

# THE PIPELINE

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SWWA

Saskatchewan Water  
And Wastewater  
Association

Editor:  
Bob Turnbull  
www.swwa.ca

MAY 2010

3rd Edition

## SWWA Annual Golf Tournament

(Texas Scramble)  
Limited Space Available



Saturday, June 5, 2010 in Swift Current, Saskatchewan  
Chinook Golf Course  
663 – 6<sup>th</sup> Avenue South East  
Registration 9:00 a.m. & Tee-Off Times 11:00 a.m.

Cost: \$60.00 plus \$3.00 GST per person if payment & registration received by May 5  
\$75.00 plus \$3.75 GST per person if payment & registration received after May 5

(GST Registration # R124095159)

**Includes: 18 holes of golf, steak supper, and prizes**

Name: _____	Phone Number: _____
Address: _____	Employer: _____
Number Golfing: _____	Attending banquet only, not golfing (\$20.00 + \$1.00 GST) per person: _____
Handi-cap : _____	OR average score: _____

### *Banquet at the Golf Course*

Please make cheques payable to:  
**Saskatchewan Water and Wastewater Association**  
Submit this form and your cheque to:  
**SWWA**  
46 Windfield Road  
REGINA SK S4V 0E7

Thank you to ClearTech Industries Ltd., sponsor of the tournament beer cart

#### **Accommodations:**

**Holiday Inn Express** - 1301 North Service Road W, Swift Current, SK 306-773-8288  
When booking quote Group Block SWW. Reservations booked by May 3 get the group rate.

#### **Camping:**

Trail Campground – 701 11<sup>th</sup> Avenue NW, Swift Current, SK 306-773-8088

Carts will be available for rental on a first come first served basis. Half of a power cart rental \$19  
(pay by the seat).

**KGS** CONSULTING ENGINEERS  
**GROUP** &  
PROJECT MANAGERS

and

**WOLSELEY**  
Waterworks Group

Invite you come out and try your luck at winning a prize in our Hole-In-One contest!  
2 prizes of \$4,000 could be won at this year's tournament. See you there!

GOLF TOURNAMENT

# 2010 SWWA TRADESHOW

**NOVEMBER 3RD AND 4TH**

The 2010 SWWA Conference and Trade Show is rapidly approaching and it is now time to pre-book your booths. We will once again be using the Salon areas of the TCU Place. This large area enables us to offer space for 100 booths of equal size.

As always trade show registrations and details will be mailed to suppliers in early May. It is my suggestion to get your booths booked as soon as possible as the booth spaces are assigned on a first-come, first-served basis. Payment for reserved booths **MUST** be received within two weeks after confirmation has been sent from the SWWA Office. If payment has not been received during the two weeks the booth will be released back into the unreserved category.

This will again be another great opportunity for the conference delegates to learn firsthand about new and existing equipment and services provided to our ever changing Industry.

I personally look forward to seeing everyone in November.

Kelly Kish  
Director/Tradeshow Chair

## CORY McMAHON

Hi, my name is Cory McMahon and I have been a Director on the SWWA Board of Directors since 2005. I work for the Town of Biggar in the Water and Wastewater Division as the Facilities Operator. I greatly enjoy my career in this industry as it is ever-changing and you have the opportunity to work with the public.

I joined the SWWA Board of Directors because I wanted to help the operators of Saskatchewan especially those from the rural areas. I greatly enjoy when operators contact me with questions or concerns and I am able to help them or point them in the right direction to get answers to their questions. Being a member of the SWWA Board of Directors has been a very rewarding experience. I have had the opportunity to meet many people in the industry from all areas and have learned a great deal about the industry and all the people who work to make it run so *fluidly*. In 2008, the SWWA Board of Directors lost a wonderful member and Director who always ensured that everyone knew about the SWWA and the opportunities and information that it provided members. When he passed, I tried to take on that role and I hope that I have been able to do half as good a job as him.

Thank you for your support over these past 5 years. If you ever have any questions or concerns, please do not hesitate to contact me in Biggar.

**Randy Hanson**  
Regional Sales Manager



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# CONFERENCE 2010 ABSTRACTS

## TECHNICAL SESSIONS (TS)

**TS #1 Canada Wide Strategy for Management of Municipal Wastewater:** Effluent from wastewater systems represents one of the largest sources of pollution, by volume, in Canadian waters. Negative impacts to aquatic ecosystems and to Canadians from harmful substances in wastewater effluent have been documented domestically and internationally for over 20 years. In Canada, the management of wastewater effluent is subject to shared jurisdiction, which has led to inconsistent regulatory regimes and varying levels of treatment across the country.

