

human consideration, the disposal of hazardous wastes and other pollution have effects on the air, water and earth. Such regulations can only be truly evaluated by time, it is hoped that frequent re-evaluation and modifications will be made after a few years of "real world" experience.

Extensive references are given, and the appendix includes details on the required signs and labels required, as well as an extensive bibliography and subject index. This volume deserves careful study by anyone interested in control of hazardous materials, and is highly recommended.

HOWARD H. FAWCETT

Handbook of Toxic and Hazardous Chemicals and Carcinogens 3rd edn., 2 volumes by Sittig, Marshall, Published by Noyes Data Corp., Park Ridge, NJ, 1991, ISBN 0-8155-1288-4, 1685 pp., \$197.00.

According to the preface:

"This handbook presents concise chemical, health and safety information on some 1300 toxic and hazardous chemicals (up from nearly 600 in the first edition and 800 in the second), so that responsible decisions can be made"

Sittig provides data for only important toxic materials whose inclusion is warranted by official recognition by state or federal governments or by supra-government such as the United Nations, ACGIH or German Research Society (DFG).

Data are furnished (for the extent available) on the following areas:

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| • Chemical description | • Points of attacks |
| • Chemical formula | • Medical surveillance |
| • Code number | • First aid |
| • Potential exposure | • Personal protection methods |
| • Incompatibilities | • Respirator selection |
| • Permissible exposure limits in air | • Storage |
| • Determination in air | • Shipping |
| • Permissible concentration in water | • Spill handling |
| • Route of entry | • Fire extinguishment |
| • Harmful effects and symptoms | • Disposal method |
| | • References |

Essentially, the book attempts to answer eight questions for each chemical:

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| • What is it? | • How does one protect against it? |
| • Where do you encounter it? | • How does one handle it and protect against mishap? |
| • How much can one tolerate? | • Where can I learn more? |
| • How does one measure it? | |
| • What are its harmful effects? | |

The book was not on my office shelf for more than one day when I had to find out about benzidine, which was thought to be contaminating a local site. The book provided all the data I needed. It is a great addition to my chemical library and I strongly recommend its purchase to every chemical spill responder, chemist and chemical engineer who has to deal with known and unknown chemicals and the hazards they pose.

GARY F. BENNETT

Industrial Hygiene Management, by J.T. Garrett, L.J. Cralley and L.V. Cralley (Eds.), Wiley/Interscience, New York, NY, 1990, ISBN 0-471-85128-0, 386 pp., \$69.96.

The timely appearance of this title, as the OSHA Chemical Laboratory Standard has emerged, should attract the attention of administrators as well as industrial hygiene and other management personnel to this carefully researched and referenced volume. Drawing on the experience of 26 authors as well as the extensive knowledge of three recognized authorities as editors, the volume digests and summarizes the management as well as professional aspects in this relatively new effort in chemical health and safety, largely in the last 40 years. The ultimate goal of increased production and lower operating costs through fewer health concerns of exposed workers is now recognized as another symbol of cost-effective management.

A scan of the table of contents reflects the broad view of the editors. Starting with a discussion of ethics (Does the Golden Rule still apply?), the overall management of the industrial hygiene activity is explored. The serious responsibility for an efficient scientific, yet still economical activity, is explored. The necessity for industrial hygiene staff to communicate in a positive manner the hazards of the chemical materials, including the Right-To-Know, even to workers who may have a less-than-interest in the effort, is a significant challenge. As exposure measurement data progresses and is analyzed, new insight is often gained which can be utilized to prevent more serious problems in the workplace. The tools of the trade, including the monitoring and laboratory back-up should be kept under close management to ensure the most effective and precise results. Realistic estimates and budgets for the program and its professional personnel must be examined if the effort is to be truly productive.

This volume is a substantial step forward in increasing the awareness of the work of the American Industrial Hygiene Association, the Division of Chemical Health and Safety of the American Chemical Society, and the Industrial Hygiene Foundation. The distillation of years of experience in this relatively