

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending September 10, 2010

Flooding Event: On August 27, PXSO approved the justification for continued operations (JCO) for the flooding event of July 8. The JCO identifies compensatory measures for the hazards associated with water accumulation in nuclear and nuclear explosive areas until B&W can develop and implement an enduring control strategy for subject hazard. This JCO supersedes the evaluation of the safety of the situation (ESS) that PXSO approved in the weeks following the flooding event (see 7/16/10 and 7/23/10 reports). The primary difference between the two temporary safety basis addendums is that the JCO requires both lightning warnings and a flash flood watch or warning (the ESS only requires lightning warnings) before the technicians must disconnect a nuclear explosive during manifold operations. Although it found the risk of mass properties operations acceptable based on the administrative compensatory measures identified in the JCO, PXSO also requested that B&W consider developing an engineered control to de-energize the mass properties equipment in the event that there is water in the pit.

Electrostatic Discharge (ESD) Floor Covering: This week, PXSO approved the ESS for the potential inadequacy in the safety analysis that resulted from the discovery of an overdue in-service inspection (ISI) of the ESD floor covering in a nuclear explosive bay (see 8/13/10 report). The ESS concludes that the ability of the ESD floor covering to perform its credited safety function has not degraded. This is based on the results of previous ISIs of the subject floor being consistent with the results of the ISIs performed on identical floors in older facilities, all of which continued to measure well within the ISI acceptance range of 100 k Ω to 100 M Ω . Following approval of the ESS, technicians completed the nuclear explosive operation that was in progress at the time the overdue ISI was discovered. Maintenance personnel subsequently performed the ISI of the floor in the facility and found it to be within the required electrical resistance range.

W84 SS-21 Disassembly and Inspection (D&I) Readiness Assessment (RA): This week, PXSO forwarded to B&W the RA report for W84 SS-21 D&I operations. The RA team identified one pre-start finding, four post-start findings, and twelve observations. The pre-start finding captured the fact that the venturi vacuum pump and piping employed in the W84 D&I process does not meet all DOE Explosives Safety Manual requirements for vacuum equipment. B&W has submitted an exemption request that provides the basis for equivalent safety as part of the closure package for this finding.

Subsequent to the completion of the RA, the team lead indicated in the memo forwarding the RA report to PXSO that one of the post-start findings needed to be re-classified as a pre-start finding. The re-classification occurred because the RA team member who originally classified the finding discovered that technicians, instead of inappropriately deviating from a procedure step (as originally captured by the post-start finding), in fact were unable to perform the step as written. PXSO has also upgraded one observation to a post-start finding (technicians may not be able to execute the action statements as written in the limiting conditions of operation for the verification of two stronglinks) and has requested that B&W perform a formal evaluation of two issues—one involving the conduct of the drill and one involving the process used to crosswalk training requirements—that were captured as observations in the RA report.