

# ALBERTA UTILITY OPERATOR

## Winter 2024

Issue #52



### The 49th Annual Operators Seminar

March 11-15, 2024, Banff, Alberta



We invite you to attend the Annual Operators Seminar in Banff - Alberta's premier event for water and wastewater operators! Participate in technical presentations, connect at networking events and engage with industry reps at the trade show.

For more details, visit page 2 & 3.

### 2023 Water Week Conference

#### Thank You!

Thank you to our delegates, speakers, sponsors and suppliers for joining us at the 2023 Water Week Conference. Your support makes the difference!

**AWWOA Thank You To Our 2023 Water Week Sponsors!**

#### In This Issue

- Operators Seminar.....1
- Thank You!.....1
- Pre-Seminar Workshops.....2
- Registration Information.....3
- Networking Events.....3
- Special Presentations.....4
- Volunteer Opportunities.....4
- Annual General Meeting.....4
- Charitable Donations.....5
- Award Nominations.....5
- Golf Tournament.....5
- Alberta Environment Update...6
- The Old Operator.....7
- Math Corner.....7
- Upcoming Training.....8
- Save the Date.....8

**DEDICATED TO THE ESSENTIALS**

# Pre-Seminar Workshop Information

## **Workshop #1 - Critical Leak Repair Without Shutdown**

**Presented by: Brandon Pater, Pacific Flow Control Ltd.**

Monday March 11, 2024 - 8:30 a.m. - 12:00 p.m.

As infrastructure ages beyond its expected life span at an alarming rate, many municipalities find themselves unable to replace it quickly enough. When critical infrastructure fails or is comprised, municipalities are forced into a state of emergency, frequently necessitating a complete shutdown. Often, this is due to a lack of awareness regarding available options. In this workshop, a range of solutions will be explored including repair clamps, temporary isolation & bypass techniques and more.

## **Workshop #2 - Taste and Odour Mitigation Approaches for Water Utilities - Recent Learnings**

**Presented by: Klas Ohman, Associated Engineering**

Monday March 11, 2024 - 8:30 a.m. - 12:00 p.m.

Taste and odour (T&O) challenges continue to plague the water, wastewater and stormwater industry. In light of recent events exacerbated by climate change, these challenges continue to increase and affect the public directly. This presentation will draw upon recent case studies and years of experience to mitigate T&O issues that arise and show you what to look out for in the building of new systems. It will also cover project success stories that support health and safety and meet regulatory requirements.

## **Workshop #3 - SCADA Systems - Basics to Emerging Technologies**

**Presented by: Zane Spencer and Nick Sawatzky, MPE, a division of Englobe**

Monday March 11, 2024 - 1:00 - 4:30 p.m.

Process control and SCADA systems are utilized extensively throughout water and wastewater infrastructure. This workshop will recap the basics of how these systems are constructed and dive into some of the new technologies that are available. Participants will engage in a discussion and explanation of typical components utilized in each of the levels of the control system model including process level, local control level, communications media level and supervisory control level.

## **Workshop #4 - Advanced Wastewater Treatment Processes (Effluent Polishing)**

**Presented by: Maryam Izadifard**

Monday March 11, 2024 - 1:00 - 4:30 p.m.

This workshop will cover advanced wastewater treatment processes, first providing an overview of the treatment process and then focusing on the question - why is tertiary treatment necessary? Part one will include an overview of tertiary treatment processes while part two will review technologies used for the elimination of micro contaminants. This will include a discussion on CEC's and technologies used to tackle the problem. In addition, case studies and the ACWA partnership will be touched on.

## **Workshop #5 - Robotics Assistance for Operators**

**Presented by: Laurent Cataye, Rocky Mountains Unmanned Systems**

Tuesday March 12, 2024 - 8:30 a.m. - 12:00 p.m.

Robotic solutions are enhancing operator efficiencies and providing safer working conditions. In this workshop, you will get an overview of these tools. Ground robotic solutions can allow operators to autonomously collect stranded data, drones can be used for confined space inspections and submersible remotely operated vehicles can help you understand what is happening in underground pipes. When you put these technologies in the hands of your operators, you open a wide range of possibilities.

