

**Developer and Owner – WWOTC**

**Online Course – Instructor Led**

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

**November 12-13, 2025 (1:00-5:00 PM 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

| <b>Lesson</b> | <b>Description</b>                     | <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                 |
|               | <b>Total Instruction/Contact Time:</b> | <b>7.0</b>           |

**CEU: 0.7**

# Impacts of Trapped Air Particles in the Water Distribution System

**November 12-13, 2025 (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 + \$49.70 HST (14%) = \$404.70

## **Fee for Non – Members**

Course: \$380.00 + \$53.20 HST (14%) = \$433.20

**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