

Biotechnology and the Environment: Research and Needs, by G.S. Onnen and A.H. Teich (Eds.), Noyes Publication, Park Ridge, NJ, 1986, ISBN 0-8155-1105-1, 170 pages, \$36.00.

This book discusses research needs relating to the effects of biotechnology on the environment. The material is based on a 1984 workshop convened to examine the manner in which the releases of genetically-altered organisms will affect the environment or indeed whether they should be released at all.

The book contains a workshop summary and four papers which cover major areas of concern: environmental effects, health effects, monitoring and quality assurance and control techniques — as each of these applies to research needs in biochemistry and the environment.

GARY F. BENNETT

Health Aspects of the Disposal of Waste Chemicals, by J.W. Grisham (Ed.), Pergamon Press, New York, NY, 1986, ISBN 0-08-033159-9, 454 pages, \$85.00.

This book was written by more than 40 academic scientists who reviewed the scientific literature on the biological effects of chemicals most frequently associated with the uncontrolled disposal of hazardous wastes. Based on their review, the academicians assessed the scientific evidence of association between demonstrated exposure to chemicals from 21 specific disposal sites and occurrence of human diseases and disorders.

The reviews indicated that there are few published scientific reports of health effects clearly attributed to chemicals from uncontrolled disposal sites. Only one report offered convincing evidence that severe health effects had resulted from exposure to a specific chemical. The remaining reports did not provide adequate scientific evidence of statistically significant and biologically plausible cause and effect relationships between specific chemicals and human diseases.

Specific chapters are devoted to:

- International Aspects of Chemical Waste Disposal
- Waste Chemicals of Major Concern
- Factors Influencing Human Exposure
- Assessment of Health Effects
- Epidemiology of Exposed Population
- Factors in Risk Assessment
- Chemical Exposure Health Studies
- Disposal Site Health Studies

Although the evidence of health effects is not conclusive, exposures may

have not had been of sufficient duration and concentration to have resulted in observable, long-term health effects correlated with dump site exposures. However, the experts concluded that many uncontrolled chemical disposal sites contain substantial quantities of toxic substances, some of which have migrated from the sites and resulted in human exposure, and which have the potential to cause serious, irreversible, or even fatal illness if exposure to the substances is prolonged.

GARY F. BENNETT

Hazardous Waste Management, Vol. 1. The Law of Toxic Torts and Toxic Substances, by G.S. Dominguez and K.G. Bartlett (Ed.), CRC Press, Boca Raton, FL, 1986, ISBN 0-8493-6356-X, 208 pages, \$88.00.

George Dominguez, Director of Information Services for the Synthetic Chemical Manufacturers Association and Kenneth Bartlett, an attorney, have combined to edit this most excellent book that appears to be the first of a CRC Press series on Hazardous Waste Management. After reading the book, I look forward eagerly to the others. Six other contributors assisted in the preparation of the nine chapters:

1. Hazardous Waste Management
2. The Constitutional Framework of Hazardous Waste Legislation
3. Treatment Options in Hazardous Waste Management and Overview
4. From Cradle to Grave: The Legislative History of RCRA
5. Summary and Analysis of RCRA as Amended
6. The Hazardous Waste Management Program Under RCRA
7. The Legal Development of Remedies of Hazardous Waste Victims — The Common Law Remedies
8. The Legal Development of Remedies of Hazardous Waste Victims — Statutory Remedies
9. Economic Issues and Aspects of Hazardous Waste Management.

In his introduction, Dominguez says: "Literature on hazardous waste has grown enormously in recent years" (I would add both in volume and complexity). The Resource Conservation and Recovery Act (RCRA) regulations have filled thousands of pages in the Federal Register that clearly are voluminous, complex and I might add boring, but very important to those in hazardous waste management.

The author notes his essential purpose in writing/editing the book "was to provide working managers with a comprehensive introduction to the practical operation aspect of hazardous waste management and with an extremely important foundation in relevant laws, rules and regulations".

After reading the book, I believe the editors accomplished what they set out