

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 10, 2000

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: H. Waugh and W. White, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending November 10, 2000

DNFSB Activity Summary: H. Waugh and W. White were on site all week. A. Matteucci and L. McGrew were on site Monday through Thursday to observe the revalidation of the W88 Nuclear Explosive Safety Study (NESS).

W88 New Authorization Basis Implementation: The revalidation of the W88 NESS began on Monday, despite the fact that no Milestone 3 meeting had been held (the purpose of a Milestone 3 meeting is to determine readiness to proceed to independent reviews). The scope of the revalidation is more extensive than a typical revalidation as defined in DOE's NESS process standard. The NESS group is expected to review the safety of the entire W88 process, not just changes that have occurred since the previous study. Senior NESS group members, participating for the first time, appeared actively engaged in the review. Presentations by the national laboratories lasted most of the week. The laboratory presentations occasionally referenced controls that were no longer in place or safety analyses that did not exist.

The W88 NESS revalidation is being conducted jointly with DOE's readiness assessment (RA) of the W88 process. Although the DOE RA for the W88 process has not started, the DOE RA team leader was present for the first week of the W88 NESS revalidation.^[II.A]

Ultraviolet-Activated Deluge System: On Friday, MHC completed its contractor readiness assessment for the ultraviolet-activated deluge fire suppression system required to support start up of W88 operations. There were several pre-start findings, including the lack of approved authorization basis changes related to the deluge system. Although DOE has completed its review of the authorization basis changes, the DOE safety evaluation report was not signed out as of Friday afternoon. The safety evaluation report will be signed out Monday morning at the earliest and is likely to contain conditions of approval directing MHC to make specific control changes related to combustible stand off distances. Notwithstanding the unapproved authorization basis changes and the fact that MHC has not declared readiness to proceed, DOE intends to conduct the Milestone 3 meeting for the W88 on Monday, November 13.^[II.A]

Lightning Protection: On October 23, 2000, MHC replaced the safety-class computer for the lightning warning and detection system with a non-approved computer. The lack of an approved design change package was discovered on October 31, 2000. This resulted in an unusual occurrence report. However, the computer appeared to be functional and had passed the surveillance and acceptance tests performed when the change was made. Consequently, DOE and MHC decided to consider this safety-class system operational despite the use of a non-approved replacement computer and without final approval of the appropriate design change packages and engineering evaluations.

On November 8, the replacement computer failed. MHC declared lightning warnings as required by the Technical Safety Requirements. Lightning warnings ended after MHC personnel returned the original computer to service, completed a USQ screen, performed post-maintenance testing, and verified the lightning warning and detection system was operable.^[II.A]

Pantex Contract: MHC announced on Friday that it lost its appeal of the Pantex contract decision. BWXT transition activities are expected to begin next week.^[III.A]