

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 27, 2003

TO: J. Kent Fortenberry, Technical Director
FROM: Donald Owen, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending June 27, 2003

Staff members W. Andrews, C. March, M. Piccarretta, and R. Rauch and outside expert R. West were at Y-12 to review implementation of Building 9212 authorization basis safety controls.

A. Y-12 Building 9206 Deactivation. Building 9206 is a former enriched uranium processing building that was placed in a standby mode with in-process material storage. A number of Board letters to DOE/NNSA had been sent prior to 2002 urging action to reduce the risk from significant amounts of hazardous and radioactive materials in Building 9206. The Board's letter of March 25, 2002 noted progress in reducing the Building 9206 enriched uranium inventory. This week, BWXT started and completed draining liquids in the secondary extraction columns in Building 9206 into safe bottles for interim storage (prior to transfer to Building 9212 for further processing). This is the first major milestone in addressing the hazardous liquid inventory in Building 9206. Preparations to address liquids in other systems are underway. (3-A)

B. Y-12 Nuclear Material Handling/Conduct of Operations. Late last week, a YSO Facility Representative (FR) observing off-loading and loading of nuclear material on an onsite transfer vehicle noted a concern that material was being loaded before material was off-loaded. The supervisor noted that no particular limits were being violated and completed the evolution. Follow-up of the FR concern after the evolution led to the determination that the procedure governing onsite transfer vehicle operations was violated as the procedure clearly requires off-load of material prior to any loading. This administrative control step is annotated in the procedure in order to highlight to operations personnel the step's importance to criticality safety.

The BWXT review of this event revealed that the material handling personnel were not appropriately ensuring step-by-step completion of the procedure, as required. The material to be loaded was first moved to the vehicle on the single available dolly. Rather than remove the off-load material, the personnel then chose to move the off-load material to the side of the vehicle interior and load the other material onto the vehicle from the dolly. Also noted was the factor that until recently, immediate loading following an off-load had not been typical of the onsite transfer vehicle operations. The chief corrective action is to review with applicable personnel the onsite transfer vehicle procedure and emphasize the need for strict procedural adherence. The site rep. discussed the lack of disciplined operations evident in this event with YSO and BWXT management. (1-C)

C. Combustible Control/Housekeeping. The staff and site rep. performed a walkdown of authorization basis safety controls in Building 9212 including the E-Wing basement area that contains much mechanical and electrical equipment. The staff noted the substantial amount of combustible, excess/unnecessary materials in several sections of the E-Wing basement area. Combustible materials (i.e., piles of trash) were noted directly in front of an electrical control panel. Staff review of the three most recent BWXT monthly fire safety inspection reports indicated that such conditions had been noted, but no corrective action was apparent. A separate walkthrough in Building 9204-4 (component quality evaluation) by the staff revealed similar combustible control/housekeeping conditions in certain areas. The staff and site rep. discussed these issues with YSO and BWXT management who indicated corrective actions would be taken. (1-C)