DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 24, 2000

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: T. Dwyer and H. Waugh, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending March 24, 2000

DNFSB Activity Summary: H. Waugh was on site all week. T. Dwyer was on site Monday-Thursday, and on leave Friday. A. Gwal and W. White were on site Wednesday and Thursday conducting electrical safety and lightning reviews. T. Burns was on site Wednesday and Thursday attending Pit Management Team and Pit Thermal meetings.

Authorization Basis Issues: [1] DOE-AL has formally delegated the authority to approve nuclear explosive operations authorization basis (AB) documents to AAO. This is a significant step forward -- both facility and weapon operations AB authority now resides in the DOE office closest to the work. One caveat has been applied to this delegation: if 2 layers of defense cannot be achieved for any high consequence event in the AB document, DOE-AL concurrence will be required prior to AAO approval. DOE-AL retains the role of authorizing official, responsible for signing the Authorization Agreement that permits an operation or facility to start up.

[2] As part of the AAO verification of proper implementation of the new sitewide Technical Safety Requirement (TSRs), AAO personnel were observing monthly/quarterly in-service inspections of bay/cell hoists. Three out of 3 could not be completed due to loss of configuration control -- i.e., erroneous configuration data or inspection acceptance criteria data. An occurrence report has been filed to declare this a systematic breakdown of a TSR Administrative Control. Meanwhile, AAO has begun to review the closure packages from the TSR contractor Readiness Assessment, and there are indications that this observation is just the tip of the iceberg.

[3] The Master Authorization Agreement (MAA) has not yet been signed by DOE-AL and therefore remains unimplemented by M&H.[II.A]

W79 Dismantlement Program: Monday evening, M&H suspended work on the W79 Dismantlement Program. The project team had been evaluating possible recovery actions from yet another material deficiency/configuration management defect in the dissolution workstand supplied by LLNL. During that evaluation, samples of exudate noted to be seeping from under the front and rear viewing window casements were collected for analysis. The analysis revealed that the exudate contains an average of 40-45% HMX -- up to a maximum value of 77%. Values over 30% HMX are considered a safety hazard. Resolution of this issue will be complicated by the presence of an uncased but not yet dissolved unit, which is in the cell and cannot be moved in its present condition. M&H has established a dedicated project team to work this issue.[II.A]

Lightning Issues: Based on the number of issues remaining to be resolved in the draft lightning BIO, AAO has decided to grant a 2-week extension on the existing lightning JCO -- BIO Implementation will be deferred from April 1st to April 15th. Assuming the BIO is revised as discussed with the Board's staff, it should be acceptable as an interim AB document [though not as an indefinite basis for operation]. Within a short period of time, however, the BIO must be updated to reflect information and analyses not yet completed by SNL. The list of research and analyses required is extensive and as yet unscheduled. This unfinished work could delay implementation of the best possible set of lightning protection controls. Additionally, M&H may have significant difficulty with proper implementation of adequate surveillance and in-service inspection of controls identified in the BIO [see Authorization Basis discussion #2, above].[II.A]

Readiness Issues: The W76 D&I Program contractor Readiness Assessment (RA) began Monday on an inauspicious note: DOE-AL had not properly approved the Plan of Action, the RA Implementation Plan was not issued, all RA team member were not identified, and numerous significant open findings from the W76 Technical Assist did not have clear paths to closure.[II.A]