

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 7, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Matt Forsbacka, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending June 7, 2002

A. BWXT Y-12 Enriched Uranium Operations: This week, the Site Representative discussed potential paths forward regarding the airborne release fraction (ARF) findings (highlighted in last week's report) with senior BWXT management. A firm commitment to perform additional tests which focus on ARF characterization is evident. To garner the maximal insight from the experiments slated for next week, the Site Representative suggested utilizing a nationally recognized expert in ARF characterization to observe and review the test protocols and experimental results. In addition, consideration is being given to automatic fire detection and suppression systems for B-1 Wing of Building 9212 that utilize chemical extinguishing agents. Operational tests of the efficacy of such systems on fires with the organic compounds of concern may germinate a paradigm shift towards expediting the implementation of engineering controls for fire protection in B-1 Wing.

On a related matter, the BWXT Performance Self Assessment (PSA) of Wet Chemistry Restart activities, scheduled to commence on June 17, is dependent on YSO's approval of the Justification for Continued Operation (JCO) submitted this week. Without the JCO, key maintenance tasks will not be performed on the Primary Extraction system in time for the scheduled start of the PSA. Training activities continue to be conducted; the Site Representative observed a technical seminar on criticality safety aspects of the Wiped Film Evaporator system. This was one in a series of seminars for subject matter experts on the various systems comprising Wet Chemistry Restart, and appeared to be a useful means for sharing safety information. (2-A)

B. Y-12 Readiness Assessments (RAs): This week, the YSO RA of the Californium Shuffler system in Building 9720-5, Warehouse, concluded with 7 pre-start findings, 1 post-start finding, and 6 observations. The tenor of the findings and observations indicate a lack of consistency in the application of conduct of operations principles. In particular:

1. Two maintenance workers were found to lack the appropriate qualifications to perform tasks in Building 9720-5. Technical Baseline Documents which establish the minimum levels of training were not established until after the YSO RA team noted potential deficiencies.
2. The safety-feature check procedure for the system was found to be missing an essential step and a warning message was omitted.
3. Reader-worker requirements specified in the startup plan were not performed in accordance with established plant standards.
4. Demarcation of the control area for the Californium Shuffler was not formally established. The identification of a control area boundary would enhance the focus of operational personnel on essential duties during the operation of the system.

Pending closure of the pre-start findings, the YSO RA team advised that the operation be started.

Also this week, the PSA for the RETECH Vacuum Arc Remelt furnace was completed by a BWXT assessment team. No substantive technical findings were reported. (2-A)

cc: Board Members