

7. Hazard Communication
8. Transporting Hazardous Wastes
9. Hazardous Waste Liability Insurance
10. Hazardous Waste Penalties and Compliance Audits

As I scanned the book, I found it well-written and — most important — understandable. The author has made liberal (and good) use of boxes to highlight very important material. He also employs another writing technique I like — copious headings and subheadings to divide the material into readable sections.

Something I do not like are monstrous appendices and this book has a record-length one — almost twice the length of the actual book text. At least half of the material: lists of state and federal hazardous waste offices, forms, MSDs, etc. could have been omitted — at a savings to the buyer of the text. One very long appendix was intriguing, viz. an almost 50-page long listing of U.S. EPA Catalog of Hazardous and Solid Wastes Publications. I had never seen this list and found it very interesting (as well as extensive) but considering one could get the list by contacting the RCRA information center in Washington, I now wonder if reproducing it was worthwhile — I tend to doubt it.

GARY F. BENNETT

Scrap Tire Technology and Markets, by U.S. Environmental Protection Agency and C. Clark, K. Meardon and D. Russell of Pacific Environmental Services, Noyes Data Corp., Park Ridge, NJ, ISBN 0-8155-1317-8, 1993, 316 pp., \$54.

Over 242 million tires are scrapped each year in the United States to be added to the 2 billion accumulated backlog of scrap tires in stockpiles and uncontrolled dumps. In the past, several of these piles have caught on fire both in Canada and the United States causing massive problems. The management of this scrap stream has become a growing problem in recent years. The market and the technology for regulating this are discussed in the book.

The book is in two parts, mirroring two reports prepared for (and by) the U.S. EPA.

1. Markets for Scrap Tires — Office of Solid Waste, U.S. EPA
2. Burning Tires for Fuel and Tire Pyrolysis by personnel of Pacific Environmental Services

In Part I, the U.S. EPA personnel discuss the problems associated with scrap tires and identify existing and potential source reduction and utilization methods that may be effective in solving the scrap tire problem. Barriers to increased utilization and options for removing the barriers are identified and evaluated.

Potential uses/disposal options for waste tires discussed are recycling alternatives (whole tire, split tire, shredded tires and ground tires); tires to energy (power plants, tire manufacturing plants, cement kilns) and pyrolysis.

Part II goes more deeply into the combustion disposal option. Not only are all aspects of burning tires discussed in a variety of modes as discussed above, but so are the effects of the fuel on emissions, emission control techniques, control efficiency and economics. Data on four industries currently using tires for fuel were given.

GARY F. BENNETT

Solvent Substitution for Pollution Prevention, U.S. Department of Energy and U.S. Air Force, Noyes Data Corp., Park Ridge, NJ, ISBN 0-8155-1319-4, 1992, 335 pp., \$48.

This book is the proceedings of a conference held by the U.S. Department of Energy and U.S. Air Force on the topic of "Alternative Technologies, Alternative Solvents, Recovery/Recycling of Low VOC Materials and Treatment for Environmentally Safe Disposal. The majority of these papers plus those received in an additional solicitation are published here: 43 papers in all make up this volume.

The papers are published in six major sections:

1. Alternative Technologies
2. Alternative Solvents
3. Solvent Recovery and Recycling
4. Dealing With Low VOCs
5. Treatment for Environmentally Safe Disposal of Solvents
6. Issues to Consider

The papers cover a wide range of topics including surface cleaning using lasers, CO₂ pellet blasting paint removal, fluxless solder, plasma stripping, supercritical CO₂ parts cleaning, biodegradable solutions, chlorine solvent alternatives, solvent database software, recycling, low VOC material, photocatalyst systems, hazardous waste incineration, chemical oxidation of organic wastes and health and environmental tradeoffs of alternative solvents.

GARY F. BENNETT

Chemical Safety Data Sheets Volume 5: Flammable Chemicals, by R. Allen (Ed.), The Royal Society of Chemistry, Cambridge, 1992, ISBN 0-85186-411-2, 300 pp., £54.95.

In past reviews of books containing information on chemicals, I have written: "In an emergency, one can never have too much information on the properties and hazards of the chemicals involved". Thus, I always eagerly scan such new books when I receive them. This series of bound, categorized safety