



A Newsletter for Water and Wastewater Treatment Plant Operators!

THE WATERDRUM

September 2017

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Exam Prep Week Windsor

St. Clair Centre for the Arts
201 Riverside Dr. W, Windsor, ON
November 6-10, 2017



Exciting News!!! AWWAO is also hosting a Southern
Exam Prep Week in Windsor, ON.
(November 6-10, 2017)

We will be offering:

- OIT Water Treatment and Distribution or,
- Exam Preparation Level 1,2, 3, & 4 WT or,
- Exam Preparation Level 1 & 2 WWT

Earn **CEUs** as you increase your skills!
Deadline to register is **October 4, 2017**

Sponsored by:



Health
Canada

Santé
Canada



Indigenous and
Northern Affairs Canada

Affaires autochtones
et du Nord Canada





The meaning of the AWWAO logo as described by the artist:

- Tree—represents Mother Earth*
- Sun—brings Life to our Environment*
- Eagle—watches over the Environment*
- Sky—ensures the Cycle of Water*

ABOUT US

The Aboriginal Water & Wastewater Association of Ontario is an information source for water environment and Operator training and certification issues and technology. AWWAO's members include professionals from Ontario First Nations, Environmental Health Officers, Tribal Councils, Municipal Suppliers and some Government Agencies.

AWWAO is dedicated to the transfer of information and concepts regarding all areas of the water environment. As members of the American Water Works Association (AWWA), the Ontario Water Works Association (OWWA), the Water Environment Federation (WEF) and the Water Environment Association of Ontario (WEAO), we provide an invaluable network for those involved in water and wastewater industry. AWWAO, through a partnering agreement with Keewaytinook Okimakanak and Health Canada co-operates and liaises with the above noted associations, and all provincial and federal government agencies. AWWAO has a volunteer seat on many of the various association's committees.

AWWAO offers its members the opportunity to:

- ◆ Be updated and informed about issues that affect the water environment.
- ◆ Interact with persons in various fields of water expertise.
- ◆ Promote concerns of the membership through a collective voice.
- ◆ Exchange information and ideas to other members, the public and Chiefs and Council.

To date, the AWWAO consistently rank the training and certification of Plant Operators as its top priority. The attainment of Certification is widely recognized as essential to performing a good job, at a high level, in the water and wastewater treatment plant operations, and an indicator of a responsible and contributing community member.

MEMBERSHIP

\$100.00 Membership Fee for First Nations Water and Wastewater Treatment Plant Operators per operator. This Membership entitles the Operator(s) to the AWWAO Newsletter, monthly bulletin, Annual Report and the Annual General Assembly and Training Conference cost reimbursement, if applicable.

\$200.00 Membership Fee for Non-Operator, Public Works Management, Administration and Management of a First Nation or Non-First Nation. This Membership entitles the Member to the AWWAO Newsletter, monthly bulletins, Annual Report and invitation to the Annual General Assembly and Training Conference.

Please Print

Name: _____

Name: _____

Name: _____

Name: _____

First Nation/Business: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____

VISION

Our Vision is to be the Association that best understands and satisfies the training, education, certification and licensing needs of Operators of Ontario First Nations. Our dedication to supporting Operators touches not only health, but safety, spirit and empowerment ... most of all knowledge.

OBJECTIVES

- ◆ To act as a voice and forum for First Nation Plant Operators in Ontario, publish a newsletter, promote communications and networking among Plant Operators and other persons interested in AWWAO's objectives;
- ◆ Promote the importance of a safe and potable water supply and the highest standard of wastewater operations;
- ◆ Promote the development and delivery of continuing education and training programs for Plant Operators and others involved in water and wastewater treatment;
- ◆ Promote the importance of technical training in maintaining and upgrading the Operator's knowledge of proper water and wastewater operation and maintenance requirements;
- ◆ Promote the importance of involving qualified Operator's in the design, construction or upgrading of water and wastewater treatment plants;
- ◆ Promote the importance of proper training, certification and licensing of Operators;
- ◆ Promote the importance of enhanced lab testing of potable water and monitoring of wastewater effluents; and
- ◆ Promote the importance of establishing an effective Operations & Maintenance Management Plan to ensure proper care is performed for the assets.