Through various consultation processes, interested Canadian parties have consistently indicated the need for all levels of government to develop a harmonized approach to managing wastewater. In 2009 the Canadian Council of Ministers of the Environment (CCME) endorsed the Canada-wide Strategy for the Management of Municipal Wastewater Effluent (CCME Strategy). This strategy facilitates the development of a harmonized regulatory framework to manage wastewater effluent in Canada. To implement the CCME Strategy, the federal government committed to develop regulations under the Fisheries Act.

Environment Canada (EC) published proposed Wastewater Systems Effluent Regulations in *Canada Gazette, Part I*, on March 20, 2010. This was followed by a 60-day comment period. EC is currently in the process of finalizing the Wastewater Systems Effluent Regulations and continuing to work with provinces and territories. Presented by Amanda Lwanga-Thompson, E.I.T., Environment Canada; Thon Phommavong, P. Eng., Ministry of Environment.

**TS #2 Protecting Your Membrane Assets:** One of the most expensive assets, and the easiest to damage, in a high pressure membrane system are the membranes themselves. Within a few hours, thousands of dollars worth of membranes can be ruined, and will require immediate replacement to ensure the continued supply of high quality drinking water to customers. With the increased numbers of membrane facilities being installed around Western Canada, specifically in Saskatchewan, this has become an important issue.

This presentation will outline proven strategies that not only protect the membranes in a treatment plant, but improve performance while increasing their lifespan. The experience of operators from multiple installations in Saskatchewan will be presented, along with their lessons learned, and case studies of operating facilities. Special consideration of appropriate cleaning strategies and the

correct timing of cleaning will be examined. Presented by Sapphire Group.

**TS #3 Transient and Surge Related Pipe Bursts, Water Loss and Damage Prevention:** This paper will give an overview of transients or surges in a piping network and the resulting pipe bursts which are very common problems. Power or PLC failures, improper valve operation or pumps without adequate control valves cause rapid changes in liquid velocity in a pipeline. This velocity change – released as pressure – can destroy fittings, pipes, valves, instrumentation and pumps. Pressure waves travel the length of the pipeline from the offending device at constant speed until they meet a barrier where they are reflected and then strengthened by incoming waves. This causes transients or surges leading to “pipe burst” or equipment failure. Repair costs, possible litigation for third party damages, plus potentially significant cost of the lost water are extremely expensive. A variety of mitigating solutions that can significantly decrease a system’s number and frequency of pipe bursts will be discussed, and a brief explanation of the applications and intricacies of the associated equipment will be outlined. Presented by Brad Clarke, Singer Valve Inc.

**TS #4 The New Wastewater Strategy - The Analytical Perspective (unraveling the mystery):** This session will examine the new testing requirements under the CCME Canada-wide Strategy for the Management of Municipal Wastewater Effluent. New tests that operators have not had to carry out in the past such as carbonaceous BOD and bioassays will be explained. Information will be provided to assist operators with proper sampling and handling techniques to ensure sample integrity is not compromised, followed by a discussion of what the results mean. Also to be discussed are the various reporting and data management options available and questions that all operators should be asking their lab. Presented by Annette Woodroffe, ALS Laboratory Group.

**TS #5 Sequencing Batch Reactors (SBR):** Activated sludge is the most widely used wastewater treatment process around the world. The process was originally developed as a Sequencing Batch Reactor (SBR) in Manchester, UK around 1914 using a “fill and draw”, ie. aerate, settle and discharge reactor. However, the continuous aeration tank-and-clarifier system became more popular and widespread. Then, in the early 1980’s when reliable technology was becoming more acceptable, eg. automatic PLC controls systems and valves, SBR’s

*continued on page 4*

became popular once again. Today, they are recognized as suitable and cost effective treatment for municipal and industrial wastewater, with systems treating populations of 50 to over a million. This paper will discuss types of SBR, process description, operation, performance and equipment. Some examples of plants from small pre-fabricated units to large multi-level stacked systems will be shown. Presented by Nigel Slater, P.Eng., AWT Technologies Inc.

**TS #6 Application of Process Instrumentation in Water/Wastewater Treatment Plants:** operators and managers today face many challenges. For example:

- Greater urbanization, increased demand for drinking water and increased sewage flow.
- Regulatory mitigation of Combined Sewer Overflows and better storm water management.
- Acquiring data from and monitoring diverse locations.
- Aging of infrastructures.
- High cost to upgrade or replace existing infrastructure.
- Increasing energy costs.

This paper discusses some innovative process control approaches/solutions, along with their benefits, limitations and recent trends that can address those issues, using mainly Canadian case studies and real life examples. Presented by Vijay Acharya, Siemens AG.

