

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 20, 2001

TO: J. Kent Fortenberry, Technical Director
FROM: Paul F. Gubanc, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending July 20, 2001

Staff member Massie and Outside Expert Lewis were at ORNL this week to observe the DOE Operational Readiness Review (ORR) for the ORNL U-233 inspection program.

A. Y-12 Integrated Safety Management (ISM): This week, BWXT conducted a series of safety-focused training sessions for supervisors who then, in turn, trained their crews. Each session starts with a formal presentation on recent ISM successes and failures, root causes and lessons learned and then is followed by small group discussions on how personnel perceive the site's safety posture. I attended both a supervisor-level and flow-down training session:

1. The BWXT management team is substantively involved in both the supervisor and flowdown sessions. BWXT senior management recognizes the benefit of this first-hand observation.
2. The small group discussions are producing candid mid-manager and worker feedback to senior management on the perceived problems with ISM implementation. The results of these sessions are being rolled up for evaluation and development of corrective actions.
3. The working-level sessions are revealing significant distrust borne out of a lack of interaction with senior management. Most striking, recent BWXT personnel changes made for safety reasons are viewed by some workers as retribution for threatening production goals. (2-A)

B. ORNL Building 3019 U-233 Inspection Program: On July 16, DOE commenced its ORR for Phase-1 of the U-233 inspection program. Observations from the ORR include:

- With a few exceptions, the ORR team is not crystallizing substantive issues and clearly coupling them to requirements/standards. The team's leadership is not challenging the team members' observations to force this focusing to occur.
- Inspection equipment failures have extended three days of evolutions into at least five. Equipment problems also interfered with performance of the contractor ORR.
 - A remotely-operated inspection camera wouldn't retract fully and for several hours obstructed the material handling pathway (i.e., couldn't set the package down).
 - One weighing scale failed its calibration check and a second scale has a readout stating "unstable." Operations continued to use this second scale despite being unable to explain the meaning of the readout or getting it to clear (though the reading does appear stable).
 - A solenoid interlock would not release the radiography source so it could be deployed for package non-destructive examination (NDE).
- Operations are supported by a minimal crew of one certified supervisor, two certified operators and one qualified NDE technician. Given the 4x10-hour work shifts, the elevated heat stress levels in the work area, and the recent history of equipment failures, the current staffing provides inadequate reserve capacity to deal with upsets and emergencies.
- During a dry spill/airborne contamination drill, a drill monitor observed what he believed to be a real loss of contamination control but did not act to control the situation. (3-A)

cc: Board Members