

to do, although I wished some of the contributors had provided more specific information in their chapters. Chapters 3 and 9 on treatment options and economic issues, respectively, are a short ten pages each and much too general. Perhaps the specifics I would have wanted will come in later volumes of the series.

I also missed some of the details of the RCRA regulations, although I find the details difficult and boring, as I said. RCRA, the law that forms the basis for the foregoing regulations, was well covered as the book said "from cradle to grave"; the regulations were not. I hope details will follow.

GARY F. BENNETT

Handbook of Laboratory Waste Disposal, by M.J. Pitt and E. Pitt, Ellis Horwood Limited, Chichester, England, 1986, ISBN 0-85312-634-09, 360 pages, \$94.95.

On February 3, 1986, the cover of *Chemical and Engineering News* graphically illustrated the problems of hazardous waste in academic laboratories. Inside the magazine was a feature story on the topic. The problem was well stated and in the main is recognized by most researchers, but it was not until his book appeared that the problem was satisfactorily addressed.

The flyleaf of the book states, and I agree:

"This wealth of practical information on waste disposal in a wide range of laboratory disciplines is intended both for the practicing scientist as well as engineers and industrial managers. It seeks solutions to real life problems with safety in major conditions."

And that it does. This is one of the most down-to-earth, useful books I have seen. It does indeed address the practical aspects of chemical handling, mishandling (spills) and disposal. On that topic, I noted with pleasure (and not a little surprise) that the authors include both U.S.A. "hazardous" and U.K. "special waste" laws.

The range of waste materials discussed ranges from paper towels to unidentified chemicals. The need to comply with regulations and safety requirements is a constantly highlighted feature. Especially helpful are bold-faced cautionary notices intended to draw the reader's attention to possible hazards, many of which are taken from known incidents to waste disposal.

Among others, chapters are devoted to: laboratory drainage; fume extraction; incinerations; chemical (disposal dilution, extraction, evaporation reaction, conversion or neutralization; gas cylinders; biological materials; radioactive substances; materials recovery and emergency procedures.

A short chapter is devoted to educational institutional laboratories. Topics covered include teaching waste disposal, classwork and accidents in project

work. it is easy to criticize especially what's not included but I feel this chapter could have been significantly expanded. Lacking also were extensive references. What was there was reasonably adequate, but could, I feel, have been improved by supplementation. Finally, commercial disposal service, overpacking and disposal costs were not treated as I would have wished.

The same criticism, lack of depth, could be levelled at several other areas — indeed the problem of medical laboratories are discussed in two pages (in the biological material chapter wherein hospitals and hospital laboratories have significant problems), unfortunately, the topic was not adequately addressed. But the book is a great start on a difficult topic whose magnitude is yet totally comprehended and clearly not adequately handled.

A final note — I found the appendices quite useful including lists of disinfectants, listed (regulatory) wastes, known carcinogens, and low hazard solids for land disposal. Most useful of all is a list of chemicals that do not improve with age, i.e., with deterioration they may become dangerous: ethers, picric acid, etc.

In summary, this is a book that is a *must* for those seriously concerned with laboratory safety and management. It is one that will stay on my bookshelf and be used.

GARY F. BENNETT

Organic Carcinogens in Drinking Water: Detection, Treatment and Risk Assessment, by H.M. Ram, E.J. Calabresse and R.F. Christman (Eds.), John Wiley, New York, NY, 1986, ISBN 0-471-80959-4, 542 pages, \$65.00.

Thirty well-known experts have combined to write this text covering virtually every aspect of drinking water contamination. The editors claim, and I concur, that this book is the first integrated, broad treatment of micropollutants in drinking water, and the complex issues involved in this area demand the expertise of many professional fields and hence the large numbers of contributors.

The book has five major sections each with a number of chapters covering the significant drinking water problem area:

1. Legislative and Regulatory Aspects of Organic Contaminant Chemicals
2. Overview Chapter
3. Identification Methods
4. Water Treatment Processes that Prevent or Remove Trihalomethanes and other Organic Contaminants in Drinking Water
5. Procedures Used in Assessing the Risks Associated with Contaminants in Drinking Water

In all, there are 20 chapters dealing with virtually every aspect of the topic.