

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 28, 2006

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for the Week Ending July 28, 2006

Mr. Owen was out of the office this week. Staff member Matt Duncan was on-site this week to perform site representative duties.

A. Uranium Holdup Program. This week, BWXT briefed YSO on their plan to address the broader uranium holdup issues that have been identified as a result of the vacuum pump filter holdup issue. This plan is intended to address the judgments of need and recommendations from the filter investigation team (see 6/23/06 site rep. report) as well as other identified issues. The plan recognizes that the Uranium Holdup Survey Program (UHSP) may not be adequate for monitoring of holdup in certain locations and that other options may be more appropriate. BWXT plans to develop and institute the Inadvertent Accumulation Prevention Program (IAPP) that includes the UHSP as one option for monitoring accumulation with several other options available (e.g., engineered features, intrusive sampling). To implement this program, BWXT plans to perform a systematic review of all fissile material activities to identify the appropriate IAPP option that adequately addresses the nuclear criticality safety concerns. A charter for this team has been issued and field reviews have started.

BWXT also briefed YSO on the specific corrective actions for the UHSP to ensure this program is adequate when identified as the method for monitoring for material holdup. Some of the key actions identified include the following:

- Site-Level UHSP Procedure – This procedure will replace facility specific procedures that are currently used. The procedure will also implement several improvements (e.g., technical basis for survey locations, requirements for trending and analysis).
- Technical Guidance Documents – These documents will form the basis for training and reference in several key areas (e.g., survey point selection, uncertainty determination).
- Staffing Plan – This plan will provide a basis for site staffing to ensure adequate UHSP support.
- Upgrade Plan – A plan to upgrade equipment and software.
- Compliance and Execution Plan – BWXT plans to identify appropriate self assessments to monitor and manage the UHSP improvements.

B. Vacuum Pump Filter - Criticality Safety. This week, BWXT completed the clean out of the other two West-side filter housings (see 6/16/06 site rep. report). A limited amount of uranium was identified and removed during these clean out activities.

C. Y-12 Maintenance Assessment. The staff and site rep. met with BWXT this week to discuss an on-going assessment of maintenance activities at Y-12. BWXT has been reviewing the definition of critical equipment and the associated maintenance strategies (e.g., preventive maintenance) for this equipment across the site. During the next few months, BWXT will be conducting training workshops to identify and evaluate critical equipment and the appropriate maintenance execution strategies.