

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 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 July 23, 1999

Mr. Gubanc was at Paducah on Thursday and Friday reviewing Recommendation 95-1 status.

### A. Y-12 Enriched Uranium Operations (EUO):

1. **Reduction** - On July 21, LMES officially notified DOE of their intention to startup reduction separate from and prior to the HF system, following a contractor RA. We understand that DOE intends to accept this proposal and verify readiness with line management oversight of the RA.
2. **HF System Preheaters** - For the fluid bed reactions to occur, the fluidizing gas must be preheated, but testing has not yet achieved the desired gas temperatures. LMES is looking at increased insulation to control the heat loss which is estimated at 70-90%. Test data implies that because of preheater vessel temperature limits, the current design still may not work, yet engineering maintains that the design is sound and supported by the data. The design document reveals that the total heat applied should be more than adequate (four times what is required), But offers almost no margin for error in gas flow rate and maximum vessel temperature.
3. **HF System Walkdowns** - On July 19 and 20, we observed EUO's walkdowns of the HF system. The walkdowns validated only very limited sections of the HF System design drawings; those that had a direct tie to facility safety, criticality safety, or process performance. Neither the design drawings, nor the recently developed process system drawings (PSD's), have been maintained under rigorous change control so the benefit of this effort is not immediately apparent. On July 21, we were informed that the PSD's would be walked down in their entirety in the near future and placed under rigorous change control. (I-A, II-B)

B. Emergency Management: On July 21, Mr. Gubanc observed the monthly meeting of the Oak Ridge "Emergency Management Council (EMC);" a group of 20+ DOE and contractor line and support personnel who have some responsibility for emergency management. It became apparent that:

4. A charter has been drafted but not finalized even seven months after the EH-2 assessment report of December 1998 criticized the EMC for having no charter.
5. There is still no clear understanding among EMC members of what the EMC is trying to accomplish. Given that the draft charter specifically states the EMC has no role in actually resolving issues (it is a "management forum"), we too are left puzzled.
6. Despite the need for DOE leadership in the area of emergency management identified in the Board's July 8 letter, the EMC does not support this function and may serve to obfuscate responsibility if line managers view the EMC as a vehicle for issue resolution.

Mr. Gubanc discussed his concerns with senior DOE management but believes they still do not appreciate the need for their personal involvement in taking strong management action. (I-A)

C. Process Vessel Code Stamping - Mr. Felton, LMES VP for Defense Programs, recently has been challenging the use of process vessel code stamps, and has appeared to be advocating ignoring standard industrial codes. In subsequent discussions with Mr. Felton, he clarified that he is not against code usage. He is challenging his engineers not to rely on code stamps to validate designs, and technically to justify process vessel design adequacy irrespective of code stamping. (I-A)

cc: Board Members