

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 23, 1999

**TO:** G.W. Cunningham, Technical Director  
**FROM:** Paul F. Gubanc and David T. Moyle, Oak Ridge Site Representatives  
**SUBJ:** Activity Report for Week Ending December 24, 1999

Mr. Gubanc was on leave Monday. The office will be closed Friday for the Christmas holiday.

A. Nuclear Criticality Safety (NCS) at Y-12: On December 17, LMES senior management promulgated written internal direction to the Y-12 nuclear facilities to conduct verifications of "area specific CSAs/CSRs related to the December 13 incident in Building 9212." For the enriched uranium facilities (Bldgs 9206, 9212, and 9215), they are also to develop plans to conduct a "CSA/CSR baseline." While we agree that the verification efforts to date are beneficial, we have several concerns with how these verifications and baselines are being accomplished.

1. As of Tuesday, LMES had not yet completed its critique of the incident. Until this is fully completed and root causes identified, the verifications cannot be viewed as adequately addressing the scope of the issues involved.
2. LMES is taking credit for having previously performed a "baseline" in the non-EUO nuclear facilities over the last few years. While some verification activities were indeed conducted, we have been unable to identify a consistent definition of what constitutes a "baseline." Additionally, we have received inconsistent explanations of what was actually done over the last few years between senior managers, facility managers and first-line workers/supervisors. As a result, we believe a false confidence exists over the extent of past verification efforts.
3. In most cases, the verifications are taking material form and quantity information from one of three sources, a) "batch cards" attached to each container, b) a material accountability database, and c) historical records. There is not, however, a meticulous hierarchy being applied to the walkdowns as to which of these sources to use and under what circumstances. As a result, the verification records become an amalgam of data of indeterminate pedigree.
4. We continue to see signs of a detached approach by LMES management to the whole NCS matter. Facilities are given only general guidance but are left to their own devices to develop the specifics. Senior managers, having previously been left uninformed by subordinates, depend on these same subordinates to explain to them "what went wrong." Over the last ten days, we've spent approximately two mandays observing or conducting walkdowns during which time we've observed no senior LMES managers (those who will prepare and submit the corrective action plan) in attendance.

LMES is expected to submit their formal corrective action plan to DOE on December 27. We will continue to discuss our concerns with DOE and LMES management.

On a related matter, on December 20 LMES requested DOE approval to resume housekeeping and safety-related surveillances/maintenance in Building 9212; most of which involve handling materials contaminated with trace levels of uranium. DOE approved the LMES request on December 22. (2-A)

B. Building 9201-5 Explosion: The DOE Type A team completed collecting evidence (external to the furnace) prior to departing Y-12 on Tuesday, and will return January 3-14 to complete its investigation. In the meantime, LMES has recognized the need for additional expertise in their recovery actions and will likely use an independent contractor for remediation of the furnace including removal/stabilization of any residual reactive compounds. (1-C)

cc: Board Members