

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 15, 1999

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

**FROM:** M. T. Sautman

**SUBJECT:** RFETS Activity Report for Week Ending January 15, 1999

**Lock Out/Tag Out (LO/TO).** Despite the compensatory actions in the standing order discussed last week, there was a fifth LO/TO incident this week. Last Friday, the B886 Facility Manager noticed that a flange on the suction of a steam system condensate return line pump was leaking. Without using any work packages, he placed a parallel pump in service and isolated both the pump and the suction strainer. While trying to tighten the nut on the flange, he accidentally broke the flange. After removing the remaining nut and flange, he left the system in this configuration over the weekend. When maintenance workers went to work on the system on Monday, they identified that both the LO/TO procedure and standing order had been violated. A LO/TO was required since there was the potential for liquid with a temperature greater than 120 degrees coming out of the strainer while the flange was removed. Maintenance workers LO/TO'ed the system and installed a new flange on the strainer to restore the system's integrity. In addition to firing the Facility Manager, RMRS plans to conduct a seminar with all their managers and selected supervisors to discuss non-conservative decision making, proper work control, and recent LO/TO violations. Both K-H and RFFO senior managers are treating these LO/TO violations very seriously.

**Year 2000 (Y2K) Compliance.** DOE-HQ's Chief Information Officer, John Gilligan, was at RFETS to discuss progress in addressing Y2K issues. The technical staff's major concern after their review last Fall was that several of the safety systems were not scheduled to be addressed until Fall 1999. RFETS, however, has been very successful in accelerating their schedules. RFFO now expects to complete conversion (i.e., renovation, validation, and implementation) of all DOE Mission Critical (a.k.a mission essential) systems by the end of January 1999. In addition, RFFO expects to complete conversion of all RFETS-Critical systems by the end of March, rather than by the end of September. Many of the RFETS-Critical systems are safety-related. The one exception will likely be the fire alarm/detection/suppression system, which may not be implemented until the end of May. If RFETS can meet their goals, they anticipate completing their contingency plans and independent verification and validation by the end of May.

**Residue Characterization.** The technical staff has received the draft technical basis for reclassifying thirteen high risk residue categories as low risk so far. A consolidated list of comments has been compiled and will be transmitted to RFFO for resolution shortly. In most cases, the data justify the reclassification. However, the Site Rep has identified one case where it appears that the number of samples taken was not sufficient to achieve a 95/5% confidence level. In addition, three different values have been used for the number of moles of hydrogen gas produced for each mole of plutonium

metal reacted with water. This causes the “bounding calculations” performed to vary by up to a factor of 4 among the various reports. Other areas for improvement include discussion of anomalies, the need for additional data to support some conclusions, and errors that need to be corrected. Finally, the Site Rep is trying to develop a better process for reviewing and resolving technical staff comments on the draft characterization reports since the current process has had mixed success.

cc: Board members