

## Book reviews

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*Building 6, The Tragedy at Bridesburg* by Willard S. Randall and Stephen D. Solomon, Little, Brown and Co., Boston and Toronto, 1977, 317 pages, \$ 9.95.

Muckraking, the process by which a journalist discredits individuals, or organisations, has become a widely-accepted approach to life in the United States, and often draws a large following. It is easy to criticise; not all individuals or organisations (even journalists) are so super human that they can avoid mistakes. When that criticism becomes a violent denunciation of a company, and human life is the question, it becomes difficult to know how to interpret and understand certain aspects of a study.

Building 6, the scene of the book, is a production building inside a major chemical production complex in the Philadelphia, Pennsylvania, area. Beginning early in the 1950's, the building produced chloromethylether and its by-product bis-chloromethylether. Chloromethylether, in the presence of hydrogen ion and hydroxyl ion with traces of water, disproportionates to aldehydes and methylal, which recombine to form Bis-CME. It is now recognised that Bis-CME is a very potent carcinogen (it was on the first list of regulated carcinogens by O.S.H.A. in the U.S.). The book relates to the exposure of personnel to this material, and to the steps which the company took to improve the situation and protect its employees. How many have been exposed, and how many died is not clear; one newspaper article referred to "54 who died".

This book is not the last word, but certainly an interesting example of a grim study. When the company involved was asked to comment on the book, we learned that they have issued no statement or press release regarding this publication. After reviewing the text, they concluded such action would serve no useful purpose. Until the whole story is seen in the proper scientific (not emotional) perspective, we can only hope that misunderstandings and knowledge gaps will not occur in the future (although we are realistic enough to fear they occasionally will).

H.H. FAWCETT

*Radioactive Waste Disposal — Low & High Level* edited by William R.

Gilmore, Noyes Data Corporation, Park Ridge, NJ, 1977, 363 pages, \$ 39.

This book provides a reasonably comprehensive review of U.S. work directed towards solving the problems posed by the accumulation of wastes from the nuclear fuel cycle. It predates the 'Carter edict' and therefore considers almost exclusively the disposal of reprocessing wastes and says little concerning disposal of unprocessed fuel. This is unfortunate, since it would have been

interesting to compare the disposal ethics of fuel versus reprocessing liquors.

The volume considers sources of U.S. generated waste, concentrating on light water reactor systems and then reviews the various methods for treating the high-level and other wastes. However, inadequate attention is paid to comparing the various techniques reviewed and the reader is left to draw his own conclusions too often. Storage of wastes is considered fully, but once more the reader has little guidance on the merits of the alternatives listed. The section, in fact, contains much material which is strictly disposal (to land or sea bed).

The recommendations for disposal of specified radioactive elements are clear and well presented, with frequent reference to their applicability to a national waste disposal site concept.

Final sections consider U.S. waste management strategy (now somewhat outmoded), commercial fuel reprocessing facilities (even more outmoded) and management procedures in other countries (all too brief).

In his Foreword the editor points out the need to publish a book such as this quickly. I am sure the publishers have done so, although the most recent references seem to be mid 1976. It is unfortunate that a major policy statement in 1977 has overtaken so much of the presentation, but for those who still believe that there is a place for reprocessing nuclear fuel there is much of value in this volume.

F.S. FEATES

*Occupational Health and Safety Concepts — Chemical and Processing Hazards*  
by Gordon R.C. Atherley, Applied Science Publishers, London, 1978, 408  
pages, £ 25.

A newcomer to industrial safety and hygiene is inevitably overawed by the breadth of knowledge required of him. A brief acquaintance with the subject will introduce him to one recurring name — that of Gordon Atherley.

As the first Professor of Safety and Hygiene, Professor Atherley has contributed much to its unification as a scientific discipline. When a man of his stature, an experienced teacher and prolific writer, addresses himself to the difficult task of providing a framework for knowledge of the biological hazards in the industrial environment, the ingredients are available for the distillation of a potent brew. The intending imbiber will not be disappointed.

Aimed at science graduates without specific biological knowledge, the book is a model of clarity, with the crisp, clear presentation characteristic of Professor Atherley's lecturing style. The reader delving into these pages will find himself almost imperceptibly drawn to the disciplines of physiology, pathology, toxicology, genetics and immunology in a manner which makes the work a pleasure to read.

The material is presented at the appropriate level, but is not designed as a