

edition of a text entitled "Control Techniques for Hydrocarbons and Organic Solvent Emissions from Stationary Sources"; it was published by the Department of Health, Education and Welfare as AP-68 in 1970. It was republished by the US EPA in 1978 under the current title.

Chapter 1 provides an overview of the topic, briefly describing the control technology that forms the basis of the standards: flares, boilers, thermal incinerators, adsorbers, adsorption, and condensation. An estimation of nationwide VOC emissions is found in Chapter 2 as is a brief discussion of the mechanism by which ozone is formed in the lower atmosphere.

Operating principles, design characteristics, disadvantages, applications, costs, and energy considerations for a variety of air pollution control equipment are described in Chapter 3. There is a good amount of information here; indeed, many cost data are given. Unfortunately, all the cost data are at least 10 years old. However, they could be updated using published cost indices.

Chapter 4 discusses the VOC emission problems and solutions thereto of diverse industries: refineries; petroleum storage; organic chemical manufacturing; paint application; pharmaceutical plants; beer, wine and whisky production, etc. Other categories of VOC control include stationary fuel combustion; forest, agricultural and open burning; TSDF (treatment, storage and disposal facilities) of hazardous wastes and POTWS (publicly owned treatment works). For each industry, one finds the following items discussed: process and facility description; emission sources and emission factors; control technique and emission reduction; regulatory status; national emission estimates; capital and annual control costs; and references.

There are four appendices dealing with emission estimates, cost indices, additive control technology, information and finally a listing of air emission control standards and documents.

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*Environmental Strategies Handbook: A Guide to Effective Policies and Practices*, edited by R.V. Kolluru, McGraw-Hill, New York, 1994, 1030 pages, price US\$ 79.50, ISBN 0-07-035858-3

With chapters written by over 30 experts from the fields of environmental science, public health, business and law, this handbook offers insight into how industries can develop optimal environmental strategies and integrate them into long-term strategic plans to ensure growth and competition advantages at the national and international levels.

The focus is on sustainable development – a relatively new concept and a very new one for texts. Indeed, this is the first book I have read that focuses on this topic. The book was produced very quickly from its conceptual development by the editor in the fall of 1991 to its publication in mid-1994.

A superb introduction entitled “Looking Forward: Our Common Enterprise”, by Stephan Schmidieny, a Swiss industrialist and chairman of the Business Council for Sustainable Development, contains the following excellent overview of the topic:

“Business is, after all, the world’s foremost creator of wealth, employment, trade, and technology, as well as the controller of tremendous human and financial resources. It is the system by which value is added to resources, and the major system through which basic human needs are met. It is also a culture which transcends and binds other cultures, in their business, people from different continents and backgrounds can deal, through business, with one another. What is more, the multinational companies are among the few private organizations powerful enough to influence international environmental and development problems. They often take a longer term and more international view than governments themselves.

Business people are often more experienced than politicians in the practice of weighing risks and making decisions based on uncertainty. We do it daily. Political and economic decisions with far-reaching consequences must be made quickly; and they will of necessity be based on incomplete scientific evidence and knowledge. The risks implied by such decisions must be weighed against the risks implied by no decision. We must work with governments and the general public to see that the right alternative is chosen.

The challenge for business is to use its capabilities and resources in a responsible and sustainable way”.

This is a massive tome on the topic. Spanning over 1000 pages, its 22 chapters and 3 appendices, divided into 8 major sections, were contributed by 36 authors with selected chapters reviewed by other experts.

To review such a monumental effort in depth would take far too much space. I really wanted to report and comment on numerous chapters because there is so much information brought together here. I agree with the editor’s preface comments:

“The volume is without precedent in the scope and reach ... the coverage ranges from regulatory framework by pollution prevention to liability and financial issues, to risk assessment and public health, to life-cycle analysis and resource management, to environmental business strategies, to global perspective – supplemented by numerous case histories and illustrations”.

The broad scope of this book is further illustrated by the titles of its eight major sections:

1. Business, Environment, and Stewardship
2. Regulation, Compliance, and Prevention
3. Corporate Management and Public Interest Perspective
4. Financial and Legal Implications and Control
5. Protecting Public Health and the Environment
6. Life Cycle Analysis and Environmental Marketing
7. Environmental Business
8. Global Perspectives and International Opportunities

The editor is to be commended for his efforts. He has compiled a most useful text that is a real contribution to both industry and academe (I predict that the book will be adopted as the textbook or at the very least be used as the most significant reading assignment in numerous University courses.) Personally, it will remain on my book shelf where I predict it will be referred to often.

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