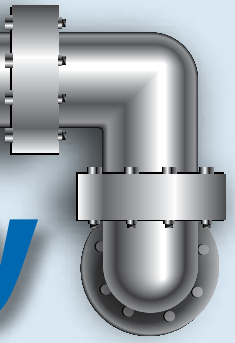




Alberta Utility Operator



37th AWWOA Operators' Seminar March 12 – 16, 2012

The Alberta Water & Wastewater Operators Association is once again pleased to invite your attendance at the Annual Operators' Seminar held at the Banff Park Lodge, 222 Lynx Street, Banff.

The Seminar offers an entertaining and informative program and over 150 displays. A Technical Program featuring 25 - 30 technical presentations takes place Wednesday, March 14 and Thursday, March 15.

The following workshop takes place Friday from 9:00 to 12:00 at the Banff Park Lodge:

The Emergency Management Framework for Municipalities

Presenter: Bruce Mackenzie, Field Officer, Central Region, Alberta Emergency Management Agency, Red Deer.

This session focuses on municipal and provincial emergency management responsibilities, agency and individual roles and responsibilities, orientation to a municipal Emergency Operation Centre, and a basic overview of the Incident Command System.

Events included with your registration begin on Monday, March 12th:

- **Delegate Registration in the Lobby** 12:00 Noon
- **Trade Show Displays Open for Viewing** 1:00 PM
- **The Wine and Cheese Reception** 6:30 PM

Other activities include six pre-seminar workshops held at Banff Rocky Mountain Resort. These require separate registration.

Brief pre-seminar workshop titles and descriptions follow.

Please check the website (awwoa.ab.ca) for additional information and to register.

1. Municipal Overview of Rehabilitation Strategies of CIPP Lining – Sanitary & Storm Mains, Service Laterals and Manholes

Monday, March 12, 2012, 8:30 AM - 12:00 Noon

Presenters: Brett Smith, IVIS Inc. and Norm Grexton, NGInc.

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What is doable with CIPP Trenchless Technology?
This workshop uses case studies that feature Open Cut Rehabilitation Projects converted to the CIPP “Trenchless” methods.

#2. Drinking Water Safety Plans

Monday, March 12, 8:30 AM - 12 Noon
Presenters: Donald Reid, PhD., P.Biol., Drinking Water Specialist, Alberta Environment and Water; Alvin Beier, RET, Drinking Water Operations Specialist, Alberta Environment and Water; and Paul Yardley, Performance Partnerships Limited

This half-day training course will provide Operators of small and medium sized water and wastewater facilities and systems with the knowledge and tools to produce Drinking Water Safety Plans, and completing Alberta Environment’s risk assessment template.
[Laptop required.](#)

#3. Potable Water Reservoir Design, Operation & Maintenance

Monday, March 12, 1:00 PM – 4:30 PM
Presenters: Bob Hawboldt, Ph.D., P.Eng., Fluid Dynamics Specialist, Associated Engineering; Andrew Stevenson, Group Manager, ATAP Infrastructure Management Ltd.

This workshop will provide Water Operators with information on potable water reservoir design, water quality regulations and monitoring techniques, problems associated with water storage, preventative operations and maintenance methods of reservoir disinfection and cleaning, as well as daily reservoir operations. Various methods of disinfection, safety practices, seasonal changes and the prevention of short-circuiting/dead zones will be covered.

#4. Operation and Maintenance of Vacuum and Pressure Membranes

Monday, March 12, 1:00 PM – 4:30 PM
Presenters: Jessica Williams, P. Eng., GE Water & Process Technologies; and Garry Drachenberg, P.Eng., Associated Engineering

This workshop will examine various applications for vacuum and pressure membrane systems including drinking water, MBR for wastewater treatment and for tertiary wastewater treatment. As well, there will be a focus on operations and day-to-day maintenance.

#5. Biological Nitrogen and Phosphorus Removal and Making it Work in Your Facility

Tuesday, March 13, 2012, 8:30 AM – 12:00 Noon
Presenter: Gerry Stevens, A.Sc.T., WWTP Operator IV, AECOM, Kelowna

This workshop will cover the theory of nitrification and denitrification, the theory of biological Phosphorous removal, requirements for Volatile Fatty Acids (VFA) and sludge fermentation for VFA, operational issues with fermenters, and optimization of the BNR process.

#6. Fusion Methods for High Density Polyethylene Pipe (HDPE)

Tuesday, March 13, 2012, 8:30 AM – 12:00 Noon
Presenters: Gio Solinas, Plainsman Mfg. Inc. and Norm Grexton, NGInc.

