

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 15, 2007

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending June 15, 2007

A. Building 9212 Documented Safety Analysis Implementation. This week, YSO and BWXT personnel continued their Implementation Validation Reviews (IVRs) for the Building 9212 Documented Safety Analysis (DSA). Both teams have identified numerous issues related to implementation of DSA controls including issues with surveillance procedures, operator training, and criticality safety. The teams have also identified some conduct of operations issues during their review. Although the IVR is scheduled to be completed next Friday, the reviews may be extended to complete the planned scope of the IVRs.

B. Special Processing Activity. During a sampling activity in the Special Processing area of the Enriched Uranium Operations Building, an operator noted that a safe bottle was pressurized as he was removing the safe bottle lid. The operator re-tightened the lid and contacted his supervisor. While another operator was describing the condition to the supervisor, that operator also loosened the safe bottle lid to demonstrate that the container was pressurized. The shift manager was then contacted to communicate the situation and additional controls were established (e.g., respirators, eye protection, use of a hood) to fully vent the safe bottle. During the critique, BWXT management noted that it is their expectation that the shift manager be contacted when an unexpected condition is identified (i.e., before opening the safe bottle a second time). BWXT inspected safe bottles with similar materials and did not identify other pressurized containers.

Safe bottles at Y-12 utilize a membrane on the lid that allows gases to escape but contains liquids. There have been instances of safe bottle pressurization in the past at Y-12 (e.g., see the 2/22/02 site rep. report). Previous testing indicates that the lid membrane diffusivity may be impacted if saturated with oil. BWXT is evaluating this particular lid. The site reps. have also asked YSO and BWXT management whether periodic inspection and cleaning of these lids may be warranted under certain conditions.

C. Quality Evaluation Relocation. As noted on February 2nd, BWXT was preparing to relocate the octagonal glovebox from the Quality Evaluation Building to the Assembly/Disassembly Building. In the last few weeks, BWXT has physically moved the first few sections of the octagonal glovebox to the Assembly/Disassembly Building with remaining sections to be moved by September. A revision to the Preliminary Documented Safety Analysis for the overall Quality Evaluation project that covers the octagonal glovebox installation was recently submitted to YSO for approval. Facility modifications to support the octagonal glovebox will continue in Fiscal Year 2008 with initial operations planned by early-2009.

D. Quality Evaluation Operations. In discussing relocation of the octagonal glovebox, the site reps. were informed of an operation planned in the next few months in the Quality Evaluation Building that has not been performed in several years and is not on the current BWXT Startup Notification Report (SNR). Following site rep. inquiry with YSO and BWXT personnel, BWXT has indicated an SNR evaluation and readiness review proposal addressing this operation will be submitted to YSO in the next few weeks.