

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 5, 2004

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: T. Hunt and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending March 5, 2004

DNFSB Activity Summary: W. White was on site all week. T. Hunt was in training off-site. [NA, NA]

Pit Repackaging Program: In February, BWXT repackaged the 9000th pit into a sealed-insert container. This represents a significant effort toward addressing the focus of Recommendation 99-1, repackaging the pits at the Pantex Plant into containers that provide a safer, more controlled environment for interim storage of plutonium. Since BWXT became the management and operating contractor for the Pantex Plant, repackaging of the pits into the improved containers has been a sustained priority. [I, NA]

Training of Production Technicians: BWXT identified this week that 7 B61 production technicians had not completed a written examination required for weapon-specific training. The requirement for a written examination is contained in DOE Order 5480.20A, *Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities*. In developing the training for the B61 course, the training instructor elected not to require a written examination, despite requirements in the DOE order and in local plant standards and procedures on training. The B61 technicians received the training in 2003, but did not take a written examination. The technicians subsequently performed hands-on work on the B61 program, but, in all cases, were under observation by certified personnel. The technicians in question were veteran technicians who had been certified previously on a variety of other programs and who recently transferred to the B61 program.

On an immediate basis, BWXT suspended the qualification of the technicians until they can complete the required examination. BWXT will conduct a causal analysis to determine the root cause of the failure to require a written examination. Areas of focus include the clarity of the flow down of requirements from DOE O 5480.20A into plant procedures, the quality-related implications of the incident, and a review of other weapon-specific courses to ensure required written examinations are being given. [I, P1]

Lightning Protection: Nuclear explosive operations remained suspended this week as BWXT continues to work through the implications of recently discovered pathways through which energy from a lightning strike might bypass the protection of safety-class surge suppression as defined in the *Lightning Basis for Interim Operation*. In December 2003, a BWXT engineer noted, while performing an unreviewed safety question evaluation, that the potential might exist for energy from a lightning strike to electrical equipment outside a bay or cell to bypass existing surge suppression for electrical circuits inside a bay or cell. BWXT completed an engineering evaluation and, in February 2004, suspended operations pending resolution of the concern.

BWXT expects to complete a justification for continued operations (JCO) this week that defines the maximum voltage level possible from this threat and that identifies compensatory measures as appropriate. BWXT will also submit a longer-term plan for adding surge suppression, as needed, to mitigate the maximum voltages and eliminate the need for compensatory measures. The JCO is expected by the end of this week. [I, W3, W4]