



## **Developer and Owner –** AIM Network

Online Course – Instructor Led

## Operating and Maintaining Water Treatment Plants as part of your Asset Management Program

(This virtual course is offered jointly by ACWWA & AIM Network)

June 16,2021

New Date - June 29, 2021

Target Audience: Water Treatment Plant Operators, Maintenance Technicians and Managers

**Purpose:** To learn tools and processes that bring operation and maintenance activities into asset management planning based on level of service, cost and lifecycle.

**Objective:** Attendees will gain an understanding of:

- How Asset Management fits into O&M Programs: A refresher of Workshop 1,
- What defines level of service for a water treatment plant and how it is impacted by O&M activities,
- How to define failure and failure modes throughout the treatment process and record them using a toolkit provided with the workshop,
- Identifying proactive and reactive maintenance activities associated with the major water treatment components and how to choose which is best, and
- How to record, develop and monitor an operations and maintenance program and how to use this information in asset management planning. Participants will record the information using a toolkit provided with the workshop.

## **Course Facilitators:**

Matt Delorme, P.Eng. – Matt is a municipal engineer with over 20 years' experience in engineering design and management. As a consultant he managed projects developing the asset management framework for the provinces of Nova Scotia and Newfoundland and Labrador and has assisted dozens of municipalities in Atlantic Canada get started on their asset management journey in partnership with AIM Network. Matt currently serves as AIM Network's technical program manager for a variety of programs in Atlantic Canada.

<u>Martha Myers</u>, <u>P.Eng.</u> – Martha is a mechanical engineer with over 30 years' experience in the petrochemical, chemical and energy industries. She has focused on Maintenance and Reliability to improve the value of physical assets using strategies for excellence in maintenance management. She is a graduate of the Asset Management Professional Program offered by PEMAC. She spearheads the Nova Scotia PEMAC Chapter, where she serves as the president and is the owner of Martha Myers Consulting Services.

Time	Topic	Notes
9:00 – 9:15	Introduction	<ul><li>Introductions</li><li>Review Agenda</li></ul>
9:15 – 9:45	Asset Management Refresher	<ul> <li>The asset management process and role of operations and maintenance (O&amp;M) for water treatment plants</li> <li>Risk and level of service (LoS) impact to O&amp;M and on reliable water treatment delivery</li> </ul>
9:45 – 10:15	Level of Service and failure modes	<ul> <li>Catalogue major assets in water treatment systems</li> <li>Define LoS performance measures for water treatment</li> <li>Define water treatment performance and identify critical failure modes (toolkit to be provided)</li> <li>Risk mitigation for water treatment failure modes</li> </ul>
10:15 – 10:45	Document Level of Service	<ul><li>Workshop:</li><li>Document Technical LoS targets and failure modes</li></ul>
10:45 – 11:00	BREAK	
11:00 – 12:15	Proactive versus Reactive Maintenance	<ul> <li>Selecting between reactive, preventive and predictive maintenance for critical water treatment components</li> <li>Inventorying and tracking spare parts</li> <li>Documenting and tracking water treatment O&amp;M activities</li> </ul>
12:15 – 12:30	CMMS Systems	<ul> <li>How can this help manage water treatment plants and how much is enough?</li> </ul>
12:30 – 1:30	LUNCH	
1:30 – 3:00	Develop an O&M Program	<ul> <li>Workshop:</li> <li>Identify critical water treatment plant O&amp;M activities</li> <li>Document water treatment plant O&amp;M programs and identify cost / benefit potential</li> <li>Reporting on O&amp;M data for asset management planning for the water treatment plant</li> </ul>
3:00 – 3:30	Reporting Out	Using O&M technical data in an asset management planning for the water treatment plant
3:30 – 4:00	Close	<ul><li>Wrap up</li><li>Next Workshops</li></ul>





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Name:			
Company:			
Company Mailing Address_			
City, Province:	Postal Code:		
Phone:	Email:		
ACWWA Membership #: If no membership number is	WEF Membership #: isted, you will be invoiced as a non-member. See pricing below.		
Fee for	ACWWA or WEF Members & Employees of UTILITY Members Course: \$295.00 + \$44.25 HST (15%) = \$339.25		
	Fee for Non – Members Course: \$325.00 + \$48.75 HST (15%) = \$373.75		
Invoices will be sent to the	ddress listed above.		
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