separation and recovery approaches can cost. This handbook is intended to give guidance as to what should be incorporated into startup, implementation, and acceptance testing of any equipment and system to be included in an MRF.

The book was originally written as a report entitled: *Handbook — Material Recovery Facilities for Municipal Solid Waste* in 1991 for the U.S. EPA.

The book focuses primarily on equipment and methods for the separation and handling of separated or already source-separated, recyclable constituents in typical municipal solid waste streams. For any single recyclable constituent within the solid waste stream, alternative approaches are identified for separation and recovery (namely, manual versus fully automated versus some kind of approach utilizing both manual and mechanical methods). For each piece of equipment in any approach, the book addresses: the basics of design; theory of operation; sizing; and equipment needs such as shredders, balers, etc. Descriptions include any limitation on materials in the feed to the equipment, area and building requirements, possible siting and permitting requirement, industrial health concerns, and level of operator experience and training needs for proper operation. In addition, economic factors are discussed.

GARY F. BENNETT

RCRA Regulatory Compliance Guide, by M.S. Dennison, Noyes Data Corp., Park Ridge, NJ, ISBN 0-8155-1321-6, 1993, 354 pp., $64.

This book was written by an attorney, especially for industrial firms as a legal compliance guide to safe, legal methods of handling hazardous wastes. The book is organized in a practical fashion to answer questions faced by companies that produce hazardous waste in their day-to-day business operation. The goal of the author is to explain (if that is truly possible) the Resource Conservation and Recovery Act (RCRA) as well as other environmental laws and regulations in such a way that a company will be able to understand and comply with them — thus avoiding the potential for significant monetary penalties (or prison).

This book explains how to identify hazardous wastes, which generation classification to use, and how to safely store, handle and dispose of waste. Practical aspects of waste handling are combined with regulatory compliance aspects such as record keeping and reporting, worker safety and environmental liability insurance.

The book has ten chapters with the following titles:

1. The Regulatory Framework
2. The Resource Conservation Recovery Act
3. Hazardous Waste Identification and Classification
4. Hazardous Waste Generators
5. Hazardous Waste Storage and Disposal
6. Hazardous Waste Reporting and Record Keeping

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.