



**Developer and Owner – WWOTC**

**Online Course – Instructor Led**

## **Emerging Issues in Water Treatment**

**December 7-8, 2022 (1:00-5:00 PM AST)**

### **Course Objective / Description**

This one-day course explores a wide variety of recently discovered potential contaminants that face many water suppliers, and examines how various treatment options affect their removal or destruction. Many of these contaminants have recently received substantial press and have piqued public interest and concern. This course will be of interest to water treatment and distribution operators, and will also be of value to supervisory and managerial personnel, including those involved with Public Relations as well as Water Treatment.

What will be covered:

- Disinfectants used in Ontario, the disinfection byproducts (DBP's) that they form and how they various treatment technologies, including biologically active filtration, perform on their removal or destruction
  - The current regulatory situation regarding these contaminants
  - Newly emerging pathogens such as enteric viruses, cyanobacteria, protozoa, gionella, mycobacterium avium complex, naegleria fowleri and others
- Pharmaceuticals and Personal Care Products (PPCP's) and other endocrine disruptors

<b>Lesson</b>	<b>Description</b>	<b>Contact Hours</b>
Lesson 1	Introduction and Overview	0.5
Lesson 2	Microbiological Issues: Bacteria	0.75
Lesson 3	Microbiological Issues: Viruses	0.75
	<b>Break</b>	0.25
Lesson 4	Disinfection Byproducts	1.0
Lesson 5	Chemical Contaminants	0.5
Lesson 6	Pharmaceuticals and Endocrine Disruptors	0.75
Lesson 7	Hydraulic Fracturing	0.5
Lesson 8	Nanomaterials	0.5
	<b>Break</b>	0.25
Lesson 9	Regulation Changes	1.25
	Exam	0.5
	Total Instruction Time:	7.0

# Emerging Issues in Water Treatment

**December 7-8, 2022 (1:00-5:00 PM AST)**

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

Company: \_\_\_\_\_

Company Mailing Address \_\_\_\_\_

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

Phone: \_\_\_\_\_ 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:  $\$355.00 + \$53.25 \text{ HST (15\%)} = \$408.25$

### **Fee for Non – Members**

Course:  $\$380.00 + \$57.00 \text{ HST (15\%)} = \$437.00$

**Invoices will be sent to the address listed above.**

**PO number to be included on the invoice** \_\_\_\_\_

**Payment can be made by Visa, Master Card or cheque.**

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

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

Signature \_\_\_\_\_

Email address for credit card receipt \_\_\_\_\_

Cheques should be made payable to:

**ACWWA**

PO Box 28141 · Dartmouth, NS · B2W 6E2

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