DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 24, 2001

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: H. Waugh and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending August 24, 2001

DNFSB Activity Summary: H. Waugh and W. White were on site all week.

2040 Sealed-Insert Container Design: On Thursday, BWXT briefed the design agencies on potential design approaches for a 2040 sealed-insert container. The 2030 sealed-insert containers currently in use at Pantex are physically incompatible with several pit types. In particular, the 2030 is unable to accommodate certain characteristics of B61, W84, W87, and B83 pits.

BWXT provided design agency representatives with three options for new sealed-insert containers. The first option involves increasing the size of the drum and redesigning the flange for the sealed insert. This option is the most expensive and will create compatibility issues with existing tooling. The second option is to simply lengthen the existing 2030 container and its insert. This will accommodate the B61, W84, and W87 pits. If this option is selected, the B83 pit will require a new fixture design, allowing it to fit into the existing 2030 container. The third option is to lengthen the existing container and bore out the inner insert flange. This will accommodate all four pit families, but will require more extensive redesign of the container insert. Both BWXT and design agency personnel favored option two, which requires less time and expense for redesign. If redesign of the B83 pit holding fixture is not feasible, however, a separate container insert may have to be developed for the B83 program at a later date.

Repackaging of pits into 2030 sealed-insert containers continues at a pace exceeding 200 pits per month. In addition, BWXT has begun scheduled surveillance on these containers and plans to inspect at least 92 containers for this fiscal year. [II.A]

W78 Step 1 Start up: BWXT submitted revised authorization basis documents for the W78 program to NNSA/AAO on Tuesday. AAO approval of these revised documents is a prerequisite for starting the W78 contractor readiness assessment. DOE approval is expected by September 4, 2001. A revised schedule for the contractor readiness assessment and subsequent Milestone 3 meeting has not yet been issued. [II.A]

B83 Electrical Testing: On Thursday, NNSA, BWXT, Sandia National Laboratories, and the Board's Pantex site representatives participated in a telephone conference regarding proposed electrical tests for a B83 unit which failed previous tests in April and June of this year. The focus of the telephone conference was the level of confidence in the current safe state of the unit and the need and justification for the proposed suite of new tests. According to Sandia personnel, the gas transfer system has probably not actuated. At least one positive indication exists for all affected valves that the system has not actuated. According to Sandia, however, absolute certainty can not be established without some subset of the proposed electrical tests. The remainder of the electrical tests are intended for electrical troubleshooting to provide system engineers with a more complete understanding of the status of various connections. Sandia will provide a followup briefing within the next few weeks to NNSA to provide additional explanation of the need for troubleshooting and fault isolation. [II.A]