

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 27, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Matt Forsbacka, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending September 27, 2002

Staff member W. Andrews was on site this week to augment the Site Representative. This is Dr. Forsbacka's final weekly activity report as the Oak Ridge Site Representative. On October 6, 2002, Dr. Forsbacka will join the National Aeronautics and Space Administration.

A. Facility walk downs. The staff executed a short notice walk down of the Warehouse (Building 9720-5) and Assembly & Disassembly (Building 9204-2E). Technical Safety Requirements (TSRs) were reviewed prior to the walk downs. In the Warehouse, the general housekeeping was very good. There is a current issue concerning the comprehensiveness of the existing TSR-associated surveillance requirement for their fire suppression system. The existing surveillance may not identify a specific condition of inoperability and is inconsistent with surveillances performed on similar fire suppression systems in other Category 2 facilities at the Y-12 National Security Complex. Current plans are to incorporate the more comprehensive surveillance in the upcoming revision to the TSR.

A significant risk reduction initiative has been completed in the Assembly & Disassembly facility. A very large wooden platform in the basement has been torn down and removed. This action significantly decreases the combustible loading and had been recommended by the fire protection professionals for many years but had never been accomplished. Some unnecessary combustibles were identified. These were associated with some construction being done in the facility. The facility management should be more vigilant in removing unnecessary combustibles from the facility as soon as possible. (2-A)

B. BWXT Y-12 EUO Fire Protection: BWXT Y-12 completed work to refurbish the C-1 Wing sprinkler system. Calibration of fire system gages is an issue still requiring resolution. Fire protection codes require the use of an Underwriters Laboratories Inc. listed gage, but do not specify calibration requirements. Safety Class and Safety Significant systems call for substantive quality assurance, and it appears that appropriate surveillance and maintenance procedures should be considered. (2-A)

C. BWXT Y-12 Highly Enriched Uranium Materials Facility (HEUMF): Post test examination of the contents of the two prototype Rackable Can Storage Boxes (RCSBs), discussed in last week's report, revealed damage to some of the cans. However, the amount of material (tungsten carbide powder, a substitute for uranium oxide powder) lost from the damaged cans was small. The principal damage mechanism was puncture of the can by the bolts attaching handles to the lid of the RCSB. These handles, installed for convenient handling of the prototypes, will not be used in the final design. It appears that the RCSBs are capable of performing their intended function, even under the most challenging impact conditions. (1-C)