As HDPE Pipe becomes the most common choice of pipe material for regional water and wastewater lines, the operator needs to understand the fusion methods for joining pipe lengths and to attach service line pipes. Certified fusion experts will provide hands on demonstrations of Socket, Butt and Electrofusion methods. Participants will have the opportunity to try their hand at one or more fusion methods.

CONTINUING EDUCATION UNIT INFORMATION FOR OPERATORS’ SEMINAR

Attending Tuesday, Wednesday and Thursday:	0.9 CEUs
Attending a Pre-Seminar Workshop:	0.3 CEUs each (separate pre-registration)
Attending Friday’s Workshop:	0.3 CEUs

(NOTE: you must attend to receive the CEUs)

In Times of Recession What Keeps you Grounded? The Old Operator

With the near collapse of the North America and World economy in 2008, many folks have been left reeling, rebounding between debt and a shrinking wage. Prior to 2008, many people enjoyed unbridled spending, lending institutions encouraged the loan of whatever amount of money you wanted, and businesses offered no installment payment for one year. Many folks were buying every kind of toy available. Whatever gave people the idea they deserved, or were owed, whatever they wanted?

My daughters will tell you, from the time they were small, I always gave them the “needs and wants” speech. Come to think of it, I still do, today. If you can separate out the things you need verses the things you want, your bank balance and peace of mind will always be in the black. When you were growing up, do you think it would have been good for you and wise for your parents to have given you everything you wanted? Of course not! This principle of “needs and wants” still holds true today, whether you are a child, parent, business or government.

Some folks will tell you we are in “hard times.” Our invested money has been lost, toys have had to be sold, vacations cancelled, or home improvements dropped. Just meeting basic needs has become a challenge. I have been heard too many times saying, “Money talks. All it says to me is goodbye.” But for the average family, this is so true as most of what we earn goes out just to meet every-day needs. We have been faced with a very abrupt reality check. People are now willing to work longer hours, welcoming any overtime that comes their way, and considering a possible second job. If your spouse is not working he or she may need to go to work. What a change from the time prior to 2008.

So, when hard times come, what keeps you grounded and afloat? Before money, investments, motorcycles, boats and fancy cars, I will take a family that loves and cares for me, a family where I am placed far above material goods. At the top of my list is a wife (spouse) who trusts, respects and loves me. Newell Hillis back in 1858 had the foresight to realize that “hurry, worry and debt” are three enemies of happiness. Having people who love you, and you returning

that love is another wonderful way to stay grounded and supported in hard times. It is said that love is the only thing I know you get more of by giving it away. I may seem to dwell on love, but I believe love is a cornerstone of real happiness and peace in this world. Love is what makes two people sit in the middle of the bench when there is plenty of room at both ends.

Another thing that will help keep you grounded in hard times is having real friends. They are the folks who are with you when tragedy strikes, sometimes never saying a word, but ready for you to lean on. They remember the little occasions, not just the big ones. Aristotle, in 384 BC, explained friends as a single soul dwelling in two bodies. There are lots of people who want to ride with you in the limo, but a friend is the one who will take the bus with you when the limo breaks down. I believe we will not learn much from one another until we stop shouting at each other, until we speak quietly enough so that our words can be heard as well as our voice. A true friend hears our words and our voice.

As far
as I can see, love,
family, a real friend,
and a positive, optimistic
outlook on life, can
begin to fill the void

World statistics from Maclean’s magazine have identified that if you have a roof over your head, clothes on your back, and a meal a day, you are in the top 95% of the richest people in the world. Many Canadians have three meals plus per day, two or more cars per family, a wardrobe that fills more than two closets, beautiful homes and much, much more. Why does it take so much to fill the human need? Well, I know one thing, it’s all just stuff – material goods – and when hard times come, the fancy car in the garage for which we can’t afford gas does not go very far in consoling us.

There are probably many other things that can help us all in hard times, but as far as I can see, close to the top of the list is love, family, friends and a positive outlook. Everyone has a gift for something, even if it is the gift of being a good friend. If I could reinvent the alphabet I would put ‘U’ and ‘I’ together. An old toast I remember went like this, “Old friends are scarce, new friends are few, here’s hoping I find one of each in you.” At least that’s how I see it.
Doug Thorson (The Old Operator)

ANNUAL GENERAL MEETING

AWWOA's annual general meeting is to be held on Wednesday, March 14, 2012.

NOTICE OF RATIFICATION OF PROPOSED AMENDMENTS TO THE BYLAWS

Proposed amendments to the bylaws are in blue text.

At the 2012 AWWOA Annual General Meeting, the following amendments changing the Association's Bylaws will be voted on:

MOTION: Move to change and update the Bylaws as per the following (all subsequent numbering will be updated):

Section 1.1

1.1.1 The name of the association is the Alberta Water **and &** Wastewater Operators Association, which may also be known or referred to as AWWOA.

