

**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

March 26, 1999

**TO:** G.W. Cunningham, Technical Director

**FROM:** Paul F. Gubanc, Oak Ridge Site Representative

**SUBJ:** Activity Report for Week Ending March 26, 1999

I was in training Tuesday through Thursday this week and will be on annual leave next week. Staff member David Moyle will cover the office in my absence. Herb Massie visited ORNL Tuesday and Wednesday to discuss and review the U-233 inspection program and provisions for long-term storage. Tim Hunt visited ORNL this week to observe DOE's preparations to conduct a Phase 1 ISM verification at the ORNL in late April.

A. Y-12 Building 9215 Ventilation: The M-Wing of Building 9215 is where high enriched uranium (HEU) parts are machined. Last week, I reported that a deficient ventilation condition in M-Wing had gone uncorrected for six months beyond that permitted by the DOE Y-12 Site Office (YSO) issued Safety Evaluation Report (SER) for Bldg 9215. In response, M-Wing machining operations were suspended on March 18. While details are still being finalized, the key facts are:

1. Ventilation air pressure in M-Wing currently operates at a higher pressure than outdoors.
2. While individual M-Wing machines and chip handling operations are individually exhausted through filtered ducts, the general M-Wing shop area is not.
3. Given the low, but possible, risk of an unfiltered release from a chip fire on the M-Wing shop floor, the SER directed that M-Wing filtered ventilation be operational by September 1998.
4. Throttling of the M-Wing supply fan can reduce the M-Wing ambient air pressure below atmospheric but results in increased temperatures. Given the high precision required on M-Wing machined components, such temperature increases are undesirable.
5. The contractor, LMES, has installed the filtered stack but has not yet completed preparations to make it operational. (Prior experiences at Y-12 are that modifications are frequently not ready-to-operate when construction is "complete.")
6. Current Y-12 commitments cannot be satisfied if M-Wing operations are suspended until the stack is operational.
7. LMES is developing a proposal (due to DOE on March 26) to accelerate the M-Wing filtered exhaust work and resume machining operations with compensatory measures to secure M-Wing ventilation should an airborne contamination event occur.

I will request Dave Moyle to obtain additional details on this matter next week including a review of what other SER commitments were not completed. (II-B.1)

B. Y-12 Site Integrated Modernization: On March 17, DOE published its Notice of Intent to prepare a Site-Wide Environmental Impact Statement (EIS) for Y-12 operations. In particular, the EIS will examine facility options ranging from continued upgrades in existing facilities to the creation of a new Y-12 manufacturing plant. The EIS will also examine siting options within the existing Y-12 Plant fence line (this extends well beyond the currently developed portion of the site). (I-A.3)

cc: Board Members