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.

This is a wide ranging book covering theoretical and practical aspects of industrial wastewater treatment. The critical chapters on analytical methodology and water tracing really do indicate a thorough consideration of the whole subject, and the book well justifies its claim to being a text book for all students of water resources technology and for water quality engineers operating within specific industries. The authorship of the book is well balanced between workers in the Universities, water industry, and the industries generating the polluted effluents. The book is full of data and is an excellent reference source. The index is short yet adequate. Generally it is a book which is very difficult to fault and is highly recommended to workers in the field of industrial effluent pollution.

JOHN F. REES

Occupational Safety, Health and Fire Index by David E. Miller, Marcel Dekker, Inc., New York and Basel, 1976, pages not numbered, $ 12.50.

About a decade ago, the National Safety Council (U.S.) issued Data Sheet 486, which presented in a matrix form references to several dozen chemicals and related standards.

As noted in the foreword to this Index, a fundamental step in the implementation of safety has always been the issuence of standard requirements for controlling hazards. In the U.S. alone, over 20 difference groups, agencies, associations and councils issue "standards" which relate in some way to safety, health and fire protection.

This Index tabulates the U.S. reference sources for a wide variety of standards and cites the publications which relate to them. Abrasives, Coated to Zirconium Powder are the two ends of a wide spectrum, which was obviously generated by a computer printout. Of major importance is the citation of the U.S. laws under PF 91-596 (the Occupational Safety and Health Act of 1970), for a wide variety of hazards. It is unfortunate that a wider coverage of related "foreign" (to the U.S.) standards could not be considered. For example, British Standards 229:1957 and 1259:1958 and the German Standards of the VDE, both very significant in understanding electrical equipment for hazardous locations, are not cited.

The Index has considerable utility for locating the American Standards and appears to be a useful reference in that regard.

H.H. FAWCETT