

BLACK & VEATCH INTEGRATED GLOBAL WORKFORCE

DISTINCTIVELY QUALIFIED



BLACK & VEATCH'S GLOBAL WATER BUSINESS PUTS INTO PRACTICE THE COMPANY VISION OF LEADING THE INDUSTRY IN VALUE CREATION.

The need for drinking water and sanitation is still fundamental, but delivering these services is becoming increasingly complex and costly. As the water industry confronts the 21st century, it faces tremendous political, operational and growth challenges. Those challenges are intensified by deterioration of aging infrastructure.

“Our clients continue to be challenged to do more with less and, in some situations, even defy Mother Nature itself,” said Dan McCarthy, President and CEO of Black & Veatch’s global water business.

“To be successful in this environment, our clients need seamless access to the best available knowledge and expertise worldwide,” he said. “Access to such a broad network of expertise cannot be achieved through traditional organizational structures and cultures.”

A GLOBALLY INTEGRATED WORKFORCE

Because of the dispersed and localized nature of the water business, timely access to the appropriate global expertise and experience historically has been very expensive and, in some cases, even prohibitive.

“We have effectively addressed this issue by transforming our regional and local teams into a ‘globally integrated workforce,’” McCarthy said. “We have redesigned our organizational structure to foster and accelerate our transformation into a knowledge culture that truly defines us in this marketplace.”

“We have created communities of practices which link our regional practice leaders, technology leaders and subject matter experts from around the world,” said McCarthy.

Headed by Global Practice and Technology Leaders, these communities of practices are unique, as they do not focus on just the “capture” of explicit knowledge. They are also designed to institutionalize and harness the tacit knowledge of B&V Water experts and make it available on demand to any Black & Veatch project manager anywhere in the world. “Interactions within such communities invariably result in a knowledge spiral that creates new knowledge and triggers innovation,” McCarthy said.

“Our ability to capture and harness the collective wisdom of our experts from all across the globe and apply it ‘at will’ to any project anywhere in the world separates Black & Veatch from its competitors,” McCarthy explained. “We have achieved this unprecedented access to knowledge through a disciplined cultural transformation that cannot be duplicated by other engineering, consulting and construction companies.”

CONSULTATIONS OUTSIDE CONVENTIONAL CONTRACT ARRANGEMENTS

“We have taken to heart and put into practice our corporate vision of leading the industry in value creation,” McCarthy said. “In an unprecedented move to achieve this vision, we’re making our Global Practice and Technology Leaders available to our Global Strategic Clients for consultation outside conventional contractual arrangements. This means that these clients can engage and interact with these world-class experts without the need of a contract or fee obligation for general consultation, problem diagnostics, solution formulation, and strategy validation and fine tuning.”

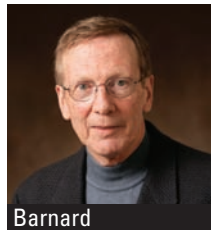
Such uninhibited access to a world of expertise is a value proposition that makes B&V Water very attractive to its growing list of Global Strategic Clients.

ABOUT BLACK & VEATCH

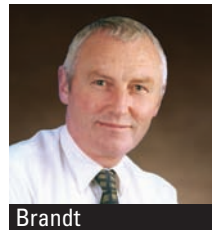
Black & Veatch is a leading global engineering, consulting and construction company specializing in infrastructure development in energy, water, telecommunications, management consulting, federal and environmental markets. Founded in 1915, Black & Veatch develops tailored infrastructure solutions that meet clients’ needs and provide sustainable benefits. Solutions are provided from the broad line of service expertise available within Black & Veatch, including conceptual and preliminary engineering services, engineering design, procurement, construction, financial management, asset management, program management, construction management, environmental, security design and consulting, management consulting and infrastructure planning. With \$3.2 billion in revenue, the employee-owned company has more than 100 offices worldwide and has completed projects in more than 100 countries on six continents.



Centers of excellence shift over time to address market technology/services needs.



