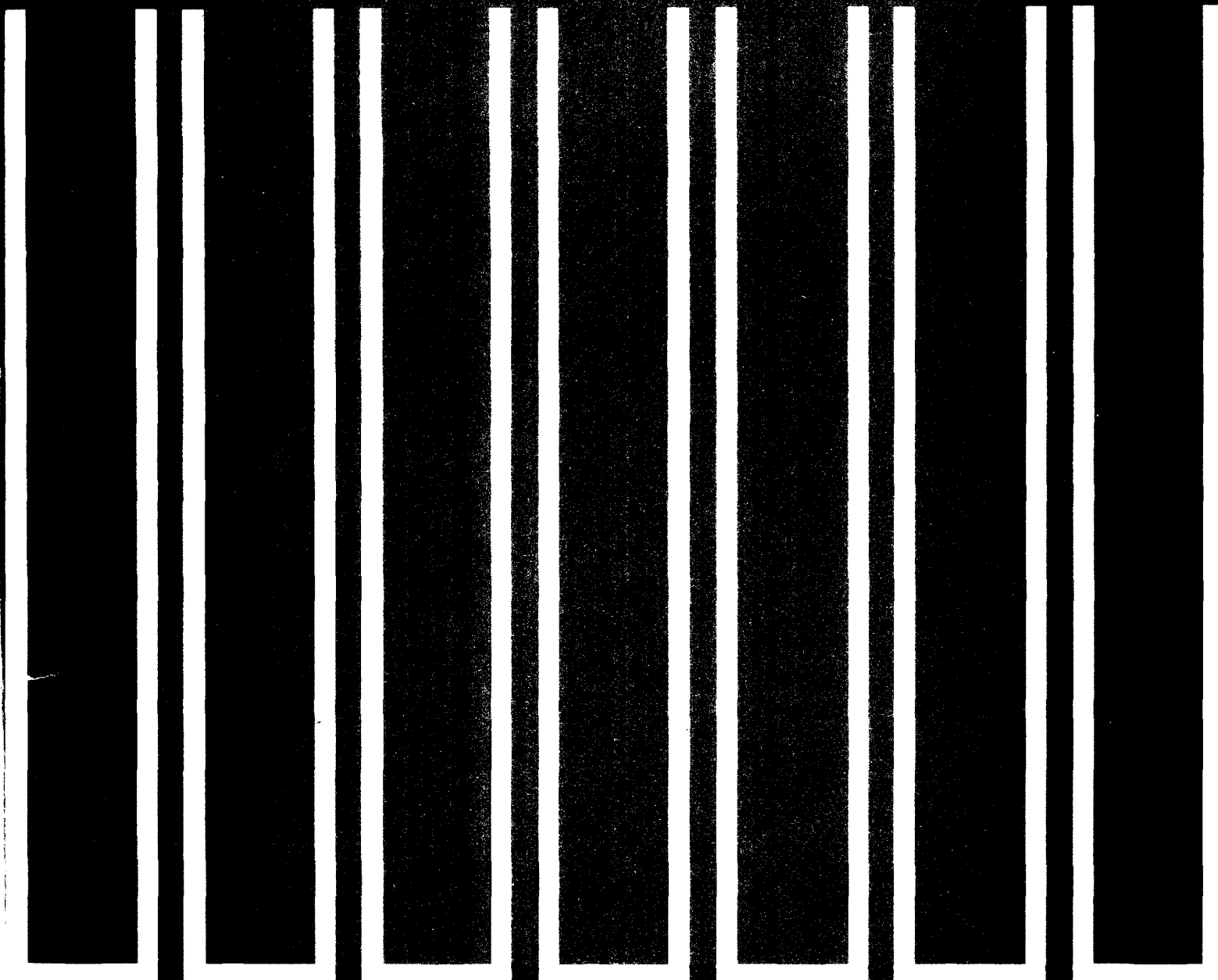


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**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**

**Public Health Service      Center for Disease Control**

**National Institute for Occupational Safety and Health**

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**OCCUPATIONAL EXPOSURE  
TO  
PHOSGENE**



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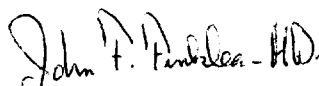
## PREFACE

The Occupational Safety and Health Act of 1970 emphasizes the need for standards to protect the health and safety of workers exposed to an ever-increasing number of potential hazards at their workplace. The National Institute for Occupational Safety and Health has projected a formal system of research, with priorities determined on the basis of specified indices, to provide relevant data from which valid criteria for effective standards can be derived. Recommended standards for occupational exposure, which are the result of this work, are based on the health effects of exposure. The Secretary of Labor will weigh these recommendations along with other considerations such as feasibility and means of implementation in developing regulatory standards.

It is intended to present successive reports as research and epidemiologic studies are completed and as sampling and analytical methods are developed. Criteria and standards will be reviewed periodically to ensure continuing protection of the worker.

I am pleased to acknowledge the contributions to this report on phosgene by members of my staff and the valuable constructive comments by the Review Consultants on Phosgene, by the ad hoc committees of the American Academy of Occupational Medicine and the American Academy of Industrial Hygiene, and by Robert B. O'Connor, M.D., NIOSH consultant in occupational medicine. The Department of the Army, Edgewood Arsenal, Aberdeen Proving Ground, Maryland, and the Ministry of Defence, Chemical Defence Establishment, Porton, England, have been very helpful in

declassifying documents so they could be reviewed for use in this report. The NIOSH recommendations for standards are not necessarily a consensus of all the consultants and professional societies that reviewed this criteria document on phosgene. Lists of the NIOSH Review Committee members and of the Review Consultants appear on the following pages.



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The Division of Criteria Documentation and Standards Development, National Institute for Occupational Safety and Health, had primary responsibility for development of the criteria and recommended standard for phosgene. The University of Washington, School of Public Health and Community Medicine, developed the basic information for consideration by NIOSH staff and consultants under contract No. HSM-99-73-36. Jon R. May, Ph.D., had NIOSH program responsibility, and Sonia Berg served as criteria manager.

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CRITERIA DOCUMENT: RECOMMENDATIONS FOR AN  
OCCUPATIONAL EXPOSURE STANDARD FOR PHOSGENE

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