

The book has 18 chapters (see below) and 4 appendices (index of references, cases cited, Code of Federal Regulations and Citation plus the US Code and Other Statutes):

1. Introduction
2. How OSHA obtained its standards
3. The employer's duty to Comply
4. General theory of control technology
5. Theories of motivation for safety and health
6. Recordkeeping under OSHA
7. Training and hazard communication
8. Safety under OSHA
9. Industrial hygiene under OSHA
10. How to preempt OSHA before OSHA knocks
11. How OSHA enforces its standards
12. How to manage an OSHA inspection
13. How to settle an OSHA citation
14. How to challenge an OSHA citation
15. Litigating with OSHA
16. Going beyond OSHA
17. Other matters related to OSHA
18. Conclusions

GARY F. BENNETT

*Current and Potential Future Industrial Practices for Reducing and Controlling Volatile Organic Compounds*, by N. Mukhopadhyay and E.C. Moretti, American Institute of Chemical Engineers (AIChE) Center for Waste Reduction Technologies, New York, NY, 1993, 60 pages, price US\$ 55.00, ISBN 0-8169-0615-7

This new study by the AIChE Center for Waste Reduction Technologies examines the impact that seven system technologies are expected to have on reducing volatile organic compounds (VOCs) during the next decade. This relatively short but very good book has eight chapters:

1. Introduction — to CWRT, the Clean Air Act and the book.
2. VOC characteristics — definitions, impact (on the environment), and the US EPA's list of more than 300 VOCs.
3. General description of VOC technology — for this reviewer at least, the real beginning of the book. Described are seven standard technologies: thermal oxidizers, catalytic oxidizers, flame/boiler/process heaters, absorbers and condensers; then relatively new (but commercially available) technologies; biofilters, membrane separations and ultraviolet oxidizers; and pilot scale technologies, corona destructive reactors and plasma technology devices.
4. VOC air regulations — la raison d'être: Clean Air Act, Clean Air Act Amendments, hazardous air pollutants, ozone protection, RCRA, EPCRA and state and local regulations.

5. Comparison of VOC abatement technologies — a discussion of the processes presented in Chapter 3 based on seven design, operating, and cost related parameters that are usually considered during the equipment selection process.

6. Impact of current and future VOC regulations — based on a telephone survey of cooperating organizations and CWRT members.

7. Future trends and practices in VOC abatement — as anticipated by some users and suppliers of VOC control equipment.

8. Economic analysis of selected VOC abatement technologies — my experience is that economic (especially comparative economic) data are scarce. Not so here. The chapter presents the capital and annualized costs of three VOC abatement technologies: thermal oxidizers, carbon adsorbers and biofiltration systems.

9. Alternative VOC abatement strategies — industry process modifications and work practices.

My overall assessment is that this is a very good book — its equipment discussions are very good and the cost data are excellent — especially on biofiltration which is a very new process.

GARY F. BENNETT

*Development and Transfer of Pollution Prevention Technology*, by Ann Rappaport, Quorum Books, Greenwood Publishing Group, Inc., Westport, CT, 1993, 203 pages, ISBN 0-89930-816-3

Centuries of unorganized, unregulated human activity in the natural environment has created a consistently high level of public and, subsequently, governmental concern. The public and global governments are aware that in each case of pollution the environmental impact was a consequence of technological choices. In the subject book, Ann Rappaport explores ways that technological choices can be modified for a more favorable outcome to the environment. The goal of her study was not to give or gain answers to the pollution problem but to discover how and why development and transfer of pollution prevention technology occurs within multinational corporations that by definition have many plants and employees nationally and internationally.

Ms. Rappaport states that an ‘appropriate technology’ approach has merit; however, it suggests that the export-oriented, pollution-causing manufacturing strategies pursued successfully in developed countries may not be suitable for developing countries; a conclusion that is sound but may carry political implications. Important progress has been made in balancing political factors with technology, environment, and development by the World Commission on Environment and Development (WCED) which observes that multinational corporations can and do have a significant impact both in their home countries as well as countries where their product may be produced, sold, or used. Ms. Rappaport presents a case study of three units or groups (the *Controls Group*, the *Medical Group*, and the *Motors Group*) within a large, unnamed, multinational, US-based corporation