

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending December 4, 2009

Work Planning: Several months ago, maintenance personnel were performing an impairment of the ultra-violet (UV) fire detection system in a non-nuclear, high explosive facility when the deluge fire suppression system inadvertently activated. Both onsite personnel and the vendor have been unsuccessful in determining the cause of the activation. As a compensatory measure until the cause of the activation can be determined, UV impairment procedures have been changed to ensure the deluge system is impaired prior to UV impairment. Depending on the work to follow the UV impairment, maintenance personnel may be directed to leave the deluge system impaired. It should be noted that, although this event took place in a non-nuclear facility, the same safety system and maintenance processes are also used in nuclear explosive areas.

Personnel were recently performing maintenance activities following a UV impairment (once again in a non-nuclear facility) when they noted the deluge system was not impaired per the requirements for that particular operation. Subsequent investigation revealed that the work request did not direct impairment personnel to perform this action. The error appears to have been the result of a miscommunication between the facility manager and a maintenance supervisor regarding the precise nature of the follow-on work. B&W is in the process of developing corrective actions.

Applicability Matrix Upgrade: Certain site personnel rely on the applicability matrix as a means of readily identifying the suite of technical safety requirements (TSRs) that apply to a given operation in a given facility. For example, facility managers rely on the applicability matrix to account for changes in operating locations and the status of safety system upgrades when determining the appropriate facility-level surveillance and inspection requirements. Last week, PXS0 approved the removal of the applicability matrix from the TSRs document. The applicability matrix will still remain in configuration management, but will now be maintained as a stand-alone document.

The applicability matrix has some limitations, as currently constituted. It does not distinguish the applicable control sets for different types of nuclear operations (e.g., pit packaging versus pit staging) within a building, nor does it specify the applicability of transportation-related controls in sufficient detail. B&W recognizes these limitations and is developing a more detailed database that will allow the user to cross-reference the applicability of controls with accident scenarios, facilities, and/or operations. Completion of this project is incentivized in the fiscal year 2010 performance evaluation plan.

W84 Permissive Action Link (PAL) Coding Operations: This week, B&W completed the contractor readiness assessment for PAL coding operations on a limited number of W84 units. The lone finding involved a procedure inadequacy in which the person-to-person [M] designator was not included in the margin for three applicable steps. B&W was designated the approval authority for these operations, which are scheduled to begin 9 December.