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## Book reviews

**Ecological Risk Assessment, G.W. Suter II (Ed.)., second ed. CRC Press/Taylor & Francis Group, Boca Raton, FL (2007). 671 pp., price: US$ 99.95, ISBN: 978-1-56670-634-6**

In the preface to this book, the author writes: "The primary purpose of preparing this edition is to provide an update." This update pertains to the field of ecological risk assessment which has ". . . gone from a marginal activity to being a relatively mature practice." Later in the preface, Suter writes: "This text is still aimed at practitioners and advanced students with at least a basic knowledge of biology, chemistry, mathematics and statistics."

Although authored mainly by Suter, several chapters written by colleagues have been included in this text which has 39 chapters divided into six major sections entitled as follows:

- Introduction to ecological risk assessment
- Planning and problem formulation
- Analysis and exposure
- Analysis and effects
- Risk management
- The future of ecological risk assessment

The book ends with a 64-page reference section that contains approximately 1300 citations.

Suter discusses a number of processes used to perform ecological risk assessments which William Ruckelhaus, former US EPA administrator, said, ". . . is the product of a shotgun wedding between science and law." Suter defines the process as "technical support for decision making." This process is commonly used to regulate chemicals, make decisions regarding the remediation of contaminated sites, the monitor importation of exotic organisms, the manage watersheds and other environmental management issues.

This book "Provides documentation consistent with the EPA framework for ecological risk assessment; explains ERA and presents the full range of useful data, models and conceptual approaches needed to perform active risk assessment; demonstrates how to organize and conduct an ERA; covers conventional risk assessments, risk assessments for existing contamination, large-scale problems, exotic organisms, and risk assessments based on environmental monitoring."

The book's final chapter examines the future of ecological risk assessment which is being pushed in new directions by developments in science and changes in policy and public expectations, i.e., a desire for more clarity and specificity in its predictions.

Gary F. Bennett*
*The University of Toledo, Department of Chemical and Environmental Engineering, Mail Stop 305, Toledo, OH 43606-3390, United States*

* Tel.: +1 419 531 1322; fax: +1 419 530 8086.
*E-mail address:* gbennett@eng.utoledo.edu

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**Corporate Environmental Management, J. Darabaris. CRC Press/Taylor & Francis Group, Boca Raton, FL (2007). 221 pp., Price: US$ 99.95, ISBN: 978-1-4200-5546-7**

This book was written by an engineer who is a Certified Public Accountant. Hence, its emphasis on the overall (business) aspects of a company's environmental program is understandable. In the first part of the book, Darabaris discusses assessment, while in the second part he provides technical details regarding management and investment concerns. Consequently, ". . .the book offers insight into how to measure the effectiveness of corporate environmental programs."

This book will be of great assistance to corporate environmental managers whose goals Darabaris notes are threefold:

- "To provide a basis for the independent assessment of environmental management that marries the various standardized approaches for measuring components (e.g., environmental audits for facilities, ISO 14000 compliance) with the larger and more sophisticated goals for overall corporate management objectives.
- To provide summary inputs regarding various global environmental management initiatives and developments that may be of interest to the target audience (with full recognition that this is a moving target).
- To provide technical and management insights and suggestions to aid environmental management professionals and their corporate management structure in their development and implementation of initiatives, as well as providing interested investment and stakeholder communities a basis for independent evaluation."

In the introduction, the author writes:

> "This text focuses on the emerging relationship between corporate management and the environment as a new era arrives on the scene, where environmental factors increasingly play a key role in corporate competition and generate a need for environmental assessments of companies. In this new era, the view of environmental problems has undergone a shift from localized industrial pollution to a broader realization of their collective impact on global environmental problems."

And he states further:

> "This new, more market-oriented regulatory approach to environmental problems is aimed toward encouraging companies to find creative solutions to their global impact by reducing carbon dioxide and other greenhouse gas emissions, curtailing household and corporate waste generation while actively promoting recycling, and introducing the PRTR (Pollutant Release and Transfer Register) system for reporting and registering potentially harmful emissions and transport of waste that attacks the problem on a large scale."

As a result, corporations and corporate environmental managers are under much pressure to "go green," i.e., to go beyond simply complying with environmental regulations. As a first step, one could adopt, the author notes, the following seven principles:

1. "Commitment of top management.
2. Development of an environmental plan and organizational structure.
3. Company-wide participation of all employees.
4. Efficient use of management resources.
5. Sustained effort to reduce waste generation.
6. Detection and minimization of environmental risks.
7. Disclosure to stakeholders and investment community."

There are many parties interested in a company's environmental program/performance. Among those parties are the stakeholders (banks and investors), onlookers (local residents and government regulators. More recently, investors are scrutinizing the environmental activities of the companies in which they are contemplating investing. Among those investors are "eco-funds" (environmentally responsible stock investment trust funds). The new "kid-on-the-block" is concern for sustainable development which is a process of "balancing the economic, social, and environmental issues over the short- and long-term to insure a viable business climate." Numerous corporations issue reports that deal with that topic.

Also in the "proactive category" is the conduct of natural resource damage assessments as claims against a corporation in this area can be devastatingly large. Avoiding such claims is important.

At this point in my review, I think it would be useful to list the chapters (all of which are relatively short):

1. Introduction
2. Environmental management assessment
3. Lines of inquiry
4. Assessment model and analytical framework
5. Internal survey
6. Corporate commitment
7. Communication
8. Functional implementation
9. Measurement systems
10. Benchmark survey
11. External survey
12. Natural resource damage assessment—proactive strategies
13. Environmental risk assessment issues
14. Emergency response analysis
15. Corporate health and safety system
16. Environmental risk management at banking institutions
17. Global warming
18. Assessment of international trends
19. Summary

The longest chapter is Chapter 16 and understandably so given the author's accounting background. That chapter has a two-page reference section as contrasted to zero to three references given in most other chapters.

Chapter 17 discusses global warming. Although the Kyoto Protocol has not yet been adapted by the United States, it has passed in the United Nations and been ratified by a sufficient number of countries to be in force. Worldwide steps being taken by companies to control carbon dioxide include carbon dioxide reduction strategies as well as carbon dioxide trading; markets for this process now exist.

At the end of Chapter 18, the author has included a paragraph each on ExxonMobil and Wal-Mart. For ExxonMobil he traces its path from denial of global warming to the point of adopting a recent strategy shifting away from it. For Wal-Mart, he briefly discusses their ". . .significant shift in strategic environmental policy." This policy has several ambitious goals to increase the efficiency of its vehicle fleet by 24% over the next 3 years and double its efficiency in 10 years; eliminate 30% of the energy used in its stores; and reduce solid waste from its stores by 25% in 3 years.

Finally, I should note that Darabaris has made liberal use of diagrams, tables and graphs to illustrate his writing.

Gary F. Bennett*
*The University of Toledo, Department of Chemical and Environmental Engineering, Mail Stop 305, Toledo, OH 43606-3390, United States*

* Tel.: +1 419 531 1322; fax: +1 419 530 8086.
*E-mail address:* gbennett@eng.utoledo.edu

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