

*The Handbook of Hazardous Waste Management*, by A.A. Metry, Technomic Publishing Co., Westport, Conn., (1980), 446 pages, 8½ × 11 in, \$ 45.

The publication of this handbook almost simultaneously with the promulgation by the U.S. Environmental Protection Agency of its massive set of rules governing hazardous wastes under the Resource Conservation and Recovery Act (RCRA) was excellent timing by the publishers.

The book was written as an "in-depth professional guide and reference to the identification, regulation and treatment, transportation, disposal and overall management of today's hazardous wastes..." It contains 15 chapters written by a roster of six experts. Approximately the second chapter on "Regulations Affecting Hazardous Waste Management" leads off with a discussion of the principal provisions of RCRA. Following comments on the national regulations, the 1978 statutes of ten US States are summarized.

In chapter 3, the author adopts the RCRA categories of flammability, corrosiveness, toxicity, etc., to describe the "hazards of solid waste". A 17-page long table listing potential hazardous wastes by industrial categories (sic codes) is also given. The chapter ends with 55 references.

Transport is covered in chapter 4. Appropriately, licensing, placarding and incident reporting are covered. However, a 50-page table giving DOT shipping regulations for all materials seems out of place and a waste of space — i.e. why do we need to know that the maximum amount of Xenon to be shipped in one package is 150 lbs.

The pages devoted to that table could have profitably been used in the next chapter on Emergency Waste Management. More could have been written about section 311 of the Clean Water Act, controlling hazardous material spills and penalties thereof. Too much time is spent on disposal of spilled wastes — really material covered in the rest of the book, as cleaned up hazardous materials are just another hazardous waste and are not unique because the material came from a spill.

Table 5.2, listing facilities that accept various hazardous wastes (or at least did when the chapter was written) also seems misplaced. It is an appropriate table but not in a chapter on emergency provisions.

Perhaps the most important chapter in the book is the sixth which deals with: site selection, classification of waste, facility management and ground and surface water monitoring.

The next three chapters deal with treatment and ultimate disposal: physical treatment, biological treatment and incineration. Categorical waste management, industry by industry, is the subject of chapter 11. Three final chapters cover land disposal, ocean dumping and site management.

The book's 8½ × 11 size is unusual, but the extra space given by the larger pages makes for pleasingly large margins (especially for one who likes to add his own notes) but this aesthetic advantage is marred by numerous photo-reproduced, typed tables, the quality and difference between them and the type set tables being very noticeable. Finally, I missed an index the

compilation of which I will admit causes the editor a great deal of work to assemble, but I think it is worth it.

GARY F. BENNETT

*Industrial Hazard and Safety Handbook*, by Ralph W. King and John Magid, Butterworths Publishers Inc., Mass., (1979), 751 pages, \$ 74.05.

The authors have written in the preface "This book is an attempt to identify and ward off the main hazards found in industry and to provide appropriate references for further study. Here within a single volume, it is possible to find quickly the information needed on any hazard without having to think through numerous publications." In this context, I believe they have succeeded as the book is a virtual compendium of the rules and procedures of industrial safety analysis.

Among the prime readers targeted by the authors are safety specialists and it is they who work with hazards (their discovery and elimination on a day-to-day basis) who will find this book most useful — to have at hand or on a nearby shelf to consult when problems arise or as the authors have suggested to browse through until the reader is familiar with the books' contents. That would certainly be the best way to use the book, because it is not easy reading: the material is technical and extensive and, of course, all chapters are not of equal interest to all readers.

The book has six major chapters of almost equal length: (1) people, profits and safety, (2) design construction inspection and maintenance, (3) the working environment, (4) fire, explosion and implosion hazards, (5) common industrial hazards and (6) special industrial hazards. There are also three short appendixes: (1) hazard warning and identification signs, (2) first aid and (3) some accident statistics.

As an example of the wide variety of the topics covered by the authors and the thoroughness, it would be worthwhile to look at the subsections of chapter 1: (1) introduction, (2) definition, (3) cost of accidents (both in the UK and US), (4) safety, responsibility and organizations, (5) accident reports, records and analyses, (6) workers or machines, (7) human factors, selection and training, (8) safety inspection and audits, (10) insurance and compensation, (11) legal aspects and inquiries, (12) secrecy and (13) planning for major emergencies.

Included in the text are a variety of charts, tables, examples, diagrams, examples of form and photographs — i.e. King and Magid utilize a variety of techniques to transfer information to the reader.

Since like the senior author, the reviewer is a chemical engineer, I turned to that chapter on fire, explosives, etc., my attention having been caught by pictures of the 1974 disaster at Flixborough (the dust jacket having noted that King is probably best known for providing a rational and accepted explanation for the Flixborough disaster.) It is unfortunate that this is one of