MISSION STATEMENT

We are a member oriented, non-profit Association, providing province-wide and year-round high-quality services and an annual forum for the First Nations Water and Wastewater Treatment Plant Operators, allowing for networking opportunities at the same time. We are committed to providing high quality information on the water and wastewater industry through the quarterly newsletter. We are dedicated to promoting, preserving and protecting the water, natural resources and environment through the education, training and networking of the Ontario First Nations Water and Wastewater Treatment Plant Operators.

The Aboriginal Water and Wastewater Association of Ontario's newsletter is published quarterly by the AWWAO at 41C Duke Street, Box 340, Dryden, Ontario P8N 2Z1
Tel: (807) 735-1381 ext. 1660
E-mail: info@awwao.org

Advertising opportunities and/or submission or request of information, please contact the Association Coordinator.



Wahgoshig First Nation 2016/2017 AWWAO Water Taste Challenge Northern Cup Winner

The coveted Josephine Mandamin Northern Water Cup award was presented to Edward Black from Wahgoshig First Nation.

Formerly known as Abitibi Band of Abitibi Indians, Wahgoshig First Nation is an Algonquin community, the Wahgoshig people were known centuries ago as a nomadic group of hunter-gatherers, whose territory straddled a large segment of what is now Northeastern Ontario and Northwest Quebec. Our First Nation membership consists of Algonquin and Cree descent mainly.

The Aboriginal Water and Wastewater Association Chairperson Ian Fortin, presented the cup on behalf of the association.



Southern Exam Prep Week 2017



Aboriginal Water and Wastewater Association of Ontario is pleased to announce that we will be having a one week Exam Prep Week on, **November 6-10, 2017**, held at St. Clair Centre for the Arts, 201 Riverside Drive West ,Windsor, ON. Course tuition, exam fees, accommodations breakfasts, luncheons and shuttles services will be covered. Please note that this location is within walking distance of Caesars Windsor Casino, Adventure Bay Water Park, many restaurants and downtown shops.

Selected Course (s):

Title: Exam Preparation OIT Water Treatment and Distribution

What will be covered?

- ◆ Drinking water regulations, standards and guidelines
 - ◆ Examination writing strategies
- ◆ Basic math, chemistry, hydraulics and electricity
 - ◆ Water treatment, distribution and equipment
 - ◆ Safety and record keeping

CEUs: 2.8

Title: Exam Preparation Level 1 & 2 Water Treatment

What will be covered?

- ◆ Examination writing strategies
 - ◆ Regulatory compliance
 - ◆ Water sources and characteristics
- ◆ Water quality sampling, monitoring and analysis
- ◆ Coagulation, flocculation, clarification and filtration
 - ◆ Disinfection and other treatment processes
 - ◆ Safety and records keeping

CEUs: 2.5

Title: Exam Preparation Water Treatment Level 3-4

What will be covered?

- ◆ Exam writing strategies
- ◆ Regulatory compliance
- ◆ Water Sources and Characteristics
- ◆ Water Quality Sampling, monitoring and analysis
- ◆ Coagulation, flocculation, clarification, and filtration
 - ◆ Disinfection and other treatment processes
 - ◆ Mathematics, formulas
 - ◆ Safety and records keeping.

CEUs: 2.6



Southern Exam Prep Week 2017

Title: Exam Preparation Wastewater Treatment Level 1 & 2

What will be covered?

- ◆ Exam writing strategies
- ◆ Regulatory compliance
- ◆ Math and chemistry for wastewater treatment
- ◆ Wastewater treatment processes including activated sludge, trickling filters and rotating biological filters
- ◆ Safety and records keeping

CEUs: 2.8

Upon successful completion of the attendance and testing requirements, each participant will be issued a certificate in accordance with regulatory requirements.



Can be found at www.awwao.org or
for further information please contact
Sara Campbell (AWWAO Coordinator)
807-735-1381 ex 1660
or email at:
info@awwao.org



**Registration forms must be
completed by
October 4, 2017**



WWOTC provide high quality water and wastewater training to an average of 3000 operators per year over about 400 training events across Canada. They are committed to operational skills development and keeping current with emerging issues.