Section 1.2 The Bylaws

1.2.1 The following articles set forth the Bylaws of the Alberta Water **and &** Wastewater Operators Association.

Article 2 - Definitions and Interpretation

Section 2.1 Definitions

2.1.1 "Act" means the Societies Act R.S.A. 2000, Chapter S-14 as amended, or any statute substituted for it.

2.1.2 "Association" means the Alberta Water **and &** Wastewater Operators Association.

Article 4 - Membership

Section 4.1 Categories

4.1.1 Membership shall include Full Members, **Associate Members**, Life Members, and Honorary Life Members.

a) Any person directly involved with the **daily** on-site operation of water treatment,

wastewater treatment, water distribution or wastewater collection may apply to become a Full Member.

- b) Any person not directly involved with the on-site operation of water treatment, wastewater treatment, water distribution or wastewater collection may apply to become an Associate Member.

Section 4.2 *Rights, Privileges and Obligations*

4.2.1 All members of the Association, whose membership dues are paid in full, are entitled to vote at Member Meetings and hold elective office except that:

- a) Life and Honorary Life Members are only eligible to be nominated for and elected to the single seat on the Board reserved for Life and Honorary Life Members.
- b) Associate Members are not entitled to be nominated for or hold elective office.

Article 6 - Nominations and Elections

Section 6.1 *Specific Rules*

- 6.1.1 All Voting Members will be provided with a ballot for the election of Directors.
- 6.1.2 All Full, Life and Honorary Members in good standing, are entitled to hold elective office (refer to 4.2.1).



Closer To Home Project Takes a Big Step Forward

In November 2011, it was announced that the Rural Alberta Development Fund Board of Directors approved \$2.4 million in funding towards a \$3.25 million province-wide project that would focus on succession, training and community capacity initiatives to attract and retain qualified water and wastewater operators.

This project will be led by the Alberta Water & Wastewater Operators Association (AWWOA). The Closer to Home – Smaller Centres Water and Wastewater Capacity Renewal Initiative will address the need for innovation and community-based solutions, driven by the high retirement-related turnover of skilled water and wastewater operations personnel.

The project will incorporate three strategies: education, engagement and empowerment. The project framework focuses on succession planning, recruitment, retention, training, mentoring, outreach support, ongoing competency development and community education. Additional information on this initiative can be found online at www.awwoa.ab.ca under the 'issues' tab.



This project received financial support from Rural Alberta Development Fund. Visit radf.ca

Math Corner

Thanks go out to Dave Noack for submitting the problems for Math Corner. Answers will be printed in the following newsletter.

New Problem:

Given the information below, calculate the filter media volume in m^3 and the number of bags required if the sand media is delivered in 1 ft^3 bags?

The sand filter is 3m long by 3.5 m wide and the depth of the media is to be 1.8 m.

Math Corner Problem from issue 15: Given the information below, calculate the chlorine demand in this plant:

Nov 4 Chlorine scale reading 34.4 kg

Nov 5 Chlorine scale reading 31.8 kg

Nov 4 plant flowmeter 597432 m^3

Nov 5 plant flowmeter 598212 m^3

Chlorine residual avg 0.9 mg/l

Answer: Chlorine scale calculation to find the dosage expressed as kg/day =

Day one reading - day two reading = $34.4 - 31.8 = 2.6 \text{ kg}$ of Chlorine was used.

Plant flow calculation to find the volume of water treated expressed as m^3/day =

Day two reading - day one reading = $598212 - 597432 = 780 \text{ m}^3 = .780 \text{ ML}$ of water was treated.

Remember: $\text{mg/l} = \text{kg/ML}$

Dosage: $2.6 \text{ kg} / .780 = 3.3 \text{ kg/ML} = 3.3 \text{ mg/l}$

If 3.3 mg/l of Chlorine was dosed and .9 mg/l of chlorine remains as residual the difference between the two will be the demand.

Dosage - Residual = Demand $3.3 \text{ mg/l} - .9 \text{ mg/l} = 2.4 \text{ mg/l}$

The purpose of the Alberta Utility Operator Newsletter is to provide a forum for communication and networking among AWWOA members in the areas of new technologies and research, regulatory concerns and changes, outstanding service and other Association concerns. The editors welcome suggestions for content from the membership.

The Alberta Utility Operator Newsletter is published three times a year by the Alberta Water and Wastewater Operators Association with assistance from Alberta Environment.

Deadlines for submission are in January, April and August.

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Views expressed in The Alberta Utility Operator are those of the writers. Unless otherwise stated, articles should not be interpreted as policy or regulation and do not necessarily reflect organizational or editorial policy.

