Monsanto

FROM NAME & STATION: Linda L. Lewis

PLAINTIFF'S EXHIBIT
MON-467

DATE: November 21, 1980

SUBJECT: Contribution to "Laboratory Safety" Handbook

REFERENCE:

cc: J. C. Bolding
P. S. Glaspie
R. K. McLeod
A. M. Patterson

TO: W. G. Juhl

I have been requested to help in the writing of a new text on laboratory safety (see attachment). Although I would consider this a personal project and not a job-related project, I need the approval of Monsanto to undertake it. I would also like to use Monsanto's technical library for references.

I would prefer the situation of having open correspondence with the editor, and having the final draft circulated at Monsanto for approval. Please let me know if this proposal meets with your approval.

Linda L. Lewis

Linda L. Lewis

Attachments

/mj

SC 16634

LAM023903

NORMAN V. STEERE & ASSOCIATES, INC.

140 MELBOURNE AVE. S. E., MINNEAPOLIS, MINN. 55414 • PHONE (612) 378-2711

November 14, 1980

Linda L. LEWIS, Senior Chemist
Monsanto Chemical Intermediates Company
PO Box 1311
Texas City,TX 77590

Dear Ms. Lewis:

Van Nostrand Reinhold Company has asked me to be the editor of a new text on laboratory safety, and we are beginning work on a book to be titled "Laboratory Safety and Health ". Our goal is to provide fundamental information on laboratory hazards and preventive measures for use by those teaching science courses in high schools and colleges.

You have been recommended as a person with experience and interest in laboratory safety and health, and one who could make a significant contribution by sharing your knowledge and insights. We understand that your company is also interested in chemical safety education for citizens and future employees. We would like to have your assistance with this project.

"Laboratory Safety and Health" will be an updating and revision of "Guide for Safety in the Chemical Laboratory" prepared by the Manufacturing Chemists Association and published by Van Nostrand Reinhold in 1954 and revised in 1972. The Manufacturing Chemists Association, now the Chemical Manufacturers Association, has relinquished their rights to the Van Nostrand Reinhold publication and has withdrawn all of their other safety publications including the Laboratory Waste Disposal Manual.

In order to meet the need for an available reference for disposal of laboratory waste, for the revised book we plan to compile new information on disposal of small quantities of common laboratory chemicals. We are looking for sources of assistance on this part of the project, and your recommendations are invited.

Enclosed for your review and comment is a copy of the outline for the book and the type of information we are seeking for the Tables of Chemical Hazard Information.

We would like to have your help on preparation of chapters on developing safety and health measures (14), emergency procedures (15), labeling needs (21), lock-out and tag-out procedures (23), hazardous chemical reactions (24), hazards in scale-up from research (25), evaluating hazards of unstable substances (26), evaluation of new processes and new products (27), and the tables of chemical hazard information (32)

Although there is no provision for reimbursement of authors or contributors, we will acknowledge the individuals and companies who provide information and will recognize your contribution with a copy of the final book.

We hope that you will be able to accept our invitation to participate in this project. We look forward to working with you and to publication of an exciting and useful book.

Sincerely,

Norman V. Steere

Norman V. Steere, Editor

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OUTLINE FOR LABORATORY SAFETY AND HEALTH BOOK
for VAN NOSTRAND REINHOLD-3rd Edition of MCA Guide to Safety in the Chem.Lab.

Draft November 5, 1980

! The basic idea is to start with the most simple and common needs and proceed through the more complex and less frequently used topics. The Tables of Chemical Hazard Information planned at the back of the book are intended to include waste disposal information that is distinctly different from that previously provided by the MCA, which they will no longer provide or permit to be reprinted.
We intend to try to have the Tables made available as a separate publication. !

CHAPTER NUMBER	CHAPTER TITLE
1.	Responsibilities for Laboratory Safety and Health
2.	Principles of Accident and Disease Causation
3.	Human Factors in Accident Causation
4.	Environmental Factors in Accident Causation
5.	Energy Factors in Accident Causation

HAZARDS IN LABORATORY ACTIVITIES

6.	Fire Hazards in Laboratories and Research Activities
7.	Health Hazards of Chemicals
8.	Instability and Reactivity Hazards of Chemicals
9.	Physical Hazards in Laboratory Activities
10.	Electrical Hazards in Laboratory Activities
11.	Radiation Hazards in Laboratory Activities
12.	Thermal Hazards in Laboratory Activities
13.	Biological Hazards in Laboratory Activities

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CONTROL MEASURES FOR LABORATORY HAZARDS

14. Developing Safety and Health Measures for Laboratory Activities
    ! Include Safety Orientation here or early in this section.!
    ! Include need for Waste Disposal planning!! !

15. Emergency Procedure Development, Preparation, and Practice

16. Fire Extinguisher Needs and Limitations

17. Techniques for Preventing Chemical and Biological Contamination

18 Protective Clothing for Minimizing Personal Contamination

19. Respiratory Protective Equipment Needs and Limitations

20. Laboratory Exhaust Ventilation Needs and Limitations

21. Labeling Needs and Systems

22. Laboratory Equipment Hazards and Precautions

23. Lock-Out and Tag-Out Procedures for Equipment Maintenance

24. Hazardous Chemical Reactions

25. Hazards in Scale-up from Small Quantities Used in Research

26. Evaluating Hazards of Unstable Substances

27. Evaluation of New Processes and New Products

28. Safe Handling of Compressed Gases and Cryogenic Fluids

29. Electrical Safety Inspection Measures

30. Special Storage Requirements for Chemicals and Flammables and Hazardous Wastes

31. Laboratory Design for Optimum Performance and Safety and Health

32. Tables of Chemical Hazard Information

!We need to be sure we have covered all the requirements for identifying, treating, packaging, etc.etc. for hazardous wastes. If possible, the Tables will include methods for treating small "laboratory" quantities of the chemicals listed. !

SC 16637

TABLES OF CHEMICAL HAZARD INFORMATION

Chemicals to be included:

Chemicals listed in ACGIH TLV
Chemicals listed in NFPA No. 49
Chemicals listed in Handbook of Laboratory Safety
Chemicals with AIHA Hygienic Guides published
Priority Pollutants
Chemicals commonly used in intro. laboratory courses

Information to be included:

Chemical Name and Formula
Chemical Abstracts Registry Number
Cost of the chemical (eg. $ /100 mg of reagent grade)
!This information could be helpful in waste decisions such as whether to save it, chuck it, or salvage it.!

Fire Hazard information, including Flash Point, Flammable Limits, Ignition Temperature, Extinguishing Agents, and whatever else pertains, such as largest size glass container permissible.

Health Hazard information, including whether compound is Corrosive, Irritant, etc, the toxic dose reported (LD 50, animal, and route of admin.), basis for TLV, relative hazards from concentrated short-term exposure (/H.L.Smyth in HLS.), references if compound has been reported carcinogenic or having other unusual effects, and whatever other information is available that is pertinent, brief, and important, such as symptoms of acute or chronic overexposure. One format we might consider is the one we used in the manuals for EPA. Another bit of information, if we could get it, would be the precautionary statements used on labels by the leading chemical companies.

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Packaging and Shipping Requirements / DOT

Spill Control Recommendations

Waste Recycling, Treatment, or Disposal Recommendations

!I like the format I used in the Handbook of Laboratory Safety Tables of Chemical Hazard Information, but that format cannot be used. Should we consider including any of the other physical data listed there, such as Boiling Point/Melting Point, Vapor Pressure, Density or Specific Gravity, and Water Solubility?? !

!Note on November 9, 1980: Let's include the physical data. !

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