Stantec's Water Treatment: Principles and Design, Updated, 3rd Edition
John C. Crittenden, R. Rhodes Trussell, David W. Hand, Kerry J. Howe, George Tchobanoglous

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DESCRIPTION

The updated third edition of the definitive guide to water treatment engineering, now with all-new online content

Stantec's Water Treatment: Principles and Design provides comprehensive coverage of the principles, theory, and practice of water treatment engineering. Written by world-renowned experts in the field of public water supply, this authoritative volume covers all key aspects of water treatment engineering, including plant design, water chemistry and microbiology, water filtration and disinfection, residuals management, internal corrosion of water conduits, regulatory requirements, and more.

The updated third edition of this industry-standard reference includes an entirely new chapter on potable reuse, the recycling of treated wastewater into the water supply using engineered advanced treatment technologies. QR codes embedded throughout the book connect the reader to online resources, including case studies and high-quality photographs and videos of real-world water treatment facilities. This edition provides instructors with access to additional resources via a companion website.

• Contains in-depth chapters on processes such as coagulation and flocculation, sedimentation, ion exchange, adsorption, and gas transfer
• Details membrane filtration technologies, advanced oxidation, and potable reuse
• Addresses ongoing environmental concerns, pharmacological agents in the water supply, and treatment strategies
• Describes reverse osmosis applications for brackish groundwater, wastewater, and other water sources
• Includes high-quality images and illustrations, useful appendices, tables of chemical properties and design data, and more than 450 exercises with worked solutions

_Stantec's Water Treatment: Principles and Design, Updated Third Edition_ remains an indispensable resource for engineers designing or operating water treatment plants, and is an essential textbook for students of civil, environmental, and water resources engineering.

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**ABOUT THE AUTHOR**

**John C. Crittenden** is Director of the Brook Byers Institute for Sustainable Systems and Hightower Chair and Georgia Research Alliance Eminent Scholar at Georgia Institute of Technology.

**R. Rhodes Trussell** is the founder and chairman of Trussell Technologies and a former Senior Vice President at MWH (now part of Stantec).

**David W. Hand** is Professor Emeritus of Civil, Environmental, and Geospatial Engineering at the Michigan Technological University.

**Kerry J. Howe** Distinguished Professor of Civil, Construction, and Environmental Engineering at the University of New Mexico and former Principal Engineer at MWH (now part of Stantec).

**George Tchobanoglous** is Professor Emeritus of Civil and Environmental Engineering at the University of California, Davis.

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