

the world were assembled to address both the theoretical aspects and case studies illustrating specific points. The book begins with fundamentals in a description of the hydrologic cycle and the nature of natural and anthropogenic events that impact groundwater quality. The chapters that follow discuss the major sources of contamination, the behavior of contaminants in groundwater, biodegradation, health implications, and water quality standards and criteria. The next 21 chapters address specific contamination sources and/or contaminants. Each presentation has its own outline and scope. Some are rather generic while others provide a great deal of specific data. The chapter on salt-water intrusion includes a good description of the phenomenon and the equations necessary to design and evaluate remedies followed by a case study. Other particularly strong chapters include those on pesticides, chlorinated organic chemicals, oil, and injection wells. Subsequent chapters are grouped around analysis and monitoring considerations (5 chapters), remediation and rehabilitation (3 chapters), and policies (3 chapters). The section on monitoring is quite extensive, while that on policy tackles some very complex issues and offers thought provoking ideas.

I recommend this book for newcomers to the field who are looking for a broad perspective on the protection of groundwaters. More experienced readers will find value in selected portions of the book, but will want much more depth in areas such as remediation and many of the contamination source discussions. In many respects, the book blends chapters that would be fitting in a text book with reference materials and editorial pieces. Depending on the readers interests, the content of any given chapter may or may not be sufficient.

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*The Book of Chemical Lists*, in two volumes, compiled and published by BLR Business & Legal Reports, Inc., 39 Academy St., Madison, CT 06443, approx. 1000 pages, 1994, US \$199.00 (includes four updates) (loose-leaf binders)

Over the years, many lists and specifications have appeared, many Federal and some by states, as to information necessary to control chemical health and safety. At last, a very comprehensive approach to the problem has brought a very excellent reference tool to locate information on workplace chemicals regulated in the US and four states.

Chapter 1 begins with an alphabetical and CAS Number listing of chemicals (with about 7000 substances included). Pages 1-1 to 1-156 give the fundamental details.

Chapter 2 is devoted to Environmental Planning and Reporting, giving the DOT Hazardous Materials Numbers (pages 2-1 to 2-98) while the ID Numbers are given in 2-99 to 2-148.

Chapter 3 lists RCRA Hazardous Waste Codes, by CAS Number, the Chemical Name, and the RCRA Code. Pages 3-1 to 3-24 cover this section.

Chapter 4, CERCLA Hazardous Substances and Reportable Quantities are listed both by CAS Number and by Chemical Name (pages 4-1 to 4-31).

Chapter 5, SARA Extremely Hazardous Substances and Threshold Planning Quantities, listed by CAS Numbers (pages 5-1 to 5-7).

Chapter 6 is concerned with SARA Toxic Release Chemicals, by CAS Number and by Chemical Name, including Form R needed for reporting (pages 6-1 to 6-31).

Chapter 7 covers Clean Air Act Hazardous Air Pollutants and Ozone Depleting Chemicals, by CAS Number and by Chemical Name, for the Clean Air Act amendments of 1990 (pages 7-1 to 7-20). Ozone depleting chemicals are listed by chemical name on pages 7-19 and 7-20.

Chapter 8 is reserved for future lists.

Chapter 9, Exposure Limits, provides the actual published exposure limits for chemicals on pages 9-1 to 9-260.

In Volume II of the book, Chapter 10 considers OSHA, inc. NTP carcinogenicity of chemical name (pages 10-1 to 10-13).

Chapter 11 lists the National Fire Protection Association Hazardous Materials by CAS numbers and by chemical names. Ratings for NFPA 325 ratings, are on pages 11-19 to 11-56.

The NIOSH Recommendations for Occupational Safety and Health, 1988, are given in Chapter 12 (pages 12-1 to 12-16).

The four states, California, Massachusetts, New Jersey and Pennsylvania regulations are given in Chapters 12-17 through 13-16-37.

As noted above, this is the most complete and convenient documentation of the health, safety, fire, and environmental ratings of chemicals, and every library would greatly benefit from its regular use.

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