



# LIFT STATIONS AND FORCEMANS

**May 27, 2019**

**Charlottetown, PE**

## **COURSE OBJECTIVES AND OVERVIEW:**

The objectives of this course are:

- To familiarize the attendees with lift stations and forcemans in wastewater conveyance; and
- To discuss issues related to design, operation and maintenance of lift stations and forcemans.

Introduction Orientation & objectives

8:30 AM to 9:00 AM	Lesson 1 Wastewater terminology
9:00 AM to 10:00 AM	Lesson 2 Hydraulic concepts
10:00 AM to 10:15 AM	<i>Break</i>
10:15 AM to 11:00 AM	Lesson 3 Types of pumps
11:00 AM to 12:00 PM	Lesson 4 Design factors
12:00 PM to 1:00 PM	<i>Lunch On your Own</i>
1:00 PM to 1:45 PM	Lesson 5 Station configuration
1:45 PM to 2:30 PM	Lesson 6 Odor and corrosion
2:30 PM to 3:00 PM	Lesson 7 Operations
3:00 PM to 3:15 PM	<i>Break</i>
3:15 PM to 4:00 PM	Lesson Review- Review key points to ensure understanding
4:00 PM to 4:15 PM	Conclusion Questions/answers

## **COURSE FORMAT:**

Every attempt is made to keep the course informal and an enjoyable day-long training experience. Registration starts at 8:00 am, and the instructor will start shortly after 8:30. Lunch is 12:00-1:00pm. Wrap-up time is usually around 4:00pm. Though all workshops are non-smoking, ample breaks are provided for coffee and discussion.

## **COORDINATORS & PRESENTERS:**

**Kevin Murphy, P.Eng.** is a Senior Mechanical Engineer with CBCL Limited with over 28 years of professional experience in the field of water and wastewater treatment plant, pumping station design and commissioning. He has extensive experience in hydraulics, pumping system design, pump failure, transient analysis, and pumping systems for various fluids including fuels, sludges, non-newtonian fluids, brine, chemicals and various other liquids. Mr. Murphy's experience includes analysis of transmission mains up to 48" in diameter and pumps up to 2000 Hp.

## **CONTACT INFORMATION:**

Registration can be made by faxing or mailing the registration form on the reverse of this page, or on-line at [www.acwwa.ca](http://www.acwwa.ca). For further information, please contact ACWWA Section office at 902-434-6002.

## **COURSE LOCATION:**

Rodd Royalty  
14 Capital Drive Charlottetown, PE

Please print clearly and fax or mail to the address listed on the bottom of this form.

I wish to register for the following course:

**Lift Stations and Forcemains**

**May 27, 2019**

**Charlottetown, PE**

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

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

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

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

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

ACWWA Membership #: \_\_\_\_\_ WEF Membership #: \_\_\_\_\_  
(If no membership number is listed, you will be invoiced as a non-member. See pricing below.)

Fee for **ACWWA or WEF Members & Employees of Utility Members**

Course: \$280.00 + \$42.00 HST (15%) = \$322.00

**Fee for Non – Members**

Course: \$299.00 + \$44.85 HST (15%) = \$343.85

Fees include coffee breaks

Lunch on your own

**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.** \_\_\_\_\_

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

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

Signature \_\_\_\_\_

Cheques should be made payable to

**ACWWA**

PO Box 28142 Dartmouth, NS B2W 6E2

Phone 902-434-6002 Fax 902-435-7796