

**Service Line Brass, Pipe  
Repair & Drilling and  
Tapping Pipe Training**

**Wednesday, August 21, 2019**

Company / System: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Please check all licenses and/or categories  
that apply:

Water Operator  Wastewater

Other system personnel  *Please List*

**\*\* Please Register In Advance \*\***

Send your registration to:

Delaware Rural Water Association

210 Vickers Drive, Milford, DE 19963

Phone: 302-424-3792 / Fax: 302-424-3790

Email: delawareruralwater@yahoo.com

**DELAWARE RURAL WATER  
ASSOCIATION CORPORATE  
SPONSORS**



**This Course Is Funded By:  
EPA**

**Delaware Rural Water Association Presents:**

**Service Line Brass, Pipe  
Repair & Drilling and  
Tapping Pipe Training**

**Wednesday,  
August 21, 2019**



Time: 9:00 a.m. - 4:00 p.m.  
ECH's: 6.0 Hrs. W - Indirect  
Location: DRWA Training Facility  
210 Vickers Drive  
Milford, DE 19963  
Cost: Free  
Instructor: Mark Snyder, Mueller Co.

**Complete & Return**

**www.drwa.org**

## About DRWA

### Mission Statement

The mission of the Delaware Rural Water Association (DRWA) is to improve the quality of utility services for rural Delaware while protecting our natural resources.

To accomplish this mission and to protect the quality of life in rural Delaware, the Delaware Rural Water Association was incorporated in 1990 as a non-profit association. A volunteer Board of Directors that include water operators, town managers, and supervisors throughout the state of Delaware governs.

### Protecting the Public Health

DRWA promotes public health protection for rural communities and small municipalities. The Association trains and assists rural and small community water professionals in their efforts to provide quality drinking water to their communities, neighbors, and families.

### Protecting the Environment

DRWA promotes water conservation and protection through publications and public awareness campaigns. Information and research provided to government officials aid in the development of effective regulations. DRWA is an affiliate of the National Rural Water Association who operates what EPA officials call "the most successful groundwater protection program in the country".



## Training

Specialized training sessions provide water professionals with an opportunity to resolve problems by sharing ideas with state and federal agencies, engineers, contractors, manufacturers, suppliers, and other water system personnel. Training sessions cover a broad spectrum of needs. Subjects range from water treatment and federal water and wastewater regulations to financial management practices and operator certification. The training allows water professionals to upgrade their skill, improve the quality of their utility's service, and protect their community's health.

DRWA's Annual Technical Conference and Exhibition draws water and wastewater professionals, government officials, manufacturers, and suppliers together in one location, allowing them to participate in specialized training and the ability to learn about the latest trends in technology, government regulations, and system management techniques.

DRWA's On-Site Training Unit (OSTU) was developed in cooperation with the Office of Drinking Water and funded through an EPA grant. The unit has classroom space, resource materials, and industry equipment. DRWA has traveled around the state to operators who can't leave their systems to attend training. Hands-on training has been provided for water testing, meter testing, cross-connection, fluoridations, well security and more.

## Agenda

### Service Line Brass, Pipe Repair & Drilling and Tapping Pipe Training

Wednesday, August 21, 2019  
9:00 am - 4:00 pm

- I. Service Line Brass, Saddles & Pipe Repair Presentation
- II. History of Drilling and Tapping
  - a. Initial Tapping of Pipe
  - b. Early Machines Used For Drilling
- III. Types Of Pipe To Be Tapped or Drilled
  - a. Old Pit Cast Iron
  - b. Ductile Iron
  - c. Asbestos Cement
  - d. PVC C-900
- IV. Various Types of Machines
  - a. Direct Drilling and Tapping
  - b. Drilling Machines Only
- V. Saddles Used For Drilling Machines
  - a. Types of Saddles
  - b. Types of Repair Saddles
- VI. Actual Tapping & Drilling of Pressurized Pipe
  - a. Drilling and Tapping Ductile Iron
  - b. Drilling PVC C-900

For more classes and information visit us at [www.drwa.org](http://www.drwa.org)