

Its goal (as stated by the author in the preface) is to present facts about all aspects of radioactive wastes in a simple, clear, unbiased manner. The information is intended for students and other interested or concerned members of the public (and, in this case, a neophyte professional).

The book starts with a chapter entitled "Questions and concerns About Waste", focusing on the modern world's need for power and the environmental impact that resulted. The Exxon Valdez oil spill, for example, the Persian Gulf War of 1990 and the 1992 Earth Summit Conference in Rio de Janeiro are mentioned as backgrounds for problems occurring with other forms of energy – by way of contrast to nuclear energy.

Chapter 2 begins the technical discussion of a very basic but lively topic, "Atoms in Chemistry". That topic leads to the next chapter, "Radioactivity, Kinds of Radiation, Biological Effects of Radiation and Radiation Standards and Protection". Waste generated as a result of energy production, commercial use of radiation and defence products are discussed in subsequent chapters.

The discussion of nuclear waste begins with Chapter 11. This chapter and the following ones have these headings:

- Classification of Waste
- Spent Fuel from Nuclear Reactors
- Storage of Spent Fuel
- Reprocessing, Recycling of Resources
- Uranium Mill Tailings
- Generation and Treatment of Low Level Wastes
- Transportation of Radioactive Material
- Disposal of Low Level Wastes
- Disposal of Defence Wastes
- Disposal of Spent Fuel

To say the author has done a good job of explaining nuclear energy production and the problems and potential solutions (at least the technical ones) to radioactive waste disposal is an understatement. This is one of the best books I have read (as simplistic as it is) in years. I strongly recommend its purchase.

GARY F. BENNETT

*Control Technique for Volatile Organic Compound Emissions from Stationary Sources*, by US Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Washington, DC, Publication by Government Institutes, Rockwell, MD, 3rd edn., 1994, 480 pages, price US\$ 85.00, ISBN 0-86587-378-X

This document is a US EPA-authored summary document that contains general information on sources of volatile organic compounds (VOCs), applicable control techniques and the impacts resulting from control applications. This report is a third

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.

GARY F. BENNETT

*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.