

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: Friday, July 29, 2005
SUBJECT: Pantex Plant Weekly Report

Failure to Implement Limiting Condition for Operations (LCO): Two weeks ago, BWXT discovered a leak in a branch of the high pressure fire loop (HPFL) outside a nuclear explosive facility. Subsequently, the fire suppression system in the facility was impaired while the HPFL tie-in piping was being repaired. This week, a PXSOFacility Representative discovered that, while an LCO was entered related to the impairment of the deluge system, an LCO related to the impairment of the wet pipe fire suppression system was overlooked. Consequently, BWXT failed to implement a fire patrol within 8 hours of the event, a required action in the wet pipe LCO, which resulted in a Technical Safety Requirement (TSR) violation.

Conduct of Operations: A procedure violation occurred during nuclear explosive cell operations this week. The operation being performed uses an engineering procedure to supplement the operating procedure. During the pre-op evolution, it is the responsibility of the production technicians to annotate the operating procedure to reflect change requests and other directions from engineering that modify the process. Because the annotations were incomplete, production technicians did not execute the engineering procedure when it was required to be implemented and performed eight steps that should have been deleted before realizing the mistake. Engineering provided a back out procedure for the operation and normal operations have resumed. Potential issues are the timeliness with which changes are formally incorporated into procedures, the frequency of verification of annotations, lack of an independent validation of annotations made by the production technician, and scope and content of pre-job briefs.

Seismic Upgrade Project: Earlier this month, in response to a PXSOREquest, BWXT issued a seismic project proposal that describes the need to initiate an activity to implement TSR controls related to seismic qualification of structures and equipment. Seismic attributes for 11 facility structure and several equipment TSR controls have not been implemented as part of the TSR Integrated Implementation Plan because of the need for analysis and/or modifications. Studies have shown some facility equipment is inadequately mounted and that it is likely that there are inadequate anchorage embedments. BWXT expects to submit a seismic project plan to PXSObefore September 2005 for approval.

Explosive Safety Manual: A DOE Explosives Safety sub-committee met last week to review the applicability of DOE M 440.1-1, the Explosives Safety Manual (ESM), to nuclear explosive operations at Pantex. Representatives from the Albuquerque Service Center, BWXT, and PXSOfacility evaluated the static dissipative flooring design and discussed which sections of the ESM were not appropriate for nuclear explosive operations. The sub-committee concluded that the requirements for *conductive* flooring and footwear contained in the ESM do not apply to the *dissipative* flooring to be installed in Pantex facilities. Although the ESM requirements were determined to not apply to the current Pantex flooring design, documentation and safety input from Sandia National Laboratories and LANL support specific nuclear explosive operations.

Configuration Management (CM): In a 5 July letter, PXSOREjected BWXT's request to include DOE Standard 1073 (DOE-STD-1073-2003), *Configuration Management*, in the contract as guidance only. Currently, BWXT does not have a sitewide CM plan that has been approved by PXSOFacility. BWXT is in the process of developing a sitewide CM policy.