DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 26, 2002

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: H. Waugh and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending April 26, 2002

DNFSB Activity Summary: H. Waugh was on leave Tuesday and was on site for the remainder of the week. W. White was on site all week. C. Martin, A. Matteucci, and R. West were on site Tuesday through Thursday to review various components of the Pantex authorization basis upgrade program.

Authorization Basis Upgrade Program: The Board's staff was on site to discuss the latest revision to the *Authorization Basis Upgrade Program Plan*. The staff also reviewed the safety analysis report (SAR) modules for transportation of full-up units and for bays and cells. These SAR modules are the first of thirteen SAR modules to be submitted during the next eleven months to meet the April 2003 compliance date for 10 CFR 830, the Nuclear Safety Management Rule. The Board's staff also reviewed the Transportation Safety Evaluation Report (SER), which documents NNSA's approval of the Transportation SAR.

The Board's staff raised several concerns regarding the identification and analysis of hazards that will require further review. Among the concerns was the lack of rationale for whether a National Weather Service tornado warning provides sufficient warning time to cease an ongoing transportation operation and place the units being moved in a secure, sheltered location. NNSA and BWXT have agreed to complete an evaluation comparing the time required to complete a transportation operation to the advance notice provided by a tornado warning

The staff also discussed NNSA resources available to review and approve the numerous SAR modules being submitted over the next year. NNSA's review and approval of these modules is critical to the timely improvement of the Pantex Plant's authorization bases and to the implementation of new safety enhancements proposed in the SAR modules. Recently announced staff losses within ASO raise questions regarding resources available to that organization to review the remaining SAR modules in a timely, thorough manner. [II.A]

High Pressure Fire Loop Leak: On Tuesday, BWXT fire department personnel discovered a leak in the high pressure fire loop near Building 12-99. The water leak was in the pipe section leading into Bay 4. An indication of a leak was first noticed several days earlier when FP engineers monitoring the run time of jockey pumps for the high pressure fire loop noticed an increase in pump run time. When the water from the leak surfaced outside Building 12-99, the fire department responded to isolate the source of the leak. Fire Department personnel were able to hear water running through the isolation valve for Bay 4. This valve was closed and the leak stopped. The fire suppression system was declared inoperable for Bay 4, and units located in Bay 4 were moved to another facility.

BWXT must now determine a path forward for replacing the damaged section of pipe. The current preferred path forward is to replace the iron pipe with a high density polyethylene that is less susceptible to corrosion. The area around the buried pipe will be excavated by hand. Replacement of the pipe section, by either BWXT or sub-contractor personnel, is expected to take less than a month. Until the work is complete, Bay 4 will remain in repair mode with its fire suppression system inoperable. Ramp traffic has been restricted outside Bay 4 to pedestrian traffic only.

At this point, BWXT personnel do not believe the leak outside Building 12-99 is related to the increased run time for the jockey pumps noticed several months ago. The jockey pumps have been replaced since that time and appear to be running on a more normal basis. [II.A]