

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 6, 1999

MEMORANDUM FOR: G. W. Cunningham, Technical Director

FROM: T. Dwyer and H. Waugh, Pantex Site Representatives

SUBJECT: Pantex Plant Activity Report for Week Ending August 6, 1999

DNFSB Activity Summary: T. Dwyer and H. Waugh were on site all week. J. DeLoach was on site Wednesday, as part of a phase II review of DOE-AL Federal training.

W56 Dismantlement Program: M&H has initiated cell operations on W56 primaries. However, difficulties are being encountered with the 1st unit: after unloading, a stress cushion continued to adhere to the primary, and required development of alternate removal methods; subsequently, alternate methods to remove an HE hemisphere required development. [Recall that this unit had been selected as the 1st unit at start-up because it was projected, by unit history review, as likely to be one of the most difficult of the entire dismantlement program.] With regard to bay operations, although the next unit in the bay began unscrewing at a lower torque than the previous 2, the torque required did not drop off as the joint was rotated through the initial 3-to-4 inches of arc. Ultimately, ~4500 ft-lb of torque was required to carry the joint thru 45° of rotation before it spun freely. Of note, M&H surface chemistry experts are currently examining samples taken from the primary-to-secondary joint threads of the 1st two units.^[II.B.2.a]

AL-R8 Sealed Insert (SI): M&H has developed a draft recommendation regarding the bolts used on the AL-R8 SI. Although the data developed to date appears to show that [1] development of some amount of oxide on the bolts is inevitable, and [2] no consideration has been given to potential untorquing difficulties (i.e., only “loss of tensile strength” has been measured), the draft document recommends that the existing Grade 8 carbon steel bolts continue to be used for the life of the program. Formal submission of this recommendation to AAO was expected last Friday, but now it appears that a paper presenting M&H bolt study results will be debated before the Corrosion Committee at the end of the month, and a separate recommendation will not be available until the end of September.

Meanwhile, current M&H schedules show the contractor Readiness Assessment (RA) to start up the 2nd line occurring Friday, August 13th, with operations commencing Monday, August 16th. However, the Project Manager believes they may yet be able to gain a day on the schedule, allowing the RA to be held on Thursday, and startup to occur on Friday the 13th or Monday the 16th, depending on closure of any findings. Design Agency personnel now plan to be on site the week of August 23rd to conduct follow-up Engineering Evaluation (EE) activities.^[II.B.2.b]

Price Anderson Amendment Act (PAAA) Activity: On Tuesday, EH-1 issued a Preliminary Notice of Violation (PNOV) against M&H, with a civil penalty of \$82,500. This action grew out of the alcohol fire on the W78 Program last December. The PNOV declares that 2 Severity Level II violations are being cited (2 x \$55,000) and that 25% mitigation has then been applied due to the thoroughness of the subsequent root-cause investigation.^[I.A.4]

Lightning Issues: M&H expects to deliver a revised lightning JCO next Wednesday.^[II.B.2.b]