

Upgrading and Retrofitting Water and Wastewater Treatment Plants

WATER ENVIRONMENT FEDERATION

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Water and Wastewater
Treatment Plants

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Prepared by Upgrading and Retrofitting Water and Wastewater Treatment Plants
Task Force of the Water Environment Federation

Jeanette A. Brown, Co-Chair

Thomas E. Sadick, Co-Chair

Alan K. Adelgren	Will Haapala	Ralph B. "Rusty" Schroedel, Jr.
Merton L. Alexander	Michael A. Hayes	Stephen E. Seigal
Arnold Bevins	George Heiner	Carl Stone
Derek Burton	Samuel S. Jeyanayagam, P.E., DEE, Ph.D.	Mike C. Tidwell
John Chack	Gary R. Johnson, P.E.	Holly L. Tryon
Brent E. Crowther	Carl Koch, P.E., DEE, Ph.D.	Albert J. Ugelow, P.E.
Lee E. Davis, P.E.	Stephen Krai	Chretien T. Voerg
Thomas E. Decker	Peter LaMontagne	Mary L. Vorissis
Hiran de Mel, P.E.	Thomas P. O'Connor	Milind V. Wable
Paul A. Dombrowski	William O'Donnell	Douglas W. Yerkes, P.E., Ph.D.
James A. Gasser	A. Yvonne Picard, P.E.	Larry W. Zimmerman

Under the Direction of the **Municipal Subcommittee** of the **Technical Practice Committee**

Water Environment Federation

601 Wythe Street

Alexandria, VA 22314-1994 USA

www.wef.org

Water Environment Federation

Improving Water Quality for 75 Years

Founded in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization with members from varied disciplines who work toward the WEF vision of preservation and enhancement of the global water environment. The WEF network includes water quality professionals from 79 Member Associations in over 30 countries. For information on membership, publications, and conferences, contact

Water Environment Federation
601 Wythe Street
Alexandria, VA 22314-1994 USA
(703) 684-2400
<http://www.wef.org>

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The WEF Technical Practice Committee (formerly the Committee on Sewage and Industrial Wastes Practice of the Federation of Sewage and Industrial Wastes Associations) was created by the Federation Board of Control on October 11, 1941. The primary function of the Committee is to originate and produce, through appropriate subcommittees, special publications dealing with technical aspects of the broad interests of the Federation. These publications are intended to provide background information through a review of technical practices and detailed procedures that research and experience have shown to be functional and practical.

Water Environment Federation Technical Practice Committee Control Group

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B. G. Jones, *Vice-Chair*

R. Karasiewicz

M. D. Nelson

A. B. Pincince

William Bertera, *Executive Director*

Preface

Audience: Plant managers, consultants, municipal officials, plant staff.

Many plant supervisors are faced with the task of coordinating and managing a plant upgrade. Because these occur every 20 to 30 years, most owners have no experience. This manual will serve as a guidance document to help plant managers and others, such as city engineers, public works directors, regulators, and contractors, through an upgrade. It will include sections on how to procure an engineer, how to develop a scope of service for the facility plan, design and construction services, how to evaluate engineering proposals, how to interact with the engineer during each phase, and other topics. In addition, it will cover what can be expected during construction, what to expect during startup, and simply how to survive this process. This manual was produced under the direction of Jeanette A. Brown and Thomas E. Sadick, Co-Chairs.

Principal authors of the publication are

Alan K. Adelgren (7)
Arnold Bevins (9)
Jeanette A. Brown (1, 5)
Lee E. Davis, P.E. (5)
Hiran de Mel, P.E. (5)
Michael A. Hayes (5)
Catherine Hodge, P.E. (5)
Samuel S. Jeyanayagam, P.E., DEE, Ph.D. (3, 5)
Gary R. Johnson, P.E. (2)
Carl Koch, P.E., DEE, Ph.D. (3)
Peter LaMontagne (9, 10)
Michael D. Nelson, (10)
A. Yvonne Picard, P.E. (5)
Thomas E. Sadick (5)
Ralph B. "Rusty" Schroedel, Jr. (4)
Stephen E. Seigal (2, 8)

Albert J. Ugelow, P.E. (5)
Douglas W. Yerkes, P.E., Ph.D. (6)
Larry W. Zimmerman (5, 7, 9)

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