

the pipeline

Spring 2023 ~ 29th Edition

SASKATCHEWAN WATER AND WASTEWATER ASSOCIATION

Hand-drawn mathematical content on a dark background:

- Trigonometry:**
 - $\cos 2x = \cos^2 x - \sin^2 x$
 - $\frac{\partial z}{\partial x} = 2; \frac{\partial z}{\partial y} = 0 \quad \vec{n} = (F'_x; F'_y; F'_z)$
 - $\sin(x+y) = \sin x \cos y + \cos x \sin y$
 - $\tan x \cdot \cot x = 1$
 - $\frac{\sin x}{x} \leq \frac{x}{x} = 1$
 - $a^2 + b^2 = c^2$
 - $a^2 = b^2 + c^2 - 2bc \cos \alpha$
 - $\eta = \lambda^2 - 3\lambda + 1 = 0$
 - $\sum_{i=0}^n (P_i(x) - y_i)^2$
- Geometry:**
 - Right-angled triangle with sides a, b, c and angles A, B, C . Formulas: $b^2 = c \cdot c'$, $a^2 = c \cdot c''$.
 - Triangle with sides a, b, c and angle α .
- Calculus/Algebra:**
 - $A+B+C=8$
 - $-3A-7B+2C=193$
 - $-18A+6B-3C=16$
 - Binomial expansion: $1, 1, 2, 1, 1$ and $1, 4, 6, 4, 1$
- Graphs:**
 - Graphs of $\sin x$ and $\cos x$.
 - Graph of $y=x$ and $y=\sqrt{x}$.
 - Graph of $y=\tan x$ and $y=\cot x$.
 - Unit circle with $\sin x$ and $\cos x$ coordinates.



Back to Basics

content

April 2023 - Spring



The pipeline is produced quarterly by the Saskatchewan Water and Wastewater Association.

Produced by Campbell Printing Ltd., Prince Albert, SK

For article / photograph submissions or for further information or content ideas please contact SWWA

Calle Behnke
Work: 306-668-1278
Email: office@swwa.ca
Box 7831 Saskatoon, SK S7K 4R5

- 03 Editor
- 04 Rynette Moore-Guillaume
- 05 Dawn Dierker
- 06 Theresa Walker
- 07 Conference Wrap-up
- 08 SWWA Supplier Report
- 11 Upcoming Workshops
- 13 Conference Awards
- 18 Conference Photos



13 William Chalk
Operator
of the Year



20 Jeanette Austin
Mastering a
Comeback



kelly
kish
SWWA Pipeline Editor

And just like that we are into the 41st season of SWWA.

Looking back over the past 40 years, the common theme that keeps popping up is how incredible the men and women in this industry are. In 40 years, we saw the birth of an association, growth through the early years, changes again as the association grew and the annual conference moved to TCU Place. Then in our 30's the CEU changes at the annual conference and moving from a newsletter with the Pipeline to a magazine and now a digital magazine. Now, we have again seen more changes to the CEU's earned at the annual conference and how the style of sessions. We have seen keynotes that were phenomenal – Pinball Clemmons, Dr. Jody Carrington, Jon Monty and now this year we are excited to announce Catriona Le May Doan as our 2023 Conference Keynote Speaker.

We have seen changes with many moving on to retired life and we have seen resilience.

It wouldn't be looking ahead if we didn't have some changes and improvements on the horizon. This year we are attending SARM, SUMA, and UMAAS to promote the association with our province and the

decision makers. We are here to be seen as the support for those in the water industry as we plan, execute, and continue to offer training, networking events, trade show, and an annual conference. We are updating the website to be more user friendly – you have spoken, and we listened. We get that June is a busy month with projects, graduations, weddings, and the list goes on, so the golf tournament has been moved to August 18. Be sure to mark your calendars and grab 3 friends or just let Calle pair you with some amazing attendees.

We have a few more workshops lined up for the Spring season – be sure to check out the website and we hope to see you out!

This issue you will get the highlight reel of the 2022 conference. Thank you to everyone who was in attendance and to all those who participated with a booth in the trade show. To our sponsors, thank you for making it possible to create the amazing experiences at both the golf and conference/trade show events.

Till August, have a great spring, may your water main breaks be few, and the weather be exactly what is needed to get those big projects done.

we plan,
execute,
and continue
to offer
training,
networking
events, trade
show,
and annual
conference



SWWA - \$1125.00
Training Scholarships
Now Available

APPLICATION DEADLINE
July 31, 2023

12 Training Scholarships



rynette moore-guillaume

SWWA President

As the incoming President of SWWA, I am beyond excited to move into this role and continue to work with our board to make our industry and association better.

