



#### **Developer and Owner - WWOTC**

#### Online Course - Instructor Led

## Impacts of Trapped Air Particles in the Water Distribution System

April 24-25, 2023 (1:00-5:00 AST)

### **Course Objective / Description**

The objective of this course is to understand and minimize the influences of air on our distribution system.

What will be covered:

- How air travels into water distribution pipes
- Impacts of air pockets that generate destructive forces
- Importance of continuously purging air to maintain pipeline efficiency
- Understanding gas laws that details out how air will behave in a pressurized system
- Operational procedures that can minimize air pockets in water systems
- Examination of old air valve designs to understand performance deficiencies that can impact how pipelines are filled and drained
- Review of air valve inspection procedures and hands-on exercises for operators
- How air bubbles can be removed with swabs & ice pigging
- Cavitation

Lesson	Description	<b>Contact Hours</b>
Lesson 1	Sources of Dissolved Air	2.0
Lesson 2	Air in Distribution Pipes	1.75
Lesson 3	Air Valves	0.75
Lesson 4	Dissolved Air Flotation	0.75
Lesson 5	Biofilm Effects	1.00
	Review and Exam	0.75
	Total Instruction/Contact Time:	7.0

**CEU: 0.7** 

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April 24-25, 2023 (1:00-5:00 AST)

Name:		
Company:		
Company Mailing Address		
City, Province:	Postal Code:	
Phone:	Email:	
ACWWA Membership #: If no membership number is	WEF Membership #: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 V	isa, 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	