

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 25, 2003

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** W. White, Pantex Site Representative  
**SUBJECT:** Pantex Plant Activity Report for Week Ending July 25, 2003

**DNFSB Activity Summary:** W. White was on site Monday and Tuesday and was on leave for the remainder of the week. A. Matteucci and D. Kupferer were on site Tuesday through Friday to provide support for the site representative.

**High-Efficiency, Particulate Air (HEPA) Filters:** The site representative held discussions this week with PXSO and BWXT personnel concerning recent correspondence from the Secretary of Energy to the Board regarding HEPA filters. In a July 11, 2003, report responding to a January 2003 reporting requirement from the Board, the Secretary committed to testing and self-assessment of HEPA filters with safety and habitability functions. This letter noted that NNSA was following the required 100 percent testing of HEPA filters at the Filter Test Facility.

An attachment to the letter noted that the Pantex Plant had no filters with habitability, safety-class, or safety-significant functions. There are filters at the Pantex Plant, however, that provide safety-related functions. There are HEPA filters for Building 12-116 that are specifically identified as defense-in-depth systems in the current safety basis for this facility. The descriptions of the ventilation systems in the site-wide safety analysis report also note that industrial grade filters for nuclear explosive facilities protect the occupants in those facilities from large, external particulate contaminants. The workers in those facilities would shelter in place in the event of an accident and bring the operations ongoing in their facilities to a safe and stable condition. Personnel in the emergency operations center would also shelter there to manage emergency response activities; filters for the ventilation system in that facility provide protection from external contamination for its occupants, including the emergency response command, under accident conditions.

BWXT and PXSO agreed to develop supplemental information that captures more completely the safety and habitability functions of HEPA filters at the Pantex Plant and the test programs that are in place for those filters. [II.A]

**Building 12-44 Blast Door Interlocks (BDIs):** BWXT submitted a justification for continued operations (JCO) of Building 12-44 this week to PXSO for approval. The JCO, which BWXT proposed would expire in December 2003, allows continuation of operations in Building 12-44 until the design flaw with the blast door interlocks can be fixed. As a compensatory measure the JCO requires that personnel operating the blast doors wait a minimum of ten seconds between closing one blast door and attempting to open the second blast door. The JCO commits BWXT to several corrective actions. These include modification of the blast door interlocks to correct the design flaw and an authorization basis change to incorporate any modifications to the interlock. BWXT will provide a schedule and cost estimate for these actions to PXSO no later than September 5, 2003. PXSO approved this JCO on Tuesday, but brought the expiration date forward to September 19, 2003. An extension to the JCO will have to be approved once PXSO has reviewed the resource-loaded schedule. [II.A]

**W56 SS-21 Tooling:** The Board staff observed ongoing dismantlement operations for one of the first weapon systems to implement SS-21 tooling. Operations were halted when a tooling malfunction occurred. This event suggests that either a decreased reliability of tooling came about after extended use or that the malfunction is inherent to the tooling design. [II.A]