



## Book reviews

### **Clean Water Handbook, 3rd Edition**

Lynn N. Gallagher, Government Institutes, Rockville, MD, 2003, 451pp., US\$ 125.00, 8.5 × 11 format, ISBN 0-86587-846-3

The purpose of this handbook as stated by the author is “. . . to provide a comprehensive roadmap to the requirements, legal theories, and critical issues of water pollution control law.” Although this book was written by an attorney from her legal perspective, it is “. . . intended to be a helpful resource for any environmental professional.”

The 20-year-old US Clean Water Act (CWA) is the primary federal statute that addresses water pollution control in the United States. This act provides the basic framework for control, preservation, and restoration of the waters of the nation governing as it does the actions of federal, state, and local pollution control agencies.

Chapter 1 provides the background of the law that governs water pollution. It begins by discussing the more than 100-year-old Refuse Act of 1899. Gallagher notes that the CWA goals are “. . . to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” The author proceeds with the important topic of defining (explaining) important terms such as: addition, pollutant, point source, and navigable waters.

Gallagher, herself, provides an excellent overview of the book when at the end of Chapter 1 she writes: “This Handbook first looks at the NPDES permit program, providing an overview of the program in Chapter 2, a discussion of effluent limitations in Chapter 3, and a discussion of whole effluent toxicity control in Chapter 4. Next, the Handbook describes programs for the control of storm water in Chapter 5 and other types of discharges in Chapter 6. In Chapter 7, we discuss the pretreatment program that governs discharges into public water treatment works. Chapter 8 covers non-point source discharges of pollutants. In Chapter 9, we address the US Army Corps of Engineers program under Section 404 of the Act pertaining to the discharge of dredged or fill material. In Chapter 10, we discuss the Clean Water Act programs for control and response to spills of oil and hazardous substances. Finally, in Chapter 11, the enforcement of the various programs under the Act is discussed.”

Having a personal interest (based on past consulting assignments), I read Chapter 7, The Pretreatment Program, with much interest. Not surprisingly, I found the chapter well written, comprehensive, and logically structured. Pretreatment deals with “Industrial discharges that do not discharge directly into waters of the United States, but instead discharge into a public sanitary sewer system, and are regulated under the Clean Water Act pretreatment program.” Discussed herein are: (1) Federal, State and local roles, (2) pretreatment standards (Federal and local), (3) prohibitions (of pollutants that might interfere with a POTW’s operations), (4) national categorical standards, (5) local permits, (6) reporting requirements, (7) user charges

and (8) enforcement. My assessment is that the chapter's coverage is comprehensive without being exhaustive.

Not surprisingly, the book is well footnoted with appropriate citations of the Code of Federal Regulations (CFR) and the US Standard Code (USC). In common with legal depositions, the book is double-spaced. That takes more pages than single spacing but certainly makes the material easy to follow.

Gallagher's writing ends on page 185 when she begins the Appendix Section. Initially, presented is a short list of acronyms. That list is followed by a copy of the complete Clean Water Act, as amended. This section is 230 pages long!

My overall assessment is that this book is a comprehensive and readable treatise of this landmark law.

doi:10.1016/S0304-3894(03)00132-8

Gary F. Bennett

### **Water, Wastewater, and Stormwater Infrastructure Management**

Neil S. Grigg, Lewis Publishers, Boca Raton, FL, 2003, US\$ 109.95, 250 pp., ISBN: 1-56670-573-8

In the preface of this book, Grigg writes: "Delivery of water, wastewater, and stormwater services requires complex and expensive infrastructure, most of which is less than 100 years old. Given the postwar building boom and recent urbanization, systems with lifetimes of 50 years or less will begin to wear out soon. Unless renewal of these systems is well managed, public works agencies and utilities will face an infrastructure financing crisis."

Simultaneously with my reading of this book, I opened up my April copy of *Water Engineering and Management* that had the following in an article reporting on congressional committee hearing on water funding. I quote: "Representative John J. Duncan, Jr. (R-Tenn.), Chairman of the House Subcommittee on Water Resources and Environment, cited expected costs of \$400 billion over the next 20 years for replacement of aging water infrastructure. To meet that need, he said, we need to double the amount of money we are investing in wastewater infrastructure each year."

This book will assist in addressing that task. Grigg's stated goal in writing this book "... is to present clear and practical information for life-cycle management of the infrastructure systems that deliver water, sewer, and stormwater services, including recent thinking on best management practices and topics such as 'acid management', 'vulnerability assessment', and 'total quality management'."

This book has 12 well-written chapters dealing with the topic which is more system management and business oriented than process oriented. This is a change from books I normally review for this journal.

Grigg has provided a thoroughly up-to-date treatment of his topic as evidenced by Chapter 8 which is entitled "Risk Management and Disaster Preparedness." A quotation from the October 2001 issue of *Business Week* is evidence of the fact the book is dealing with current affairs. The 15 pages devoted to the topic made so critical by the 9/11 attacks is a good start. I predict that future issues of similar books will have a much greater number of pages devoted to this topic.