of the book and the best collection of "new" material, discusses the real world aspects of design, construction, and operation. It is in this section where the years of experience in wetland building are discussed by those who are involved. Some chapters are anecdotal, others more scholarly in their review of the literature. Almost all of them, however, have good information on how wetlands do and do not work when we build them. Section IV, Recent Results from the Field and Laboratory, is the largest part of the book at 350 pages and seems to be the repository for all of the papers not appropriate for detailed case studies or wetland design. Such are the problems with turning a proceedings into a book; everything has to go somewhere. These chapters are grouped together, even so far as to give the groups the same chapter number with different letter subscripts (a very annoying feature). Some of these chapters in the last section, e.g., Bob Kadlec's chapter on decomposition in wetlands, have very useful information that may get lost in the large volume.

The book has been very well edited and the figures, legends, and tables are generally clear. Although a little too big and repetitive for a class in wetlands, the book certainly should be used by any wetland scientist or manager who is at all interested in constructed wetlands. I remember I was disappointed that I was not able to participate in this meeting at all interested in constructed wetlands. I remember I was disappointed that I was not able to participate in this meeting in 1988, but I am delighted that Don Hammer took the enormous amount of time to pull these proceedings together for our benefit. It is a volume that I have already referred to several times and will continue to do so.—WILLIAM J. MITSCH, School of Natural Resources and Environmental Biology Program, The Ohio State University, Columbus, OH 43210.

Oil Spill Response Guide


Contrary to its title, this comprehensive book is not a broadly applicable guide to oil spill response; rather, it was prepared for spill contingency planning in the Alaskan Beaufort Sea and other arctic environments. It is a reprinting of information from Arctic Oil spill Response Guide for the Alaskan Beaufort Sea, prepared by these authors for the U.S. Coast Guard R&D Center, March 1988.

Significant offshore petroleum activity in the Alaskan Beaufort Sea led to the preparation of this planning guide. It was intended to help the On-Scene Coordinator (OSC) prepare spill contingency plans and implement response operations in the event of a spill.

This hardcover book covers virtually all aspects of oil spill response quite thoroughly, but primarily as applied to the Beaufort Sea environment. The book begins by presenting general environmental and drilling activity information for this region, describing the federal (U.S.) and Alaskan response organizations, and discussing initial response options (an important element of all oil spill cleanup responses). The important elements and mechanics of such response operations are then covered in considerable depth. The book provides a good understanding of the state-of-the-art of spill containment, cleanup, and disposal in arctic environments. Use of dispersants, shoreline cleanup, and in-situ burning are covered competently. General information on oil spill equipment and techniques, and the kinds of equipment stockpiled by industry spill response cooperatives in Alaska and California, by Canada, and by the Pacific Area Strike Team is also provided.

The final chapter on Oil Spill Response Scenarios is a good description of seven hypothetical spill response operations, as developed by experienced consultants. These scenarios should be useful in familiarizing the OSC and his team with the necessary elements of response operations: response planning, spill monitoring, equipment deployment, spill containment and mechanical/chemical cleanup, shoreline cleanup, and collection/disposal of recovered oil.

Appendices provide useful information on oil spill skimmers (descriptions and performance evaluations), federal/state requirements for contingency plans, and Alaska's open burning laws. The bibliography is limited (79 references), and there is no subject index. Also absent is technological or regulatory information generated since the Exxon Valdez oil spill in March of 1989.

This book will be useful primarily for those responsible for spill response planning/implementation in the Arctic Beaufort Sea and similar environments. Much of its information is, however, also applicable to response planning in other regions.—J.R. GOULD, Health and Environmental Sciences Department, American Petroleum Institute, 1220 L Street, NW, Washington, DC 20005.

Air Pollution's Toll on Forests & Crops


Air pollution effects on forests and crops have been of considerable concern recently to scientists and policy makers, especially with proposed revisions in the Clean Air Act. This book culminates a two-year policy review of air pollution effects by the World Resources Institute. It provides information regarding effects of all forms of air pollution on forests, crops, and human health; and for policy recommendations for reducing air pollution levels.


The book is cohesive, and includes reference lists at the end of each chapter as well as a comprehensive index that will prove useful to researchers. As with any compendium, the chapter authors differed in their approaches, with some providing an encyclopedic review of information while others were more selective and speculative. The human health chapter, while well written, seems out of place in the context of the overall emphasis on vegetation effects.

Overall the book takes a strong advocacy position in favor of long-term policies to control air pollution. This book should be useful for both policy and scientific debates, as well as for anyone working with air pollution issues.—D.M. OLSZYK, U.S. Environmental Protection Agency, Environmental Research Laboratory-Corvallis, Corvallis, OR 97333.