DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 18, 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 June 18, 1999

Jim McConnell was at Y-12 this week to observe the LMES assessment of the HF System.

A. Y-12 Hydrogen Fluoride (HF) System for Enriched Uranium Operations (EUO):

1. **Configuration Control** - This week it was revealed that the HF System had been modified to use incompatible material (i.e., stainless steel sintered filters) in the HF fluid bed to support testing without being controlled as a "temporary modification (TM)." Since this loss of configuration control could also occur in operating systems, Mr. Moyle reviewed EUO TM's and found, amongst other problems, that 6 of 11 active TM's had exceeded their required removal date. No undocumented TM's were identified. The EUO operations manager now recognizes the problems with controlling and tracking TMs and intends to remedy the situation within the next few days.
2. **Operational Testing Safety** - On Wednesday, the EUO Chief Test Engineer informed Mr. Gubanc that operational testing could be safely continued, despite the host of recent material defects, due to the use of only water and <90 psig N_2 or air. Testing of the gas preheaters is on hold. On Friday, EUO management acknowledged they were reexamining their basis for assuring the safety of continued testing: especially as new system problems are identified.
3. **Line Management Responsibility** - In response to our concerns, LMES (Felton) has identified the EUO Deputy Manager as the person responsible for making the HF system operational; including resolution of emergent engineering and construction issues. This is to be formally communicated by memo within LMES in the near future.
4. **Management Understanding** - We met with senior DOE and LMES managers to discuss concerns about the apparent lack of appreciation of the safety implications of recent issues in both the short-term (i.e., EUO resumption) and the long-term (i.e., Y-12 modernization). The senior managers acknowledged the staff's concerns and understand that the recent safety issues identified with the HF system are symptoms of deeper and more significant problems that require more substantive action. (I-A, II-B)

B. Year 2000 (Y2K) Preparations: On June 15 & 16, Mr. Moyle attended a DOE-HQ review of Oak Ridge Y2K computer issues. The review was primarily administrative in nature though it appears all contractors at Oak Ridge are making progress and there is a clear emphasis on safety systems. The DOE team stressed that safety systems should be treated with the same level of rigor as mission critical systems. As part of the Y2K efforts, contingency plans are being prepared for all safety systems. At this time, however, it is not clear that these plans adequately address uncontrolled external effects such as loss of utilities or vendor supplies which may be critical to safety. (I)

C. ORNL U-233 Inspection Criteria: On June 17, Mr. Gubanc participated in a staff videoconference with ORNL on the U-233 inspection criteria. While productive, it was obvious that ORNL is still approaching the criteria as an administrative task. Given the numerous staff comments and ORNL self-recognized enhancements, ORNL should better appreciate the value of developing these criteria. A revised set of criteria are now expected by the end of June. Given that the inspection procedures are due to be developed by mid-July, this effort is now close to becoming critical path. (III-A.1)

cc: Board Members