

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 22, 2001

TO: J. Kent Fortenberry, Technical Director
FROM: Charles M. Coones, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending June 22, 2001

Site Representative Gubanc was on annual leave this week. Staff member Zull and outside consultant Lewis were at ORNL to witness the contractor ORR for the U-233 inspection and packaging project.

A. Y-12 Disassembly - BWXT has yet to formally respond to either the June 6 or June 11 letters from YAO requiring an overall assessment of the readiness process and a justification for continued operation for other work in 9204-2E. One letter attempting to address these issues was issued and later retracted by BWXT after initial reaction by YAO. BWXT appeared to be ready to restart the older hood in 9204-2E without completion of the technical basis document. The staff suggested that the technical basis for operation of the hood be completed prior to operation. DOE has also adopted this position and BWXT is working the basis document.

B. Development Accident- On June 19, a researcher in 9202 experienced a violent chemical reaction when scraping experiment residue from a beaker inside a glovebox, shattering the beaker in his hand. One of the gloves was cut by glass from the beaker and one of the glovebox windows was seared by the heat of the reaction. However, no one was injured and no contamination was found outside the glovebox. The experiment was researching alternative forms of uranium purification using ammonium hydroxide. Only depleted uranium is used in this research. Early indications are the researcher slightly altered the process of the experiment and exceeded the scope of his work authorization. Investigations will be completed next week. Currently, research work in Development has been suspended by BWXT and will be restarted on a case-by-case basis after assurance of process safety is obtained. The staff encouraged YAO to consider the restart implications imposed by DOE Order 425.1 on Development, which is a nuclear facility.

C. TRU Waste Facility - The first concrete was poured for the TRU waste facility, once all parties agreed that the facility will be provided with fire suppression throughout.

D. U-233 ORR - The UT-Batelle ORR for the U-233 project started on June 18. The ORR team selected appeared to be adequate in composition and experience. The work evolutions were performed using redlined versions of some of the procedures, demonstrating that parts of the process were still in the test and checkout phase. There was also a software problem that prevented the slide valve above the radiograph station from operating properly. This is evidently a recurring problem that had been seen before but not completely remedied. Although several operators are available, UT-Batelle has only qualified one operations supervisor for this multi-month task. Loss of this individual would result in a total work stoppage. Management indicated backup supervision was planned.

cc: Board Members