## **Workshop #6 - Chloramines (Total Chlorine) Boosting**

**Presented by: Win Tun and Emily Liu, Alberta Environment and Protected Areas; Simon Patterson, County of Two Hills**

Tuesday March 12, 2024 - 8:30 a.m. - 12:00 p.m.

The acceleration of climate change, operational glitches, poorly maintained reservoirs and longer regional water lines have contributed to treated water chlorine residual loss and challenges in maintaining adequate levels of residuals in distribution systems. Operators are now facing the daunting task of boosting chloride. This workshop will assist operators in understanding ammonia-N complications, provide options to boost chloramines and demonstrate how to undertake these boosting strategies.



**\*\*PRE-REGISTRATION IS REQUIRED\*\* - NO ONSITE REGISTRATION IS ACCEPTED**

# Seminar Registration Information

## Continuing Education Unit (CEU) Information for Operators Seminar:

Attending Wed. and Thurs: 0.9 CEUs

Attending a Pre-Seminar Workshop: 0.3 CEUs  
(separate pre-registration required)

Attending Friday Technical Session: 0.3 CEUs

\*NOTE: You must attend to receive CEUs

### Registration:

Register online at [awwoa.ca](http://awwoa.ca)

NOTE: Seminar registrations will be accepted online until **March 6, 2024**. Anyone who has not been confirmed as registered by March 6 will need to register onsite for an additional \$50 fee.

## Cost:

**Full Seminar Registration -** \$290 + GST  
AWWOA Members (Monday - Friday)

**Full Seminar Registration -** \$405 + GST  
Non-Members (Monday - Friday)

**Single Day Registration -** \$150 + GST  
(Wednesday or Thursday)

**Trade Show Only -** \$100 + GST  
(One Day)

**Banquet Ticket (includ. 2 bev tix) -** \$70 + GST

**Pre-Seminar Workshop -** \$135 + GST  
(Monday and Tuesday)

## Seminar Networking Events

### Women of Water (WOW)

Date: March 12, 2024, 5:30 - 7:00 p.m. | Location: Elk & Oarsman, 119 Banff Ave

All women of the Annual Operators Seminar are welcome to attend to the newly named Women of Water (WOW) event! Join us as we share the successes and stories of women working in the water/wastewater industry.

### Pub Night

*sponsored by ACC Water Solutions Inc and Klearwater Equipment & Technologies*

Date: March 12, 2024, 7:00 - 10:00 p.m. | Location: Elk & Oarsman, 119 Banff Ave

AWWOA is taking over the Elk & Oarsman Pub! End the Tuesday of the Annual Operators Seminar with a drink and appetizers while getting to know fellow operators.

### Casino Night

*sponsored by Wolseley Waterworks with co-sponsors: Clow Canada, Trojan Industries, Pro-Line Fittings, Westlake Pipe & Fittings and GF Urecon*

Date: March 13, 2024, 7:30 - 10:30 p.m. | Location: Banff Park Lodge, 201 Lynx Street

Experience a fun money casino with classic games, drinks and good competition. Unwind with fellow operators and win prizes at the end of the night.

### Banquet & Entertainment

Date: March 14, 2024, 7:00 - 10:00 p.m. | Location: Banff Park Lodge, 201 Lynx Street

Join us at the annual Seminar Banquet for a three-course meal and evening entertainment. Stay tuned as we announce the event performer.

*Tickets are \$70 + GST and can be purchased at [AWWOA.CA](http://AWWOA.CA).*



# Seminar Updates

## Special Presentations

### Wednesday Opening Session

#### Tyler Smith - Humboldt Broncos

Wednesday, March 13, 2024 - 11:00 a.m. - 12:00 p.m.

Tyler Smith is a survivor of the Humboldt Broncos bus crash, where he lost 16 of his teammates, friends and coaches. He is also the founder of Not Alone, a clothing line and embroidering shop in Leduc, AB. With his girlfriend, Kat Kastner, he won the Amazing Race Canada Season 9, racing for everyone lost and those impacted by the Humboldt Broncos tragedy.

