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 Forword the editor points out the need to publish a book such as this quickly. A 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

text-book, more an attempt to provoke thought and organise one's knowledge. Central to the work are the author's three concepts: firstly, that biological hazards may be represented in a simple input-output model; secondly, preventive measures are not controlled by scientific knowledge alone, but by economic, social and political pressures in addition; thirdly, preventive measures can be classified in a simple hierarchal system.

With excellent line drawings and the use of statements of objectives at the introduction to each chapter, the reader is left in little doubt as to the author's intentions and his success in achieving them. I particularly liked the extensive use of case histories, conferring realism to the text.

Despite an attractively produced book, the price of £ 25 is a serious obstacle to the individual purchaser. Anyone connected with health and safety at work should, however, read it at least once, since it is unlikely to be followed, as Professor Atherley has since departed these shores for the New World.

DENIS D'AURIA

*Treatment of Industrial Effluents* edited by A.G. Callely, C.F. Forster and D.A. Stafford, Hodder and Stoughton, 378 pages, $7.95.

This book of twenty-one chapters can be conveniently divided into two major parts, namely, the general methodology and science of wastewater treatment and secondly, a consideration of the particular treatment methods and problems encountered in specific industries. The book's major consideration is of biological treatment which still forms the main route of effluent purification. Consideration of physico-chemical processes however is not neglected.

The first two chapters comprise very general short introductions to the fundamental processes of effluent purification and the problems of control and management. Chapter 3 gives a useful outline of the law relating to the discharge of industrial wastes in Wales and England and Chapter 4, an invaluable appraisal of analytical techniques both established and modern used in the industry, together with an assessment of the precision and accuracy of analytical methods. Chapters 5, 6 and 7 consider biological oxidation methods, physical treatments and sludge disposal respectively. Chapters 8 and 9 provide a Cooks' Tour for engineers of the relevant microbial biochemistry and ecology, and despite their superficial presentation, both chapters are very readable and ample references to more detailed works are cited.

An excellent chapter on the effects, causes and control of river eutrophication is followed by a series of chapters dealing successively with the specific waste problems of the paper making, dairy, petrochemical and resin, textile and tannery, farm and food, coking and pharmaceutical industries. Further chapters consider surfactant and oil spill degradation and the final chapter considers the important topic of water tracing.