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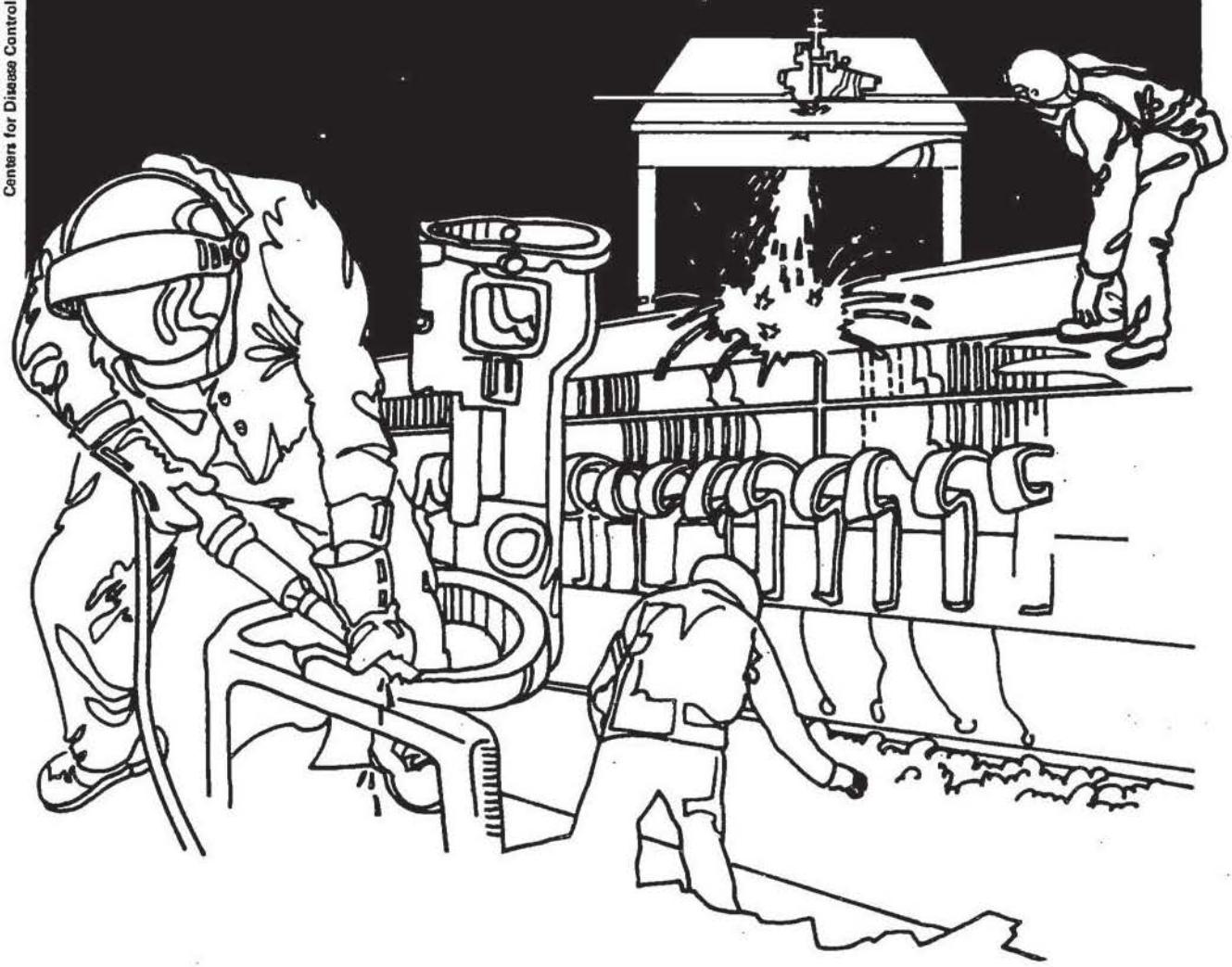

Health Hazard Evaluation Report

HETA 82-250-1181
COBE LABORATORIES, INC.
CRANBURY, NEW JERSEY

PREFACE

The Hazard Evaluations and Technical Assistance Branch of NIOSH conducts field investigations of possible health hazards in the workplace. These investigations are conducted under the authority of Section 20(a)(6) of the Occupational Safety and Health Act of 1970, 29 U.S.C. 669(a)(6) which authorizes the Secretary of Health and Human Services, following a written request from any employer or authorized representative of employees, to determine whether any substance normally found in the place of employment has potentially toxic effects in such concentrations as used or found.

