

**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

February 12, 1999

**TO:** G.W. Cunningham, Technical Director

**FROM:** Paul F. Gubanc, Oak Ridge Site Representative

**SUBJ:** Activity Report for Week Ending February 12, 1999

A. DOE Oak Ridge Operations (ORO) Technical Capability:

1. On February 8, ORO senior management met to discuss the need for additional Fac Reps (in light of the Secretary's November 20, 1998, memorandum on Workforce 21). While an increase and the value of Fac Reps was generally supported, the staffing analyses (of each Assistant Manager) were not consistently developed or presented. Also, underlying issues (e.g., overall staff utilization, projected attrition) were raised but not pursued. I have forwarded my observations to the acting ORO Manager for his consideration.
2. ORO has initiated internal discussions on "succession planning". I intend to discuss with ORO management whether this planning will meet the requirements of the Federal Technical Staffing Plan required of defense nuclear facilities by Secretarial Policy DOE P 420.1 dated December 10, 1998. (I-B.2)

B. ORNL Molten Salt Reactor Experiment (MSRE): On February 12, I toured the MSRE and its mockup testing facility with the cognizant DOE Facility Representative and contractor managers:

1. The DOE Fac Rep and contractor managers all showed a high level of technical familiarity with MSRE activities and displayed a good working relationship between them.
2. The questioning of workers (operators, radcon technicians, tool developers) revealed a high degree of worker involvement and mutual cooperation.
3. The December 18 contamination "puff" experienced during probing of the MSRE activated charcoal bed (ACB), internally contaminated the ventilated enclosure (a small building above the ACB) and the robot inside it. Decontamination of the enclosure is complete but does not support downposting the enclosure interior as a contamination area.
4. Now that the robot is contaminated, it is no longer available to be used at the mockup testing facility (a non-radiological area). The impact of this limitation is not yet clear though past mockup tests have identified robot-unique problems before actual use in the field.
5. MSRE staff are designing a small containment to cover the ACB access so that any future releases will be captured before being dispersed into the enclosure. (III-A.2)

C. Y-12 Enriched Uranium Operations (EUO) Restart: Key observations associated with Phase-B (wet chemistry) restart preparations:

1. Hazard evaluations are now planned for each of the Phase-B processes. Reduction has already been completed, Primary Extraction (using the HAZOP technique) started last week, Chemical Make-up started this week, and the HF System will commence next Monday. Most evaluations are expected to use the What-If/Checklist technique.
2. The EUO restart logic has been amended to include Y2K compliance and hazard evaluations for each of the Phase-B processes. (Y2K is also being evaluated for Phase-A processes.)
3. Next week LMES is expected to deliver their baseline schedule for EUO Phase-B to DOE.

A Board staff review of EUO Phase-B preparations is planned for next week. (II-B)

cc: Board Members