Book reviews

Toxic Metals, Pollution Control and Waste Protection by Marshall Sittig, Noyes Data Corporation, Park Ridge, NJ, 1976, 350 pages, \$39.

This 350 page compilation brings together data on toxicity, detection, standards, handling procedures, removal techniques, waste disposal and costs of controls for 18 hazardous metals. Perhaps the one significant omission is uranium which presents particular hazards when mined, refined and used and would seem to have a wide enough application outside the nuclear power industry to justify its inclusion. Otherwise the traditional hazardous metals are covered in sections ranging from six to seventy pages.

The material is arranged in the book by element and the accounts presented, whilst readable, are often confusing and sometimes demonstrate the lack of a critical assessment, or at least the use of common units throughout each chapter. For instance on page 75 one reference apparently states that 0.01 to 10 ppm of cadmium is toxic to fish and twenty lines lower we learn that concentrations between 0.008 and 0.01 are lethal to 50% of a test batch of trout. Apart from the apparent inconsistency and the omission of concentration terms (presumably ppm) these apparent inconsistencies receive no comment. Similarly on p. 164 two quite different figures are quoted for tetraethyl lead levels in industrial waste waters without comment.

The general feel of the book is that it was created using scissors and paste on a few highly pertinent reports which brought together information on a particular environmental impact of a number of elements (for instance their toxicology, flow through the economy, or waste disposal). As such it serves a useful purpose in providing reference information in an easily analysed form, but there is no doubt that the reader intending to make use of the data will need to have access to the original reference sources and then to make his own critical appraisal.

F.S. FEATES

Disaster Technology: An Annotated Bibliography by Diana H. Manning, London Technical Group, Pergamon Press, Oxford, 1976, 282 p.

Over 700 entries classified by numerical indices into seven sections including an Appendix of over 60 items added since the bibliography first appeared in 1973, a Review with references to entries drawn upon, a Postscript to bring the reader up to date with a discussion of some recent developments, a subject and an author index combine to make this more than a bibliography. It is the ready-reckoner of disaster technology.

Opinion about the emotive subject of natural disaster has for long suffered from the series of traditionally narrow, often 'blinkered' views, of members of

separate disciplines. Disciplines conceived and created to serve a world with quite different and now outdated priorities. Problem-serving research, and the problems related to natural disaster in developing countries in particular, cannot be undertaken in this way. The subject is at once multi-disciplinary, and it will be hastened towards inter-disciplinary understanding by this publication.

The importance of the Review section cannot be over-emphasised being a product of the author's belief in inter-disciplinary assessment of the social impact of technical advancement in less developed situations. The book would in fact have been improved by the placing of the Review at the commencement, thus helping to ensure its reading by all and every 'discipline' using the book.

The Bibliography was first produced in 1973, with the assistance of the Rowntree Trust, at a time when the emerging applied science of disasterology was far less formed than it is now. Many of the works it includes did not have the advantage of liaison, co-ordination or inter-disciplinary academic rigour that later works have had, and that future work will have as a result of this publication. It is unfortunate therefore that, in the opinion of this reviewer, some credibility is lost by the comparatively superfluous and often negatively critical "Abstractor's notes" on some entries which were often written some years previously. An annotated bibliography need not be a critical bibliography and it is difficult in a multi-disciplinary subject for one critic to possess the judgement for criticism as well as abstraction. Nevertheless, this is a small criticism of a colossal contribution to an all-round view of international and inter-disciplinary response to the problems caused by disaster in developing countries.

Since the book's first appearance three years ago disaster response in relief, preparedness and prevention has grown into an established and credible activity considerably assisted no doubt by works such as this. The growth of understanding of the subject and the development of issues within it in the next three years, it can now confidently be said, will grow likewise. Resources to combat the problems identified will only be made available as a result of wider understanding by those who control them. That understanding will be well served by publications such as this, as long as, from somewhere, resources will be made available for its continued up-dating and republication.

JAMES LEWIS

How to Dispose of Toxic Substances and Industrial Wastes by Philip W. Powers, Noyes Data Corporation, Park Ridge, NJ, 1976, xiv + 497 pages, US \$48.

The book is divided into two main sections. In the first part (190 pages) the methods available for pre-treating wastes are described together with a fairly extensive coverage of the methods most commonly used for ultimate disposal. The second, and larger portion of the book considers the hazardous wastes arising in 21 industrial sectors ranging from automobile production to wood