

The published papers are ever-placed by the editors in one of two groups:

- Wastewater management technology – 12 papers
- Solids, residues and recycle techniques – 9 papers

My negative comments aside, there are many interesting technologies for handling the hazardous components discussed. Among the technologies are:

- Photocatalytic oxidation
- UV oxidation using ozone or hydrogen peroxide
- Solar photocatalysis
- Solid catalysis using hydrogen peroxide
- Removal of fluoride by hydrous cerium oxide
- Cell-biopolymer uptake of strontium
- Affinity dialysis metal removal
- Acid recovery by amine extraction
- Dechlorination of organic compounds by potassium hydroxide
- Bioremediation of creosote and polychlorinated biphenyl (PCB)-contaminated sites.

All in all the papers present a varied menu of technologies. As I said, they are well done, but I'd re-title the book: *Innovative Solutions to Wastes Containing Hazardous Substances*'.

GARY F. BENNETT

*Solvent Waste Reduction*, by U.S. Environmental Protection Agency and ICF Consulting Associates, Inc., published by Noyes Data Corp., Park Ridge, NJ, 1990, ISBN 0-8155-1254-6, 158 pp., \$ 45.00.

The main text of this book is based on papers presented at U.S. EPA seminars covering various aspects of solvent waste reduction, with topics ranging from regulation and disposal bans to on-site and off-site treatment methods. Included in the book are solvent waste reduction alternatives are defined as: (a) any in-plant practice or process that avoids, eliminates or reduces waste so as to reduce environmental risk to any media; and/or (b) the treatment, reuse, or recycling of any material that reduces the volume and/or toxicity of waste prior to final disposition.

Chapter titles include:

- (1) Land and liquid disposal bans
- (2) Title III SARA (Superfund Amendments Reauthorization Act) – The community's right to know
- (3) Solvent waste burning regulation
- (4) Waste minimization liability issues
- (5) Minimization of process equipment/cleaning waste
- (6) Source reduction – parts cleaning

- (7) Solvent waste minimization by the coating industry
- (8) What to do with hazardous waste; regulations, management and disposal
- (9) Waste reduction for chlorinated solvents users
- (10) On-site reuse and recycle of solvents
- (11) Commercial (off-site) solvent reclamation
- (12) Making the most of bottoms and residues
- (13) Treatment: solvent waste stream
- (14) Treatment of spent solvent wastewaters: Focus on changing economics

Appendix A: Separation techniques for solvent recovery

Appendix B: Treatment and pretreatment

Appendix C: Good operating practice

This book is very well written with each chapter authored by a different government or industry expert. Unfortunately, their manuscripts have been photoreproduced (reduced) and the small print size makes the book a little difficult to read.

GARY F. BENNETT

*Worker Protection During Hazardous Waste Remediation*, by L.P. Andrews (Ed.), Center for Labor Education and Research, published by Van Nostrand Reinhold, New York, NY, 1990, ISBN 0-442-23899-1, 391 pp., \$ 44.95.

Eight different authors working out of the Center for Labor Education and Research of the University of Alabama, Birmingham, Alabama, authored this book from their bases as members of a group that has been training workers all across the United States in occupational safety and health since 1970. The material in the book clearly spells out the best ways to recognize industrial hazard, handle wastes, prevent accidents and treat exposed victims in industrial settings.

In the introduction of the book, the authors outline the problem and their approach in this way:

“Hazardous waste sites are dangerous not only for the obvious reasons (such as potential exposure to toxic wastes) but also for some less obvious reasons. For example, these sites are unpredictable – nobody knows for sure what is buried in an abandoned site until the site assessment is complete and surprises still can occur. Also, site characteristics change as materials are removed; specifically, trenches are excavated, causing a confined space hazard; bulking of compatible containerized wastes creates waste hazards. The book addresses the specific problems and provides solutions with practical procedures and application for the special work practices needed to provide a safe work environment and to maintain compliance with SARA and the applicable OSHA standards.”

The titles of the book's 14 chapters clearly reveal its coverage: