

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 3, 2006

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for the Week Ending February 3, 2006

Mr. Davis was out of the office all week.

A. Highly Enriched Uranium Materials Facility. As previously reported, concrete placements for the Highly Enriched Uranium Materials Facility (HEUMF) were suspended due to non-conformance in the length of reinforcing steel that functions to tie the foundation slab to the wall (see 1/13/06 and 1/20/06 site rep. reports). Applicable requirements in the BWXT drawings of record had been incorrectly translated to construction contractor fabrication drawings. Causal evaluation was in progress. Late last week and this week, BWXT identified additional non-conformances. These non-conformances, however, involve instances where the as-constructed condition did not meet fabrication drawing requirements. These included:

- reinforcing steel ("U-bars") that provides seismic resistance at the wall to roof slab junction was missing for a length of placed wall;
- vertical reinforcing steel was found to be missing from the placed floor slab adjacent to an internal door opening (this issue was discovered in early January but was identified to site management last week);
- more than half of the vertical reinforcing steel ("hook bars") on a length of wall being checked by BWXT on Thursday for resuming limited concrete placements was found to not meet the vertical height requirement above the floor slab.

Given these issues, on Thursday BWXT ordered the construction contractor to suspend essentially all HEUMF construction work. Corporate executives from BWXT and Bechtel Systems and Infrastructure Incorporated came to Y-12 on Friday to discuss the non-conformances and the path forward with BWXT and YSO management. A team of BWXT and Bechtel personnel from outside of Y-12 will perform a review of the HEUMF construction program including requirements flowdown, quality assurance, and construction contractor response to the work suspension. This review is to start on February 7^h and last about two weeks. Review results are to be factored into overall corrective actions.

In parallel with the external review, BWXT will continue causal evaluations, perform extent of condition reviews and determine corrective actions. BWXT management noted that the extent of condition reviews will (1) address placements where reinforcing steel configurations can be readily verified and (2) identify those placements where reinforcing steel configurations cannot be readily verified and require further evaluation. BWXT management also noted that limited placements where reinforcing steel configurations can be verified may be allowed prior to completion of causal evaluations with additional compensatory pre-placement checks.

cc
Board Members