

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 29, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Matt Forsbacka, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending March 29, 2002

BWXT Y-12 and the Oak Ridge National Laboratory were at minimum staffing levels on Friday, March 29, in observance of a holiday.

BWXT Y-12 Building 9720-5, Warehouse: On Tuesday, personnel evacuated the facility due to smoke that was observed to be coming from the ventilation system in the facility's office space. A material inventory was in progress at the time, and no injuries or nuclear safety concerns were reported as result of the facility evacuation. The source of the smoke was later determined to be from an air conditioning unit compressor motor, located on the roof of the facility's office space, that had burned out. The following day, the Board's site representative observed a management critique of the event and the personnel response thereto. During the critique, the events, beginning with the first observation of smoke to the resolution of the situation, were painstakingly recreated and recorded in chronological sequence with input from workers, managers, Fire Department personnel, and security force personnel. This event and the critique provided insights with regard to emergency response and the ingrained response to protecting nuclear material:

1. It took approximately 7 minutes to fully evacuate the facility and completely account for all personnel (31 people) from the time smoke was noticed and the Plant Shift Supervisor was contacted. Facility management ordered the evacuation over the local public address system and instructed that immediate and orderly evacuation from the Material Access Area be taken through the security portal. Because some material was being inventoried, workers expressed some confusion about securing the material. Management reiterated the need to evacuate immediately through the security portal, and the workers did so. Facility "crash doors" allow for more immediate evacuation, but procedures would require an extensive material inventory to be performed if these doors were used. During the critique, management stated that if workers are in mortal danger, or perceive that they are, they should use the "crash doors."
2. The evacuation took place fairly quickly, but workers lingered at the building entrance before proceeding to the assembly station. In addition, a concern was expressed that personnel with medical training were not available to assess workers at the assembly station for potential medical problems. However, in accordance with established procedures, the assembly station coordinator did ask if anyone was injured.
3. A team of security and operations personnel was sent back into the facility to secure the material before the source of the smoke had been fully identified. This action was based on the on-scene commander's judgement that the smoke had cleared and reentry was safe.

This event should give managers, workers, and emergency and security respondents at all nuclear facilities cause to assess their priorities for future emergencies and to look for opportunities to improve safety aspects of emergency response. (1-C)

cc: Board Members