loromethane
omochloromethane
5-Trichlorobenzene
,4-Trichlorobenzene
-(2-chloroisopropyl)ether
Chlorotoluene
,3-Trichloropropane
omomethane
chlorodifluoromethane
phthalene

Each health advisory summarizes available data concerning the occurrence, environmental factors, pharmacokinetics (adsorption, distribution, metabolism and excretion), and health effects (both human and animal) of a specific contaminant (mixture as well as analytical methods and treatment technologies for the contaminant). The health effect data are used to estimate concentration of the contaminant in drinking water that are not expected to escape any adverse noncarcinogenic health effect over specific exposure duration.

As with all U.S. EPA work produced, the material is very well written and well referenced.

GARY F. BENNETT

The Fate and Effects of Oil in Freshwater, edited by J.W. Green and S.W. Trett, Elsevier Applied Science Publishers Ltd. /The British Petroleum Company p.l.c., London, 1989, ISBN 1-85166-318-5, xii + 338 pp., £56.00.

Catastrophic supertanker accidents, pipeline breaks and leaking underground storage tanks: All of these emission sources threaten a fragile aquatic environment. The book does not discuss pollution of the ocean, but rather focusses on the fate and effects of oil in freshwater. The editors' objectives in writing the book were to provide a comprehensive compilation, summary and critical evaluation of the available scientific literature on the impact of petroleum on freshwater organisms; to review procedures for the cleanup of petroleum from freshwater habitats and to examine restoration and recovery rates; to provide background information on the chemistry and fate of petroleum in freshwater; and to identify gaps in the information on the effect of petroleum-related contamination of freshwater.

I believe these goals were reached. The book is well written and certainly comprehensive being comprised of nine chapters written by UK university, industrial and research center scientists.

By title the chapters are:

- 1. Introduction
- 2. Composition, sources and source identification of petroleum hydrocarbons and their residues

- 3. Input, behaviour and fates of petroleum hydrocarbons
- 4. Biological and ecological effects of oils
- 5. Biological and ecological effects of dispersants
- 6. Biodegradation of oil in freshwaters
- 7. Clean-up technology
- 8. Restoration and recovery
- 9. Summary on conduction

There are over 600 references cited; a glossary is given and in addition a standard index, the authors have compiled a systematic (biological species) index.

GARY F. BENNETT

Heavy Metals in the Environment (Trace Metals in the Environment Vol.1), edited by J.-P. Vernet, Elsevier, Amsterdam, 1991, ISBN 0-444-89064-5, xviii + 406 pp., Dfl. 270.00.

Studies released recently in the United States have revealed that lead is a far more toxic pollutant than previously thought. And more steps are being taken to limit human exposure through air (lead from gasoline), water (lead in soldered joints), and solid phase (lead in paint and soil) pathways. Concern for lead and other metals is not solely a U.S. problem; it is global; hence the series of books, *Trace Metals in the Environment*, is well conceived. The goal is to provide a forum for transdisciplinary studies on heavy metal pollutant fate, transport, effects and abatement.

The continuing worldwide interest in the role of heavy metals in the environment has led to seven international conferences, the first in 1975 in Toronto, the seventh in 1989 in Geneva. This volume, the first in a new series, contains 22 papers selected from the many presented at the last conference (at the time of printing Vol. 2 in the series has appeared).

The coverage is very broad as the title of the various chapters listed below (and the number of papers in each chapter) indicate:

- Atmospheric transport: Large scale transport, modes (1)
- Acid deposition and soil acidification (2)
- Soil interaction (2)
- Regional studies: Freshwater and marine environment (3)
- Bio-accumulation (2)
- Microbial adaptation and microbial interaction (1)
- Health effects of metals (1)
- Radionuclides as chronometers and tracers (4)
- Wastewater (4)
- Analytical and general methods (2)