Tyler hopes to inspire others dealing with mental health conditions by proving that you can still lead a full life beyond trauma. Through his mission, he hopes to cultivate a community of leadership, vulnerability and courage.



Tyler Smith

### Friday Morning Workshop

#### Effective Tough Conversations - The Key to High Performing Teams

Melanie Richmond and Rachele Lee, Einblau & Associates

Friday, March 15, 2024 - 8:30 - 11:45 a.m.

Retiring operators, technology advancements and regulatory changes are all current challenges in the industry. A lack of communication is often a big contributor, leading to a lack of clarity, individuals not holding themselves accountable and performance issues. Through this workshop, you'll gain tools to effectively manage these conversations and achieve positive results.



## Volunteer Opportunities

Interested in volunteering at the Annual Operators Seminar? The AWWOA Executive has an opportunity for members in good standing.

We are looking for a dozen people who can contribute 10 hours throughout the week. Duties include selling 50/50 tickets and assisting with registration. You will receive seminar registration and a banquet ticket.

If you are interested in volunteering, please email [connect@awwoa.ca](mailto:connect@awwoa.ca) with your information.



## Annual General Meeting

AWWOA's Annual General Meeting will be held on Wednesday, March 13, 2024 during the Annual Operators Seminar at the Banff Park Lodge.

The following items will be discussed: AWWOA election results, finance, audit reviews and yearly updates; door prizes; and find the hydrant draw prizes.

**Annual General Meeting**  
**March 13, 2024 - 3:45 p.m.**  
**Banff Park Lodge, Main Ballroom**



# AWWOA Updates

## Charitable Donations Update



**The Water School Project**

Here we are again! A new year is upon us, which we have celebrated in our own ways. As water and wastewater professionals and suppliers, you have given most generously to the Association's charitable endeavours year

after year! Since 2013, you have generously contributed over \$188,000, providing access to clean, safe water to thousands of people in Uganda.

Once again, we will be looking for your support over the next year to help fund our next project for the Water School. The Water School will be looking at placing Sawyer water filter systems in a number of primary schools. They have moved away from SODIS because it was hard to keep enough bottles in schools.

In addition, we hope to fund a pipe distribution extension, with tap stands from a deep (80 metre) borehole which has already been dug and put into operation. This will allow the existing infrastructure to reach more villages with clean water from an aquifer, delivered by multi outlet tap stands throughout the villages. The water is raised by a solar pump to a tank 12 metres in the air. This provides enough pressure to deliver the water by gravity flow. They have done 6 of these systems in water starved areas in the past 3 years, and they work well.

This is only possible through the support of events like the silent auction and 50/50 we have in Banff. So, when you are attending the Banff Seminar this spring, please remember to take some time to head down to the auction rooms and bid on an item; I'm sure there will be lots of unique items available.

See you all in Banff!

Bert Sr. Miller  
Charitable Donations Chair

## Upcoming Awards

Do you know a member who has demonstrated exemplary service to the water and/or wastewater field? Nominate them for an award! These are presented each year at the AWWOA Seminar. Check out our website for the details including nomination guidelines and submission details.

- **Gerald Samuel Operator of the Year Award**
- **Ron Bayne Service Award**
- **Steve Blonsky Honorary Life Membership**

**Application Deadline is January 31, 2024**

**Submit to: [connect@awwoa.ca](mailto:connect@awwoa.ca)**



**Tanya Hunter, 2023 Ron Bayne Service Award from AWWOA Chair Sandra Kotch**

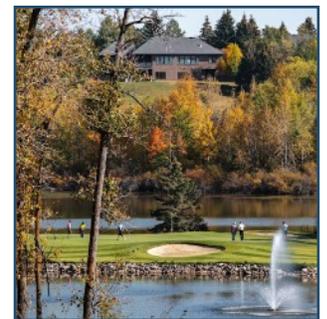


**Corey Hodgson, 2023 Gerald Samuel Operator of the Year Award from AWWOA Chair Sandra Kotch**

## Save the Date - Golf Tournament

Planning for the Annual AWWOA Golf Tournament is in the works! We look forward to welcoming you to Innisfail in June 2024.

