

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 25, 2008

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending January 25, 2008

A. Wet Chemistry Tank Overflow. During operation of the high capacity evaporator this week, operators inadvertently overfilled the product tanks and overflowed approximately 30 liters of solution to the floor in the Enriched Uranium Operations Building. Operators took appropriate action to contact nuclear criticality safety and respond to the overflow. During subsequent investigation by B&W, operators noted that there have been similar problems with the potential for overfilling these particular tanks in the past because of the tank configuration, location of the tank level sight glass and the fluid dynamics during transfer to these tanks. As a follow-up action, B&W will be performing an engineering evaluation to determine if the tank level indication or method of transfer can be improved to prevent recurrence of these problems. In the interim, B&W has conducted operator training to address the potential for an overflow from these tanks and is considering a procedure change to capture this information.

B. Oxide Conversion Facility Restart. Since September, the Board staff has inquired with NNSA Headquarters on application of the requirements of DOE Order 425.1, *Startup and Restart of Nuclear Facilities*, to restart of the Oxide Conversion Facility (OCF, see the 9/07/07 site rep report). The OCF has not been operated with enriched uranium since September 2006. YSO had originally approved that a contractor Readiness Assessment (RA) be performed to confirm readiness for OCF restart in lieu of contractor and DOE Operational Readiness Reviews (ORRs), which are required for restart of a nuclear facility following a shutdown of more than 12 months. In October, YSO decided to also perform a YSO RA (see the 10/12/07 site rep. report). Following recent interaction with NNSA Headquarters, YSO submitted an exemption request on January 11th to NNSA Headquarters to now perform contractor and YSO ORRs but with the ORRs conducted concurrently instead of in a serial manner. NNSA Headquarters concurred with the exemption request on January 18th, but emphasized the need for the reviews to remain independent. The ORRs are now anticipated to start on February 11th. Contractor and YSO ORR Plans-of-Action are in development.

C. Specific Administrative Control Implementation. As noted on January 11th, B&W recently completed a design adequacy review for the monitoring and alarm equipment supporting a Specific Administrative Control regarding glovebox oxygen level. The design adequacy review was required to support upgrading this equipment to safety-significant. This review recommended installation of a backup power system (uninterruptible power supply) to improve reliability; however, the B&W letter that forwards the design adequacy review, which was required to meet a Condition of Approval in the YSO Safety Evaluation Report, does not address installation of a backup power system. This week, B&W personnel noted to the site reps. that there are no plans to go forward with the recommended upgrade but a compensatory measure (daily functional check of the equipment) will continue to be implemented. The site reps. have inquired on the basis for the apparent decision not to install the backup power system. In addition, YSO is also pursuing this issue.

cc
Board Members