



JOHN E. DYKSEN, P.E.

VICE PRESIDENT – CAPITAL INVESTMENTS, PLANNING AND DELIVERY

Education:

M.S., Environmental Engineering, New Jersey Institute of Technology
B.S., Civil Engineering, New Jersey Institute of Technology

Professional Registration:

Licensed Engineer - New Jersey
Licensed Water Supply Operator - New Jersey

Professional Associations:

American Water Works Association
AWWA Research Foundation
International Ultraviolet Association

Years of Experience:

35

Awards

AWWA George Warren Fuller Award
AWWA Honorary Member Award
Best AWWA Journal Paper Award
NJAWWA Technology Transfer Award

Mr. Dyksen has more than 35 years of experience in water supply, treatment, and distribution system projects, including over 12 years in direct utility management responsible for the operations of both surface and groundwater systems. He is a professional engineer and a licensed water system operator.

Mr. Dyksen has had first-hand experience with water supply planning and treatment while being employed with several NJ utilities. As Director of the Ridgewood Water Department, he was responsible for all aspects of system planning, operation and maintenance, including the design of several ground water treatment facilities to remove VOCs. As Assistant Vice President of Operations for Middlesex Water Company, he was responsible for the engineering and distribution departments which were involved in the planning, design and operation of the Company's water system. As Director of United Water's corporate engineering and planning group, he was responsible for the evaluation and design of water supply, distribution and treatment projects.

He is nationally recognized as an expert in water treatment, and has conducted water supply and facility planning; pilot and plant-scale process studies and design; trace organics and inorganics removal process studies and design corrosion control studies; studies and design of facilities for handling, treating and disposing of water treatment plant wastes; and distribution system studies for over 120 water systems throughout the United States, Canada, Australia and Europe.

Past Chair of the NJAWWA and past member of the AWWA Board of Directors. Past member of the AWWA Water Quality Division. Past Chair of the Water Quality Technology Conference – Tampa and Philadelphia. Current member and past chair of the NJAWWA Research Committee. Past member of the NJAWWA Education Committee, Program Committee, Public Information Committee.

Member of the Water Research Foundation Board of Directors; past Chair of the AwwaRF Research Advisory Council (RAC); and past member of the RAC.

Selected Project Experience

United Water Management & Services

2/08 - Present

Responsible for United Water's \$150 million per year capital program for the regulated and non-regulated business units. Also, responsible for implementation of the capital projects through the corporate and local engineering groups.

Responsible for United WERCs, a research center in North America created by United Water and part of the R+i Alliance group of research centers in Europe.



Responsible and/or providing guidance for the following projects:

- Manage underground Asset Management Program
- Haworth WTP Upgrade construction
- Haworth residuals disposal plan
- UWTR radium removal
- UWNJ Haverstraw WTP on the Hudson River
- UWDE ASR installation
- UWTR ASR evaluation
- UWNJ de-aeration facilities testing and construction
- Arsenic research project for UWNJ
- UWPA Stage 2 DBP compliance study
- UWNJ Residuals Handling and Disposal Plan
- UWNJ Iron and Manganese Treatment Facility
- UWMatchaponix Treatment Plant Upgrade
- UWNJ Haworth WTP Solar Power Study
- UWNJ Laboratory HVAC upgrade
- UWNJ Hudson River pilot plant

Black & Veatch

5/03 – 2/08

NJ Department of Environmental Protection

Project Manager - Responsible for the development of two feasibility studies (one for ground water and one for surface water) to identify the best available treatment techniques for removing unregulated organic chemicals that have been detected in NJ's ground and surface water supplies. Treatment techniques that were reviewed include GAC, air stripping, oxidation, membranes, and conventional treatment techniques.

United Water New York

Project Manager - Conceptual study and design of a 2.5 mgd desalination facility to treat Hudson River water to meet peak demands. The project includes water quality analyses, treatment process evaluation, pilot testing, and conceptual layout and design. It also includes interfacing with the regulatory agencies and providing input for site selection. The plant is planned to use GAC as a polishing step to remove any organic chemicals that may be present in the river.

NJDEP Interconnection Study

Assistant Project Manager – Comprehensive evaluation of all major interconnections in NJ to develop a plan for wheeling water throughout the state during emergencies and droughts. Also includes an evaluation of the water resources in various regions of the state.

NJ American Water

Project Advisor - Assisted in the investigation of alternatives for supplemental water supplies for NJAWC's Atlantic and Cape May county systems. The



alternatives included ASR, desalination, new wells, and a new pipeline to the NJAWC Western system.

Brick Township MUA

Project Manager - Responsible for a variety of water quality and treatment projects including water supply monitoring, treatment plant improvements, distribution system monitoring, corrosion control, and chlorine system evaluation.

United Water New York

Project Manager - Responsible for a variety of projects including several master planning studies that included distribution system modeling and analysis, water supply evaluation, and treatment.

United Water New Jersey

Project Manager - Responsible for various planning and design projects including comprehensive evaluation of improvements to the 200 mgd Haworth Plant, addition of aeration to the Oradell Reservoir, installation of UV at several wells, evaluation of UV addition to the Haworth Plant, residuals management facilities for the Haworth Plant. As part of this project, the use of GAC in the filters was considered.

