

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 28, 2001

TO: J. Kent Fortenberry, Technical Director
FROM: Paul F. Gubanc, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending September 28, 2001

Staff member Forsbacka was at Y-12 this week to assist with Site Rep duties. Outside Expert West was at Y-12 observing disassembly campaign preparations. Staff member Andrews visited Oak Ridge to assist in a review of control and maintenance of authorization bases by DOE-ORO.

A. DOE Environmental Management (EM) Control of Authorization Bases (AB): This week, the staff identified the following additional concerns with the understanding and control of AB by DOE-Oak Ridge EM (ORO/EM) and its prime contractor, Bechtel Jacobs Company (BJC):

1. On September 25, BJC issued a proposed justification for continued operations (JCO) to DOE for approval for the Y-12 depleted uranium storage facility. While the JCO more accurately reflects current operations, it does not clearly define the facility's inventory limit and does not address a plume modeling inaccuracy identified by the Site Rep.
2. Building 9720-25 is a Y-12 classified waste storage facility operated by BJC and categorized as a low hazard, radiological facility. The AB consists of a 1991 hazards classification, a number of negative USQDs and a recent positive USQD. The AB has not been updated in ten years. In March 2000, a classified positive USQD was completed but not approved by the contractor until December 2000 and it has yet to be approved by DOE. There do not appear to be clear limits on any of the hazardous materials, including enriched and depleted uranium, brought into the facility and thus it is unclear how BJC and DOE can be assured that the authorization basis safety analysis scenarios continue to be at least bounding and that the facility's categorization remains the same.
3. The staff compared a BJC list of 29 AB documents awaiting DOE approval with ORO/EM's current action tracking system list. Of the 29 documents on the BJC list, only three were on the DOE list also. There were six documents on the DOE list which were not on BJC's. Over 50% (15 of 29) of the documents on the BJC list were over a year overdue for approval and four were over 3 years overdue. It is likely that there are AB documents on neither list.
4. In February 2000, DOE conducted a combined Phase 1 and 2 ISM verification which identified 50 findings; many related to AB. DOE's September 2000 follow-up verification closed 40 of these findings and served as the DOE-ORO Manager's basis for declaring BJC's ISM program implemented. A review of six AB-related findings found that actions taken to close them were inadequate. ISM's true state of implementation is questionable. DOE & BJC have initiated corrective actions but the issues' magnitude is not yet bounded. (1-C)

B. Y-12 Dismantlement Preparations: Dismantlement dry-runs started this week with the intent to have operators complete a full performance (simulating where required) of the recently revised procedure, conduct additional training on sections of the procedure, and complete their qualifications. These actions were to be completed in preparation for a line-management performance self-assessment (PSA) prior to declaring readiness for the contractor readiness assessment. Numerous issues arising this week have resulted in not completing the first dry run. By Friday morning, only the first task and most of the second task had been completed out of four (the remaining are mostly simulations and take less time). A major issue occurred Monday

when a unit would not fit into the rotary cutter, which is used for the first task. Investigation revealed that the wrong cutter blades were installed. No drawing existed of the proper configuration which implements a safety requirement. The correct blades were found, replaced, and determined to provide a satisfactory fit. Other issues included violation of a radiological work permit by 3 workers, violation of an area posting, and missing container signage. Despite the number of issues, which indicate a lack of conduct of operations proficiency, and an inability to accomplish operations, training and qualification as planned, BWXT management exerted significant pressure to start the PSA this week. BWXT management decided Friday to delay the start of the PSA until October 2nd. (2-A)

cc: Board Members