Sponsored by:



Health
Canada

Santé
Canada



Indigenous and
Northern Affairs Canada

Affaires autochtones
et du Nord Canada



Ontario's Water Conference & Tradeshow

The Aboriginal Water and Wastewater Association of Ontario attended the Ontario Water Conference & Tradeshow in May 2017 in Niagara Falls

AWWAO shared a booth at the Trade Show with the Ministry of the Environment and Climate Change (MOECC) and with the Keewaytinook Centre of Excellence (KCE).

The Conference continues to be the premier drinking water event in Ontario, consistently attracting over 900 delegates from all areas of our industry: operators and owners, manufacturers and suppliers, consultants, academics and regulators. The Trade Show had more than 100 exhibitors representing the manufacturers and suppliers of products and services to the water industry. This was a great opportunity to network, and keep informed about technical, regulatory, and equipment development which affect the industry.



Northern College Hosts 14th Annual Traditional Pow Wow



TIMMINS, ON: The 14th annual Northern College Traditional Powwow was held at the Timmins Campus Board Members Ian Fortin and Gary Wheatley attended the pow wow on behalf of AWWAO. The powwow featured performances by drums, dancers and singers from throughout Ontario and beyond, and highlighted customary aspects of Aboriginal tradition.

The theme of this year's powwow was Honouring the Red Road. Traditional teachings describe the Red Road as a guiding path that aligns with positive values, including wisdom, love, courage, respect, humility, honesty and kindness. Teachings represent the Red Road as the centre stem of an eagle feather, an item which is central to many local Aboriginal ceremonies and activities.

“When we walk the good Red Road, we honour our traditions, our Elders, our name, our children, our parents, and mother earth,” says David Faries, Elder at Northern College. “That is why the eagle feather is a sign of hope. It reminds you to stay on the centre stem, where the good life is. It also reminds you that if you stray from the road – and you will, because you are human – you can always return to the road and the good life.”



Local students gather in Timmins for Protecting Our Water Pow Wow



River Christie-White dances at Mountjoy Historical Participark on Friday during the fourth annual Timmins High & Vocational School pow wow, Protecting Our Water. Students from various school boards and towns braved the rain to attend the event. Christie-White is from Oneida Nation of the Thames, near London, Ont.



By Emma Meldrum

TIMMINS - The Protecting Our Water Pow Wow had no shortage of water.

The fourth annual event, hosted by Timmins High & Vocational School in partnership with O’Gorman High School and Kiskinohamatowin, witnessed plenty of rain and was held at Mountjoy Historical Participark, next to the Mattagami River, which is currently under a flood watch.

“Water is sacred for First Nations people,” said Chad Boissoneau, who spoke on behalf of Mattagami First Nation’s chief and council.

“Water provides life, provides food, it cleans. Water is a way of life for everybody, Native or non-Native.”

The pow wow, which was held Friday, gathered elementary, junior and high school students from around Timmins, including Cochrane, Iroquois Falls and Matheson.

Jennifer Henderson, an aboriginal youth liaison officer for Central District School Board Ontario North East, was a member of the organizing committee.

“The goal of our pow wow today is to bring out youth, elders and every age of people in between, no matter what nation they come from or what their background is. We hold this powwow every year as a celebration of culture,” said Henderson.



Cont'd



Clean water is near and dear to his heart.

Melanie Hannah, another committee member who also works at Misiway Health Centre, said that “the rain is very appropriate,” considering the students chose to recognize water at the pow wow.

Ian Fortin, who chairs the Aboriginal Waste and Wastewater Association of Ontario (AWWAO), had a booth set up to educate students.

AWWAO represents water plant operators across the province.

“We do exam prep courses, things of that nature, to get the operators ready to write their provincial certification. Although we're not governed under provincial laws, we try to follow them as a best practices guideline,” said Fortin.

“As the planet becomes more and more populated, it's unfortunate, but we're polluting our own water system.

“Water plant operators, we're the boys behind the scene, but when you turn on your tap and get clean, potable water, it's because of our guys.”

