



**Developer and Owner – WWOTC**

**Online Course – Instructor Led  
Cyanotoxins and Their Treatment**

**April 28-29, 2021 (8:30 – 12:30 AST)**

**Course Objective / Description**

This course has been developed to provide participants with a history of this issue, a complete explanation of cyanobacteria, what they are, where they occur, the toxins that they produce, as well as source water management and treatment methods used to remove and inactivate them. Conventional and enhanced water treatment methods will be described along with waste management considerations. Current water quality guidelines and regulations will be explained. Utility case histories will also be described. Videos and practice questions will be included.

What will be covered:

- Description, distribution and history of cyanobacteria
- Cyanobacterial toxins and regulatory guidelines
- Source water management
- Multi-barrier protection
- Conventional and enhanced water treatment
- Waste management
- Utility case history highlights

<b>Timeline</b>	<b>Lesson</b>	<b>Description</b>	<b>Contact Hours</b>
07:30-08:30	Lesson 1	Cyanobacteria Explained	1.0
08:30-09:30	Lesson 2 Lesson 3	Historical Perspective Cyanobacteria Toxins and Health Effects	1.0
09:30-09:45		Break	0.25
09:45-11:00	Lesson 4 Lesson 5	Multi-barrier Protection Source Water Protection	1.25
11:00-12:00	Lesson 6	Water Treatment Strategy	1.0
12:00-12:30		Lunch	0.5
12:30-13:30	Lesson 7 Lesson 8	Conventional Water Treatment Enhanced Water Treatment	1.0
13:30-14:30	Lesson 9	Waste Management	1.0
14:30-14:45		Break	0.25

14:45-15:00	Lesson 10	Summary and Conclusions	0.25
15:00-15:30		Exam	0.5
		<b>Total Instruction/Contact Time:</b>	<b>7.0</b>

**Instructor:**

**Michael Lukich - Training Specialist**

**CEU: 0.7**

**Cyanotoxins and Their Treatment**

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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: \$345.00 + \$51.75 HST (15%) = \$396.75

**Fee for Non – Members**

Course: \$370.00 + \$55.50 HST (15%) = \$425.50

**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