

Book Reviews

Hazard Communication Standard Inspection Manual, 3rd edn., by U.S. Department of Labor, Occupational Safety and Health Administration, Directorate of Compliance Programs, Office of Health Compliance Assistance, Government Institutes, Rockville, MD, 1991, ISBN 0-86587-256-2, 198 pp., \$55.00.

The Hazard Communication Standard Inspection Manual was developed by the Office of Health Compliance Assistance in OSHA for the following purpose;

"...establishes policies and provides clarifications and ensures uniform enforcement of the Hazard Communication Standard (HCS)."

(HCS is found in 29 CFR 1910.1200 — HAZWOPER). The first 31 pages of the manual convey OSHA's message on the topic with a major focus on Inspection Guidelines, Violations and Interfacing with old standards.

The major share of the book, as with many other compliance manuals is taken up by appendices, several of which are Federal Register page reprints.

Major appendices include:

- Clarifications and interpretations of the hazard and communication standards.
- Permissible exposure limits (to contaminants)
- Occupational exposure and hazardous chemicals in laboratories — 29 CFR 1910.1450
- Hazardous waste operations and emergency response (HAZWOPER) 29CFR 1910.120

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Emerging Technologies in Hazardous Waste Management II, by D.W. Tedder and F.G. Pohland (Eds.), ACS Symposium Series 4681, American Chemical Society, Washington, DC, 1992, ISBN 0-8412-2102-2, 444 pp., \$89.95.

This book is a continuation of a conference session theme begun in 1989. The last volume bearing the same title was published in 1990; in it 22 papers were published. In reviewing the first volume of what appears to be a series, I said the papers were more "innovative" than "emerging" technology. Not so for this one. Many of the papers are truly emerging technologies — biofilters, sequencing batch reactors and stabilization processes.

Twenty papers have been published under four main headings:

1. Thermal treatment and abiotic emissions control
2. Water management
3. Biological treatment
4. Solid waste management

Actually the papers are quite varied, ranging from those dealing with currently utilized technology to basic research.

For example there were papers describing application of sequencing batch reactors, ultraviolet light/ozone/hydrogen peroxide reactor systems and biofilters. All three processes are now utilized industrially for waste treatment. In the emerging stage, I would place a paper from Chicago's Institute of Gas Technology on hazardous material destruction in a self-regenerating combustor-incinerator and in the same category one on detoxification of organophosphate pesticides by an immobilized enzyme system. In the basic research area, I would place papers on the incineration of contaminated soils in an electrodynamic balance and a paper on multicomponent ion exchange-equilibrium Chazabite zeolite. Finally there were two review papers worthy of note, one on contaminant leaching from stabilized waste and another on oxidative techniques for ground water treatment.

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Controlling Chemical Hazards: Fundamentals of the Management of Toxic Chemicals, by R.P. Cote and P.G. Wells (Eds.), Unwin Hyman, Boston, MA (distributed by Chapman and Hall, London), 1991, ISBN 0-040-60402-1 (hb), 310 pp., £40.00.

In the preface the authors write:

"This book presents environmental protection managers and advanced students in environmental studies programs with an overview of the principles, facts, multidisciplinary approach, and some of the complexities of the management of toxic substances."

To accomplish this task, the editors solicited experts from government, industry, academia, law and environmental groups to write 13 separate but loosely interconnected chapters that deal mainly with toxicology and risk assessment, fate and transport and workplace exposures. In this context, I would rate this book as fair to good.

The editors claim further coverage:

"The text explores critical issues facing managers' responsibilities for preventing and controlling problems associated with the manufacture, transport, use and disposal of chemicals."

In this area I would not rate the book highly.

The obligatory reference to the tragic accident involving methyl isocyanate at Bhopal is noted (about 3400 deaths are claimed, a number that seems to