

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 29, 2002

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: W. White, Pantex Site Representative
SUBJECT: Pantex Plant Activity Report for Week Ending November 29, 2002

DNFSB Activity Summary: W. White was on site Monday through Wednesday. The Pantex Plant was closed on Thursday and Friday for the Thanksgiving Holiday.

Natural Phenomena Hazards: In August, OASO requested that BWXT evaluate the impact of implementing the recently revised DOE Standard 1020-2002, *Natural Phenomena Hazards Design and Evaluation Criteria for Department of Energy Facilities*. This standard defines the evaluation criteria for analyzing facilities for natural phenomena hazards such as earthquakes, tornados, and high winds.

BWXT submitted its impact evaluation to OASO earlier this month. BWXT recommended that the new evaluation criteria in DOE Standard 1020-2002 not be applied to the analysis of existing facilities. Instead, BWXT recommended applying the new standard only for analysis of new facility designs starting in FY03. In its evaluation of the changes in each of the chapters and sections of the new standard, BWXT rejected implementing them on a value-added basis. BWXT identified the implementation of new wind design and evaluation criteria as the biggest cost impact, particularly with respect to evaluating existing facilities for higher tornado wind speeds and more stringent tornado missile criteria.

OASO is currently reviewing the impact evaluation. BWXT will continue to use the 1994 version of the standard as it completes the analysis work required to develop and upgrade facility safety basis documents under 10 CFR Part 830, *Nuclear Safety Management*. [II.A]

Assessment by the Office of Independent Oversight. Last week, the DOE Office of Independent Oversight and Performance Assurance (OA) completed its evaluation of the environment, safety, health and emergency management programs at the Pantex Plant. The OA assessment identified effective performance from the safety management systems for nuclear facilities, but noted the need to improve the feedback and improvement mechanisms. The OA assessment found significant weaknesses with respect to the emergency hazards assessment and noted the need for improvement in several areas of the emergency management program. Following are four of the ten specific findings identified in the final draft of the OA assessment report:

- NNSA and BWXT have not ensured all potential high radiation areas are properly identified, designated, and controlled in accordance with site and DOE requirements.
- BWXT has not implemented mechanisms that appropriately identify, track, and assess all hazardous materials so that current inventories, changes in inventories, and changes in processes are adequately evaluated to support emergency planning and response.
- BWXT has not accurately assessed an appropriate spectrum of emergency events and conditions or determined barrier failure indicators and pre-determined protective actions based on event consequences to provide the necessary technical basis for effective emergency response decision-making tools.
- OASO has not established a program for conducting assessments of the Pantex emergency management program. [II.A]