**TS #7 Haloacetic Acids (HAA) & THM Formation Potential – Testing Methodology:** The Guideline for Haloacetic Acids (HAA) was added to the “Guidelines for Canadian Drinking Water Quality” in 2008 and the Guideline for THM was lowered a few years ago. HAA and THM may be generated from the chlorination of water in drinking water supplies. HAA & THM Formation Potential tests provide valuable information to assess the formation potential of source waters and to evaluate the various processes used to optimize treatment systems before chlorination. The methodology and some typical experimental scenarios will be presented. Data from tests performed on several unnamed provincial water systems will be discussed. Presented by Dr. Wo Yuen, Saskatchewan Research Council.

**TS #8 Wastewater Disinfection Methods:** Under certain regulated circumstances, a municipality’s wastewater must be disinfected prior to discharge. There are a number of options to accomplish this, such as chlorination and ultra-violet radiation. This paper will explain the reasons for wastewater disinfection, will explain a number of disinfection options and will describe the disinfection method of choice. Presented by Tibor Takach, P.Eng., KGS Group.

**TS #9 Ethical Issues that Face Operators in a Highly Regulated Industry:** Today, more than ever, the operator is faced with pressures of producing safe drinking water, not making a mistake and ensuring all regulations are followed. The pressure on an operator to meet these objectives while within a limited budget and while only being allowed a few hours a day to operate the plant can lead to poor decision making. Poor decision making or decisions made without consideration of potential consequences leads to questions over ethics.

Areas where ethical problems can occur will be discussed, for example: issues concerning sample collection / processing, maintenance/repair, housekeeping, due diligence and reporting of operational matters. The proper operation of water and wastewater systems is very important to the regulator but can also be seen by community officials as a low priority or even a nuisance, leaving the operator in a no-win situation, tripping over ethical landmines. Presented by Gordon Will, P.Eng., Saskatchewan Watershed Authority.

**TS # 10 Lagoon Optimization** Wastewater facultative lagoons can be an effective way of treating municipal wastewater. This paper will discuss methods an operator can use to get the best performance from his/her community lagoon system. Presented by Martin Hildebrand, P.Eng., Nelson Environmental.

**TS #11 Is Your Drinking Water Safe?** Water treatment strives to ensure that drinking water is always clean and free of contaminants to ensure proper health and wellness. Routine inspection of drinking water facilities is critical to determine the levels of sediment and by-product that may exist, especially in settling basins, quiescent zones and reservoirs as a result of the treatment process. It is also crucial for the operator to realize the structural integrity of the water reservoir.

This paper will outline actions that an operator can take to effectively recognize problems with the potable water tank. In addition, this paper explains how on-line robotic inspection and cleaning of potable water tanks assist in maintaining drinking water systems and drinking water quality, and how a real time video recording of the process can assure the cleaning was performed to the owner’s satisfaction. Presented by Trevor Klock, Scantron Robotics Inc.

## WORKSHOPS (WS)

### **WS #1 Fundamentals of Calibration and Certification of On Line and Lab Instruments in Water & Wastewater:**

This workshop will give an overview of the theory of operation of water analysis instrumentation. It will give a review of calibration and certification practices and will explain best practices for calibration and certification. Finally, calibration procedures for on line and lab instruments will be explained. Presented by Andre Lemoine, ClearTech.

### **WS #2 SCADA Solutions Enhance Productivity of Water Utilities:**

Efficient monitoring of even a well-developed water distribution network with good operating practices has long been a challenge for management. Improper system management might result in problems such as, increased costs, insufficient water, inconvenience, unsatisfied customers, and excessive or misuse of water and more. To minimize these problems water utilities must improve their system operation based on real time data communicated to a control center. Supervisory Control and Data Acquisition (SCADA) solutions as an integrated part of utility-wide water management program may significantly improve the system effectiveness. Key workshop topics include:

- Remote plant monitoring and control,
- Monitoring pump conditions and performing operation sequences,
- Flow monitoring,
- Residential Automated Meter Reading (AMR),
- Monitoring water supply assets,
- Implementing a SCADA control center,
- Design and implementation of a secure SCADA-Data communication system, including Remote Terminal Units, Programmable Logic Controllers and Intelligent Electronic Devices

Participants will obtain the basic knowledge to specify the SCADA requirements for their utility. All will be offered the opportunity to consult with the presenter via email with questions regarding SCADA solutions for their utility. Presented by Dan Ehrenreich, Motorola Israel Ltd.