The Hazard Evaluations and Technical Assistance Branch also provides, upon request, medical, nursing, and industrial nygiene technical and consultative assistance (TA) to Federal, state, and local agencies; labor; industry and other groups or individuals to control occupational health hazards and to prevent related trauma and disease.

HETA 82-250-1181
SEPTEMBER 1982
COBE LABORATORIES, INC.
CRANBURY, NEW JERSEY

NIOSH INVESTIGATOR:
Raymond L. Ruhe, I.H.

I. SUMMARY

On May 10, 1982, the National Institute for Occupational Safety and Health (NIOSH) received a request to conduct a health hazard evaluation from an authorized representative of Cobe Laboratories, Inc., Cranbury, New Jersey. The request concerned employee exposures to airborne concentrations of xylene and butylated hydroxy toluene (BHT) at the Renalyte Operation. The operation is designed to package Renalyte (used by kidney dialysis patients) in one-gallon plastic containers. At the initial stage of the operation, a labeling machine affixes a label to each container using a hot melt glue. Occasionally, the rollers of the labeler must be cleaned, using a solvent (mostly xylene and BHT) from a pressurized can.

On July 27 and 28, 1982, NIOSH conducted an industrial hygiene survey to determine employee exposure to airborne concentrations of xylene and BHT used in the operation. Six personal breathing air samples for xylene and BHT were collected on solid sorbents and analyzed according to NIOSH Methods S-318 and S-167, respectively.

Concentrations of xylene ranged from less than the minimum amount detectable (0.01 mg per sample) to 2.5 mg/m^3; NIOSH recommends an exposure limit of 436 mg/m^3 as a 10-hour time-weighted average concentration. The air concentrations of BHT measured in the breathing zone of the production technician were less than the minimum amount detectable (0.01 mg per sample) by the analytical method.

On the basis of the environmental sampling conducted at Cobe Laboratories, no health hazard was identified at the time of the survey.

KEYWORDS: SIC 3841 (Surgical and Medical Instruments and Apparatus), xylene, butylated hydroxy toluene (BHT)

II. REFERENCE

1. National Institute for Occupational Safety and Health. NIOSH manual of analytical methods, Vol. 1, 2nd ed. Cincinnati, OH: National Institute for Occupational Safety and Health, 1977 (DHEW (NIOSH) Publication no. 77-157-A).

III. AUTHORSHIP AND ACKNOWLEDGEMENTS

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IV. DISTRIBUTION AND AVAILABILITY OF REPORT

Copies of this report are currently available upon request from NIOSH, Division of Standards Development and Technology Transfer, 4676 Columbia Parkway, Cincinnati, Ohio 45226. After 90 days, the report will be available through the National Technical Information Service (NTIS), 5285 Port Royal, Springfield, Virginia 22161. Information regarding its availability through NTIS can be obtained from NIOSH Publications Office at the Cincinnati address. Copies of this report have been sent to:

1. Manager of Security and Safety, Cobe Laboratories, Denver, Colorado
2. Plant Manager, Cobe Laboratories, Cranbury, New Jersey
3. NIOSH, Region II
4. OSHA, Region II

For the purpose of informing the one affected employee, a copy of this report shall be given to the affected employee or posted by the employer in a prominent place accessible to the employee for a period of 30 calendar days.

TABLE I

Results of Personal Breathing Zone Air Concentrations
of Xylene and Butylated Hydroxy Toluene (BHT)

Cobe Laboratories, Inc.
Cranbury, New Jersey
HETA 82-250

Date	Job	Sampling Period	Sample Volume (Liters)	Xylene mg/m^3*	BHT mg/m^3
7-27-82	Production Technician(a)	1305-1507	11.9	2.5	-
7-27-82	Production Technician(a)	1305-1507	11.8	-	LD**
7-28-82	Production Technician(a)	1007-1223	13.5	LD	-
7-28-82	Production Technician(a)	1007-1223	13.7	-	LD
7-28-82	Production Technician(a)	1310-1436	8.5	LD	-
7-28-82	Production Technician(a)	1310-1436	8.6	-	LD
NIOSH Recommended Standard				436	-

* mg/m^3 = milligrams of substance per cubic meter of air sampled
** LD = less than detectable limits; 0.01 mg per sample for both xylene and BHT

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