

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 23, 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 June 23, 2000

A. Enriched Uranium Operations (EUO) Restart: On June 22, LMES proposed the following to Mr. Beck, DP-20, as regards EUO. DOE expects to request a formal proposal by mid-July.

1. The UF₄ Reduction process is projected to receive a DOE ORR the week of August 21.
2. LMES will complete the HF system technical baseline by the end of CY 2000 and then lay up the system as a backup contingency (although the hydrogen reduction portion of the system would still be required under LMES' proposed alternative discussed below).
3. LMES proposes by Fall 2001 to complete development and deploy new casting and uranium reduction processes to achieve chemical purification and metal production. If successful, this could significantly defer the need to restart the HF system and wet chemistry. We offered DOE the following cautions since the LMES presentation did not address them:
 1. Project and quality management issues remain and will become even more critical.
 2. Any new processes will demand critical review and engineered provisions for new pre- and post- processing requirements, criticality, radcon, security, process safety, etc.
 3. EUO management is enjoying the benefits of restarting previously operating processes (even so, restarting A1 & A2 will take nine months). They may not fully appreciate the difficulties associated with reconstituting and making operational new or long inactive processes. (2-A)

B. Y-12 Highly Enriched Uranium Materials Facility (HEUMF): During a telephone conference with the DNFSB staff on June 13 to support a July review, the LMES HEUMF project manager indicated that he expected soon to issue the Project Execution Plan (a DOE-LMES interface document) and Project Management Plan (an LMES internal document). Questions precipitated internally by that call resulted in LMES providing these documents for review to Paul Rice. Based on the results of Rice's review and other factors, the schedule for the HEUMF has been extended:

1. Starting Monday, DOE will supplement its staff with a project management subcontractor. This person is expected to assist in the preparation of DOE's project management procedures.
2. Mr. Rice will have an assist visit on HEUMF documents/processes during the week of July 10.
3. The LMES independent assessment of readiness to issue the HEUMF request for proposal (RFP) has been deferred until early August with a new goal of issuing the RFP in September. (1-C)

C. Miscellaneous Events:

1. On Tuesday, a criticality alarm undergoing testing inadvertently actuated. The evacuation response was adequate, but issues were identified including delays in notifying a hearing-impaired employee and response by workers who had indications that a criticality hadn't actually occurred.
2. Two bottles of dried picric acid were discovered in an ORNL Life Sciences building at Y-12 (Bldg 9210). The bottles were successfully removed but issues were identified over assignment of roles and responsibilities between ORNL and Y-12 contractor & DOE personnel.
3. ORNL Building 3019 this week recognized that its criticality safety analyses do not currently address flooding of more than one storage well during a fire sprinkler system activation. Given the large amounts of water potentially available and the interconnectedness of the wells via the ventilation system, ORNL's self-examination of this issue is appropriate. (3-A)

cc: Board Members