

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 18, 2004

TO: J. Kent Fortenberry, Technical Director
FROM: Donald Owen, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending June 18, 2004

A. Highly Enriched Uranium Materials Facility (HEUMF). As reported on March 5th, YSO had approved limited site preparation activities (e.g., asphalt removal and site grading), but no major excavation activities pending resolution of a DOE Office of Inspector General issue. Site preparations began several weeks ago. This week, YSO approved starting excavation for the building foundation, now expected to start in the next few weeks. As reported on April 16th, the classified HEUMF Preliminary Documented Safety Analysis (PDSA) had been formally submitted to YSO. In late May, YSO transmitted their comments on the PDSA to BWXT. YSO anticipates resolving comments by early July. YSO approval of the PDSA is anticipated by the end of July to support approval of the Critical Decision 3 milestone by NNSA that would allow HEUMF construction to proceed.

B. Y-12 Conduct of Operations. As reported on March 12th, a BWXT action in the Y-12 Conduct of Operations improvement initiative is instituting a "Conduct of Operations Representatives" program in nuclear facilities. These individuals will report to Quality Assurance division management (independent from Manufacturing Division management) and are intended to provide independent oversight of operations and personnel mentoring in nuclear facilities. The site rep. observed a BWXT progress briefing to YSO on this action. Selection of personnel for the nine designated positions is complete and their assignment to nuclear facilities, following initial training, will start by early July (six individuals) and be completed by September (three individuals). BWXT and YSO management noted that line management (i.e., Manufacturing Division) support and cooperation will be key to success of this program.

C. Recommendation 97-1. As reported on October 3rd, the uranium-233 inspection and repackaging program in Building 3019 at ORNL, developed in response to Recommendation 97-1, *Safe Storage of Uranium-233*, had been completed and a summary report of the inspection program was pending. This week, the summary report of the inspection program was issued by ORNL. DOE-ORO personnel noted to the site rep. that all Oak Ridge efforts under Recommendation 97-1 are complete and that efforts to propose closure of the Recommendation belong to Headquarters.

D. Y-12 Work Control/Conduct of Operations. Two events were identified this week indicating some basic problems with work control by operations and maintenance personnel.

- An operation to clean out sludge containing enriched uranium from tanks associated with the Westfalia centrifuge process in Building 9212 was performed in late May without the "Work Instruction" required by site work control processes when fissile material is to be handled. This issue was raised by the system engineer who had been developing the Work Instruction and learned that the operation had already been completed.
- As externally reported this week, work to stop a pipe clamp ring leak on an acid pump in Building 9204-2 (special materials processing) was completed without the pump system isolation being independently confirmed as required (the pipe clamp ring broke upon tightening and a splash of acid occurred). In reviewing this event with YSO and BWXT management, the site rep. noted that the governing work package included additional scope to replace the pump if the clamp ring leak could not be stopped, however, a Job Hazard Analysis (JHA) was not performed as required by recently revised JHA screening criteria (see 3/12/04 site rep. report).

YSO and BWXT management indicated to the site rep. that investigation of these events continues.