

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 1, 2002

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: W. White, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending November 1, 2002

DNFSB Activity Summary: W. White was out of the office on Tuesday to recruit at Texas Tech University and was on site for the remainder of the week.

Fire Protection Assessments: A staff report forwarded to NNSA by the Board in September noted the lack of formal guidance for conducting periodic assessments of compliance with combustible material controls in nuclear explosive facilities. These assessments by fire protection engineering personnel are required in the TSRs (5.6.33.7).

Following the Board letter, BWXT developed a guidance document for conducting the assessments. The guidance document identifies required training for personnel performing the assessments and notes nine specific criteria to be evaluated while performing the assessment. The guidance document also requires authorization basis and program personnel to concur with the assessments before the assessment results are formally transmitted to the responsible process engineer, facility representative, and production manager by the fire protection engineering program manager.

Since the guidance document was issued on October 7, nine assessments have been completed, some of them noting items in use, but not captured in the combustible loading documents for the applicable program. A few of the assessments have also noted concerns with the performance of production technicians in maintaining control of combustible materials. However, none of the assessments have been finalized or transmitted to operations, program, and authorization basis personnel. Also, a formal program is not yet in place to identify corrective actions needed to address the findings and to track the implementation of the corrective actions. A program to address findings from the assessments is essential to ensure compliance with the combustible material controls in the TSRs. [II.A]

Calibration of Radiation Monitoring Equipment: On grave shift Wednesday morning, production personnel performing a pre-operational check in a W79 dismantlement facility noted that the calibration sticker for an alpha continuous air monitor had a serial number different than the monitor itself. Production technicians appropriately notified production management personnel to resolve the discrepancy. Personnel responsible for calibration of the monitors were contacted and, making the assumption that the calibration sticker was in error, informed production personnel that, as operations in progress would have been difficult to suspend, it was acceptable to proceed with operations until the discrepancy could be resolved. According to a BWXT memorandum, production personnel were requested to proceed with normal operations since "the incorrect number on the calibration sticker was probably a typographical error."

Facility safety basis documents being developed by BWXT (and approved by OASO) routinely rely on operation of the radiation monitors to protect initial condition assumptions made in calculations regarding exposure to workers during accidents involving radioactive material. To date, however, most of these analyses have not identified the monitors as safety-significant or safety-class equipment, instead relying on the radiation safety administrative control program to establish radiation monitoring requirements. Presumably, if the monitor had been safety-significant equipment, immediate action would have been taken either to verify the calibration of the equipment or suspend operations. Instead definitive verification of equipment calibration was postponed to the following shift when it was more convenient. [II.A]