

Book reviews

Emergency Management: Concepts and Strategies for Effective Programs, L.G. Canton. John Wiley & Sons, Inc., Hoboken, NJ (2007). 366 pp., Price: US\$ 79.95, ISBN: 0-471-73487-X

This book is very different from ones I have reviewed from the past and published in the Journal of Hazardous Materials. Prior books that I have reviewed, dealt, in the main, with short-term response to specific threats—these threats being mainly from hazardous chemical releases.

“This book suggests that it is time for a different approach, one that is supported by social science and by new national standards for emergency programs. This approach is based on the concept that emergency management is a distributed process, one that must be collectively performed by the community. Emergency management must be integrated with other community goals and as such, must be perceived as adding value to the community by helping the community manage overall risk.”

As a result of Hurricane Katrina and the chaos it cost for those impacted by it, the author began to question many of the traditional approaches to disaster response. He notes that an article by Dr. E.L. Quarantelli on the qualitative differences between catastrophe and disaster encouraged his new approach.

Long-time readers of this journal may recognize Dr. Quarantelli's name as he served for many years on the Editorial Advisory Board. It was my pleasure to meet him when he was at Ohio State University.

The author has written a book that “. . . approaches emergency management from a different perspective than the traditional four phases of emergency management. It does not have the equally traditional listing of hazards and impacts. It doesn't even give a lot of detail about response.” He advances a concept that demands a change in the role of the emergency manager from that of a technical expert who is responsible for everything vaguely related to disasters, to that of a program manager who coordinates the community's management of risk.

“The text begins with historical and social science perspectives on emergency management, and then delves into the historical and evolving roles of the emergency manager. Following a broad discussion on establishing an effective emergency management program, the text explores its indi-

vidual components, concluding:

- Assessing risk
- Developing strategies
- Planning concepts
- Planning techniques and methods
- Coordinating response
- Managing crisis”

The author best describes the book's coverage. I quote from the introduction:

“The first three chapters of this book focus on the three pillars on which successful emergency management is based: an understanding of history, knowledge of social science research, and technical expertise in emergency management operations. The chapters also provide insight as to how emergency management has evolved and suggests reasons why the current method of response planning doesn't work as well as it should.

Chapter 4 discusses establishing and administering the emergency management program. Traditionally, emergency management 'programs' have merely been a collection of activities with only vague relation to each other, primarily driven by federal grants. Chapter 4 provides a mechanism for addressing program governance and oversight and for linking program elements through a strategic plan.

Chapter 5 considers the analysis of risk as the basis for strategy development. It considers both the traditional macro view of hazard identification and analysis as well as the micro view required for continuity planning.

Chapter 6 covers strategy development, a major weakness in many emergency management programs. The focus is not so much on individual strategies as it is on the interface between the strategies. It is this conceptual basis that helps build the flexibility needed in disaster response.

Chapters 7 and 8 focus on the development of the various plans needed within the emergency management program. Again, the chapters are more concerned with the process than with the specific plans and with tactical planning issues rather than field operations. Chapter 7 discusses planning concepts while Chapter 8 suggests methodologies to translate these concepts in to actual plans.

Chapter 9 considers issues related to tactical response. It discusses the pros and cons of incident management sys-

tems and suggests a coordinating methodology that may prove more effective than traditional command control structures.

Chapter 10 focuses on the roles and responsibilities of senior official in the management of strategic response. It suggests that the normal involvement of the senior officials in the emergency operations center may be counter-productive and suggests new ways of managing disasters using crisis management principles.”

The writing in the book is excellent and the advice given by the author clear. This book should serve professionals in the emergency management field very well.

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Beryllium: Sampling and Analysis, K. Ashley (Ed.). ASTM International, West Conshohocken, PA (2006). 119 pp. US\$ 55.00 (soft cover), ISBN: 0-8031-3499-1

This relatively short book resulted from an ASTM Symposium on Beryllium Sampling and Analysis which was held in Reno, Nevada in 2005. Nine of the 18 papers presented have been published in three sections of this book:

- (1) Beryllium disease—exposure monitoring and standardization issues.
- (2) Beryllium exposure measurement and reference materials—national and international perspectives.
- (3) On-site monitoring for beryllium—sampling and analytical aspects.

The editor describes the content of these three sections as follows:

- (1) *Beryllium disease*. The intent of this section was to present an overview of beryllium disease and efforts to reduce worker exposures through improved monitoring methods and the development of standard methodologies. Some of the papers presented discuss the industrial uses of beryllium and the history of beryllium disease. Other papers dealt with occupational monitoring and standardization of sampling and analytical methods.
- (2) *Beryllium exposure, measurement and reference materials*. This portion of the symposium covered global efforts and progress in beryllium occupational monitoring, as well

as the development and characterization of beryllium reference materials. Applications of sampling and analytical methods to industrial hygiene chemistry and practice were highlighted, and needs for reference materials containing beryllium oxide were identified.

- (3) *On-site monitoring for beryllium*. The ability to carry out on-site beryllium analysis has been a desire for many years, and this part of the symposium covered recent developments in this area. New portable analytical methods for determining trace beryllium in samples from air and services have been developed and evaluated, and advances in this research arena are continuing. These methods include both real-time qualitative and semi-quantitative methods, as well as near real-time quantitative techniques for ultra-trace beryllium analysis. Given that occupational exposure to beryllium can cause a lung disease that is ultimately fatal, timely and accurate sampling and analysis of the work place environment is essential in providing for worker health as well as insuring that the facility meets exposure limits for that element in the air as well as on surfaces.

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Industrial Waste Treatment: Contemporary Practice and Vision for the Future, N.L. Nemerow. Butterworth-Heinemann/Elsevier, Burlington, MA (2007). 585 pp., Price: US\$ 99.95, ISBN: 0-12-372493-7

This book is distinctly different from the normal course of environmental books that I review. It has two distinct parts that I have classified as “the past” and “the future.”

The material in the “past” section is very familiar to me—as this section contains a concise discussion of conventional treatment processes. I found innumerable references to articles that I have read, some very old but still historically relevant; many of these articles were written by Nemerow himself.

In this book, Nemerow has clearly fulfilled his intentions “. . . for the book to be an overview of the subject of industrial waste treatment and disposal as used in the twentieth century and how it is evolving into a new conceptual field as we enter the twenty-first century.” In my opinion, he has achieved his goal very well, covering current (or perhaps I should say past) waste treatment unit operations in the following chapters: (1) theories and practices, (2) contaminant concentration reduction, (3) neutralization, (4) equalization and proportioning, (5) removal of