

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending June 6, 2014

Work Planning and Control (WP&C): Post work tests (PWTs) for maintenance activities often require Facilities, Infrastructure, and Services (FI&S) personnel to hand off execution of the work package to Production operators. In the majority of these cases, the work package will require the operators to execute portions of a Production procedure governing normal operation of the system. Since system maintenance will sometimes leave these systems in an atypical starting configuration, it is incumbent on the FI&S work planner to work with the responsible system engineer to define the work steps and hazard controls necessary to bridge any gaps between the actual configuration of the system and the configuration assumed in the Production procedure. In the last two years, several events have exposed weaknesses in B&W's WP&C performance in this area. For example, one of the primary causes of last year's event in which a worker was injured after being exposed to lithium hydride (see 4/5/13 report) was that the work package did not capture the work steps or hazard controls needed to bridge the gap between the actual configuration of the system and that assumed in the procedure utilized for the PWT.

Last week, FI&S issued a revision to the Integrated Work Control Manual that is intended to address these weaknesses. The revision shifts much of the responsibility for defining PWT requirements from the work planner to the system engineer or equipment owner (SE/EO) by significantly expanding the types of equipment and situations for which the SE/EO must define the PWT. This expansion, along with new expectations for a higher degree of specificity in the instructions on the PWT form, should improve the clarity and overall adequacy of PWTs. In another improvement, the new process requires the SE/EO's signature indicating that the PWT was completed successfully prior to resumption of the maintenance activity. The site reps provided B&W and NPO management feedback that these PWT enhancements would also benefit from additional guidance on the expected rigor of planning walkdowns for Production procedures used in maintenance work packages.

Oxide Conversion Facility (OCF): This week, the site rep observed resumption of hydrofluorination bed operations at OCF. This was Enriched Uranium Production's (EUP's) second attempt to operate the bed since hydrogen fluoride (HF) leaks in the vaporizer enclosure halted operations last August. EUP operators suspended operations prior to the introduction of HF due to indications of an obstruction impeding the flow of nitrogen to the bed. Engineering personnel are working with EUP personnel to develop a procedure that would allow operators to oscillate the flow of nitrogen in an attempt to dislodge the obstruction.

Fire Protection: NPO sent a letter to B&W that expressed concern about the lack of configuration control in the potable water systems that support the site's fire protection systems. This concern stems from the recent inadvertent isolation of fire suppression systems in Buildings 9201-5 and 9826 caused in part by utilities personnel relying on potable water system drawings that were not accurate (see 5/23/14 report). NPO requested a corrective action plan within 45 days that includes prioritizing utilities drawings that require verification and correction.

NPO Oversight: The NPO manager recently started to conduct weekly conference calls, called the Integrated Weekly Operations Call (IWOC), in which NPO Assistant Managers, their deputies, and select subject matter experts, collectively discuss significant issues at Pantex and Y-12. The primary purpose of the call is to drive integration between Assistant Manager organizations in the follow-up to these issues.