

What Went Wrong? Case Histories of Process Plant Disasters, by T.D. Kletz, Gulf Publishing, Houston, TX, 1985, 204 pages, \$39.95.

A recent chemical industry news release noted that 135 people have been killed by chemical accidents in the United States in the last 5 years. The same week as this report appeared, a hazardous materials newsletter I received, noted that a Congressional amendment to a Superfund bill would establish, if passed, community preparedness planning groups for hazardous chemical spills.

There is, as readers of this journal might expect, great concern about hazardous chemicals in the United States after the tragic accident with methyl isocyanate at Bhopal, India. That incident has, and will continue to have, long-ranging impacts on the chemical industry — not just in the United States but worldwide.

Kletz's book, containing more than 100 case histories of chemical plant accidents, could not have been better timed for its market release. But it is not a book written quickly to grab the "Bhopal-induced" market. Kletz has written authoritatively for many years about chemical plant safety. Indeed I have long been one of his admirers, having read several of his articles published in the American Institute of Chemical Engineer's Loss Prevention Series of publications, and this book naturally contains numerous references to his own publications — in fact in almost all the entire 18 chapters he refers to one of his many articles.

The book examines the causes and aftermaths of numerous "chemical" tragedies — almost every one of which could have been prevented. It includes hazard identification and removal, clearing choked lines, modifications, reverse flow, static electricity, tank trucks, storage tanks, human errors, labelling of equipment, stack explosions and blocked stacks, leaks, entry to vessels, isolation permits and misunderstanding of material strength in construction.

In my opinion, no chemical engineer involved in the design or safety of chemical plants should be without this book. It is simply excellent — informative, unique and well written.

GARY F. BENNETT

Recovery, Recycle and Reuse of Industrial Waste, by K.E. Noll, C.N. Haas, C. Schmidt and P. Kodukula, Lewis Publishers, Chelsea, MI, 1985, ISBN 0-87371-002-9, 196 pages, \$24.95.

This book is the first of a new series of Industrial Waste Management books (that I have seen) to be produced by Lewis Publishers.

Directed at industrial engineers and managers, the book attempts to explain the underlying concepts, advantages and disadvantages of recovery,

recycle and reuse. In that context, this book deals with the variables affecting the unit processes employed for the separation of organic and inorganic pollutants from various industrial waste streams.

The information gathered by the authors during their search of the literature is presented in two major sections of the book.

Section 1 — Chapters describing the methodology currently available for recovery of industrial and hazardous waste, and developing technologies for recycle, reuse and recovery.

Section 2 — Chapters describing five technical categories used for recovery: sorption, molecular separation, phase transition and physical dispersion and separation.

The book emanated from a study by the Industrial Waste Elimination Research Center (operated by Illinois Institute of Technology and Notre Dame University) which is a U.S. Environmental Protection Agency funded consortium of the two mentioned universities. The study was one of the legally mandated technology evaluations of the existing state of the art of hazardous materials control and treatment.

The book is really only a literature review of the fields indicated above. Nothing unique or unknown is contained in it, but the authors have produced a potentially useful compilation of the literature on the subject.

GARY F. BENNETT

Protecting Personnel at Hazardous Waste Sites, by S.P. Levine and W.F. Martin (Eds.), Butterworth Publisher, Stoneham, MA, ISBN 0-250-40642-X, 384 pages, \$24.95.

It has been a long time since I have seen a book that cost so little and that was potentially so useful as this one. As the number of Superfund (uncontrolled hazardous waste sites) in the United States approaches 800 and the U.S. Congress gets ready to inject billions of dollars more into the cleanup program, the number of workers involved in remedial actions (cleanup) will increase dramatically in the next few years.

Clearly, protection of the health of these workers should, and will be, paramount in planning and operating cleanup programs. And this book will be an invaluable aid in that process.

The book has the following 13 chapters whose titles reveal the scope of coverage.

1. Recognition, evaluation and control at the hazardous waste sites
2. Federal government programs
3. Occupational health safety programs for hazardous waste workers
4. Information gathering
5. NIOSH air monitoring at hazardous waste sites
6. Comparability and material handling