

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director
FROM: Wayne Andrews, Donald Owen and David Kupferer, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending August 13, 2010

This is the last Oak Ridge report for Mr. Owen pending his new assignment in Washington, DC.

B53 Dismantlement/Procedures. This week, B&W completed its Readiness Assessment (RA) for startup of B53 dismantlement operations (see the 7/23/10 site rep. report). The review team concluded that B&W met the prerequisites for startup of operations. The review team identified one post-start finding; in the event of loss of coolant during Wachs cutter operations, the Fire Hazards Analysis requires the Wachs cutter to be disengaged whereas the response procedure does not instruct the operators to disengage the cutter. The review team also identified observations related to improvements that should be made to the criticality safety evaluations, operating procedures, job hazards analyses, and equipment testing documentation. B&W is planning to perform 'first-use' B53 dismantlement operations in a couple months.

The site reps. shared the following observations regarding the eight operating procedures for B53 dismantlement operations with Y-12 management:

- The Y-12 procedure writer's manual highly discourages referencing between procedures (i.e., a procedure directing operators to perform steps from a second procedure prior to resuming the original procedure) because of the increased potential for personnel error. In conflict with this guidance, the subject procedures frequently reference each other.
- There are at least 15 instances in which the subject procedures include the flexibility for process engineers to direct work (see the 1/29/10 site rep. report). B&W recently trained the process engineers that this direction must be written, peer reviewed, and concurred with by the Shift Manager.
- One of these procedures includes 94 up-front precautions and limitations and another includes 53 up-front precautions and limitations (see the 7/9/10 site rep. report).

Fire Protection. All personnel that enter B-1 Wing in Building 9212 are required to read a briefing on the Fire Protection Program. This briefing includes direction that, upon hearing the Evacuation Announcement, personnel should begin an orderly evacuation of the Wing through the radiological Boundary Control Station unless they believe they are in imminent danger (in which case they should exit the Wing via the closest exit). The Evacuation Announcement is an automated message that directs personnel to leave the building by the nearest exit.

Last Wednesday morning, the B-1 Wing Fire Detection and Alarm System was activated and the Evacuation Announcement was made throughout B-1 Wing (no personnel were in the Wing and the only personnel in the immediate vicinity were located in the Oxide Conversion Facility and a supervisor's office, both of which are adjacent to the Wing). The fire department responded to B-1 Wing within 10 minutes and determined that the cause of the alarm was a pull station on the third floor. Due to confusion on how personnel throughout Building 9212 should have responded to this alarm, B&W is re-evaluating its procedures and policies.

Uranium-233 Disposition/ORNL Building 3019. This week, a team led by DOE Headquarters performed an assist visit to review the status of the U-233 Downblending and Disposition Project (see the 5/21/10 site rep. report). The review team provided 18 recommendations to the new project management team including recommendations related to both technical issues (e.g., seismic analysis, HVAC design, Thoron hazards, NQA-1 implementation, etc.) and project management issues (e.g., planned reviews, metrics, communication, issues resolution, etc).