

# Contents

## Part I Chemical and Biological Principles

Metals in Aquatic and Terrestrial Systems: Sorption, Speciation, and Mobilization A. C. M. BOURG (With 17 Figures) . . . . .	3
Microbiological Oxidations of Minerals and Mine Tailings B. C. KELLEY and O. H. TUOVINEN . . . . .	33
Response of Plants and Vegetation to Mine Tailings and Dredged Materials W. H. O. ERNST (With 2 Figures) . . . . .	54

## Part II Biological and Geochemical Assessment

Case Histories of Coastal and Marine Mines D. V. ELLIS (With 9 Figures) . . . . .	73
Development of Dredged Material Disposal Sites: Implications for Soil, Flora and Food Quality W. van DRIEL and J. P. J. NIJSSEN (With 6 Figures) . . . . .	101
Biological Assessment of the Environmental Impact of Dredged Material W. AHLF and M. MUNAWAR (With 1 Figure) . . . . .	127
Soil Pollution by Metals from Mining and Smelting Activities T. ASAMI (With 2 Figures) . . . . .	143
Geochemistry of Priority Pollutants in Anoxic Sludges: Cadmium, Arsenic, Methyl Mercury, and Chlorinated Organics M. KERSTEN (With 11 Figures) . . . . .	170

Assessment of Metal Mobility in Dredged Material and Mine Waste by Pore Water Chemistry and Solid Speciation U. FÖRSTNER and M. KERSTEN (With 6 Figures) . . .	214
Diagenetic Processes in Aquatic Mine Tailings Deposits in British Columbia T. F. PEDERSEN and A. J. LOSHER (With 10 Figures)	238
Behaviour of Trace Metals in a Tropical River System Affected by Mining J. JEFFERY, N. MARSHMAN, and W. SALOMONS (With 6 Figures) . . . . .	259
Heavy Metal Transport in Streams – Field Release Experiments B. M. CHAPMAN, D. R. JONES, and R. F. JUNG (With 13 Figures) . . . . .	275
<b>Subject Index</b> . . . . .	301