### **WS #3 Industrial Electrical Safety for Non-Electrical Workers:**

79% of electrical-related workplace fatalities in the past decade have involved non-electrical workers. This workshop will help operators understand electrical hazards, assess their risk and control exposure to hazards. It will explain basic electrical theory, help to understand electrical codes, standards and hazards, and include effects of electricity on the human body. Potentially hazardous electrical tools, equipment and locations will be explained so one can identify dangerous situations. Safe work practices, electrical emergencies, rescue, and role of first aid will be discussed. Presented by Magna Electric Corporation.

### **WS #4 Regulations, Permits to Operate & Operator Certification:**

Saskatchewan is adopting a new, results-based model for environmental regulation that will improve protection of the environment, while promoting innovative new tools in environmental management. The current regulatory regime was developed in the early to mid-1970's and consisted almost entirely of prescriptive legislation and regulations that directed agency inspections and enforcement when contraventions were identified.

The Ministry of Environment (MOE) regulates drinking water and wastewater at nearly all of Saskatchewan's villages, towns and cities. To accomplish efficient and safe regulation of water and sewer, MOE's Environmental Protection and Audit Division contains the Municipal Branch which has two main sections: the Environmental Protection Services Section that reviews plans and projects to issue one-time Permits to Construct, and the Environmental Services Section which issues ongoing Permits to Operate water and sewer works.

In the area of operator certification there has been a request by the federal government for an Agreement in Trade within the Labour Mobility Act. The Canadian Water and Wastewater Operator Certification Committee has been working with the Association of Boards of Certification to develop the Canadian Best Practices which will form the bases for reciprocity between the provinces and territories. These practices will be outlined and changes addressed within this presentation. Present requirements will also be discussed.

The presentation will explain organization, legislation, permitting requirements, guidelines and timelines for the regulation of construction and operation and certification of drinking water works and wastewater works in the province of Saskatchewan. Presented by Frank Reid, P.Eng., Gary Paptic and Rod Broadfoot, Ministry of Environment.

### **WS#5 Couplings, Service Saddles, Tapping Sleeves (Wet & Dry) and Repair Clamps:**

This workshop will explain the different types of such devices; where, why and how they are used in a distribution and collection system. It will discuss their components, what they are made of; the types, sizes of pipes and the material the pipes are made of on which they are used; and how to install, pressure test and back-fill, once the devices are correctly installed. The slide presentation will be supported by a variety of examples of these devices. Presented by Dave Brewer, Robar Industries Ltd.

**WS #6 Blowers, Air Compressors and Air Dryers:**

This workshop will explain the differences between blowers and air compressors and where each can be used to best advantage. It will explain types of blowers and compressors describing particular applications, limitations and benefits. Also explained will be preventative maintenance and troubleshooting for modern blowers, compressors and dryers. A comparison will be made between using Original Manufacturer Equipment (OME) vs. Aftermarket Equipment. The purpose of air drying, either via a desiccant or a refrigerant will be explained as each may pertain to a particular air use in a facility. Presented by Mike Gregorash, Comairco Equipment.

# Who I am

## KARLIS VAN CAESEELE

My name is Karlis Van Caeseele, I have worked in this industry for 14 years and in that short time there have been a lot of changes, especially with the implementation of certification. Working for a smaller centre means you handle everything from water and wastewater issues to snow removal, etc.

Being on the SWWA board has been very rewarding as, hopefully, we are helping the industry move forward. I have made many new friends through this experience, and look forward to making more. One thing I have learned by networking with fellow operators is we all have similar issues.

If you have any questions or concerns please feel free to contact myself or any board member and we will try to help you.

# OPERATOR OF THE YEAR NOMINATION INFORMATION

## PURPOSE OF THE AWARD...

Established by the SWWA executive in 1988 to recognize excellence as a water and/or wastewater operator. Two awards will be presented annually: one for populations of 1,000 or less, the other for populations exceeding 1,000.

## NOMINATIONS...

Nominations can be made by: Mayors, Aldermen, Administrators, City/Town Engineers, City/Town Superintendents or Foremen, fellow employees. The nominator will be required to submit written documentation to the selection committee as soon as possible. Deadline is October 15 of each year.

## ELIGIBILITY...

The nominee must be a member of SWWA and must be certified by the Operator Certification Board. The nominee can be full or part time operator employed by a municipality or industrial water/wastewater utility.

## AWARD PRESENTATION...

The Dale Heshka (over 1,000 population) and the Dave Clark (less than 1,000 population)

Operator of the Year Awards will be presented at the annual SWWA Conference.



## ATTENTION:

### Suppliers wishing to attend the 2010 Conference as a delegate

This message is for those suppliers that would like to attend the full conference as a delegate instead of showcasing at the trade show.

