factors affecting safety in the workplace, workplace education and controlling safety hazards.

Chapter 2 provides the most interesting reading (for me at least) as it discusses in some detail Occupational Legislation, especially the Federal Occupational Safety and Health Act (OSHA). The chapter is written from the perspective of the employee, being adapted from a Labor Union Health and Safety Guide. It discusses in some detail the format of an OSHA inspection and the promulgation of the results thereafter, including citations and penalties or lack thereof. Also discussed are OSHA hazard communication standards. Finally, the Right-to-Know Laws of both the State of New Jersey and the Federal Government are discussed.

Chapter 3 is an enigma. It is well written, but in 20 pages the author tries to cover the significant aspects of several major environmental laws: Clean Water Act, Clean Air Act, Toxic Substances Control Act, Resource Conservation and Recovery Act and CERCLA and SARA. That is just too much material for the writer to cover (and the reader to comprehend) in a small space. And it is really not health-related material, or at least not occupationally health-related material. This chapter could well be omitted. Small businesses need the information, I agree, but it can best be obtained somewhere else.

Chapter 4 is really the essence of this topically oriented book. In it, the author discusses the general aspects of employee health (medical surveillance records, etc.), industrial hygiene principles (forms of hazards, chemical risk, explosions, effects of hazardous substances), industrial hygiene monitoring methods, discussion of personal protective equipment and respiratory protection. The chapter also includes a discussion of safety and health committees and the promotion of employee health.

Chapter 5 is a short chapter, devoted to the delivery of information and sources of information and assistance; a list of useful books is given; also the role of OSHA on-site consultations is discussed.

The book ends with a lengthy appendix section that occupies the last 100 pages or 35% of the book. Personally, I believe that is out of balance with the text. Four of the appendices provide resource information geared to one of the first four chapters. The last appendix is general information.

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Principles of Accident and Emergency Management, by L. Theodore, J. Reynolds and F. Taylor, John Wiley & Sons, Inc., New York, NY, 1989, ISBN 0-471-61911-6, 487 pp, $58.50.

The authors have written a very readable book at a very elementary level. As such, it does achieve part of the author's goal of serving as a starting point for the novice. It may also serve as a useful tool for organizations that do not

employ graduate chemical engineers with responsibility for hazardous operations. It would seem to this reviewer that a wider audience exists, namely: graduates of business colleges who have management responsibilities for certain technical functions or students taking special technical elective courses in business colleges.

Part I, consisting of the first three chapters, is an excellent review of some of the historical aspects of past accidents, as well as a review of the major legislation in effect in the United States. This section in particular will be useful to the beginning manager who has little knowledge of the field. Chapter 3 is devoted to the planning steps needed in order to respond in an appropriate manner to an accident or some emergency. Sufficient details are provided in an easy "how-to" approach, which would enable almost anyone to develop a reasonable first plan. It also emphasizes the need for continuous training of all personnel involved in the process.

Part II (Chapters 4, 5, 6 and 7) is a mixture of definitions, terms, process descriptions and applications. Chapter 4, on the one hand, might have been left out of the book. It is too brief to be of value to practicing engineers, and few people will benefit from the material the way it is presented. The terminology and/or definitions would be more useful in a concise glossary of terms in the appendix. The process and equipment descriptions could be included with the appropriate text, such as Chapter 6 on Accident Prevention, which is helpful in a book such as this. Chapter 5, on the other hand, dealing with Fire and Explosion fundamentals is especially well written and useful to a wide audience. Chapter 7, which discusses characteristics, uses and manufacture of several basic chemicals serves as a good review of some potentially hazardous operations, as well as a review of which properties are important and what health effects can result from exposure to them.

Part III of the book deals with atmospheric dispersion. Chapter 8 presents the major equations which describe dispersion fundamentals, as well as analytical solutions to a number of cases that might be encountered. Some applications, concentrating on atmospheric effects, are discussed in Chapter 9 and some discussions about readily available models are presented in Chapter 10. A number of example problems are worked out.

Part IV deals with risk assessment. Chapter 11 presents an elementary review of probability, which should provide the novice with some of the language used in hazard and risk assessment. This is followed by a discussion of common distribution models in Chapter 12 and some useful examples of applications in Chapter 13.

In summary, the book is well written but suffers from a lack of consistency in the level of difficulty of presentation. Its scope might best be suited to the beginning manager who has little technical background but needs to understand some of the jargon of the field.

LESLIE E. LAHTI