Registration will open Spring 2024. Stay tuned to [AWWOA.CA](http://AWWOA.CA) for details.



**7th Annual Golf Tournament  
Innisfail Golf Club  
Innisfail, AB  
June 17, 2024**

# Alberta Environment & Protected Areas Update

Happy New Year from the Water and Wastewater Operator Certification Team! As we move into the New Year, we are busy approving 2023 training and certification renewals.

Certification renewals expiring December 2024 will start on July 1, 2024. You can submit your training any time. The best practice is to submit your training as you complete the course so you can avoid renewal delays.



You can watch for the new 3-Year Strategic Plan to be posted on the Alberta Environment website. Highlights including promoting the profession, profession alignment, improving CEU requirements and evaluation, developing and adapting new program streams and growing the Certification Advisory Board.

WPI/PSI has launched a new exam scheduling platform which will require operators to create a new account. The new platform will allow operators to determine whether their preferred testing site and time are available. Email reminders will be sent 72 hours before your scheduled exam.

In 2023, the certification exam length was also increased to 3 hours to align with other Canadian Best Practices and address the concern of operator's not having enough time to complete.

If you have any questions or concerns, reach out to [waterandwastewateroperatorcert@gov.ab.ca](mailto:waterandwastewateroperatorcert@gov.ab.ca).

## NAIT Industry Practicum 2024



Are you planning to hire staff for the upcoming May-August 2024 season or looking to fill future vacancies within your organization? Hire a W&WW Student!

NAIT's W&WW Technician students are required to obtain a minimum of 600 hours of work experience in one or more of the disciplines in order to complete their Certificate. Approximately 70 students will be seeking employment to complete the industry practicum portion of the program. With your support, we hope to provide our students with a variety of employment opportunities on February 2, 2024.

If you are interested in participating, please contact:

**Darren Demchuk, Program Chair**

P: 780-771-7081 / 780-471-7005 E: [wwwpracticum@nait.ca](mailto:wwwpracticum@nait.ca)

## SAIT Industry Practicum 2024



SAIT's Water and Wastewater Treatment Operations students are required to complete a 600 hour work practicum in order to complete their certificate program. SAIT's WWTO students are also trained and prepared to write the 4<sup>th</sup> Class Power Engineering exams. With your support, we hope to offer our students a variety of practicum opportunities for spring/summer 2024.

If your organization is interested in hiring a student, please contact:

**Camille Scheibner, Practicum Coordinator**

P: 403-232-2880 E: [camille.scheibner@sait.ca](mailto:camille.scheibner@sait.ca)

# The Old Operator

## It's More About the Conversation Than the Location



Doug Thorson

When I am upset, frustrated or angry, I tend to hide myself from others. I try and find that quiet place of repose. When I am frustrated, rather than hiding I should be seeking a friend to talk with, someone who will share a compassionate ear. This also works both ways; when others are in need why are we so reluctant to come to their aid, to lend that compassionate ear or heart? Why is it so hard to offer kindness? We don't seem to have any issue accepting it joyfully from others. Kindness costs you absolutely nothing when you share it.

What kind of encouragement have you offered to a family member or a friend today? Deep down, I think having compassion for others has a great deal to do with patience. If we can't even have patience with ourselves, how can we ever have patience with others? Mahatma Gandhi said wisely, "To lose patience is to lose the battle." In my interpretation, "The chicken can only be gotten by laying the egg, not by smashing it."

*"Patience is not the art of waiting; it is the ability to keep good attitude while you are waiting."*

A story is told about communication and friendship which comes out of Northern Spain, hundreds of years ago. If you were to visit there, you would be intrigued to find the countryside crowded with unnatural shaped caves. These caves were all carved by hand. Every cave appears to have a small room above the main cave. This was farm country and at the close of harvest, the farmer would store all his produce in the cave. The farmer would sit above the cave in the office and inventory all his produce, what to sell and what to keep.



As time went on, it became a regular habit for fellow farmers and surrounding neighbours to gather and tell about the harvest, their livestock, share stories, secrets, and dreams. Soon these caves were called "The telling rooms," a place for communication with others. If you needed, the intimate company of a safe friend, you would head for the "telling room." I can only assume many deep friendships were formed in these rooms.

