

**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

August 6, 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 August 6, 1999

Mr. Gubanc was on annual leave Thursday and Friday

A. HF Supply System (HFSS) Review: Over the past several weeks, we have reported a myriad of problems in the construction and testing of the HFSS. LMES published their internal assessment of the HFSS line item project this week and deserves credit for being so candid in their review. The report is highly self critical of nearly every aspect of the project, and suggests a need for significant management changes. Corrective actions to address the report findings are still under development. Even though DOE project management ultimately shares responsibility for problems identified with the HFSS, we have seen no comparable self evaluation effort to date on the part of DOE. (I-A. II-B)

B. Reduction Process at Y-1 2 Enriched Uranium Operations (EUO): We previously reported concerns that if the intended UF<sub>6</sub> feed for reduction contained moisture absorbed during its several years of storage, unexpected pressurization could occur in the reactor vessel during firing. Engineering has determined that approximately 0.1 w/o water in UF<sub>6</sub> feed is a level of potential concern. All six samples analyzed this week contained 0.16 to 0.26 w/o water. Operations intends to bake this UF<sub>6</sub> in a muffle furnace using an approved drying procedure prior to introduction into the reduction process. In light of these results, we believe that a procedural requirement for moisture analysis of all UF<sub>6</sub> feed may be warranted. We will continue to engage EUO management to ensure that potential hazards associated with UF<sub>6</sub> impurity are adequately addressed. (II-B.2)

C. Emergency Preparedness: In response to the Board's July 8 letter, DOE-OR is taking the following actions regarding emergency preparedness

1. A DOE-OR working group, composed of a representative from each line organization and the emergency management project office (EMPO), has been established to identify issues, develop corrective actions, and force reservation-wide decisions to occur where needed. This group is currently attempting to capture and integrate the findings of prior assessments to ensure their issue list is complete.
2. The working group has so far identified four major issues demanding resolution: a) hazard assessment methodology; b) consequence modeling methodology; c) command and control; and d) emergency response cadre training and qualification. Of these, command and control will be the most contentious and demand the strongest leadership from senior DOE management.

3. The DOE-OR Deputy Manager, Steve Richardson, has become personally involved with reviewing the status of corrective actions and decision-making.

Mr. Gubanc has also suggested that the working group address how to maintain senior management involvement after the working group is disbanded and creation of a formal change control process for the emergency management program structure. Both of these are needed to ensure policies and improvements achieved by the working group are not reversed unknowingly (I-A)

cc: Board Members