to a staging bay. The Move Right System declined the request for authorization because he was attempting to move one of the pits from a different location than the one in which the Move Right System database showed the pit to be. The production technician noted his original error and removed the pit with the location error from the list of pits for which he was trying to obtain move authorization. He attempted to obtain authorization again, but a series of mistakes in using the Move Right System interface apparently led the technician to believe the Move Right System had dispatched the pits without providing an authorization number.

Assuming a computer error, the technician decided to move all five pits without the authorization number, violating plant procedure. Material handlers knowingly accepted the pits for transportation without an authorization number and moved the pits to the staging bay, again violating plant procedure. The technician attempting to receive the pits using the Move Right System in the receiving bay was not able to do so because the Move Right System had never initiated a move. At this point, the technician in the receiving bay stopped work and contacted his supervisor and the operations center.

Although there is likely room for improvement with the user interface of the Move Right System, the fundamental cause of this occurrence appears to be the failure of production personnel and material handlers to follow plant procedure. No movement of nuclear material should have been conducted without an authorization number from the Move Right System. Personnel involved in the move were aware of this requirement and chose to move the pits without an authorization number. [I, P3A, P3B, P3C, P3F]

Conduct of Operations (Part 2): Also on Tuesday, BWXT personnel moved a nuclear explosive without contacting the operations center to verify the status of movement windows, an explicit violation of the compensatory actions discussed in last week's report that were put in place to address systemic failures in the safety-class administrative control program for transportation. Following this occurrence and other recent incidents involving the transportation program, BWXT took additional actions to clarify the standing order defining the compensatory measures and to institute a checklist to aid personnel in following the required actions to obtain approval for transporting radioactive or explosive material. Production personnel will not be allowed to initiate material movements until they have completed classroom training on the new standing order. In addition, the checklist for each material move must be signed off by a manager prior to the initiation of the move. BWXT and PXSO personnel continue to avoid identifying a breakdown of the administrative control program for transportation. [I, P3A, P3B]

Conduct of Operations (Part 3): Given the recent series of occurrences related to procedure adherence and the transportation program, BWXT decided to stand down operations at the Pantex Plant on Friday morning to allow first-line supervisors to meet with employees and reinforce job performance expectations, particularly with respect to adherence to procedures. [I]