

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 19, 2007

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending January 19, 2007

A. Oxide Conversion Facility/Conduct of Operations. As reported on December 29th, BWXT was completing investigation of the release of a small amount of hydrogen fluoride (HF) from primary confinement that occurred in early October during a safety interlock surveillance evolution. A causal analysis has been completed and the site rep. observed Oxide Conversion Facility (OCF) management brief results of the investigation to OCF personnel this week. Overall, OCF management considers that the event resulted from lack of proper communications among OCF management, shift management, production crew and system engineering personnel. Among numerous factors noted were:

- a HF vaporizer draining evolution several days prior to the event was suspended due to a problem in establishing required nitrogen pressurization; the shift manager did not record system status with clarity and detail sufficient for proper turnover;
- operators and shift management did not recognize the hazard of remnant pressure in the system that was created when opening the vaporizer vent line isolation valve during the subsequent interlock surveillance; opening this valve with the dock scrubber not operating created a path for HF to circulate back to the vaporizer enclosure and out of primary confinement;
- prior to the event, a system engineer had sent an E-mail to OCF management recommending purging of the system; however, OCF management had incorrectly inferred from the E-mail that draining was complete; since the interlock surveillance procedure only called for vaporizer draining, no action to purge was considered necessary.

Several actions have been identified including procedure revisions, training on the event and on expectations for proper communications, a comprehensive OCF system operability evaluation, and adding a new production support manager focused on OCF and the metal reduction process.

B. New Dismantlement Program. BWXT has started a new dismantlement program with the first unit having undergone the first phase of dismantlement. Due to similarities of the dismantlement process with an ongoing program, YSO and BWXT concluded that an independent readiness review was not required.

C. Enriched Uranium Operations Building. The site reps. recently met with the new facility operations manager for the Enriched Uranium Operations Building. The acting operations manager will continue to formally disposition safety basis items as the new manager completes facility qualifications. This position has experienced high turnover during the last few years due in some measure to the complexity and the degraded (aging) conditions of the building. To provide additional support for the operations manager, BWXT has added four new assistant operations manager positions. The assistant operations manager positions are responsible in one of four areas: safety basis; chemical processing; casting/metalworking; and balance-of-plant. BWXT management noted that this structure should reduce the operations manager's workload on narrowly-focused, day-to-day issues and allow more attention to key strategic areas.