

**HANDBOOK OF ENVIRONMENTAL IMPACT ASSESSMENT.** Volume I, Environmental Impact Assessment: Process, Methods and Potential, 484 pp. Volume II, Environmental Impact Assessment in Practice: Impact and Limitations, 450 pp. Judith Petts, ed. 1999, Blackwell Science Ltd., Oxford, Great Britain. \$165 each.

Reviewed by Lance N. McCold, Oak Ridge National Laboratory, P.O. Box 2008, M.S. 6206, Oak Ridge, Tennessee 37830-6206.

When I saw the announcement of this book, I thought that, as someone who considers himself a specialist in environmental impact assessment (EIA), I should have it on my shelf. Having reviewed it, my conclusion is that while the book has real value, it is hardly the essential reference I anticipated. EIA scholars may find it a valuable reference, but most environmental professionals in the U.S. are unlikely to find it particularly useful.

The first thing to say about this book is that it is mistitled. *Webster's New Collegiate Dictionary* (1981) defines handbook as a "concise reference book covering a particular subject." With over 900 pages in 38 chapters prepared by 42 authors, the book certainly covers most aspects of EIA from a variety of perspectives. However, it is certainly not concise. My idea of a handbook is a book packed with lots of useful, easy to find facts, figures and formulae — but little narrative. These volumes are packed with narrative, and finding material of interest takes way too much digging for a "handbook."

The editor's statement of purpose for the book, "to provide a truly international perspective on the status of EIA, and up-to-date and critical reference in terms of key methodological issues, and a discussion of essential improvements in the context of sustainable development," is essentially accurate. Those who are interested in international perspectives on the status of EIA are likely to find much of interest here.

Each volume is a mixture of practical, theoretical, and more conjectural material. Each author takes a somewhat different tack. The introduction, and the first eight chapters of Volume 1 address "EIA as a Decision Tool." This part of the book includes chapters on intriguing topics, that are more likely of interest to the policy maker and academic than of value to the practitioner, such as: EIA and sustainable development, EIA versus other environmental management tools, strategic environmental assessment, criteria and standards for assessing significant impact, and the impact of EIA on decisions. Interspersed with these are somewhat more practical chapters on public participation and cost-benefit analysis.

After the stratospheric topics of the first nine chapters, Volume 1 concludes with ten chapters on “process and methods,” but, it is difficult to discern the intended audience for these chapters. Chapter 10, which addresses screening, scoping and alternatives, begins with definitions of these concepts — giving one the idea the chapter is aimed at people who are new to EIA (but somehow understood the preceding chapters?). The remaining 20 pages of discussion is more a survey than a tutorial — not particularly useful for those new to EIA. The next chapter, “EIA Monitoring and Auditing,” begins with a section on causality and feedback, but the discussion is more theoretical than practical, and someone who lacked good grasp of the subject would find the presentation very difficult. For instance, the author defines “effects monitoring” as “the measurement of the impact of an implemented project on the environment, by means of measuring environmental quality, registering complaints, etc.” Huh? Those of us who already know what monitoring is get the idea, but I suspect the student or new practitioner would be at a loss.

The remaining topics of Volume 1 are air quality, water impacts, social impacts, ecological impacts, visual impacts, risk assessment, cumulative effects and strategic environmental assessment methods. Each of these is an important EIA topic, but treatment permitted by 20 to 25 pages strikes me as too challenging for the beginner and too superficial for the experienced practitioner.

Volume 2 begins with four chapters under the heading of “quality and effectiveness.” The first chapter asks whether EIA practice is a potential fulfilled or an opportunity wasted, and concludes it is most often the latter. The second chapter is titled “comparative evaluation of EIA systems” — an interesting topic to academics, but not likely to be helpful to the practitioner. Chapter 3 addresses “capacity building,” a very important issue in developing countries — this chapter may be important reading for a practitioner beginning to practice in developing countries. Finally, Chapter 4 addresses quality and quality control in EIA, a topic that may deserve as much attention in the US as in other parts of the world. The discussion relies heavily on work done in Europe and the British Commonwealth. This material may be useful to those wishing to develop national strategies for improving EIA quality, but it does not provide tools for the practitioner.

The second part of this volume addresses “EIA at the international level” in chapters on transboundary effects and on EIA multilateral financial institutions. These chapters are surveys that may be useful beginnings for practitioners moving into the international arena. For a book of

this breadth, it surprising that this part does not include a chapter on EIA in Antarctica. The EIA scheme established by the Protocol on Environmental Protection to the Antarctic Treaty has interesting similarities and differences with NEPA.<sup>1</sup> (Ironically, this reviewer's only meaningful international experience involved EIA in Antarctica. ) A discussion of the Protocol, in a book that otherwise is quite comprehensive, might have served practitioners moving into that area of practice in the same way the other chapters in this part might.

Part 3 of this volume is six chapters that summarize the state of EIA practice in various parts of the world. These chapters may provide a useful introduction for EIA practitioners seeking a little knowledge about the practice in parts of the world with which he or she is unfamiliar. In parts of the world to which EIA is new, they will probably go out of date quickly.

The final part of this volume is seven chapters on sectoral experience. Each chapter addresses EIA for a different type of activity. I have found this kind of survey to be of little help. For those who find such reviews of interest, these chapters address EIA on policy, land use plans, waste management, road and rail development, energy projects, mining projects, and water projects.

A promotional flyer distributed by the publisher reports that the book is "the first broad, critical overview of the subject with an international approach," provides "readily accessible information on environmental impact assessment and strategic environmental assessment," is "an essential reference work for all practitioners in the field of environmental management and assessment," and "helps identify and define 'good practice.'" The book does give a broad overview of the subject. It may "help identify 'good practice,'" but it does not establish a clear new standard. If you had these volumes on you bookshelf you would certainly have some "readily accessible information," but it would likely be information that is more useful to the academic than the practitioner. I find it very unlikely that a practitioner of EIA will find these volumes "an essential reference."

I have found considerable disparity between the stated aim of these volumes and what they deliver. Nevertheless, the book has much to recommend it. It delivers views of EIA by 42 noted

---

<sup>1</sup>Readers who are interested in these differences may find interest in a paper comparing the two systems: "Environmental Impact Assessment Under the National Environmental Policy Act and the Protocol on Environmental Protection to the Antarctic Treaty," J. T. Ensminger, L. N. McCold, J. W. Webb, *Environmental Management*, Vol. 24. No. 1, pp. 13-23, 1999.

authors from Europe and other regions of the world. For those who are particularly interested in international perspectives on EIA, this book should be a useful addition to the library.

While these volumes are not likely to become essential references for EIA practitioners in the United States, they may be worthwhile additions to the libraries of the companies who employ such practitioners. These volumes may find their best audience among academics, as they give little evidence of being written with the practitioner in mind. The volumes may be much more useful to practitioners in other English-speaking countries than they appear from the U.S. vantage point of this reviewer.