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Chapter 5. Water SupplyThe Hydrologic Cycle and Water Availability; Groundwater Supplies; Surface Water Supplies; Water Transmission; Conclusion; Problems; Chapter 6. Water Treatment; Coagulation and Flocculation; Settling; Filtration; Disinfection; Conclusion; Problems; Chapter 7. Collection of Wastewater; Estimating Wastewater Quantities; System Layout; Conclusion; Problems; Chapter 8. Wastewater Treatment; Wastewater Characteristics; Onsite Wastewater Disposal; Central Wastewater Treatment; Primary Treatment; Secondary Treatment; Tertiary Treatment; Disinfection; Conclusion; Problems Chapter 9. Sludge Treatment, Utilization, and DisposalSources of Sludge; Sludge Treatment; Utilization and Ultimate Disposal; Conclusion; Problems; Chapter 10. Nonpoint Source Water Pollution; The Runoff Process; Control Techniques Applicable to Nonpoint Source Pollution; Conclusion; Problems; Chapter 11. Water Pollution Law and Regulations; Common Law; Statutory Law; Conclusion; Problems; Chapter 12. Solid Waste; Quantities and Characteristics of Municipal Solid Waste; Collection; Disposal Options; Litter; Pollution Prevention; Conclusion; Problems; Chapter 13. Solid Waste Disposal
Disposal of Unprocessed Refuse in Sanitary LandfillsVolume Reduction Before Disposal; Conclusion; Problems; Chapter 14. Reuse, Recycling, and Recovery; Recycling; Recovery; Energy Recovery from the Organic Fraction of MSW; Composting; Conclusion; Problems; Chapter 15. Hazardous Waste; The Magnitude of the Problem; Waste Processing and Handling; Transportation of Hazardous Wastes; Recovery Alternatives; Hazardous Waste Management Facilities; Pollution Prevention; Conclusion; Problems; Chapter 16. Radioactive Waste; Radiation; Health Effects; Sources of Radioactive Waste
Radioactive Waste Management

Sommario/riassunto

Complex environmental problems are often reduced to an inappropriate level of simplicity. While this book does not seek to present a comprehensive scientific and technical coverage of all aspects of the subject matter, it makes the issues, ideas, and language of environmental engineering accessible and understandable to the nontechnical reader.Improvements introduced in the fourth edition include a complete rewrite of the chapters dealing with risk assessment and ethics, the introduction of new theories of radiation damage, inclusion of environmental disasters like Chernobyl and Bhopal, a