

Book Reviews

Risk Assessment at Hazardous Waste Sites, by F.A. Long and G.E. Schweitzer (Eds.), American Chemical Society, Washington, DC, 1982, 128 pages, \$19.95.

The national meetings of the American Chemical Society (ACS) have been a good source of papers for a wide variety of books. This book, a product of one of those meetings, contains nine papers, presented at the 183rd ACS Meeting held in Las Vegas, Nevada, in March/April 1982.

Risk assessment is the main theme of only six of the papers. The other three deal with the general problems of uncontrolled hazardous waste sites, geophysical monitoring, county-level assessment and case studies — and perhaps could have been left out of this “risk-oriented volume...” as being non-responsive to the title.

The importance and the difficulties surrounding the understanding of the topic cannot be overemphasized. Media reporting (and exaggerating) of the situation at, and surrounding, problem disposal sites has thoroughly confused and scared the public — as well as many professionals. At least for the latter group, if objectivity is to be retained, a sober, rational and defensible risk assessment program must be put in place nationally. Six of the published papers form a good basis for beginning this program:

- (1) Risk Assessment under the National Contingency Plan
- (2) Impact on Human Health
- (3) Risk Assessment in Effective Handling of Waste Sites
- (4) Monitoring to Support Risk Assessment
- (5) Industrial Guide to Risk Assessment
- (6) Incorporating Risk Assessment into RCRA

A good basic understanding of what risk assessment as applied to hazardous waste (and problem sites) is, is gained by reading these papers. Each is good, well written and pleasingly produced; actually the writing and printing are surprisingly uniform since the book appears to have been photo-reproduced from typed manuscripts, and quickly put into print (about a year after the conference).

However, I did find small points on which to comment:

(1) One author used 1000 ppb as an expressed concentration rather than 1 ppm, which I find is a more appropriate and less “exaggerated” unit. Personally, I think we scientists do ourselves a public disfavor by using higher whole numbers rather than the lower decimal number. The public hears only the 1000 and is alarmed; it cannot understand the units.

(2) The papers appear not to have been edited well as at least one of the papers has the phrase “Today I have”, which is a leftover from the verbal presentation and is not appropriate for the written format.

(3) To publish a book with only six relevant papers may also be ques-

tioned. Together, the nine papers only encompass 128 pages, and at \$19.95, that's 16 ¢ per page. There are many more topics that could have been added — mathematical approach, assessment of toxic chemicals, acceptability of risk, etc. — to flesh out the volume.

In summary, the topic of risk assessment is a very current and important one, the book is a step in the right direction, but only a very small step

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Environmental Law Handbook, 7th edn., by J.G. Arbuckle, G.W. Frick, R.M. Hall, Jr., M.L. Miller, T.F.P. Sullivan and T.A. Vanderver, Jr., Government Institutes, Rockville, MD, 1983, 507 pages, \$48.

When I began teaching environmental engineering 20 years ago, I rarely mentioned the law in my classes. Today, I rarely do not, because it is the law, mainly set at the federal level in the United States, that establishes the treatment goals which pollution abatement equipment and engineers must meet. Beyond that, I tell my students that most U.S. laws have severe financial and criminal penalties for willful mismanagement of the environment or fraud (such as lying to USEPA).

I purchased the previous edition of this book and read it from cover to cover, heavily annotating and underlining parts of interest. Even to a layman, it is a readable book and very useful in its explanation of torts, nuisance, trespass, negligence, strict liability, etc. This new and revised edition is a valuable update.

In the first chapter, the authors cover defenses available against suits, opinion evidence, privileged communications, administrative law, attorney fees and civil and criminal liability.

After the very useful introduction, the authors deal with the significant environmental problems and the federal laws controlling them:

- National Environmental Policy Act
- Water Pollution Control
- Air Pollution Control
- Resource Conservation and Recovery Act
- Toxic Substances Control
- Federal Regulation of Pesticides
- Occupational Safety and Health Act
- Noise
- Comprehensive Environmental Response Compensation Liability Act
- Environmental Auditing
- Land Uses and Major Issues in the Control of Industrial Development

Of the foregoing, the chapters on Environmental Auditing, Comprehensive Environmental Response Compensation Liability Act (Superfund) and OSHA are new, while the chapters on the Resource Conservation and Recov-