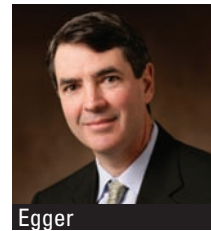
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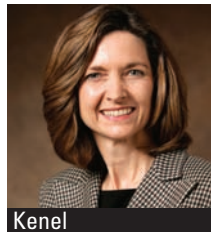
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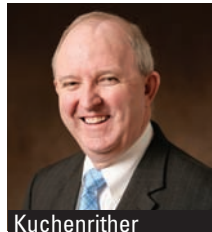
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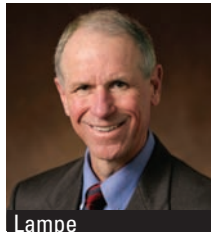
Johnson



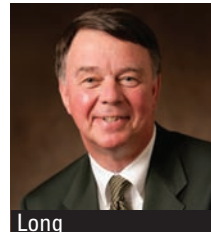
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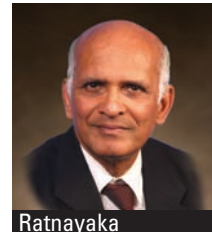
Kuchenrither



Lampe



Long



Ratnayaka

B&V WATER GLOBAL PRACTICE AND TECHNOLOGY LEADERS

Dr. James Barnard is recognized internationally as “the Father of Biological Nutrient Removal (BNR).” A celebrated career includes groundbreaking work that forms the basis for all BNR process configurations in use today. His current research on membrane and biofilm technology is leading to innovations that may reduce BNR plant size by more than two-thirds. Contact him at BarnardJL@bv.com.

Malcolm Brandt has directed numerous water supply engineering projects in the UK, Middle East and Asia. He is a widely published author in the water industry, including publications, articles and papers on advanced process technology, and is a co-author of the noted reference, the 5th Edition text *Water Supply*. Contact him at BrandtM@bv.com.

Jonathan Clement is a specialist in the treatment of drinking water by using the most advanced treatment processes in the world. An award-winning author, he won the highest prize for drinking water research excellence from the American Academy of Environmental Engineers. Contact him at ClementJ@bv.com.

David Egger is a specialist with geoenvironmental experience in water and wastewater for underground infrastructure, tunneling, hydropower and dams, and structural foundation projects. His noted specialization in risk management and refined Spiral Risk Analysis offers clients state-of-the-art management for complex underground ventures. Contact him at EggerdF@bv.com.

Dr. Terry Johnson has spent more than 35 years directing municipal and industrial wastewater treatment, including conceptual planning and design. Dr. Johnson has authored numerous technical articles and contributed to the 4th Edition of *Design of Municipal Wastewater Treatment Plants*. Contact him at JohnsonTL@bv.com.

Pam Kenel has been a technical specialist for numerous water facility planning and water resources management projects. Her specialties include water quality, as well as hydrologic/hydraulic and operational evaluations for surface waters. Kenel also focuses on coordination with state and

federal regulatory agencies and outreach programs for stakeholder and community groups. Contact her at KenelPP@bv.com.

Dr. Dick Kuchenrither is a recognized expert in the area of residuals management and has been instrumental in helping many cities implement and gain public acceptance of beneficial reuse programs. Dr. Kuchenrither has authored numerous papers, chapters and presentations and co-authored a widely used textbook on biosolids management. Contact him at KuchenritherR@bv.com.

Dr. Les Lampe is a widely known and accomplished researcher, author and teacher. He has been instrumental in building the company's global reputation for technical leadership and innovation in water supply and water resources. He is an active member of several technical and professional water supply organizations. Contact him at LampeLK@bv.com.

Bruce Long is a recognized expert in membrane filtration and emerging water treatment technologies. He has extensive experience with developing progressive design parameters for water treatment plants, with particular emphasis on pilot plants and testing programs, data-driven up-scaling for full-scale treatment facilities and process optimization and compliance. Contact him at LongBW@bv.com.

Don Ratnayaka has extensive experience that covers today's technology spectrum. He has overseen water treatment process components for facilities across the globe, including some of the largest in the world. An accomplished author, Ratnayaka is a co-author of the 5th Edition (June 2000) of the standard text *Water Supply*, as well as many other noted water industry publications. Contact him at RatnayakaD@bv.com.



INTEGRATED GLOBAL WORKFORCE

Seamless access to the best water knowledge.