Trenton, NJ Water Works

Project Manager - Responsible for evaluation of the installation of a 45 mgd UV system to treat the effluent from TWW's open, finished water reservoir.

Long-Term Effects of Disinfection Changes on Water Quality

AwwaRF Research Project #2940

Various Locations

Principal Investigator — Collaborated effort including participation from 24 utilities throughout the United States and national experts to investigate and document the long-term effects of disinfectant changes on distribution system water quality.

United Water Management & Services

6/99 – 3/03

Director, Engineering and Planning — Responsible for \$75 million per year capital program development and management for all United Water properties, including preparation of master plans, treatment studies, and distribution system analyses. Included planning and design for over 20 different treatment facilities around the country, and distribution system planning for over 4,000 miles of distribution mains. Directed planning activities including hydraulic modeling for various United Water operating companies. Managed technology transfer and research and development activities, including such treatment technologies as ultraviolet light, high-rate clarification, ozonation, and membranes.

United Water New Jersey

5/97 – 5/99

General Manager, Engineering and Technical Services — Responsible for all engineering, planning, and construction projects for United Water New Jersey including treatment and distribution systems improvements. Annual capital program included over \$20 million of system improvements.



Malcolm Pirnie, Inc.

4/94 – 4/97

Senior Associate

- Technical Director Delegate of Drinking Water for the firm — Responsible for quality control of process design and plant evaluation for Malcolm Pirnie’s water treatment and distribution system work.
- Responsible for comprehensive evaluation of New York City’s Hillview Reservoir operations related to coliform incidences that occurred in the City’s distribution system during 1993 and 1994.
- Technical review and assistance for various water treatment and distribution system analyses conducted for the U.S. Navy at various naval stations in the U.S. and Europe.
- Served as Technical Reviewer/Advisor for preparation of Lead and Copper Rule Guidance Manual, Volume II: Corrosion Control Treatment for USEPA.
- Evaluation of water quality data and impacts of new drinking water regulations on the water system of the City of Phoenix, Arizona as part of a Water Quality Master Plan for the City.

Middlesex Water Company

8/91 – 3/94

Assistant Vice President of Operations/Director of Engineering

Responsible for the Engineering and Distribution/Maintenance Department of the Company. Also responsible for design, bidding and supervision of all construction and maintenance projects for the Company including expansion and upgrading of system facilities, management of engineering consultants, personnel training and development, special studies and investigations, construction and regulatory compliance.

Ridgewood Water Department

5/88 – 7/91

Director

Responsible for activities and operations of the water treatment, pumping and distribution system that services the towns of Ridgewood, Wyckoff, Glen Rock and Midland Park NJ. Directed operation and maintenance of well pumping facilities, chemical treatment facilities, and storage facilities; maintenance and expansion of distribution facilities; and planning for upgrading and expanding water system operations. Supervised the preparation of department fiscal reports, water bills, records of consumer accounts and other financial reports.

Malcolm Pirnie, Inc.

5/74 – 4/88

Senior Associate

Technical Director Delegate of Drinking Water for the firm, responsible for quality control of water supply, process design and plant evaluation and distribution system evaluation for Malcolm Pirnie’s National Water Group. Started in 1974 as an engineer working on various water, wastewater and storm water projects. Advanced through Project Engineer, Project Manager, and Senior Associate working on a variety of water system projects around the country.



Selected Publications & Presentations

- Participated in USEPA Workshops on Assessment and Management of Drinking Water Contamination conducted in 10 EPA regions during 1985-89, including presentation on controlling lead levels at the consumer's tap.
- Principal Investigator for AWWA Research Foundation research project, entitled *Pilot Evaluation of In-Line Ozone and Hydrogen Peroxide Treatment for Organic Chemical Removal*
- Co-Principal Investigator for AWWA Research Foundation research project entitled, *Use of Electrotechnologies for Inactivation of Cryptosporidium*
- Technical Investigator for AWWA Research Foundation project, entitled *Guidance Manual to Maintain Water Quality within Distribution Systems*
- Developed, coordinated and participated in 11 seminars on volatile organic chemicals in groundwater supplies, which were presented to municipal and industrial water supply people in seven states
- Lecturer: Participated in USEPA workshops on Assessment and Management of Drinking Water Contamination conducted in 10 USEPA regions during 1985-89, making presentations on organics and inorganic treatment technologies. Participated in 10 USEPA workshops on Emerging Technologies in Drinking Water Treatment in 1987-91, making presentations on organics treatment.
- Course Chairman, Disinfection of Drinking Water, University of Wisconsin.
- Program Coordinator/Speaker/Instructor at the State Operator Training Center, Rutgers University, New Brunswick, New Jersey.
- Coordinated Sunday Seminar on Ozone at 1990 Annual Conference of AWWA.
- Coordinated Sunday Seminar on Disinfection By-Products at 1991 Annual Conference of AWWA.
- Coordinated Sunday Seminar on Balancing Disinfection and Disinfection By-Product Regulatory Requirements at 1992 Annual Conference of AWWA.
- Author: Over 100 papers on water treatment, organics removal by activated carbon and air stripping, water plant sludge treatment and disposal, water supply, and distribution systems. Some examples are shown below.