

Twenty papers have been published under four main headings:

1. Thermal treatment and abiotic emissions control
2. Water management
3. Biological treatment
4. Solid waste management

Actually the papers are quite varied, ranging from those dealing with currently utilized technology to basic research.

For example there were papers describing application of sequencing batch reactors, ultraviolet light/ozone/hydrogen peroxide reactor systems and biofilters. All three processes are now utilized industrially for waste treatment. In the emerging stage, I would place a paper from Chicago's Institute of Gas Technology on hazardous material destruction in a self-regenerating combustor-incinerator and in the same category one on detoxification of organophosphate pesticides by an immobilized enzyme system. In the basic research area, I would place papers on the incineration of contaminated soils in an electrodynamic balance and a paper on multicomponent ion exchange-equilibrium Chazabite zeolite. Finally there were two review papers worthy of note, one on contaminant leaching from stabilized waste and another on oxidative techniques for ground water treatment.

GARY F. BENNETT

Controlling Chemical Hazards: Fundamentals of the Management of Toxic Chemicals, by R.P. Cote and P.G. Wells (Eds.), Unwin Hyman, Boston, MA (distributed by Chapman and Hall, London), 1991, ISBN 0-040-60402-1 (hb), 310 pp., £40.00.

In the preface the authors write:

"This book presents environmental protection managers and advanced students in environmental studies programs with an overview of the principles, facts, multidisciplinary approach, and some of the complexities of the management of toxic substances."

To accomplish this task, the editors solicited experts from government, industry, academia, law and environmental groups to write 13 separate but loosely interconnected chapters that deal mainly with toxicology and risk assessment, fate and transport and workplace exposures. In this context, I would rate this book as fair to good.

The editors claim further coverage:

"The text explores critical issues facing managers' responsibilities for preventing and controlling problems associated with the manufacture, transport, use and disposal of chemicals."

In this area I would not rate the book highly.

The obligatory reference to the tragic accident involving methyl isocyanate at Bhopal is noted (about 3400 deaths are claimed, a number that seems to

climb with every new reference). To complete the release scenario, the Love Canal, Valley of the Drums, and Chernobyl are cited. Not famous, but described in detail, is a pesticide warehouse fire in Nova Scotia. Unintentionable as these problems were, their impact and especially their avoidance/control were not. However catastrophic these accidents were, the book would have been much better if the editors (contributors) had stuck to the risk/toxicology/transport scenarios — or problems of chronic emissions and left out acute spills/releases.

Other criticisms include chapters not terribly well written and others that rambled appearing to be without organization. As is common with multi-authored texts, great difference is found between the different chapters. However, the book is very well referenced.

Unfortunately, this is not one book I can recommend. But it could be improved by, as noted above, a clear focus and much improved editing. Additionally, I'd begin each chapter with an abstract or preview of what's in the chapter.

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The Generator's Guide to Hazardous Materials Management, by L.H. Traverse, Van Nostrand Reinhold, New York, NY, 1991, ISBN 0-442-00159-2, 420 pp., \$59.95.

With a gross understatement Traverse begins his book with the following:

"Today's environmental coordinator faces a full calendar of regulatory responsibilities. The laws for land, air, and water are challenging and ever-changing as progress continues and our environmental knowledge grows. The subjects and regulations concerning our environment are at times difficult to comprehend without proper training."

He then continues with a very practical text that outlines for the most basic user, the essentials of safe and environmentally sound (that means legally correct) practices of handling, storage and disposing of hazardous chemicals and hazardous wastes. In doing this, Traverse neatly intertwines regulations and regulatory forms with his explanations of what they mean and how to use them.

His technique is perhaps best illustrated by Chapter 5: Chemistry of the Material Safety Data Sheet. Traverse begins with the question: How much chemistry do I have to know? And then he goes through each section of a Materials Safety Sheet to answer his own question. First he shows an example section, then he discusses what information is found in that section and what it means.

When written (1991) the book was current with even a discussion of the new U.S. EPA land ban regulations. But I noted that one minor section on when the clock begins running for drum accumulation of wastes has changed (in the year this reviewer delayed in writing the review) thus emphasizing once again how dynamic (that means ever changing) regulations are.