Visit the Saskatchewan Water and Wastewater Association website to download a

**“Supplier Without A Booth” Conference Registration Form.**

[www.swwa.ca](http://www.swwa.ca)

## Operator of the Year Nomination Form

I wish to nominate:

**Operator's Name:** \_\_\_\_\_  
**Community employed at:** \_\_\_\_\_  
**Operator's telephone number:** \_\_\_\_\_  
**Years of service:** \_\_\_\_\_  
**SWWA member since:** \_\_\_\_\_

**Nominator's Name** \_\_\_\_\_  
**Nominator's Title** \_\_\_\_\_  
**Telephone number** \_\_\_\_\_  
**E-mail address** \_\_\_\_\_

**CRITERIA** Judging will be handled by a committee selected by the SWWA Executive using the following categories for selection. Remember each category can refer to a Water or Wastewater Operator.

1. General Operations (Understands complete operation of the system and equipment.)

<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>
Exceptional		Above average			Average

Comments: \_\_\_\_\_

2. Aesthetic Quality of Finished Product. (Consistently producing the best possible quality of water the water/wastewater plant allows.)

<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>
Exceptional		Above average			Average

Comments: \_\_\_\_\_

3. Adherence to Legislative Requirement (Water samples tested regularly, meets min/max requirements of water quality guidelines.)

<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>
Exceptional		Above average			Average

Comments: \_\_\_\_\_

4. Water/Wastewater Records (Records kept up to date, such as inventory, maintenance, operation logs, lab results, etc.)

<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>
Exceptional		Above average			Average

Comments: \_\_\_\_\_

5. Preventative Maintenance Schedules (Maintenance performed when scheduled, reviewed and revised annually to meet changing requirements.)

<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>
Exceptional		Above average			Average

Comments: \_\_\_\_\_

6. That "Extra Mile Service to the Community (Willing to work "above and beyond the call of duty")

<b>10</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>
Exceptional		Above average			Average

Comments: \_\_\_\_\_

To help the SWWA Selection Committee further to judge each nominee please state any pertinent information that you feel the nominee deserves recognition for, such as innovations or cost saving measures used within the operation, any community involvement, volunteer work, etc.

\_\_\_\_\_  
 \_\_\_\_\_

For SWWA Office Use Only:	
Operator of the year Award for the category of ( +/- 1,000)	
OCB Certified	

Fax or mail this form to the SWWA Office.  
 Fax Number: (306) 761-1279  
 Mailing Address: 46 Windfield Road REGINA SK S4V 0E7

SWWA Conference 2010, November 3 & 4 at TCU Place and November 5 at the Hilton Garden Inn  
Saskatoon, Saskatchewan

Type of Member: (Check one)

**Regular:**  
A VOTING member of the SWWA and is an employee involved in the O & M of water and/or wastewater systems within Saskatchewan.

**Agency:**  
A NON-VOTING member of the SWWA and is not employed in the O & M of water and/or wastewater systems, but has an interest in this field.

<b>Name:</b>	<b>Employer:</b>
<b>Mailing Address:</b>	<b>Position:</b>
<b>City:</b>	<b>Phone (work):</b>
<b>Postal Code:</b>	<b>Fax:</b>
	<b>Phone (home):</b>

**Conference Registration will be open:**

Tuesday, November 2 in the Prince Albert Room of the Hilton Garden Inn from 6:30 pm – 8:30 pm  
Wednesday, November 3 at TCU Place from 7:30 am – 10:00 am

**Regular and Agency Member Conference Package:  
All days, all meals, 2011 SWWA Membership, Trade Show & Banquet.  
All conference information sessions and workshops.**

\*\*\*FAXED REGISTRATIONS ARE NOT ACCEPTED\*\*\*

		Fee	5% GST R12409515 9	TOTAL	Amount Paid
<b>Early Bird Conference Package</b>					
For registrations & payments <b>postmarked by October 1, 2010</b>	<input type="checkbox"/>	\$332.04	\$16.60	<b>\$348.64</b>	
<b>Conference Package</b>					
For registrations & payments <b>postmarked after October 1, 2010</b>	<input type="checkbox"/>	\$482.04	\$24.10	<b>\$506.14</b>	
<b>Additional Options for Conference Delegates:</b>					
<u>Extra</u> Banquet Ticket (per extra ticket)	<input type="checkbox"/>	\$42.86	\$2.14	<b>\$45.00</b>	
<u>Extra</u> Meal Package (banquet ticket <u>not</u> included)	<input type="checkbox"/>	\$106.65	\$5.33	<b>\$111.98</b>	
<u>Extra</u> Meal Package (banquet ticket included)	<input type="checkbox"/>	\$153.27	\$7.66	<b>\$160.93</b>	
<b>Spousal Program (Maximum Number 35)</b>					
Name of attendee:	<input type="checkbox"/>	\$40.00	\$2.00	<b>\$42.00</b>	
				<b>TOTAL</b>	

