

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 16, 1997

TO: G. W. Cunningham, Technical Director
FROM: Jim McConnell and Harry Waugh, Pantex Site Representatives
SUBJECT: Pantex Plant Activity Report for Week Ending May 16, 1997

1.DNFSB Activity Summary: Harry Waugh was on site all week assisted by Charles Keilers.

2.SS-21 Facility Layout : As reported last week, while observing B61 Mod 5 dismantlement activities in Building 12-64, it was noted that weapon material was located in areas other than those pictured in the facility layout diagram that is included in the Nuclear Explosive Operating Procedures (NEOPs). This was particularly evident in the bay where the disassembled nose and tail components were gathered awaiting further disposition. The B61 Dismantlement Program Engineer was notified of our concerns that the crowded conditions in the bay were a possible threat to worker safety. This week we revisited these bays and found them in very good order. The bay where the B61 actually exists as a nuclear explosive does not suffer a crowded condition because the number of assemblies and partial disassemblies is limited by nuclear material and HE control limits. The question of whether specific layout controls are required in bays housing benign subassemblies and components is being discussed with Pantex management.

3.12-116 S/RID delay: The draft engineering Standards/Requirements Information Document (S/RID) for the new SNM staging facility (12-116) has gone through several revisions but will not be done before backfit construction starts (Aug 97). Last year, M&H set a goal to use this S/RID to validate the backfit design. Now, M&H considers this goal unachievable but also unnecessary due to earlier extensive design, FSAR, and draft S/RID reviews. M&H still intends to complete the S/RID before operations. DOE-AAO has questioned this approach since it does not provide the complete and systematic requirements review before construction that was initially intended. This delay appears to be driven by apparent lack of agreement within M&H, within DOE, and between DOE and M&H on what is needed in this facility-specific S/RID and how the S/RID will be used. Without this clear definition, it appears the S/RID's scope and level of detail may have expanded to more than just the agreed-upon set of applicable requirements and standards that is discussed in DNFSB/TECH-5. We are pursuing this.

4.SNM Activities: Building 12-66 may eventually be used to store the entire DOE inventory of surplus pits and thereby end up with the largest plutonium inventory of any facility in the DOE complex (i.e., possibly four times the strategic reserve inventory in 12-116). The DOE Record of Decision on fissile material storage and disposition states that Zone 12 facilities will be upgraded by 2004 to store surplus pits now in Zone 4 and at Rocky Flats, pending disposition. Current plans are to convert 12-66 (a hardened warehouse) to this mission. M&H is compressing the schedule to develop a backfit conceptual design before August 1. Technical uncertainties include criticality safety for such a large array, as well as seismic, thermal, and choice of container. In particular, alternatives to AT-400A containers are being considered for the majority of the surplus pits.

5.Future Activities:

a.May 27 - M&H AT-400A Corporate ORR begins

b.May 27-June 9 - W87 WPRR

c.May 30-June 5 - W79 Type 6B DMSO WPRR

d.June 2 - Reconvene W-69 NESS

e.June 10 - B61-7 NESS Revalidation begins

f.June 10 - W76 SS21 Milestone II meeting

g.June 11 - B83 Program Review

h.June 23 - W79 Type 6B DMSO Readiness Assessment begins

i.July 7 - W87 SEP begins

j.July 7-18 - DOE AT-400A ORR (following conclusion of M&H ORR)

Copy to:

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