It is so important for us to provide ongoing opportunities through education and networking that promote professional growth in our water industry. The past two years have created challenges for our board and our industry as critical essential service providers for our communities. Our industry is changing, and we need to continue to adapt and be proactive. We have tried to evolve, be creative and find opportunities for our association to bring people together and create learning opportunities.

Our annual conference provides an ideal setting to exchange ideas and find new inspiration. Our 40th conference in 2022 was a huge success. We had Jon Montgomery as our Keynote Speaker and he shared with us his experiences as an Olympian at the 2010 Vancouver Winter Games and spoke of his opportunities as host for the Amazing Race Canada. Jon was a small-town boy from Russell, Manitoba, who had a dream and made it happen through his hard work, perseverance and belief in himself. We were lucky to have Jon also attend our tradeshow and auction off a beer mug with an Amazing Race envelope. Thanks to SaskWater for sponsoring Jon to attend our conference.

For this latest conference, we launched a new format that included a change in our process for continuing education units. We received overwhelmingly positive feedback and were granted approval from the Operator Certification Board to continue with this new format. This was extremely encouraging for our board, and we hope to initiate more positive change for our members.

Saskatchewan currently has 1,480 certified operators. With new operators pursuing certification on a regular basis, we have been discussing the changes to the water and wastewater certification exams with the Water Security Agency. At our February meeting, they

communicated to us that they are reviewing the Class 1 and 2 wastewater certification exams. New Class 3 and 4 wastewater treatment exams are expected in 2023 from Water Professional International (previously Association of Boards of Certification) In January 2023, the Minister appointed two new board members for the Operator Certification board.

I'm grateful to be working in this role on initiatives that benefit our members after years as a member myself. I have been working in the Water and Wastewater industry for over 26 years, beginning my career at City of Moose Jaw in the Engineering Department. In 2007, I joined SaskWater and am currently the Director of Operations.

I have always been passionate about making a difference in the Water and Wastewater industry, through both work and volunteer opportunities. I have worked on a contract basis with Saskatchewan Polytechnic for twelve years, teaching water and wastewater certification classes to operators around the province. My volunteer work has taken me to Costa Rica to assist on a water system project, and to Guatemala, where we drilled a water well. I was also chosen to assist on damage assessment teams after Hurricanes Rita and Katrina. My last volunteer initiative was a fundraising project with WaterAid Canada in support of water projects in east Africa, which involved climbing Mt. Kilimanjaro in Tanzania. I have been fortunate to have these opportunities shape my experience and perspective of this industry and I look forward to learning more through this new role and expand my network of colleagues in the industry

I am very honoured to be the president of the SWWA for the next two years and will strive to make our association stronger. By encouraging networking and identifying other opportunities for operators to develop and enhance their professional relationships, I hope we can all find new ways to make a difference in our industry.



dawn dierker

Director of Training
Advanced Municipal Solutions

Back to the Basics of Training

When I heard the topic for this edition of the Pipeline was "back to basics" I thought about what that means for those of us in the world of operations and training. The first thing that came to mind was the need for many of our students to go back to the basic rules that they learnt in math to be able to solve the formulas on the certification exams. This seems to be an area that causes a great deal of anxiety and stress for many of our adult learners. They say math is like a language and if you don't use those skills you lose them. The brain is elastic and once attendees start practicing "order of operations", solving for unknowns and using the formulas on the calculation sheet a lot of the skill comes flooding back.

Other topics that we have to revisit and go back to the beginning with include chemistry and biology. These are other topics that seem to perplex students because they have not used them possibly in many years. Once we start talking about atomic weight, basic cell structure and the pH scale you can see their eyes light up and they remember these long forgotten concepts.

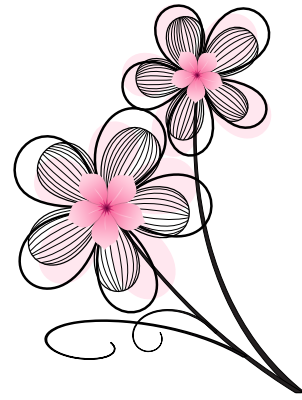
Sometimes recent high school graduates may feel that the return to the basic math and science concepts is a waste of time. But, for those students that are out of practice and have forgotten hard won skills it is a necessary step in the certification process.

