

REMINGTON ARMS COMPANY, INC.
LONOKE, ARKANSAS 72086

To: T. C. Douglas February 25, 1993
From: F. G. Lopata *F. Lopata*

SUBJECT: FEBRUARY PROGRESS REPORT

R&D LABORATORY:

A Process Hazards Analysis for this lab complex was submitted to the Process Safety Management Committee. Seven pre-start-up hazard analyses were identified and a schedule outlined for their completion. One of these needs to be done for each instrument to be located on the Chem lab side before installation and operation.

Safety tests to determine the safe storage limits for the day-boxes and the propagation test box have been scheduled. The day-boxes are to be tested March 8, weather permitting.

BATF has not yet approved the magazine Building 612 but some of explosives I ordered have arrived and are being stored in another plant magazine.

LEAD-FREE PRIMING MIX:

The literature search materials are being studied as time permits to determine formulations covered by patents and to develop some ideas for proceeding toward a Remington lead-free primer.

Acquisition of commercially available lead-free primers has begun in order to examine them. We are treating CCI as the benchmark.

Additional operating procedures are being written for submission to the Explosives Committee in order to be able to work with "non-standard" materials, to do primer analysis and to finalize the explosive weight limits.

PLANT SUPPORT:

Participation is continuing in the revision of the explosives audit procedures as a member of the primer area team.

Participation is continuing in the Process Safety Management team.

In response to the Primer Team meeting/objectives, we have collected data from 160 particle size analyses, 73 infra-red spectra, and 150 differential scanning calorimetry runs. We are attempting to put this data into meaningful form to

present to the Team and to Production. (These runs were on lead styphnate, TNR, and tetrazene from manufacturing.)

We also loaned our water-jet siever to F. Whitmore so that he could wet-sieve lead styphnate and we could compare methods of particle size analysis.

We have received infrared spectra of non-Remington manufactured tetrazene, normal lead styphnate, basic lead styphnate, and TNR for use as comparisons. (However, we must build our own spectral library of our own compounds to use as standards for actual instrumental analysis. We are still waiting for computer hardware corrections before we have this capability.)