

A review of the chapter titles gives evidence of the book's practicality and 'how-to-do' approach: auditing, checklists, questionnaire, examples, etc. The book however, lacks reference to the literature, a feature I feel detracts markedly from its utility.

G.E. Bennett

PII S0304-3894(96)01858-4

Proceedings of the Thirteenth Technical Seminar on Chemical Spills, Calgary, Alberta, June 1996, Environment Canada, Ottawa, Ont., Canada, 1996, 396pp.

These proceedings contain copies of 22 papers presented at this seminar; they cover a wide variety of topics. Major thrust areas at the conference were:

1. Countermeasures
2. Fate and effects
3. Analytical
4. The spill problem

Not given in sessions by themselves, but interspersed under other topics were remediation or site assessment papers found which dealt with the environmental problems of former missile sites in Latvia and the Ukraine.

Other topics that caught my attention were papers on:

1. Recovery of selenium from water using a membrane process
2. HCl spill modeling
3. Chlorine gas release prevention preparedness and response
4. Validation of the Eurospill chemical spill model (for a chemical spill onto a water body)
5. LPG tank failure
6. Recent Canadian chemical spill statistics data

G.F. Bennett

PII S0304-3894(96)01857-2

Toxics Watch 1995, Inform, Inc., New York, NY, USA, 1995, \$125.00, 773pp.
ISBN: 0-918780-64-0

As one begins to read this book, the statistic that 13,000,000 chemicals have been discovered/created and of that number 72,000 are used in daily commerce catches one's attention quickly. Especially since many of these chemicals are very toxic compounds. Moreover, each year 685,000 new chemicals are identified.

Inform's concern is expressed by the following statement: "Almost none of the 72,000 chemicals in commerce in the United States have been fully characterized for their ability to cause environmental and health effects."

But then good news is found in the following: "Life expectancy in the United States is going up, and toxic environmental chemicals have been a very small constraint on that expectancy."

Given this background, INFORM goes on to examine chemical production and use, chemical waste production and reduction and chemical release/reduction in general. A great deal of data are given, analyzed, and re-analyzed (almost to exhaustion, I believe). The 16 contributors to this volume have examined data from the USEPA's Toxic Reduction Inventory, RCRA, and other sources in an attempt to determine trends in the use of chemicals in commerce, their presence in industrial waste and their release to the environment.

As I read the book, I very much liked INFORM's question and answer approach to its investigations/findings. However, I did not find their reports (data reproduction) of amounts of waste/chemical by country/state/county useful. Nor were the 3-dimensional plot easy to utilize.

But I believe they attain their goal as expressed below:

"In *Toxic Watch 1995*, the first in a series of reports, INFORM has explored a broad range of U.S. data on the use and presence of toxic substances in our environment, looking for answers to important questions. Just how prevalent are toxic substances in the environment? What are the major sources of toxic contaminants? What industries contribute the greatest share of toxic substances and waste? What has been the impact of government and industry programs designed to reduce toxic exposure? Are we managing toxic materials in the most environmentally sound way possible? Perhaps of greatest importance, is the United States meeting its national goal of reducing toxic waste at the source by preventing its creation in the first place?"

Given that INFORM's mission is to examine business and municipal practices that threaten the environment and public health, and their current research focusses on strategies to reduce industrial and municipal wastes to preserve air and water quality, they have done a good job. And I believe a fairly balanced job without the abnormally inflammatory rhetoric of a radical environmental group. Although, as I have said before, INFORM writers seem to present the same data three or four different ways.

My only major quarrel with the book is with the length of the Chapter 9 on environmental justice. I even question its inclusion. This topic, although important in a social context, was totally out of place in this book.

G.F. Bennett

PII S0304-3894(96)01860-2

Concentration Fluctuations and Averaging Time In Vapor Clouds, a CCPS Concept, by D.J. Wilson, Publisher Center for Chemical Process Safety (CCPS), American Institute of Chemical Engineers, New York, 181 pps. ISBN: 0-8169-0679-3, \$90 for U.S. and Canada; \$125 elsewhere.

Sampling vapor cloud releases during the first few seconds to a few hours is more difficult than hour-by-hour variations. The preface of the volume attempts to bring to