

Water and Wastewater Pumps and Pump Stations

Presented by the South Jersey Water Professionals Association, the
New Jersey Water Association and Municipal Maintenance Co

Tuesday, September 19, 2023 – Remington & Vernick Engineers, 2059 Springdale Rd, Cherry Hill, NJ 08003

Lunch will be provided compliments of Municipal Maintenance Company.

Course objective: To teach the basic types of centrifugal water and wastewater pumps, pump impellers, how to measure head & flow, how to read a pump curve, and the importance of proper pump selection to achieve maximum pump longevity. In addition, we will cover how advanced pump station monitoring can improve the longevity of your equipment and help predict downtime. The course is oriented toward municipal or industrial pump station operation and design.

Who will benefit from this course? Water and wastewater operators, technicians, engineers, supervisors, foremen and others involved in the operation and design of municipal water and wastewater pump stations. The course consists of 3 hours of classroom presentations.

Agenda:

8:00-8:30 Sign-in

8:30-12:00 What is a Centrifugal Pump

Centrifugal Pump Types

- a) Dry-pit Pumps
- b) Submersible Pumps
- c) Dry-pit Submersible Pumps
- d) Suction Lift Pumps

Pump Components

- a) Stuffing Impeller types
- b) Box
 - a. Mechanical Seal
 - b. Packing
- c) Pump Sensors

Break (15 Minutes)

Measuring head and flow

Reading Pump Curves

Importance of proper pump selection

Break (15 Minutes)

Remote Pump station Monitoring

- a) Typical Pump station monitoring devices.
- b) Pump Station Alarms
- c) The benefits of more advanced remote management
 - a. Help overcome operational, system and technology challenges.
 - b. Understanding how the hardware and software are integrated.
 - c. The Importance of security
- d) The practicality in today's water industry

12:00

Dismissal

Instructors: **Daniel Hennessy, P.E., Municipal Maintenance Co** – Five years with Municipal Maintenance Company's equipment sales division, responsible for distributing pumps to the Municipal Wastewater and Water industry throughout New Jersey, Eastern Pennsylvania, and Delaware. Prior to joining MMC Dan spent 11 years at a consulting engineering firm as a design engineer and municipal engineer. He received his Bachelor of Science Degree in Civil Engineering from Rutgers University. Dan is a licensed Professional Engineer in NJ.

Michael Ciacciarella, Grundfos - Mike has been District Sales manager with Grundfos for three years. He was previously employed by Sulzer/ABS pumps as an application engineer and controls product portfolio manager. He received his Bachelor of Science Degree in Electrical Engineering from Seattle University in Seattle, Washington. He has authored technical papers on pump controls and monitoring in trade magazines, Pumps and Systems, as well as contributed to many others. He is an active member of WEA, NEWEA, NYWEA, AWWA, as well as numerous other local water and wastewater groups.

Accreditation:

3.0 Training Contact Hours for NJ-Licensed Water/Wastewater Operators. TCH Course # 04-082301-30

3.0 Hours toward license renewal for NJ Certified Public Works Managers. DLGS-NJWA-252 (3.0 Technical)

Please plan to arrive at 8:00 am.

Registration is required and is available at www.njwater.org