

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 8 June 2007
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: Outside expert D. Boyd was at Pantex to observe the first week of the NNSA readiness assessment (RA) for W76-1 assembly operations.

NNSA Readiness Assessment Declaration of Readiness: The NNSA RA to evaluate whether BWXT is prepared to start-up SS-21 W76-1 assembly operations was formally initiated on Thursday. Three weeks ago, BWXT completed a contractor RA that identified 20 pre-start findings. Two of the pre-start findings—one related to the use of mock tooling during demonstrations, one related to posting safety basis documents—have yet to be closed by BWXT. PXSO has reviewed the ramifications of the subject findings and determined that they will not preclude an adequate review by the NNSA RA team.

Specific Administrative Controls (SACs) and New Information (NI): In October 2006, the DNFSB staff reviewed SACs at Pantex. The staff had two primary concerns: (1) administrative controls that only provide for worker safety are not designated as SACs and (2) programs to periodically reassess the adequacy and implementation of SACs do not exist. This week, PXSO informed BWXT that it is unsatisfactory that these deficiencies have not been addressed and directed BWXT to develop a corrective action plan. In addition, PXSO reiterated its concerns that the NI process procedures do not adequately describe the appropriate process for handling NI. Specifically, PXSO has identified examples of NI currently in the BWXT NI database that should be reported as Potential Inadequacies of the Documents Safety Analysis, but have not been because of incorrect criteria in the NI work instruction. PXSO has requested that BWXT develop a technical basis for dispositioning these NI related issues.

Recommendation 2004-2, Active Confinement Systems: Last month, BWXT completed its first of three ventilation system evaluations related to the Recommendation. This evaluation assessed the confinement ventilation strategy of Building 12-64, a Hazard Category 2 nuclear facility used for special nuclear material operations. The conclusion of the evaluation report is that the conservative analysis demonstrates the consequences of a worst-case facility fire are sufficiently low that the 12-64 ventilation system is not required to fulfill a safety function; therefore, there is no need to evaluate potential upgrades. Based on directions contained in the Ventilation System Evaluation Guidance, it appears that BWXT should have compared the ventilation system in 12-64 against the performance criteria for safety significant ventilation systems, despite that the system does not perform a safety function. PXSO forwarded the evaluation to the Chief of Defense Nuclear Safety and the Independent Review Panel for further review.

Fire Alarm Notification System: When an alarm is triggered on-site (including heat sensors, water flow sensors, equipment failure sensors), a signal is sent from a local alarm panel to a receiving station in the fire department dispatch center. The sitewide fire alarm system (including the fire alarm panels and receiving station computers) is considered defense-in-depth. Until recently, two separate computer systems were used to receive signals in the fire department dispatch center; the Security Information System (SIS; installed in 1998) and the CentraScan system (installed in 1994), neither of which are currently supported by the manufacturer. During the past nine months, the signals from alarm panels that support nuclear facilities were transferred from the less reliable SIS to a new computer system, the Monitoring Automation Systems (MAS). In addition to being supported by the manufacturer, the MAS could help BWXT improve tracking and trending of issues with the sitewide fire alarm system.