

*Slurry Trench Construction for Pollution Migration Control*, by P. Spooner, R. Wetzell, C. Spooner, C. Furman, E. Tokarski, G. Hunt, V. Hodge and T. Robinson, Noyes Publications, Park Ridge, NY, 1985, 237 pages, \$36.

The problems of migration of soluble pollutants from uncontrolled hazardous waste sites has required the development of barrier techniques to stop the flow of groundwater with its attendant load of undesirable contaminants. This need resulted in this book which originally was a report commissioned by the U.S. Environmental Protection Agency and compiled by JRB Associates.

Major chapters include:

- Theory of slurry and back-fill function (with bentonite slurries and formulations)
- Slurry wall application
- Site investigation and characterization
- Design and construction of slurry walls
- Slurry wall monitoring and maintenance
- Evaluation procedures

GARY F. BENNETT

*Emergency Action Guides*, by P.C. Conlon and A.M. Mason (Eds.), American Association of Railroads, 1920 L Street, NW, Washington, DC, 800 pages approximately.

This is potentially the most useful book to come across my desk since the U.S. Coast Guard CHRIS Manuals were published over ten years ago. The core of the book are the Emergency Action Guides for 134 different chemicals that combined make up 98% of the volume of the hazardous materials carried by U.S. railroads. Data reported for each chemical include:

- General Hazards: threshold odor concentration, STEL, TLV, conditions to avoid
- Health Hazards: public health, skin, eye contact, inhalation, ingestion
- Fire Hazards: lower and upper flammable limits, behavior in fire, hazardous combustion products
- Explosive Hazards
- Protective Clothing and Equipment
- First Aid
- Fire Response
- Spill Response
- Air Spills
- Land Spills
- Water Spills
- NFPA Hazard Diamond

The unique feature of these guides in their use of the action/consequence/mitigation approach to chemical emergency response. Potentially, adverse consequences associated with each response technique are described along with ways to counteract each consequence.

Two other sections include: (1) a brief overview of the chemical emergency preplanning process, (2) sources of additional aid, (3) chemical regulation, (4) identification and classification, including cross references for U.N. identification numbers and the AAR's 49 STCC codes numbering series, and (5) a glossary of technical terms used in the guide.

No one in emergency response should be without the book. It is excellent.

GARY F. BENNETT

*Contaminant Removal from Public Water Systems*, by Daniel C. Houck et al., Noyes Publications, Park Ridge, NJ, 1985, 524 pages, \$52.

This book is really a combination of four reports created for the U.S. Environmental Protection Agency:

1. Turbidity removal for small public water systems
2. Microorganism removal for small water systems
3. Nitrate removal for small public water systems
4. Radionuclide removal for small public water systems

In this book, the authors (eight in all) of the various reports describe the rationale as well as methods for contaminant removal from small public water systems. Information is provided on: (1) why contaminant removal is important, (2) theories of control, (3) process options for control, (4) design procedures for control, (5) process control methods, (6) operation and maintenance procedures, and (7) cost estimation methods.

GARY F. BENNETT

*Safe Storage of Laboratory Chemicals*, by David A. Pepitone (Ed.), Wiley-Interscience, New York, NY, 1984, 282 pages, \$60.00.

There are very few books that I review that I feel compelled to read completely. This book is an exception, perhaps because it is in area of deep interest to me or perhaps it is because the book is very practical and well written. For whatever reason, I can say I read, with deep interest, most of the nine chapters.

On the jacket cover, the publishers have written:

*"Safe Storage of Laboratory Chemicals is the first book to treat the subject of chemical storage from a comprehensive safety perspective aimed at the small volume users... This timely book offers a balanced approach to the safe storage of chemicals, including the necessary knowledge for identifying chemical storage hazards and solutions and alternative measures for sorting specific classes of chemicals."*