When frustration overtakes you, don't hide away, seek out a good friend, a confidant. Like these farmers in Northern Spain, you will develop deep friendships and a patient ear. Today your "telling room" may be the back patio, your local coffee shop, or a quiet walking path. One thing for certain, it's not about the location, it's about the conversation, at least that's how I see it. *The Old Operator Doug Thorson*

## The Math Corner

Answer:



David Noack

WINTER 2024

*Math Corner is an effort to improve an operator's technical skills. Your answer should be correct and match co-workers.*

### QUESTION:

An operator measures the raw influent at his plant to have a BOD<sub>5</sub> of 205 mg/L. After treatment, this BOD<sub>5</sub> is reduced to 18 mg/L. Calculate the Removal Efficiency of BOD<sub>5</sub>.

$$\begin{aligned} &= 91.122\% \\ &= \frac{[205 - 18] \times 100\%}{205} \\ &= 91.122\% \end{aligned}$$

*The green formula sheet reads:*

# Upcoming Training

Check out these upcoming training opportunities:

Register online at: [AWWOA.CA](http://AWWOA.CA)

## February - March - April 2024

### Biological Nutrient Removal - in Calgary

February 12-13, 2024 - Cost \$460 (\$560 Non-members) - 1.2 CEU's

### Process Control: Intermediate - in Edmonton

February 12-13, 2024 - Cost \$460 (\$560 Non-members) - 1.2 CEU's

### Dissolved Air Flotation - in Calgary

February 15-16, 2024 - Cost \$460 (\$560 Non-members) - 1.2 CEU's

### Risk Management in W&WW Treat. Systems

February 15-16, 2024 - Cost \$460 (\$560 Non-members) - 1.2 CEU's

### Level III/IV Water Distribution Certification Preparation - in Edmonton

February 20-21, 2024 - Cost \$460 (\$560 Non-members) - 1.2 CEU's

### Level III/IV Wastewater Collection Certification Preparation - in Edmonton

February 22-23, 2024 - Cost \$460 (\$560 Non-members) - 1.2 CEU's

### Your Wastewater Lagoon: The Ins and Outs of Design and Operation - in Edmonton

March 25-26, 2024 - \$450 (\$560 Non-members) - 1.2 CEU's

### Flowmeter Fundamentals - in Edmonton

March 27, 2024 - \$350 (4350 Non-members) - 0.6 CEU's

### Pumps & Hydraulics Principles for Operators - in Calgary

April 2 & 3, 2024 - Cost \$460 (\$560 Non-members) - 1.2 CEU's

## Connect with AWWOA

Toll free: 1-877-454-7745 Local: 780-454-7745

Email: [info@awwoa.ca](mailto:info@awwoa.ca) Website: [awwoa.ca](http://awwoa.ca)

Visit us on [Twitter](#), [Facebook](#), [LinkedIn](#), [YouTube](#)



## Save the Date

**March 11-15, 2024**

### Annual Operators Seminar

Banff Park Lodge

Banff, AB

**June 17, 2024**

### Annual Golf Tournament

Innisfail Golf Club

Innisfail, AB

**November 13-15, 2024**

### Water Week Conference

DoubleTree by Hilton Hotel

Edmonton, AB

## Online Training Courses

AWWOA offers certification preparation courses online. Work from anywhere with Internet access and manage your training for a time that works for you!

The following courses are available for online study:

- Entry Level Training
- Small Water Systems
- Small Wastewater Systems
- Level I Cert Prep
- Level II Water Treat. Cert Prep
- Level II Water Dist. Cert Prep
- Level II Wastewater Treat. Cert Prep
- Level II Wastewater Coll. Cert Prep
- Level II/IV Water Treat. Cert Prep
- Level III/IV Water Dist. Cert Prep
- Level III/IV Wastewater Coll. Cert Prep
- Level III/IV Wastewater Treat. Cert Prep

PM 41796530

Alberta Water & Wastewater  
Operators Association

11318 119 St NW  
Edmonton, AB T5G 2X4