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Altri autori (Persone)	NemerowNelson Leonard
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Nota di contenuto	Front Cover; Industrial Waste Treatment; Copyright Page; Contents; Prologue; List of Tables; List of Figures; Industrial Environmental History; Introduction to Industrial Waste Treatment; Part A: Twentieth Century; Chapter 1: Theories and Practices; Volume Reduction; Classification of Wastes; Conservation of Wastewater; Changing Production to Decrease Wastes; Reusing Both Industrial and Municipal Effluents for Raw Water Supplies; Examination of Batch or Slug Discharges of Process Wastes; Example of Twentieth-Century Practice of Volume Reduction; Review Questions; References Chapter 2: Contaminant Concentration ReductionProcess Changes; Equipment Modifications; Segregation of Wastes; Equalization of Wastes; By-Product Recovery; Proportioning Wastes; Monitoring Waste Streams; Accidental Spills; Example of Twentieth-Century Practice of Contaminant Concentration Reduction; Review Questions; References; Chapter 3: Neutralization; Mixing Wastes; Limestone Treatment for Acid Wastes; Lime-Slurry Treatment for Acid Wastes; Caustic-Soda Treatment for Acid Wastes; Using Waste Boiler-Flue Gas; Carbon Dioxide Treatment for Alkaline Wastes Sulfuric Acid Treatment for Alkaline WastesAcid-Waste Utilization in Industrial Processes; Example of Twentieth-Century Practice of Neutralization; Review Questions; References; Chapter 4: Equalization

and Proportioning; Equalization; Proportioning; Example of Twentieth-Century Practice of Equalization and Proportioning; Review Questions; References; Chapter 5: Removal of Suspended Solids; Sedimentation Theory; Design of Sedimentation Process Units; Flotation; Screening; Example of Twentieth-Century Practice of Suspended Solids Reduction; Review Questions; References; Suggested Reading
Chapter 6: Removal of Colloidal Solids Characteristics of Colloids; Chemical Coagulation; Coagulation by Neutralization of Electrical Charges; Removal of Colloids by Adsorption; Example of Twentieth-Century Practice of Colloidal Solid Removal; Review Questions; References; Chapter 7: Removal of Inorganic Dissolved Solids; Evaporation; Dialysis; Ion Exchange; Algae; Reverse Osmosis; Miscellaneous Methods; Refractories; Example of Twentieth-Century Practice of Removal of Inorganic Dissolved Solids; Review Questions; References; Chapter 8: Removal of Organic Dissolved Solids; Lagooning Activated-Sludge Treatment Modified Aeration; Dispersed-Growth Aeration; Contact Stabilization; High-Rate Aerobic Treatment; Trickling Filtration; Spray Irrigation; Wet Combustion; Anaerobic Digestion; Mechanical Aeration System; Well Injection; Foam Phase Separation; Brush Aeration; Subsurface Disposal; The Bio-Disc System; Collection and Reclamation (Scavenging); Chemical Oxidation of Organic Matter; Miscellaneous; Example of Twentieth-Century Practice of Organic Dissolved Solid Removal; Review Questions; References; Chapter 9: Treatment and Disposal of Sludge Solids
Anaerobic and Aerobic Digestion

Sommario/riassunto

Taking the reader through the history of industrial waste treatment and directing them toward a new path of best practice, this book illustrates how current treatment techniques are affected by regulatory and economic constraints, scientific knowledge and tolerances. This book provides the reader with the basis for a more effective method of waste treatment which is sustainable and supportive of industrial improvements. Overall, it provides valuable information for planners, industrial, civil and environmental engineers and government officials for a better understanding of current practices