Charitable Donations Report

George Washington, first US President back in 1753, with reflection on his career said, "Observe good faith and justice toward all nations, cultivating peace and harmony with all." In the early 1960's, Lyndon B. Johnson, 36th US President said, "There are no problems we cannot solve together, and very few we can solve by ourselves." If I may, kindness can become its own motive; we are made kind by being kind.

In reflection, while I do not feel right about being pompous, I feel we can all take satisfaction that in this past year, 2011, we have helped cultivate peace and harmony in third world countries. We have assisted in cultivating peace by satisfying a basic human need of clean water and sanitation to children, parents and teachers in Kenya and Bolivia. I believe that when we solve problems together, it benefits us all. First, we have saved lives and improved the daily health of many children and parents. Second, in working for others, we have become kinder people. The AWWOA and all its members is a better organization for partnering with Water For People Canada and The Water School in helping others who have not been blessed with all the benefits we have in Canada.

Every day we are each given small opportunities to bring someone joy that can make a huge difference in a life. Over the past ten years, the charitable donations from AWWOA members have literally helped thousands of men, women and children to enjoy a more fruitful and bountiful life through clean water and sanitation. I would like to thank all our AWWOA members and Suppliers for your generous spirit through 2011. All the men, women and children who have benefited from your generosity don't know who you are, but rest in the comfort that real generosity is doing something for someone.

In August of 2011, Nancy McAteer of our AWWOA Executive had an opportunity to join the Water School people and visit some of the water projects in Kenya. Nancy was kind enough to

provide us with a short review of her trip.

WATER SCHOOL TRIP TO KENYA

On October 15, 2010, I was fortunate to embark on a journey to Kenya, Africa. The trip was organized by the Water School as a chance for AWWOA members to get a first-hand look at the projects our monies have supported. The funds have been raised through our Charitable Donations Committee and the generosity of our members and supporters. The tour started in Nairobi, Kenya which was our home base for visiting the four different projects we toured. The schools we visited varied in size and location. We visited a very rural school and also schools that were in slums and were much larger, some with enrollments of well over 1,000 students.

It is without question that the projects the Water School initiates have changed the lives of thousands of children and their families. As Canadians we are taught to appreciate the resources and life styles that we are raised with, but one can only truly appreciate these when they see what others have not. The children in the schools we visited welcomed us with bright smiles and glowing faces, most likely oblivious of what they were lacking. Providing a means for clean drinking water is not the only benefit to these projects. Education and support is an integral part of these projects in teaching the children a healthier life style.

Please continue your generous support to provide funding for future projects that are sponsored by the AWWOA.

Nancy McAteer

I would like to close by thanking everyone for your generous charitable donations in 2011 for these projects. May you abound in happiness, knowing there can be no happiness if the things we believe in are different from the things we do.

Doug Thorson



Upcoming AWWOA Courses

Entry Level Training	Edmonton	February 22 & 23, 2012
AWWOA Annual Seminar	Banff	March 12 – 16, 2012
Level II Certification Preparation	Calgary	March 21 & 22, 2012
Excel 2007 - Water and Wastewater Operator Training	Calgary	March 28 & 29, 2012
Standard Operating Procedures (SOP)	Calgary	April 3, 2012
Emergency Response Planning & Critical Analysis	Calgary	April 4, 2012
Chlorination Workshop	Red Deer	April 11, 12 & 13, 2012
Entry Level Training	Calgary	April 18 & 19, 2012
Water Well Operation and Maintenance	Edmonton	April 18 & 19, 2012
Water Well Operation and Maintenance	Peace River	April 25 & 26, 2012
Level I Certification Preparation	Edmonton	April 23 & 24, 2012 May 14 & 15, 2012
Small Water System Operations	Edmonton	May 7, 2012
Small Wastewater System Operations	Edmonton	May 8, 2012
Water Distribution Systems	Lethbridge	May 7 & 8, 2012
Wastewater Collection Systems	Lethbridge	May 10 & 11, 2012
Filter Surveillance	Calgary	May 9 & 10, 2012
Support Systems & Applied Math Certification Preparation	Calgary	May 16 & 17, 2012
Hydrant Maintenance and Repair	Edmonton	May 28 & 29, 2012
Hydrant Maintenance and Repair	Edmonton	May 31 & June 1, 2012
Water Meters: Selection, Installation, Testing and Maintenance	Edmonton	June 11 & 12, 2012
Water Meters: Selection, Installation, Testing and Maintenance	Edmonton	June 14 & 15, 2012
Water Distribution Systems	Red Deer	June 18 & 19, 2012
Wastewater Collection Systems	Red Deer	June 21 & 22, 2012