That is why we recommend, for students that have been out of school for several years, to take a refresher course that covers the basic math and science that will be focused on in the certification courses. Even 3-5 days will help regain the confidence that the student needs to face the challenges they may face in the classroom or on the job.

"They tell stories
of having to
do more,
say less and
overall prove
themselves
over and over
to get the credit
they deserve."



teresa walker
Inspirational Facilitator



Communication really is the builder of the bridge when we stay focussed on strengths.

How do we bridge the gap from what was to what will be?

Whether we are referring to the chapters in our personal lives or within our industries.

Change is inevitable – how we each approach and adjust to change is very personal.

There is no right or wrong way; rather focussing on strengths is the space to highlight.

What used to be the way or worked best may not now – modifications and alternatives,

“outside the box” thinking and ways are now possibilities for less time, people and cost invested.

As well sometimes there is something said for “tried and true ways.”

So how do we bridge the gaps from then to now?

*Respect is key – what was may no longer be; that does not dismiss or belittle it in any way.

Our history holds a lot of information if we are willing to reflect and be open to learning from the past.

*Communication really is the builder of the bridge when we stay focussed on strengths.

Everyone holds unique strengths and perspectives; when we address and hold a safe space for others to feel seen and heard that is when real momentum and progress occurs, and goals achieved.

*There is no “I” in teamwork.

When individual’s strengths are properly matched with the task everyone enjoys a greater experience.

Tasks are accomplished safely, effectively, and with pride.

The same holds true in our personal lives when intertwining occurs between the chapters.

There is a time to push forward and a time to pause – energy is required in the doings and rest is just as important!

Wherever you are now, in the present moment, and moving forward the key is to stay strength focussed.

Let’s connect to learn more about #Tools4Success offered by visiting www.teresawalker.com

#Make The Most With Your Moments

#MakeTheMostWithYourMoments

calle behnke
Executive Director

a fantastic opportunity to reconnect with those in the industry and those who were new to the annual event.

Welcome to the Post conference wrap up and kickoff to year #41.

We started off the annual conference and trade show with a networking night held at Winston’s English Pub on the lower level. The event was well attended and a huge thank you to Mueller and Jordan Webb for sponsoring the event. It was a fantastic opportunity to reconnect with those in the industry and those who were new to the annual event.

For the conference we were testing out a new pilot option for CEU’s like the one AWWOA uses at their seminar in Banff. Those attending were asked to sign off that they attended each day all the required number of sessions – this meant no stamping which as one of the organizers and stampers made things way smoother moving between rooms for sessions. After the conference, it was evaluated and approved for the 2023 conference by the OCB to continue with the same ceu process. Thank you to everyone who was in attendance and helped us with a successful test pilot of the process. Technical sessions and workshops also saw some changes. Sessions were all moved to 55 minutes which included questions and answers. The only regular workshop was held on Friday with Jeannette Austin of Excello Consulting talking to those in attendance on “Mastering a Comeback-Moving from Stressed to Resilient”.

Our keynote speaker was Jon Montgomery of The Amazing Race Canada sponsored by SaskWater. Jon spoke about his experience as a skeleton racer and the need to be able to work collaboratively with a team and what that looks like from a professional and personal aspect.

The trade show was one of the best shows from the past few years and was a great way to get back into the swing of things with new conversations, laughter, and learning all about the various technologies. The Watering Hole Beer was from Better Brother Brewing a brewery located in Saskatoon and we had some amazing RootBeer Floats sponsored by Ford Meter Box. Steve Kratko from Ford is a fan of floats and with the craft Rootbeer from Better Brother Brewing was an absolute hit with everyone.

Let’s talk food – the food this past event got rave reviews from everyone suppliers and delegates alike. Never has everyone been of the same agreement and you could say we knocked it out of the park this year. Create your own nachos, a pastry waffle bar of so many topping options, and of course a perogy bar because it would not be a Saskatchewan event without perogies.

Are you ready for even more big things? Stay tuned for the announcements of what will be coming for the Annual Event and until then we have some great workshops lined up for you this spring.



GOLF

TOURNAMENT

where: Manitou Beach

When: August 18, 2023



Register as a team
of 4 or a single

Hotel: Manitou
Springs Hotel -
block code on the
SWWA website



SWWA CONFERENCE 2023: SUPPLIER REPORT

jordan webb

I have to say
what a great conference in 2022!

Coming off a couple of different years, it was exciting and fun to have an excellent turnout, 425 registered attendees.

