Edward W. Podczerwinski, P.E.

Wastewater Industry Knowledge

Over 25 years experience in civil, environmental and process engineering; functions as a specialist developing and applying advanced engineering concepts to specific problems; applies techniques and modern engineering tools to identify, formulate, and solve engineering and research problems; budgeting and scheduling; regulations and permitting; project planning and project management.

Experience

Acting Director of Monitoring and Research Department *(since May 2017)*

- Direct the focus of work and allocation of resources for a 300 employee department with a $30 million budget
- Review and approve all research projects and the reports they generate
- Responsible for timely transmittal of accurate data resulting from process and environmental monitoring programs to meet operating permit and regulatory requirements
- Direct administration of resource recovery, industrial pretreatment, user charge and other ordinances and resolve technical issues
- Develop, implement and maintain a long-term process facility capital planning process
- Review and approve planning technical studies and reports to evaluate process and/or equipment feasibility and the application of alternative technology to District facilities and procedures

Other District Positions Held (*August 1997 to April 2015):*

- Deputy Director, Monitoring and Research Department
- Managing Civil Engineer, Environmental Monitoring & Research Division
- Principal Civil Engineer, Plant Design Management, Engineering
- Senior Civil Engineer, Process Design
- CAD Manager, Process Facilities Division
- Associate Civil Engineer, Process Design
- Assistant Civil Engineer, Process Design

Project Engineer
PECO & Associates, Inc., *Chicago, Illinois (July 1993 to August 1997)*

Design Engineer
PECO & Associates, Inc., *Chicago, Illinois (Jan. 1991 to August 1992)*

Education

MS, Structural Engineering
Warsaw University of Technology, Warsaw, Poland

BS, Civil Engineering
Warsaw University of Technology, Warsaw, Poland

Registration and Associations

Licensed Professional Engineer (PE), States of Illinois and Wisconsin

Water Environment Federation

National Association of Clean Water Agencies

Key Projects

MWRD Regulatory & District Initiative Planning, Biosolids Master Planning, and Odor Master Planning

Disinfection Facilities, O'Brien Water Reclamation Plant, 11-054-3P

Disinfection Facilities, Calumet Water Reclamation Plant, 11-241-3P

Disinfection Technology Evaluation & Recommendation for the Calumet and O'Brien Water Reclamation Plants (Disinfection Task Force)

Battery 'E' at the O'Brien WRP, 06-020-2P

Primary Settling Tanks & Grit Removal Facilities, Calumet WRP, 07-220-3P

New Preliminary Treatment Facilities at Stickney & Calumet Water Reclamation Plants, 04-823-3P

Development of algorithm for TARP Volume Calculations, 97-254-2E

South Aeration Battery Air Piping, Egan WRP, 01-474-2P

RAS Flow Improvements in Battery B, Stickney WRP, 01-102-2P

Replacement of Diffuser Piping, Stickney WRP, 96-117-2P

Water Main System Upgrades at Stickney WRP, 97-155-2P

RAS Flow Improvements in Battery A, Stickney WRP, 96-120-2P

Lining & Deepening of Lagoon 30, Stickney WRP, 96-130-2P

Lining & Deepening of Lagoon 27 & Desilting Basin, Stickney WRP, 96-127-2P

Publications and Presentations

E. Podczerwinski. *Water-Energy Nexus*, International Mechanical Engineering Congress and Exposition, Houston, Texas, November 2015

E. Podczerwinski, Grabowy, J., *Developing a Long-Term Capital Improvement Plan and Vetting Capital Improvement Projects Using an Organization-Wide, Transparent and Objective Approach.* MWRD Monitoring & Research Department Seminar, May 2015

E. Podczerwinski, Busza, B., Salabaj, D., Swaim, P., Lachcik, T., Baxter, D. *"Big Disinfection" in Chicago: The Fast-Track Design of 480-MGD Disinfection Facilities for the Calumet WRP*, WEFTEC 2013

E. Podczerwinski, Brosius, E., Kerrigan, J., Gorgan, J. *Rejuvenating the Chicago River: Innovative Design Considerations for New Ultraviolet Disinfection Facilities.* WEFTEC 2013

E. Podczerwinski. *Computer Modeling to Support Process Design at the District. MWRD* Monitoring & Research Department Seminar, November 2011

E. Podczerwinski, Celaya, B., Iehl, R. *Sustainable Design at the Calumet Water Reclamation Plant.* WEFTEC 2009

E. Podczerwinski, Compton, E., Celaya, B., and Iehl, R. *A European Approach to Grit Removal.* Article in Water Environment & Technology Magazine, July 2009

E. Podczerwinski, Brosius, E., Weber, T., Garcia, Liu, M. X., Brunner, C., Cockerill, E. *CFD Modeling Optimizes the Design of Primary Settling Tanks at MWRDGC's Calumet Water Reclamation Plant.* WEFTEC 2008

E. Podczerwinski, Iehl, R., and Sveum, K. *Innovative Ideas in the Design of Preliminary/Primary Treatment at Calumet WRP.* IWEA Conference, 2008

E. Podczerwinski. *Master Plans for Stickney, Calumet and North Side Water Reclamation Plants.* The American Council of Engineering Companies of Illinois Fall Government Affairs, 2007

E. Podczerwinski and Kunetz, T. *Rehabilitation of a 12-Inch Cast Iron Water Main Requires a Variety of Trenchless Technology Methods.* IWEA 2001