

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: Friday, July 1, 2005
SUBJECT: Pantex Plant Weekly Report

Pit Repackaging: A team of BWXT and Lawrence Livermore National Laboratory (LLNL) personnel performed an engineering evaluation this week to qualify three LLNL pit types for packaging into sealed insert (SI) 2040 containers. The BWXT goal is to resolve the 4 pre-start findings by next week and receive a release from LLNL to begin SI 2040 packaging of at least two of the LLNL pit types shortly thereafter. Los Alamos National Laboratory personnel are expected to begin the engineering evaluation of their 2040 pit types on 18 July.

W70 Component Disposition: Later this month, BWXT is planning to conduct a readiness assessment to analyze the restart of W70 component processing in a nuclear explosive bay, which was last performed in 1998. The Process Hazards Analysis (PHA) for the W70 disposition, developed in accordance with 29CFR1910.119, *Process Safety Management of Highly Hazardous Chemicals*, was recently approved and defines the controls necessary for the process. The process relies heavily on credited special tooling as engineered controls. Tooling and Machine Design needs to provide Design Requirements Documents for the numerous special tools.

Multi-unit Operations: This week, BWXT line management raised questions to BWXT senior management regarding the type and number of unit configurations that are allowed to occupy a given facility at any one time under the approved authorization basis. BWXT determined, and PXSO concurred, that no inventory related technical safety requirements have been violated. BWXT plans to improve the level of detail in its analysis and to more clearly describe unit inventory limits based upon unit configurations.

Quality Assurance Survey (QAS): The NNSA Weapon Quality and Surveillance Division, NA-121.3, conducted a QAS 1.0 assessment of PXSO this week with a focus on site implementation of both QC-1, Revision 10, *DOE/NNSA Weapon Quality Policy*, and the Quality Assurance Procedures Manual. PXSO was found to be compliant on 14 of the 19 QC-1 elements applicable to the site. Although the changes in Revision 10 of the policy should have a relatively minor impact on Pantex, one of the five non-compliances noted by the review team was the fact that Revision 10 of QC-1 is not yet in the BWXT contract. Other non-compliant elements include the lack of a documented risk-based approach for performing management assessments and the need for a formal process to suspend weapon work to address quality issues. Additionally, PXSO continues to operate with a shortage of Quality Engineers and Specialists.

Hazardous Energy Control: On June 27, 2005, BWXT determined that personnel performing repairs last week on a leaking coolant system in a LINAC machine had worked near a 120-volt stored energy source that had not been locked out when the LINAC main power supply was de-energized. The 120-volt source, which provided power to an aiming laser and other components and was independent of the power controlling the LINAC, was serviced by several capacitors that had not been discharged. The LINAC machine had been replaced in October 2004 and maintenance personnel had not been trained on the new configuration.