

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 5, 2000

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Paul F. Gubanc and David T. Moyle, Oak Ridge Site Representatives  
**SUBJ:** Activity Report for Week Ending May 5, 2000

Board members Eggenberger and DiNunno, and staff members Andrews and Helfrich visited Y-12 on Wednesday to review enriched uranium operations (EUO) restart preparations. Staff members Massie, Winters and Zull visited ORNL to review U-233 programs at Building 3019 and the Molten Salt Reactor Experiment (MSRE). Andrews also reviewed the DOE readiness verification program.

A. Y-12 Enriched Uranium Operations (EUO) and Restart: As discussed this week, on-going operations and restart were significantly impacted by recent subcontractor cuts. As of Friday:

1. Resumption of fissile material operations (i.e., Phase A processes) have been occurring process-by-process over the last week. EUO Management is preparing for each operation using a very deliberate, safety-conscious methodology. Complete resumption is expected by the end of May.
2. To sustain on-going operations will require exchanging about 20 LMES persons for others with the appropriate skills. An additional 40 people (gleaned from existing LMES staff) are needed to maintain progress on the near-term portion of restart (HF & reduction). LMES and DOE management recognize that these up to 60 reassignments must be carefully evaluated so as not to create intolerable impacts (e.g., safety, productivity) elsewhere at Y-12.
3. EUO has abandoned plans to install a sprinkler system in B-1 Wing due to an estimated cost of roughly \$20M. We consider the estimate grossly excessive and an insufficient basis to abandon this safety upgrade. We'll discuss this further with DOE and LMES.
4. EUO expects to issue a revised restart baseline by the end of May. (1-A)

B. DOE Management Field Presence: After several months of pressing on DOE and LMES senior management to rectify their inadequate field presence (also reiterated by the NaK report):

1. The ORO Manager expects to elicit field presence expectations from her management team within the next couple weeks. The Manager schedules field walkdowns every other week.
2. On April 28, the DOE Assistant Manager for Defense Programs promulgated expectations that "each GS-14 and above spend at least four hours per month in the field." He acknowledged this is not very aggressive but that it's better than what his staff (ex. Fac Reps) is currently achieving.
3. On April 19, the LMES senior line managers issued their expectations (nothing quantifiable). The LMES senior ESH&Q managers have issued no such guidance. LMES is reportedly moving to incorporate field presence metrics into personnel performance evaluations.

We find DOE's and LMES' glacial and minimal progress in this regard disappointing. (1-C)

C. MSRE Remediation: Preparations for two upcoming U-233 remediation activities have failed to identify and force implementation of controls commensurate with the hazards.

1. The UF<sub>6</sub> conversion facility accident analysis (in ORNL Bldg 4501) postulates a building fire initiating a UF<sub>6</sub> release from a transfer carrier and leading to an off-site dose as high as 20rem.
  2. The charcoal bed remediation project depends on system vacuum to confine dispersible uranium deposits that are 500R/hr on contact and could pose a significant threat to workers if released.
- Despite these risks, no safety controls have been identified. Based on the staff's concerns, however, MSRE personnel committed to re-evaluate the need for safety controls. (3-A)

cc: Board Members