

*The COSHH Regulations: A Practical Guide*, by D. Simpson and W.G. Simpson (Eds.), Published by the Royal Society of Chemistry, available from Turpin Transactions Ltd., Blackhorse Road, Letchworth, Herts SG6 1HN, or from CRC Press, 2000 Corporate Blvd., NW, Boca Raton, FL 33431 or from D.A. Books and Journals, P.O. Box 163, 648 Whitehorse Rd., Mitcham, VIC 3132, Australia, 1991, ISBN 0-85186-189-X, 192 pp. £45.

COSHH is the widely used abbreviation for "Control of Substances Hazardous to Health", which regulates under powers conferred by the U.K. Health and Safety at Work etc., Act of 1974. Ten contributors from a range of industry, medicine and consultants have collaborated with the editors. As noted in the introduction, few or no absolute definitions of "substances hazardous to health" are given, but five classifications are noted:

- (1) Substance or substances hazardous to health, as decided by the Health and Safety Executive;
- (2) Pollution, as decided by the Pollution Inspectorate;
- (3) Nuisance—anything else that can be prosecuted;
- (4) Poisons—a limited range of toxic substances inconveniently defined in law;
- (5) Toxic substance—anything anyone happens to dislike.

"All reasonable steps" must be taken to ensure that the control measures or protective equipment are used and applied properly. Checks must be made of equipment (at intervals stated), and there must be monitoring of the workplace. "Suitable procedures" must be used and records kept—personal exposures of identifiable employees must be kept for at least 30 years. Employees must be kept under "suitable health surveillance". Information about exposure to "substances hazardous to health" must be provided to employees, including information about risks and precautions to be taken.

The COSHH regulations do not refer to penalties, but are as in the Health and Safety at Work etc., Act. A maximum fine of £2000 can apply to each charge, or, on conviction on indictment, fines of an unlimited amount and imprisonment not exceeding two years on each count.

While the above overview of COSHH may create the impression that a useless regulation has evolved, in subsequent chapters it is noted that, after much detailed study and work by industry, associations, trade groups and legal advisors, specific guides for many hazards and appropriate control measures have evolved. These authors admit the Regulations can be modified or interpreted so the end result, namely the preservation and improvement can be achieved. As with the cry of "too expensive" heard in the U.S. when the OSHA Act of 1974 was passed, the cost is obviously high, depending on your evaluation of the risk and consequences of occupational diseases, accidents and other mishaps, for cost-effective operation operations, the human and environmental impact must be monitored and improved where shown necessary. Besides the

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:

- |                                      |                               |
|--------------------------------------|-------------------------------|
| • 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? |  |