

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 8, 2004

TO: J. Kent Fortenberry, Technical Director
FROM: Donald Owen, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending April 9, 2004

A. Y-12 Building 9212 Oxide Conversion Facility (OCF). As reported on March 5th, OCF “cold operations” were being delayed due to a number of factors. This week, cold operations were started for the hydrogen fluoride (HF) cylinder handling and loading task (using a training cylinder). Cold operations for the main processing tasks are expected to start during the next few weeks.

This week, YSO approved the BWXT Operational Readiness Review (ORR) Plan of Action (POA). The BWXT POA defines a detailed set of line management prerequisites for declaring readiness and starting the contractor ORR. One lessons-learned from prior startup/restart efforts at Y-12 (e.g., wet chemistry in Building 9212) was lack of sufficient practice of procedures after stability of the procedures was reached. Two POA prerequisites discuss practice of procedures, but provide no clear minimum standard of practice (e.g., a minimum number of successful practice evolutions). These prerequisites also do not clearly address if full, integrated evolutions (HF loading through product uranium tetrafluoride canning) are to be demonstrated versus individual task demonstrations. The site rep. discussed these observations with YSO management. (II)

B. Y-12 Activity-Level Work Planning. As reported on January 30th, YSO and BWXT had initiated a review of existing work planning and authorization processes for addressing infrequent and potentially hazardous activities. Results of the review were briefed to Y-12 management this week. The review team recommended two sets of criteria for such evolutions that would trigger successively higher levels of review and/or approval within BWXT management. Activities meeting the first set of criteria would require formal review by the facility Operational Safety Board (existing entities at Y-12). Activities meeting the second set of criteria would require review and approval by a Management Review Board (a new group to consist of BWXT senior managers). Other recommendations include additional training for work planning and review board members as well as revision to the Integrated Safety Management (ISM) System description.

Trial use of such new protocols in select facilities is planned during the next few months. YSO management requested that BWXT management consider proper involvement of subject matter experts and use of advanced hazard analysis techniques (i.e., beyond typical job hazard analyses), when appropriate, in incorporating these recommendations into the Y-12 ISM System. The site rep. notes that a revisiting of the corrective actions stemming from the Sodium-Potassium fire/worker injury event in 1999 (see the March 12th site rep. report) was not accomplished as part of this effort but is now intended to be performed during the next ISM Annual Update review scheduled in August. (I)

C. Feedback and Improvement. As reported on March 12th, it was found that Building 9204-4 shift management had not called for a critique following a report of use of an unauthorized, rigged device to get a vacuum lifting fixture to seat on a part. BWXT had indicated that this issue would be addressed in follow-up actions. The site rep. reviewed the investigation report recently completed by Building 9204-4 management; it clearly notes the issue and references applicable site guidance on when critiques are required. The report identifies that a “lessons-learned” document would be promulgated. No other actions were specified on that issue. The lessons-learned document, however, does not mention the applicable site guidance and addresses other issues with the event. Consequently, the lessons-learned document may not be effective in addressing when to call a critique. The site rep. discussed these observations with YSO and BWXT management. (I)