

Tri-Con Operator Classes

WEDNESDAY 8:00am – 12:00pm, Room 210 (3.5 hours)

Basic Motor and Pump Maintenance

TRE Pending: All Operators (Non-Process)

Instructor: **Bob Andrews**, Hills Industrial

Students will learn:

- How to read a motor nameplate
- Motor storage recommendations
- Basic systems considerations for motor/pump selections
- Proper basic installation requirements
- Startup and baseline information gathering
- Preventive, predictive, and reliability-based maintenance
- Relubrication of bearings
- Inspection and testing at prescribed intervals
- Motor storage tips and recommendations

Bio: Bob is the current Service Manager at Hill's Industrial. He has 36 years of electro-mechanical repair experience and 15 years' experience as Field Service Technician performing on-site duties such as motor/pump installations, bearing changes, laser shaft and belt alignments, and power transmission repairs.

WEDNESDAY 1:30pm – 5:00pm, Room 210 (3 hours)

Coagulation, Flocculation, Sedimentation and Filtration

TRE Pending: All WWT/All IWW/All WT Operators (Process)

Instructor: **Eddie Cope**, Anne Arundel County

Designed to assist water plant operators, this advanced course focuses on tracking the flow of water through the four fundamental chemical/physical processes in water treatment. Participants will examine chemical reactions, the physical event of each process, and the plant equipment involved. Instruction and practice in solving typical operational and mathematical problems associated with these treatment functions will also be covered. (This course has received TRE certification for both water and wastewater operators because some wastewater treatment plants may employ one or more of these processes). ***Each participant should bring a calculator to this class.***

Bio: Since 1994, Eddie Cope has been sharing his knowledge of water and wastewater treatment with students in Maryland, Delaware, Virginia and Pennsylvania. With 37 years of experience in the water and wastewater fields as an Operator, Team Manager, and Program Manager, Eddie holds various certifications such as: Class 4 Water, Sampler license, and Superintendent. In addition to his 70 college

credits, he holds his Certified Environmental Trainer (CET) certification. Eddie's true passion is teaching and coaching students. He enjoys connecting with operators of all levels, sharing his knowledge and experience, and helping to expand interest and dedication to water in all forms. For Eddie, teaching is the best way to give back to an industry that has given him so much. Eddie lives with his wife Noelle on Kent Island, MD and has three children: Eddie, Julia and Ella.

[THURSDAY 8:30am – 12:30pm, Room 210 \(3.5 hours\)](#)

Advanced Wastewater

TRE Pending: All Operators (Process)

Instructor: **Bill Shreve, Sr.**, MCET and KCI Technologies

Students will learn:

- Introduction/Background
- Nutrient impacts, Regulations
- Chemical processes for Nitrogen
- Biological processes for Nitrogen & Phosphorus
- Filtration Processes
- Groundwater Discharge Systems
- Membrane Systems

Bio: Bill Shreve Sr. has over 48 years of experience in all aspects of operating, directing, and managing public utilities in Baltimore City, Anne Arundel County, St. Mary's County, Maryland Environmental Service and Charles County. Since retiring in August of 2021, he has been working for Maryland Center for Environmental Training and KCI Technologies providing training for various groups throughout the state.

[THURSDAY 2:00pm – 5:30pm, Room 210 \(3 hours\)](#)

Process Math for Operators

TRE Pending: All Operators (Process)

Instructor: **Scott Harmon**, Trainer

This session will focus on mathematics and application fundamentals of the water and wastewater treatment industry. This class will focus on using math to, understand water treatment processes. Upon completion of this course, personnel should be able to perform calculations needed to verify various plant processes. Examples include chemical dosing, detention time, pressure backwash flow rates and horsepower pump rates.

Bio: Scott has amassed over 39 years of experience in the water and wastewater industry. During this

time, he has worked in multiple roles including operator, manager, and trainer. He has managed a large municipal water treatment system for Anne Arundel County, Maryland. While working in the county, Scott was responsible for developing Operations and Reporting Plans, as well as providing training for administrators and staff on their responsibilities.

Following his retirement, Scott continued to make significant contributions to the industry by joining The Maryland Rural Water Association as the Training and Technical Support Specialist. In this role, Scott provided training and technical assistance to water boards, superintendents, town managers, clerks, and operators. Over the course of four years, Scott conducted over 1,500 hours of training on various topics related to administrative, managerial, operational, and reporting concerns for small and disadvantaged water systems in Maryland.

His outstanding program was recognized with the prestigious Training Program of the Year Award by The National Rural Water Association in 2021. Currently, Scott serves as a Senior Training and Technical Support Specialist at The Rural Community Assistance Partnership, where he continues to support rural communities across the nation.

In recognition of his dedication to the water and wastewater industry and his commitment to training and education in Maryland, Scott was appointed to the Water and Wastewater Primacy Licensing Board for Maryland.