AWWAO holds an annual competition, called the Water Taste Challenge, which grades water from member communities based on taste, colour and appearance.

Local First Nations communities such as Mattagami, Wahgoshig and Temagami are members of AWWAO.



Water Walkers' Visit Walpole Island

AWWAO Board of Director, Stacey Kicknosway had the opportunity to see the "Water Walk" in his home town, Walpole Island First Nation.

Nokomis (Grandmother) Josephine Mandamin said "We're doing it for the water,"

"The water is going to be very expensive... we want people to afford it. We've also got a petition out for the water, so that water can be a human right. It's a right for everybody, not just for rich people like Nestle or whoever."



Mandamin added: "We're walking for the water and we're doing a peaceful walk. We don't get political, but sometimes we're forced to."

Mandamin said they are hoping to end up in Stoney Point by the end of the day on Thursday. "We can't stop the water because once it starts moving in the morning it has to keep moving," she said.

"We pass it from one to the other, carefully not turning back with it... because if you turn back with it the current and rivers will stop slowing. We just got to keep moving. The staff is there for the protection of the waters, the men carry the eagle staff. If there is no men, they will carry both the staff and the water."

Mandamin has been leading similar walks for many years, and the current one is set to be her last.



The Water Walkers reached Walpole Island at around 11 a.m. on Wednesday.

After the walkers arrived, they were welcomed at Bkejwanong Kinomaagewgamig where a prayer, song, and a round dance was held for them.

Walpole Island officials say the walkers explained that they've been walking for almost 50 days and still have 50 more days to walk.

"It was a wonderful experience as this is Grandma Josephine Mandamin's final water walk," Walpole Island officials posted on social media.

"The final message that was given from the walkers was to be aware, respect, and to take care of our water as it is living just like us."



AWWAO CERTIFICATION WEEK

AWWAO held a one week certification and CEU session (March 6-10, 2017) in Hamilton for First Nation Operators culminating in the OWWCO exam. There were 32 operators in total. The WWOTC provided the venue and instructors for the certification training.



AWWAO CERTIFICATION WEEK

The courses and instructors for the certification week were: Dave Russell, Zobia Jawed and Mike Campbell.



Zobia Jawed instructed Exam Prep WT Level I & 2



Dave Russell instructed Exam Prep WWT Level I & II



Mike Campbell instructed Exam Prep OIT WT & WD



AWWAO CERTIFICATION WEEK

Congratulations to Jamie Oakes and Liz Brant for winning the \$50.00 gift cards. Stacey Kicknosway presented the gift cards.



Stacey Kicknosway and Jamie Oakes



Stacey Kicknosway and Elizabeth Brant



Woodward Avenue Water Treatment Facility

The First Nation Operators that were enrolled in the WT I & II took a guided tour of the **Woodward Avenue Water Treatment Facility**.

Lake water enters an intake pipe and is pumped to the Woodward Avenue Water Treatment Facility. The water treatment process includes:

- ◆ pre-chlorination
- ◆ screening
- ◆ clarification by means of coagulation with polyaluminum chloride
- ◆ flocculation by mechanical mixing
- ◆ sedimentation
- ◆ filtration using granulated activated carbon in the filters to remove taste and odour
- ◆ chlorine and ammonia added to the filtered water to bring the combined chlorine residual to approximately 2.2 - 2.5 milligrams per litre
- ◆ hydrofluosilicic acid ([fluoride](#)) added to the drinking water to promote dental health

The water treatment plant has a rated capacity of 909,000 m³/day (200 million gallons per day) and operates between one quarter and one third of its capacity.



