

Physical Sciences for

Water and Wastewater Operations

May 9, 2018

Sydney, NS

COURSE OJECTIVES AND OVERVIEW:

This course covers a variety of topics that relate directly to your daily work in the field of water and wastewater operations. Whatever part of the water or wastewater industry you work in, chemistry and microbiology are playing an important role in the processes used to prepare potable water or clean wastewater effluent to acceptable levels.

In this one-day workshop session you will have an opportunity to examine the chemistry of water, the ways in which chemicals are used to treat water, and the role that microbiology plays in the water industry.

It is critical for everyone working in the industry to understand how the chemicals used daily to treat water and wastewater actually work and why and how they are used. Everyone should also know how to ensure that these chemicals do their job most effectively.

8:30 A.M. – Module One: The Chemistry of Water

- Matter
- Elements
- Reading the Periodic Table
- Compounds
- Reactions and Products
- It's Your Turn
- Compounds
- Solutions
- The Universal Solvent
- QUICK QUIZ

10:00 A.M. – 15-Minute Morning Break.

10:15 A.M. – Module One Cont.

- Water as a Conductor
- Impurities and Contaminants
- · Acids and Bases In Water
- Acids and Bases the pH Scale
- Solution Concentrations
- Density
- Specific Gravity
- Solids and Liquids
- Gases

12:00 P.M. – 30 Minute Lunch break

12:30 P.M. – Module Two: Protecting Water Quality

- Thought Provoking
- Protecting Water Quality
- Part One: Microorganisms
- Bacteria
- Protozoa
- Viruses
- Algae

- A Case In Point
- Quick Quiz

2:30 P.M. – 15-Minute Afternoon Break

2:45 P.M. - Module Two Cont.

- Inside the System
- Chlorine Safety Issues
- How Does Chlorine Work?
- Chlorination Strategies
- Ultra-Violet Disinfection
- Ozone
- Protecting Water Quality
- Measuring and Monitoring Success

4:30 P.M. – Close of Day

CONTACT INFORMATION:

Registration can be made by faxing or mailing the registration form, or on-line at www.acwwa.ca. For further information, please contact ACWWA Section office at 902-434-6002.

May 9, 2018 Sydney, NS

COURSE LOCATION:

850 Grand Lake Road Fire Hall Sydney, NS

Physical Sciences for Water and Wastewater Operations

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Name:		
Organization:		
Mailing Address:		
City, Province:		Postal Code:
Phone:	Fax:	Email:
(If no membership nu	**RACWWA or WEF M Course: \$280.00 + Fee fo Course: \$299.00 +	WEF Membership #: be invoiced as a non-member. See pricing below.) Itembers & Employees of Utility Members + \$42.00 HST (15%) = \$322.00 Or Non – Members + \$44.85 HST (15%) = \$343.85 e coffee breaks and lunch
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