

**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 16, 1999

**DNFSB Activity Summary:** T. Dwyer and H. Waugh were on site all week. J. McConnell was on site Wednesday, with DP-20. T. Burns was on site Thursday observing the AL-R8 SI.

**Lightning Issues:** M&H/AAO continue to wrestle with development of a response to the SNL lightning letter [see last week's report]. Of particular concern is the fact that the June 29<sup>th</sup> SNL letter contradicts previously submitted SNL recommendations (e.g., the specific analysis of the W56 Transport Cart), as well as SNL work in support of the Lightning Protection Project Team (LPPT). This calls into question SNL credibility as a source of technical recommendations in the lightning arena. SNL support of Pantex analytical needs also appears to be lacking, as evidenced by the minimal number of SNL resources available to work on this issue.

AAO is interpreting the latest SNL letter as a "best management practice," as opposed to a requirement. To formally accept the risk of ignoring this advice from their lightning expert, they are fashioning a JCO that, in some cases, rescinds existing site lightning controls. For example, latest drafts of the JCO authorize continued operations during lightning warnings for any weapon with a [confirmed] unarmed MSAD, ramp transportation for any full-up warhead in an approved shipping container, and ramp transportation for any full-up bomb. Of note, AAO intends to provide the draft JCO to the Design Agencies (including SNL) prior to submission for DOE-AL approval, although it is not clear that formal Design Agency buy-in will be requested or required. It is also not clear that DOE-AL has the authority to approve this JCO. The NESS community (DOE-AL/AAO/M&H) intends to submit a minority opinion that the changes envisioned in the JCO are not trivial, and require NESS and DOE-HQ involvement. Ironically, there is one benefit to this maelstrom of activity -- all Pantex lightning controls are finally being collected in 1 place.

Even with all the controls collected, however, M&H ability to properly implement them remains an open question. Recent history reveals a trend of failures in this area -- including ALO-AO-MHSM-PANTEX-1999-0051, an occurrence report filed this week indicating that, since the resumption of W78 operations on the Dynamic Balancer (Building 12-60, Bay 2), the NEOP has improperly directed PTs to lift W78's without the hoist isolation strap required by the facility authorization basis. It may be that a literal interpretation of the SNL letter -- no transportation during lightning warnings, as a "safety standdown" of some duration, would be the only corrective action that would allow M&H to get a handle on site lightning controls. [II.B.2.b]

**AL-R8 Sealed Insert (SI):** Tuesday, M&H successfully placed a pit into the 1<sup>st</sup> production unit AL-R8 SI. This success was tempered by difficulties encountered that day -- startup was delayed from 0900 to 1500 by work control package inconsistencies and the loss of configuration control regarding the 1<sup>st</sup> two pits brought in for packaging. By Friday, 5 of 6 pits (W54/W68) had been packaged; 1 was not packaged, at Design Agency direction, due to observed cleanliness and surface pitting concerns. The Design Agency Engineering Evaluation (EE) for these pit families was closed, although further EE activity is expected both before Building 12-64 shutdown and after Building 12-99 AL-R8 SI line start-up. [Of note, equipment is already being installed in 12-99, but startup is not expected until September, leaving a ~3-week production gap.] Efficiencies gained through proficiency are expected to allow M&H to achieve an AL-R8 SI throughput of 50/mo for each shift on a given line. The M&H priority for repackaging operations puts W62/W68 pits tying up FL-containers on site first in line. In a separate issue, LLNL has evaluated the structural capacities of stage right 6-packs, and fears that the safety factor may be insufficient. M&H/LLNL experts are re-examining their calculations. [II.B.2.b]