**2011 SWWA MEMBERSHIP**

If you **are not attending** the conference, but would like to obtain a 2011 Membership please complete the top of this form and submit with payment

\$40.00 plus \$2.00 GST Total \$42.00

Cheques are to be made payable to: Saskatchewan Water and Wastewater Association.  
Submit form and payment to: SWWA, 46 Windfield Road, Regina, SK S4V 0E7

A limited number "conference rate" rooms are available until October 1.  
Hilton Garden Inn, 90 22<sup>nd</sup> Street East, Saskatoon – Phone: (306) 244-2311

**Conference Exam Session - Tuesday, November 2, 2010**

**Sign In Time: 6:30 p.m.**

**Exam Time: 7:00 p.m. – 10:00 p.m.**

**Location: Estevan Room - Hilton Garden Inn, 90 22<sup>nd</sup> Street East, Saskatoon  
(Maximum 50)**

Name: \_\_\_\_\_

Mailing  
Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_

Employer: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Select **one** of the following:

**Category and Class Chosen**

**Small Water System;**

**Small Wastewater System;**

**Water Treatment - 1, 2, 3, 4;**

**Water Distribution - 1, 2, 3, 4;**

**Wastewater Treatment - 1, 2, 3, 4;**

**Wastewater Collection - 1, 2, 3, 4;**

\_\_\_\_\_

Exam Cost: \$75.00 plus 5% GST \$3.75 (gst # R124095159) = \$78.75

**October 1 is the deadline for the exam registration and payment to be received at the SWWA Office.**

Amount Enclosed: \_\_\_\_\_

Your receipt is your registration; bring it and a form of ID to the Exam Session.

Send Your Application and Fee to:

**SWWA  
46 Windfield Road  
REGINA SK S4V 0E7**

## Groundwater Issues in Saskatchewan

This one day workshop will focus primarily on groundwater exploration, development and potential treatment modifications related to surface water influences. The intention is to provide operators with case studies related to how groundwater supplies for municipalities are developed, then move towards discussing existing problems associated with groundwater supply (i.e production problems, groundwater under the influence issues) before finally looking at well maintenance options and design alternatives at the treatment plant.

### WORKSHOP REGISTRATION FORM

**Ground Water Issues in Saskatchewan (0.5 CEU) - Class Size: 40, Lunch Included**

**June 4 – Swift Current**

**Location:** Credit Union iPlex  
2001 Chaplin St. East

**Sign In Time:** 8:00 a.m. – 8:30 a.m.

**Start Time:** 8:30 a.m.

**End Time:** 4:15 p.m.

**Name:** \_\_\_\_\_

**Street Address/Box Number:** \_\_\_\_\_

**City:** \_\_\_\_\_ **Postal Code:** \_\_\_\_\_

**Work Phone:** \_\_\_\_\_ **Home Phone:** \_\_\_\_\_

**Deadline for workshop registration:** May 21, 2010, two (2) weeks prior to date of workshop. All workshop attendees must pre-register and pre-pay. No walk-up registrations allowed and no cheques are to be submitted at the workshop.

**Per Workshop Cost:**

**Member Price:** \$80.00 plus \$4.00 GST - \$84.00 \_\_\_\_\_

**Non-Member Price:** \$130.00 plus \$6.50 GST - \$136.50 \_\_\_\_\_

**2010 Membership + Member Price:** \$120.00 plus \$6.00 GST – \$126.00 \_\_\_\_\_

**Complete the following IF you are purchasing a 2010 Membership AND attending the workshop as a member.**

**Work Fax:** \_\_\_\_\_

**Employer:** \_\_\_\_\_

**Position/Title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

Submit this form and your cheque made payable to:

Saskatchewan Water and Wastewater Association  
46 Windfield Road  
REGINA SK S4V 0E7

## From the President's writing desk:

What type of SWWA membership do you have?

SWWA has three different types of membership, each one with its own benefits and requirements.

Make sure you have the one that is right for you!

