

faced by decision makers. Fourteen major disasters from throughout the United States are discussed including the Love Canal dump site, MGM Grand Hotel fire, Hyatt Skywalk disaster, TWA hijacking, eruption of Mt. St. Helens, Hurricane Frederick and the Coalinga Earthquake. Each case provides management examples in the four recognized management stages — mitigation, preparedness, response and recovery — and conclude with discussion, questions and a list of emergency management resources”.

The case method is a well-established teaching technique in the College of Law and Business Administration, but outside of those fields it is not used much especially in engineering (the reviewer’s area); and in the field of public administration, the authors say the case method is “underutilized”. This is unfortunate given the following quotation:

“The outstanding virtue of the case system is that it is suited for inspiring activity, under realistic conditions, on the part of students. It takes them out of the role of passive absorbers and makes them partners in the joint processing of learning and furthering learning.”

The cases chosen from my perspective — The Love Canal (uncontrolled hazardous waste site), Casa Grande (a hazardous material incident) and Water, Water Everywhere (contaminated wells) were excellent and nicely covered the spectrum of chemical disaster problems. All cases were factually and generally fairly presented.

However, in terms of factual material (i.e. data on amount of contamination of chemicals), the cases were devoid of that. And the overall discussion of the Love Canal case, was too short — admittedly that case could fill (and has done so) whole books.

Finally, the four questions at the end of each chapter were, I feel, too few to adequately explore all the issues involved. Perhaps the teacher’s guide that goes with the text has more questions.

Having made my criticisms, I’ll back off and say that I would like to use the book to teach a course — or at least use the cases dealing with chemical technology in a course of mine. Unfortunately, I would have to learn how to use the case method, but I will wager both my students and I would profit from the exercise.

GARY F. BENNETT

Biotechnology for Degradation of Toxic Chemicals in Hazardous Wastes, edited by R.J. Scholze, E.D. Smith, J.T. Bandy, W.C. Wu and J.V. Basilio, Noyes Data Corp., Park Ridge, NJ, 1988, ISBN 0-8155-1148-5, 697 pp., US \$59.

This book is based on a conference held in Arlington, Virginia, in June, 1986, to assess the usefulness of biotechnology for the treatment of hazardous/toxic wastewaters. Of the 55 papers presented at the conference, 37 are included in these Proceedings, along with the results of a Research Need’s Workshop held

at the conference. The book was originally published as a U.S. Government University Research Consortium conference report entitled "International Conference on Innovative Treatment for Toxic Waste-waters".

One cannot but be impressed by the prestige of those who presented papers at the Conference and the wide variety of topics discussed. A complete recitation of the scope of the conference would require a listing of all the papers published; that is clearly not possible here. In brief, however, the topics discussed include:

- Biological treatment of toxics in wastewater
- Suspended growth/fixed filter system
- Metals — toxicity, removal, effect on fixed filter systems
- Anaerobic treatment
- Leachate treatment
- Sequencing batch reactors
- Phenolics: PCBs, stillage,
- Rotating biological contactor
- Contaminated soil treatment
- Land treatment
- Fate of 4,5 Dinitro-*o*-cresol in a POTW
- Anoxic/oxic activated sludge treatment

The above list does not completely cover all the conference presentations, but should give the reader an idea of the conference's scope.

GARY F. BENNETT

Environmental Law Handbook, by J.G. Arbuckle, N.S. Bryson, D.R. Case, C.T. Cherney, R.M. Ridgeway, Jr., J.C. Martin, J.G. Miller, M.L. Miller, W.F. Pedersen, R.V. Randle, Jr., R.G. Stoll, T.F.P. Sullivan and T.A. Vanderver, Jr., Government Institutes, Rockville, MD, 1987 (9th ed.), ISBN 0-86587-706-8, 608 pp, US \$57.95.

Written by no less than 13 attorneys, this handbook is a most useful and respected piece of work — and has been for all its editions. The authors have provided current and practical (that means understandable to engineers) information on all the major environmental areas and U.S. laws pertinent to those areas.

The initial chapter (55 pp.) discusses the fundamentals of environmental law — which I found, as an engineer, to be extremely useful. Terms such as case law, common law, torts, trespass and nuisance are explained. Also discussed are defenses, evidence and administrative law. Finally, there is a most useful and relevant section — criminal and civil liability of corporate employees.