Fun was had at the ice breaking event at Winston's pub Tuesday night. Many new faces and some returning veterans. The tradeshow was buzzing with action, in speaking with suppliers some could not even leave their booth due to demand on the tradeshow floor. I know I lost my voice and could not schedule bathroom breaks (wastewater humor there somewhere) due to the flow of traffic. We had craft beer from Better Brother Brewery (based in Saskatoon) to sample, desert waffles, perogy bar, nacho bar and craft root beer float stands, no one went hungry.

To wrap up I would like to say a big thank you to sponsors, suppliers and members who attended. Without your attendance this association event does not happen! Looking forward to seeing you again or for the first time in 2023.

The Saskatchewan Operator Certification Board

Your Certification Renewal and Continuing Education Units

How do I know when to renew my certification?

Renewal forms are mailed to operators, usually 2 to 3 months before the renewal date. If your renewal date is approaching and you have not received your notice, you can download the renewal form from our website: <https://saskocb.ca/wp-content/uploads/Renewal-Application-August-16-2018-1.pdf>

What do I need to renew my certification?

You will need a renewal application, \$150.00 renewal fee and one (1) Continuing Education Unit (CEU) every two (2) year renewal period. You cannot repeat the same CEU's for two consecutive renewals

(i.e. – if you took First Aid for your last renewal, you cannot repeat this course and use it for this one).

How do I obtain CEU credits if there are no in person courses or conferences available?

There are several courses now available through internet webinars, video conferences and online registrations. You can refer to our CEU approved list on our website for more information and options. Some courses will be noted as “online”, “webinar”, etc if it has been approved as such. You can check out the course facilitator websites for further details or contact them directly.

I have extra CEU credits from my last renewal, can I use them for this one?

CEUs must be earned during your current certification period (i.e. – May 2019 – May 2021) so any CEUs earned prior to that date will not be accepted.

I want to take a course for my CEU credit but it is not listed on the approved list. What can I do?

You can complete a CEU Evaluation Form for the course, including an agenda and detailed timeline and submit to our office. The Board will review it at the next Board meeting and, if approved, it will be added to our approved list and uploaded to our website.

The form can be found on our website - <https://saskocb.ca/wp-content/uploads/CEU-Evaluation-Form-June-10-2020-1.pdf>

I do not have access to the internet and online learning options, can I get an extension on my renewal?

At this time, we are not able to extend renewal obligations for anyone not able to obtain their CEU credits. If you cannot obtain CEUs you can contact our office or the EPO in your area for further instruction. EPOs can be found on the Facility Classification List on our website under the Operator Certification tab - <https://saskocb.ca/certification/>

Where do I find the Board meeting dates and submission deadlines?

All meeting dates and deadlines are listed on the home page of our website – www.saskocb.ca

How do I submit my documents to the OCB office?

Email, fax or Canada Post mail are all accepted ways to submit your documents to the OCB.

You can always call or email us with your questions:

Email – info@saskocb.ca

Phone – 306-789-3430

Fax – 306-789-3429

Website – www.saskocb.ca

UPCOMING WORKSHOPS

April 28 – Iron & Manganese Workshop

May 2 – Hydrant Operation & Maintenance
(Town of Battleford)

May 10 – Successfully Operate & Maintain
Your Membrane Facility: Reverse
Osmosis/Nanofiltration – Saskatoon

www.swwa.ca/training



SaskOCB
Operator Certification Board



SWWA - \$1125.00 Training Scholarships *Now* Available

Four Training Scholarships of up to \$1125.00 each are available in the SWWA's financial Fiscal Year of Aug 1 to July 31 with the following criteria:

- The payment will not exceed a single course registration fee or \$1125.00 (whichever is less). Submit receipts with the application
- Successful applicants (members or their employers) are limited to one scholarship per SWWA fiscal year.

To be considered for a scholarship, applicants must:

- Complete the SWWA Training Scholarship Application
- Be an SWWA member in good standing
- Be registered to upgrade certification level or be registered to become a certified operator
- Must be a SWWA member for a minimum of 1 year

APPLICATION DEADLINE
July 31, 2023

All applications can be filled out on the website and submitted afterwards to scholarships@swwa.ca



william
chalk

OPERATOR OF THE YEAR

Class 2 Operator, Swift Current WWTP

William Chalk was hired by the City of Swift Current in 2005 as a labourer in the Waterworks department. He quickly established himself as an integral part of the department with his tireless work ethic and ability to adapt to all the unknowns associated with the day-to-day operations of the water-wastewater department.

