

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
Subject Index	301