

Michigan Department of
Natural Resources &
Environment
Water Bureau

ANNOUNCES

TRAINING COURSE FOR WATER DISTRIBUTION SYSTEM PERSONNEL

Fall 2010



Sponsored By:
Michigan Section, AWWA
Michigan Department of Natural
Resources & Environment

Jennifer Granholm, Governor
Rebecca Humphries, Director
www.michigan.gov/dnre
1-800-662-9278

2010 Training Calendar

Basic Math & Hydraulics
Gull Lake – August 24-26

Advanced Cross Connections
Lansing - Sept 9

Distribution System Short Course
Higgins Lake – Sept 13 – 15

Basic Math & Hydraulics
Higgins Lake – Sept 13 - 15

Distribution System Short Course
Gull Lake – Oct 5 - 7

Limited Treatment Short Course
Gull Lake – Oct 5 - 7

Regional Meetings
(Distribution System focus)
Gaylord – Oct 13
Port Huron – Oct 14
Mt. Pleasant – Oct 19
Kalamazoo – Oct 20

U. P Distribution Seminar
Escanaba – Oct 26 – 27

RTP Distribution Seminar
Lansing – Oct 28

Detach and **mail, e-mail or fax** the
completed application form by **July 21,**
2010 to:

Paul Brun Del Re
Operator Training & Certification Unit
Michigan Department of Natural Resources
& Environment
P.O. Box 30273
Lansing, MI 48909-7773

E-mail: brundelrep@michigan.gov
Fax: 517-241-0325

SELF-STUDY -- This course is also
available on a home-study, correspondence-
course basis (up to 2.4 CECs). Students
wishing to take the course by
correspondence need to contact CSUS at
(916) 278-6142 or email
wateroffice@csus.edu.

**Do not send money for the lecture
version of this course now.**

COURSE CONTENT -- This course is for water distribution system personnel. The course textbook is "Water Distribution System Operation and Maintenance" prepared by California State University, Sacramento. The course will include information on:

- Storage Facilities
- Distribution System Facilities
- Water Quality Considerations
- Distribution System Operation and Maintenance
- Disinfection
- Safety

Depending on location, the course will begin in mid-August or early September and run to early November, meeting once or twice a week (40 classroom hours).

THIS COURSE IS NOT INTENDED TO BE A WATER DISTRIBUTION EXAM REFRESHER.

LOCATIONS -- We will attempt to offer the course at the following locations provided there is an adequate number of participants at each location:

- Bay City
- Grand Rapids
- Kalamazoo
- Lansing
- Taylor
- Warren
- Waterford

STAFF -- The teaching staff will be people with knowledge in water distribution systems.

CREDIT -- Individuals in the drinking water field may be awarded up to 4.0 CECs of MDNRE Advisory Board-approved **technical** continuing education credits for successful completion of the lecture version of this course or 2.4 CECs of **technical** continuing education credit for successful completion of the correspondence version.

COST -- The cost is expected to be \$180 to \$200 depending on the location and number of participants. This fee, which includes the textbook, will be paid directly to the respective instructors.

Do not send money now.

Please return the attached application as soon as possible, preferably no later than July 21, 2010. For further information, phone Paul Brun Del Re at 517-241-8914.

ALL APPLICANTS WILL BE NOTIFIED AS TO THE EXACT TIME AND PLACE OF COURSE AND OTHER DETAILS BY THEIR INSTRUCTOR. APPLICANT NAMES WILL BE GIVEN TO THE INSTRUCTORS BY MID-AUGUST.

FALL DISTRIBUTION O&M APPLICATION

The following person(s) desire to attend "Water Distribution System O & M"

Operator ID #

Name _____ (_____)

Name _____ (_____)

Name _____ (_____)

Employer _____

Email Address: _____

Mailing Address: _____

Telephone (_____) _____

Check Location Desired:

- Bay City
- Grand Rapids
- Kalamazoo
- Lansing
- Taylor
- Warren
- Waterford

Please return by July 21, 2010

ANNOUNCEMENT

of

Upcoming Training

Sponsored by:

Michigan Department Natural Resources and Environment
Michigan Section, AWWA

Advanced Electricity Gull Lake August 24-26, 2010 \$425.00

This course is designed to enhance fundamental knowledge of basic electricity, electrical components, electrical and instrumentation measurement, and electrical and instrumentation troubleshooting. Class size will be limited to approximately 30 individuals to ensure that all questions, discussions, and hands-on training are adequately provided for. Each student should bring an appropriate test meter to measure volts, amps, and ohms. Some of the topics that will be included are alternating current, plant emergency systems, understanding and studying single and three phase circuits, transformers, recognition of higher voltages and the dangers, motors, starters and blue print reading, power factor and understanding instrumentation control loops. Certified drinking water and municipal wastewater operators satisfactorily completing this course may be awarded 1.8 continuing education credits (CEC's) in the "Technical" category. **It is strongly recommended that students take or have taken the Basic Electricity Course prior to enrolling in the Advanced Electricity Course.**

Advanced Cross Connection Seminar Lansing Sept. 9, 2010 \$70.00

The purpose of this seminar is to teach the principles of cross connection control as they relate to public water supply systems. The need for continued training in the field of cross connection control in Michigan is readily apparent given the major incidents of backflow that have occurred in water utilities in recent years. Cross connections on public water supply distribution systems continue to pose a distinct threat to the potability of the water supply. Certified drinking water operators may receive 0.5 CEC's in the "Technical" category. The seminar can be repeated within your renewal cycle for full credit due to the agenda changing each year.

Basic Math & Hydraulics Gull Lake August 24-26, 2010 \$325.00 **Higgins Lake September 13-15, 2010 \$325.00**

This course is being offered to allow water utility personnel an opportunity to acquire basic information in the subjects of math and hydraulics. Course topics include: use of a calculator, operational math, calculation of areas and volumes, velocity and rates, basic hydraulics, weight, density, specific volume, pressure calculations, chlorination calculations, etc... Certified drinking water and municipal wastewater operators satisfactorily completing this course may be awarded 1.8 continuing education credits (CEC's) in the "Technical" category.

Distribution Short Course Higgins Lake September 13-15, 2010 \$325.00 **Gull Lake October 5-7, 2010 \$325.00**

This course is being offered to allow water utility personnel an opportunity to acquire basic information in subjects important to distribution systems. Course topics include: water mains, bacti sampling and analysis, pipeline appurtenances, safety, distribution system rules, tapping, service line, meters, cross connection, system operation, maintenance and special problems, winter maintenance, pumps motors, well houses and chlorination. Certified drinking water operators satisfactorily completing this course may be awarded 1.8 continuing education credits (CEC's) in the "Technical" category.

Limited Treatment Gull Lake October 5-7, 2010 \$325.00

This course is offered to allow water utility personnel an opportunity to acquire basic information in the subjects important to limited treatment systems. This course will cover topics including; basic math, chlorination, fluoridation, safety, iron removal, wells and pumps and miscellaneous treatment. Certified drinking water operators satisfactorily completing this course may be awarded 1.8 continuing education credits (CEC's) in the "Technical" category.

Please register for the following courses using the form attached or for more information go to the MI-AWWA website at <http://www.mi-water.org>