<p><b>Regular Member:</b></p> <p><b>Who falls into this category?</b></p>	<p>This is a <b>voting</b> member of the SWWA.</p> <p>Is an employee involved in the Operation &amp;/or Maintenance of water and /or wastewater systems within Saskatchewan.</p> <p><b>THOSE WHO ARE CERTIFIED OR ARE WORKING TOWARDS CERTIFICATION.</b></p>
<p><b>Agency Member:</b></p> <p><b>Who falls into this category?</b></p>	<p>A <b>non-voting</b> member of the SWWA.</p> <p><b>Is not employed</b> in the Operation &amp;/or Maintenance of water and /or wastewater systems, but has an interest in this field.</p> <p><b>GOVERNMENT EMPLOYEES SUCH AS EPO, MANAGERS, DIRECTORS MAYOR, COUNCILLORS, ALDERMEN</b></p>
<p><b>Supplier Member:</b></p> <p><b>Who falls into this category?</b></p>	<p>A <b>non-voting</b> member of the SWWA.</p> <p>Is a company &amp;/or individual in the business of supplying goods &amp;/or services to the water &amp;/or wastewater industry.</p> <p><b>CONSULTING ENGINEERS SALES REPRESENTATIVES</b></p>

**All members receive a subscription to the Pipeline and all members are automatically a member of WCW.**

### *Calling All Members.*

We are in the process of updating our display board. We are looking for good quality digital photos that depict typical, unusual or things that would be of interest to our members. We want to provide a show case of what we do to act as a recruitment tool and also to give a visual display of what we do in our industry. Do you have anything going on in your area that other members would be interested in? If you can help us please send the photos, contact info and provide a brief explanation of what they are about to the SWWA office.

### *Coming soon.*

Have you ever wanted to be in a “dirty movie?” We may have an opportunity for you to fulfill that fantasy. SWWA in conjunction with MWWA, AWWOA and WCW is in the process of making videos as part of a new working for water initiative. This is a recruitment tool aimed at attracting people to our industry. Stay tuned to find out how you can get your five minutes of fame.

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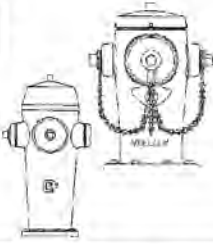


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# Achieving Efficient Water Use in Saskatchewan Communities

Water conservation is inextricably tied to energy conservation with both playing primary roles in adaptation to climate change. Reducing water use reduces energy used for the pumping, treatment of water and wastewater and heating of water. Water conservation is considered to be a largely untapped approach to addressing climate change and its' impacts on energy and water availability. Showering an extra two minutes is equivalent to leaving a 60 watt light bulb on for twelve hours. On the other hand, a 20% reduction in shower time or the flow rate can achieve the energy efficiency of changing five incandescent light-bulbs to compact fluorescent.

In the first fifteen months of the Provincial Toilet Replacement Rebate Program, over 16,500 toilets were replaced; over 500 million litres of water saved and over 950 tonnes of CO<sub>2</sub> emissions avoided. Not only has the replacement of these toilets resulted in water and CO<sub>2</sub> savings in the first year of the program, but they will continue to do so over the lifespan of these toilets. This program has been recently expanded to include First Nations, institutions, municipal governments and non-profit organizations. The program directly benefits all municipalities through reduced water and sewage treatment costs, and indirectly through its positive impact on our environment as a whole.

There are a variety of other opportunities available for municipalities to achieve water use efficiencies. Household water savings of up to 80 litres per capita daily can be achieved by replacing older showerheads with efficient low flow showerheads and by adding aerators to faucets. This

can be done with a minimal investment of around \$50. Replacing old top-loading washing machines with a new HE model can achieve another 40 litre per capita daily savings.

Outdoor water use can be completely eliminated using such elements as xeriscaping and rainwater collection. A one-millimetre rainfall on an 8 by 15 metre house roof amounts to about 120 litres of water, and in a storm, a property can easily receive several millimetres. Common commercial rain barrels vary from about 50 litres to over 200, and can be larger. With good planning and thoughtful use of stored rain water, residents could significantly reduce their outdoor use of treated tap water. Rain barrels offer homeowners a water source that is chlorine and salt-free and usually warmer than tap water making it better for plants as well as for washing vehicles.

Municipalities can play a key role in water and energy conservation by encouraging uptake of these water saving technologies through educational, financial and regulatory incentives. A number of municipalities have chosen to partner with the Saskatchewan Watershed Authority in order to increase uptake of the Provincial Toilet Replacement Rebate Program. If you would like to discuss partnership details or would like further information on water conservation opportunities that are available for municipalities, please contact Dolores Funk, Senior Water Conservation Coordinator for the Saskatchewan Watershed Authority at (306)694-3900.

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# Spousal Program. . .

