

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 9, 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 July 9, 1999

DNFSB Activity Summary: H. Waugh was on site all week. T. Dwyer was on annual leave through Wednesday, and on site Thursday and Friday.

AL-R8 Sealed Insert (SI): On Thursday, the AL-R8 SI Readiness Assessment team leader transmitted a memorandum to the M&H General Manager indicating that closure documentation for all pre-start findings has been signed, and approved action plans for all post-start findings have been validated. The Readiness Assessment team therefore recommended starting AL-R8 SI operations immediately upon AAO approval of the associated Authorization Agreement (AA). Both the AL-R8 SI AA and the revised Building 12-116 AA have been sent to DOE-AL.^[II.B.2.b]

W56 Dismantlement Program: M&H initiated use of the new W56 procedure last Friday, and the PTs reported that they obtained approximately ½-inch of movement in the joint. However, when completion of the separation process was attempted on Tuesday, no joint movement could be accomplished, even though steady torque was applied for periods of up to 2 hours. A different unit will be subjected to the new method next week.^[II.B.2.a]

Lightning Issues: DOE has received a letter from SNL regarding movement of nuclear weapons during lightning warnings. *SNL recommends that nuclear weapons, in any configuration, not be transported in unprotected areas during lightning warnings or lightning storms* [emphasis in original]. AAO and M&H have determined that implementation of this recommendation will require development of a Justification for Continued Operation (JCO) to clearly define the risk DOE will accept, as well as highlight those areas that will require accelerated investigation by Design Agency personnel. A draft JCO will be submitted to AAO by late Monday, along with a companion implementing Engineering Instruction (EI). Key items to be dealt with in the JCO include:

- ! storage of nuclear weapons in Zone 4 -- none of the Zone 4 magazines are considered "protected areas" as far as lightning is concerned;
- ! transportation of full up warheads -- AAO appears to be driving toward allowing transportation of full up W87s, relying on the unarmed MSAD to stand off lightning;
- ! transportation of partial assemblies -- AAO will only authorize movements involving containers that have been approved in authorization basis documents (e.g., W56 Transport Cart, W87 Physics Package Transfer Cart);
- ! transportation of bombs -- AAO will not allow bomb transportation during lightning warnings, although the question of bomb storage in Zone 4 will now come to the fore;
- ! bay/cell operations -- currently developed [but not yet implemented] TSR controls will be captured in the JCO, although AAO will accept specific risks in Buildings 12-50 [bonded but unanalyzed], 12-60 Bay 1 [unbonded and unanalyzed], and 12-104 Bay 16 [unbonded].

AAO intends to continue Building 12-50 operations uncurtailed, as they involve only full-up warheads and the facility has been bonded. Until facility bonding in Buildings 12-60 Bay 1 and 12-104 Bay 16 is complete, no nuclear weapon operations will be allowed -- with the exception of W87s, for which unarmed MSADs will again be relied upon for lightning protection.^[II.B.2.b]