

# Pumps – Operations & Maintenance

This course is approved for operator certification renewal  
CEU value of 0.6  
Applicable for WT, WD, WWT, WWC

**December 7, 2018 - Sydney, NS**

## **COURSE DESCRIPTION:**

Topics covered but not limited to, will include:

- Pump Theory
- Hydraulic Terminology
- Pump Anatomy
- Basic Centrifugal Pump Hydraulics
- Understanding how Centrifugal Pumps work
- Curves, how to read and understand System Head, Performance and more
- Cavitation - Signs to Look For. Causes & Corrections. Suction or Discharge
- Vortexing - causes and effects, Recognizing and Preventing Air Entrainment
- Troubleshooting Methods, Recognizing Mechanical and Hydraulic noises
- Pump Hands On, dismantle, discuss and reassemble a pump as a group

## **COURSE PRESENTERS:**

Presented by Kelly Dunn

Kelly is an industrial millwright and has been certified through Xylem to work on explosion proof pumps. Mr. Dunn has worked for the past Twelve (12) years with Xylem (formerly ITT Water & Wastewater) as a Pump and Service Mechanic. In this position he carries out pump repair work in the shop, field service work including pump startups, problem solving (both in the field and service shop) and is a member of the Xylem team working directly with our customers.

Co-ordinated and assisted by **Brian A. Hazlett** who is a certified operator and has 40 years of professional experience in the operation and management of various distribution, collection, and treatment systems for drinking water and wastewater.

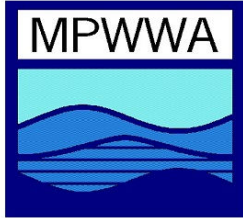
## **COURSE LOCATION & TIME:**

Centre 200  
481 George St., Sydney, NS

8:30am- 4:30pm,  
Lunch “*On Your Own*” 12:00- 1:00, Refreshment breaks supplied

## **CONTACT INFORMATION:**

Registration can be made online at [mpwwa.ca](http://mpwwa.ca), faxing or mailing the registration form. For further information, please contact Clara Shea at 902-434-8874.



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

Organization: \_\_\_\_\_

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

City, Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

MPWWA Member Number: \_\_\_\_\_

Members \$225.00 plus 15% HST = \$258.75

Non-Members \$250.00 plus 15% HST = \$287.50

**Payment can be made by visa, master card or cheque. Invoices will be sent to the address listed above.**

**Please send PO number if you want it included on the invoice.**

PO \_\_\_\_\_

Card Holder's Name \_\_\_\_\_

Card Number \_\_\_\_\_ Expiry \_\_\_\_\_

Signature \_\_\_\_\_

**Cheques should be made payable to:  
MPWWA  
C/O Clara Shea, Executive Secretary  
PO Box 28142 Dartmouth, NS B2W 6E2  
Phone 902-434-8874 Fax 902-434-8859**