Woodward Avenue Water Treatment Facility (cont'd)

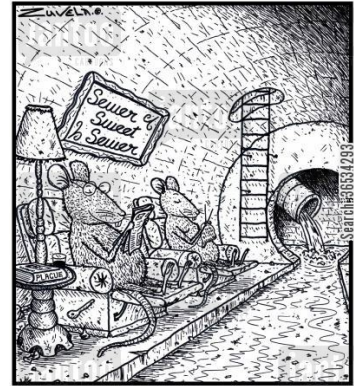


Woodward Wastewater Treatment Plant

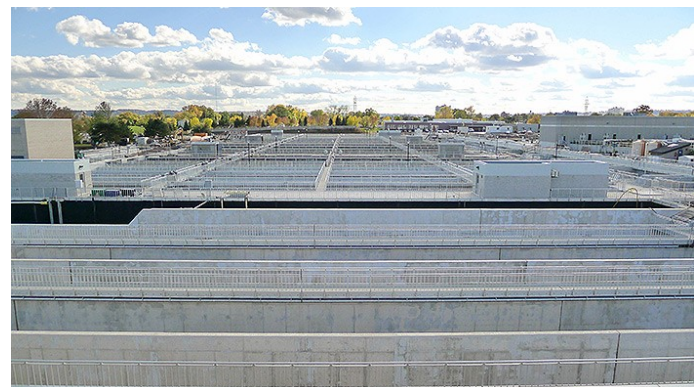
The First Nation Operators that were enrolled in the WWT I & II took a guided tour of the **Woodward Wastewater Treatment Plant**.

The Woodward Avenue Treatment Plant has an average daily capacity of 409 million litres. The facility is a secondary conventional activated sludge plant with sludge dewatering and digestion. There are five wastewater treatment processes used at this plant, including:

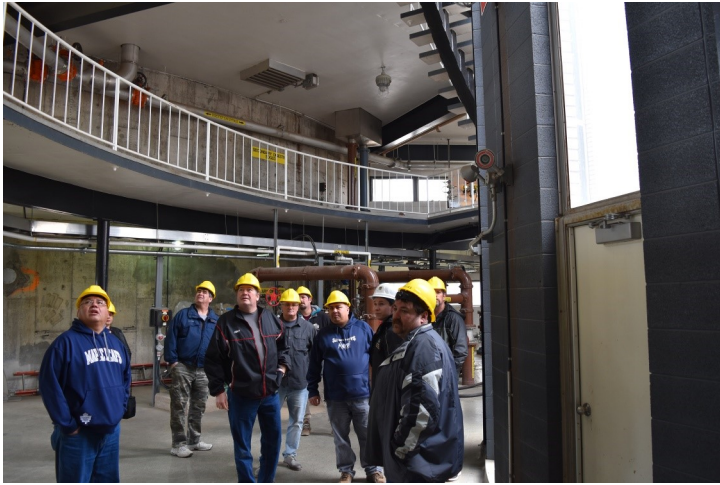
- ◆ Preliminary treatment
- ◆ Primary treatment
- ◆ Secondary treatment
- ◆ Effluent disinfection
- ◆ Sludge digestion
- ◆ The Woodward Avenue Treatment Plant digester complex treats:
 - ◆ primary treatment sludge
 - ◆ thickened secondary activated sludge



This complex has five primary and three secondary anaerobic digesters. The digestion process uses a heated biological process to reduce the volume of organic matter and destroy pathogens. This process produces methane gas and biosolids. The methane gas is used as a fuel or converted into electricity. The treated biosolids, after being conditioned, are approved for use on agricultural land.



Woodward Wastewater Treatment Plant (cont'd)



What do you call a sewer expert?
A connoissewer



Hamilton Water and Wastewater Treatment Plant-Earth Globe



During the tour operators were able to see Hamilton's Water and Wastewater Treatment Plant-Earth Globe.

Located in Hamilton's Woodward Avenue Facilities, Waste and Wastewater Treatment Plant sits the massive globe with the earth's major continents painted on it.

This local landmark is widely recognizable to many living in and around the Golden Horseshoe region. Known to many as the giant round tank painted like a globe, with "Hamilton" placed prominently on the map in 1.2-meter high letters. It's literally "full of gas", methane to be precise. It collects methane gas from the digestion of thousands of tonnes of sewage sludge at the city treatment plant.

Board of Directors

Ian Fortin - Chairperson

Wes Morriseau - Vice Chairperson

Gary Wheatley - Secretary

Steve Laronde - Treasurer

Jake Beedie - Director

Jason Fox - Director

Stacey Kicknosway - Director

Phil Tangie - Director

Sara Campbell - Coordinator