We know as spring is here no-one wants to think of November but there is a wonderful time that happens . . . **The SWWA Spousal Program!** The program will be held on Thursday, November 4 2010 the spouses will have the opportunity to enjoy an afternoon of pampering, relaxation, and socializing. The afternoon will begin with the ladies being bussed from the Hilton Garden Inn and the Park Town Hotel to the Paramount Day Spa. At the spa, the ladies will receive a Soothing Paraffin Wax Treatment and an

Intermezzo Facial, also, their choice of a Relaxing Massage Break, Shampoo and Style, or Makeup Application. While the women are awaiting their services, there will be the chance to socialize and food and beverages will be provided. The women will be bused back to



their respective hotels at the completion of the afternoon. With the changes, we are able to accommodate up to 35 women during the afternoon. Spots are filling up fast so, gentlemen, sign up your deserving ladies early as they deserve it for waiting up for, and putting with the hours of water breaks and sewer plugs. So ensure their spot in the program, they need the break! Enjoy your spring and summer, we look forward to seeing everyone in November.

Milton and Connie Wood



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# SWWA CONFERENCE & TRADE SHOW

NOVEMBER 3 - 5, 2010

## Draft Agenda

### Tuesday, Nov. 2

#	Day/Time	
	6:30 - 8:30 p.m.	Conference Registration
	7:00 p.m.	Exam Session
	7:00 p.m.	SWWA, OCB & MOE Stakeholders' Meeting

### Wednesday, Nov. 3

#	Day/Time	Workshop/Session
	7:30 - 10:00 a.m.	Conference Registration
1 - TS	8:30 - 9:15 a.m.	Canada Wide Strategy for Management of Municipal Wastewater - Environment Canada & Ministry of Environment
2 - TS	8:30 - 9:15 a.m.	Protecting your Membrane Assets - Sapphire Group
3 - TS	8:30 - 9:15 a.m.	Transient and Surge Related Pipe Bursts, Water Loss and Damage Prevention - Singer Valve Inc.
	9:15 - 9:45 a.m.	Coffee
4 - TS	9:45 - 10:40 a.m.	The New Wastewater Strategy -The Analytical Perspective (unravelling the mystery) - ASL Laboratory Group
5 - TS	9:45 - 10:40 a.m.	Sequencing Batch Reactors - AWT Technologies Inc.
6 - TS	9:45 - 10:40 a.m.	Application of Process Instrumentation in Water/Wastewater Plants - Siemens AG
7 - TS	10:40 - 11:25 a.m.	Haloacetic Acids (HAA) & THM Formation Potential - Testing Methodology - Saskatchewan Research Council
8 - TS	10:40 - 11:25 a.m.	Wastewater Disinfection Methods - KGS Group
9 - TS	10:40 - 11:25 a.m.	Ethical Issues That Face Operators in a Highly Regulated Industry - Sask Watershed Authority
	11:30 - 12:30	Lunch
1 WKSHP	12:30 - 4:00 p.m.	Fundamentals of Calibration and Certification of On-Line and Lab Instruments in Water & Wastewater - ClearTech
2 WKSHP	12:30 - 4:00 p.m.	SCADA Solutions Enhance Productivity of Water Utilities - Motorola Israel
3 WKSHP	12:30 - 4:00 p.m.	Industrial Electrical Safety for Non-Electric Workers - Magna Electric Corporation
	4:30 - 7:00 p.m.	Free Time (Supper on your own) & Trade Show Booths Open
	7:00 - 9:30 p.m.	Watering Hole Ice Breaker & Trade Show

### Thursday, Nov. 4

#	Day/Time	Workshop/Session
	7:30 - 8:30 a.m.	Breakfast
AGM	8:30 - 9:30 a.m.	AGM - Open Meeting & Keynote Address: TBA
	8:30 - 12:00 p.m.	Trade Show - Coffee to be served amongst booths at 9:30 - 10:00
	12:00 - 1:00 p.m.	Lunch
4 WKSHP	1:00 - 4:30 p.m.	Regulations, Permits to Operate & Operator Certification - Ministry of Environment
5 WKSHP	1:00 - 4:30 p.m.	Saddles & Repair Clamps - Robar Industries, Ltd.
6 WKSHP	1:00 - 4:30 p.m.	Blower, Air Compressors and Dryers - Comairco Equipment
	6:00 - 6:30 p.m.	Cocktails
	6:30 - 10:00 p.m.	Banquet & Entertainment

### Friday, Nov. 5

#	Day/Time	Workshop/Session
	8:00 - 9:00 a.m.	Breakfast
10 - TS	9:00 - 9:45 a.m.	Lagoon Optimization - Nelson Environmental
	9:45 - 10:15 a.m.	Coffee
11 - TS	10:15 - 11:00 a.m.	Is Your Drinking Water Safe? (Robotic Inspection/Cleaning) - Scantron Surveying
AGM	11:00 - 12:00 p.m.	Reconvene AGM/ Elections
	12:00 - 1:00 p.m.	Lunch - Final Draws & Closing Remarks



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