

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 1, 2002

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: H. Waugh and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending February 1, 2002

DNFSB Activity Summary: H. Waugh was on leave all week. W. White was on site all week. W. Andrews, F. Bamdad and D. Nichols were on site this week to review the BWXT unreviewed safety question (USQ) procedure and to observe operations. T. Dwyer, J. Shackelford and R. West were on site this week to discuss conduct of operations and observe operations.

BWXT USQ Procedure: On November 29, 2001, OASO approved BWXT's USQ procedure. During a review of the procedure this week, the Board's staff concluded that if it were implemented strictly as written, the Pantex standard's treatment of Potential Inadequacies in Documented Safety Analyses (PISAs) would not provide the level of safety required by 10 CFR 830.203. Further, if it were strictly followed, its provisions would result in fewer positive USQ findings than one would expect from DOE G 424.1-1. This conclusion should not be construed to mean that the Pantex USQ program is inadequate. The conclusion simply reflects a comparison of the written Pantex standard to the stated DOE expectations. Discussions with BWXT and OASO personnel suggest that the standard may not accurately capture the USQ process at Pantex. OASO personnel indicated that a new revision to the USQ procedure should be released near the end of February 2002; OASO will consider the major issues raised by the Board's staff prior to that revision.

Conduct of Operations: In an October 3, 2001, letter, the Board requested that NNSA provide details on procedural compliance concerns at Pantex and the corrective actions NNSA proposed. This week, the Board's staff discussed the corrective actions with both OASO and BWXT personnel and spent significant time observing nuclear explosive operations in Pantex bays and cells. BWXT has designed a series of initiatives to address the issue of procedural compliance, and progress has been made in this area. However, procedural violations were identified in four of six weapons programs observed, as well as in maintenance and transportation operations. It appears that the single most effective action that BWXT has taken to improve procedural compliance is to require line-by-line stamp-off of each procedural step as it is completed. Most of the violations observed could be traced, in part, to poor procedures--it appears that BWXT's self-assessment and auditing teams are not providing the feedback necessary to guide effective corrective actions. BWXT's longer term corrective actions will be evaluated in future staff reviews. [II.A]

High Pressure Fire Loop: The potential leak discovered last week in the high pressure fire loop has not yet been isolated. At least one jockey pump has run nearly continuously since last week to maintain system pressure. Evaluations of the jockey pumps have not indicated any problems with the pumps. BWXT has repaired most of the main drain leaks identified last week, but this did not result in a significant reduction in the run time for the jockey pumps. BWXT personnel are continuing efforts to isolate the possible leak and are exploring the use of various types of leak detection equipment. In addition, BWXT is considering the possibility of systematically isolating various sections of the high pressure fire loop in an attempt to locate the leak. BWXT personnel have not observed any visual indication of a leak. [II.A]