



ELSEVIER

Journal of Hazardous Materials 64 (1999) 323

**Journal of
Hazardous
Materials**

Book review

Remediation of Petroleum Contaminated Soils: Biological, Physical, and Chemical Processes, Eve Riser-Roberts, Lewis Publishers, Boca Raton, FL, 1998, US\$69.95, 542 pp., ISBN: 0-87371-858-5

Early in the text, to establish the importance of the topic, the author quotes from a US Office of Technology Assessment (OTA) report: “. . . once developed and proved, biodegradation is potentially less expensive than any other approach to neutralizing toxic wastes (Nicholas, 1987). Such systems involve a low capital investment, have a low energy consumption, and are often self-sustaining operations. Biological means of decomposition require less energy than physicochemical processes and can be a competitive option under certain circumstances.”

Riser-Roberts has provided extensive coverage of the topic. As a professional writer and researcher, she has compiled this text, using (I estimate) 1800 references. As such, it must be the definitive book on the topic. Every aspect of in situ and ex situ bioremediation is discussed. Chemical and physical processes in current use are presented. Not only are the processes for treating contaminated soils described, but also those for dealing with contaminated leachate and volatile organic compounds resulting from the site contamination or the treatment process utilized.

The author is a technical writer who appears to have limited practical experience in the area. Consequently, she has simply extracted material from the literature without evaluation or much interrelation—but she has done that extraction thoroughly (the large number of references attests to that). The coverage is comprehensive. Given the large amount of information, the inclusion of a well-developed, 40-page index was important.

Combined with Lewis' other book, *Practical Environmental Bioremediation: The Field Guide*, the two books make a very powerful combination in this practice.

GARY F. BENNETT