

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 2, 2003

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: W. White, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending May 2, 2003

DNFSB Activity Summary: W. White was on site all week. C. March was on site Monday to accompany the site representative on a walk down of fire protection systems. T. Dwyer was on site Wednesday to attend the rewrite of an NNSA policy letter on facility representatives. C. Keilers was on site Thursday to attend a meeting of the Standing Management Team.

W87 Milestone 0 Briefing: The W87 project team briefed the Standing Management Team on the beginning of the W87 seamless safety project. Implementation of the seamless safety process for the W87 program will take just over a year. Completion of the final hazard analysis is scheduled for November of this year. The analysis is expected to address disassembly, inspection and assembly operations and to cover the processing of multiple units in a given facility. According to the project team, however, this schedule depends on having no new tooling and no major process modifications for the W87 program. Based on assumptions related to the response of insensitive high explosives to certain accident scenarios, the project team chose not to pursue the type of seamless safety process being implemented for warhead systems with conventional high explosives. The Standing Management Team noted, however, that the extent of potential tooling changes could not be determined prior to starting the project and that the number of tooling changes and process modifications would have to be driven by the hazard analysis for the process and the need to meet seamless safety criteria. [II.A]

Lightning Protection for Vacuum Chamber Operations: BWXT identified a potential inadequacy in the safety analysis for the vacuum chamber this week. A slot was identified in the Faraday cage structure for the facility that was not addressed in the existing lightning protection analysis for the facility. BWXT is currently preparing a justification for continued operations that evaluates the impact to safety controls for lightning protection and proposes compensatory measures where appropriate. [II.A]

Software Quality Assurance: PXSO sent a letter to BWXT this week requesting a revision to BWXT's report that addressed DNFSB and PXSO concerns relative to software quality assurance for the Move Right System and the Interactive Electronic Procedures System. The letter requests changes in the report, including the following general areas for improvement:

- The BWXT report is to focus on software quality assurance improvements and not responses to specific occurrences.
- The report should focus on the desired software quality assurance program, the basis for such a program, and BWXT's plan for implementing that program over time.
- Explicit commitments to develop a comprehensive requirements specification for the Move Right System, perform testing and validation of the entire Move Right System, and perform a human interface evaluation should be added to the report.
- The report should include resource-loaded schedules.
- The report should address the compensatory measures that have been taken to enhance the Move Right System since its implementation.

The PXSO letter also noted BWXT's proactive stance in implementing the Move Right System and the Interactive Electronic Procedures System in an effort to improve procedural adherence. [II.A]