He moved into the position of Lift Station Operator in 2007 and in addition to looking after the City's 13 stations, he assumed the role Effluent Irrigation Maintainer as well, working on irrigation equipment in the summer months and maintaining 4 large lagoons. As a Lift Station Operator, Will learned to overhaul pumps, mixers, and motors, which was pivotal in getting equipment and lift stations up and running with minimal downtime.

Will was offered a position at the Wastewater Treatment Plant in 2011 where he continues to work today as a class 2 Operator. Will is scheduled to advance to Class 3 in WWT within the year. His knowledge of various equipment makes him an ideal Operator, and his background as a welder has helped the WWTP fabricate many different parts for plant repairs, reducing plant costs significantly. Will splits his time at work between the on-site laboratory and maintenance duties and performs Supervisory duties when called upon.

Will is an avid hunter and fisherman, spending as much time outdoors with his two kids, Kohen and Sterling, as he can. In his spare time, he makes his own fishing lures, builds custom fishing rods, and educates many of the locals on hunting practices and procedures.

Thank You

2023 Conference Sponsors

MUÉLLER

FORD METER BOX

KGS GROUP

FLOCOR

NEPTUNE TECHNOLOGIES INC.

ADVANCEDE MUNICIPAL SOLUTIONS

JS INDUSTRIES

ACTI-ZYME

NEXOM SAGR

ALGAE CONTROL CANADA

CLEARTECH

SASKWATER



bob
reynolds

SWWA Lifetime Membership

Bob stands for
best of the best.
Congratulations.

Congratulations to Bob Reynolds who was given a SWWA Lifetime Membership at the SWWA Annual Awards Ceremony in 2022.

Bob worked in the water industry for 42 years for the Town of Foam Lake starting in 1979 and has seen many changes to the job and the industry. He has a keen eye for detail, an impeccable work ethic and knowledge for the job. Known as a guy that is always willing to lend a helping hand or a listening ear, or even a seat at the table if it is needed. His positive attitude is truly contagious to everyone around him. When it was asked of Kevin Beatty what he had to say about his boss he responded, "He's the best boss anyone could ever ask for, and it has truly been a pleasure working alongside him all these years."

Bob has really gotten into the "swing" of retirement already. He was able to make a trip down to California and was able to play on Pebble Beach this past year. Wouldn't you know it, he even beat Tiger Woods.

Bob it really has been a pleasure to have you in this industry and to recognize you at the 2022 SWWA Awards Banquet.

As DJ Peterson said when she introduced Bob for this award, "your name says it all because Bob stands for best of the best. Congratulations."

Thank You to our 2022 Sponsors

OUR SPONSORS ARE A HUGE PART OF WHY THE SWWA IS SO SUCCESSFUL AND CAN GIVE SUCH AN AMAZING EXPERIENCE FROM THE GOLF TOURNAMENT TO THE ANNUAL CONFERENCE.

THANK YOU! YOUR SUPPORT IS SO VERY APPRECIATED!



gary
papic

SWWA Lifetime Membership

Gary Papic was raised in Regina and Weyburn and graduated high school in Weyburn, SK. Where he was a star of the high school football team. Gary is a graduate of the Environmental and Water Sciences Technology Program from Kelsey Institute/Sk. Polytechnic (1982) in Saskatoon and is a member of the Engineering & Technologists of Saskatchewan. Gary also took one year of Economics at the U of S in Saskatoon.

Gary began his working career as a surveyor for the Town of Cudworth in 1982. He started working for the Town of Gull Lake later in 1982 in the position of Water Treatment plant Technician until 1983 when he moved to Lloydminster and began work as a Water Treatment Technician with the City of Lloydminster.

ON September 16, 1985, he moved on to work for Saskatchewan Environment where he continued to work through the many re-organizational and name changes. He had worked for the WSA for 37 years when he retired on April 14, 2022.

Throughout the span of his career Gary instructed many courses for operators both during his time as an operator and with the provincial government. Gary was also involved in the North Battleford Cryptosporidium outbreak investigation and can tell you firsthand why an operator's job is absolutely essential.

Gary was an integral part of the organization of the SWWA and was a director on the SWWA Board from its inception in 1983 to 1985. Gary also served as Pipeline editor and writer during his time on the board.

The SWWA honoured Gary with a lifetime membership in November 2022 and the annual awards ceremony. As a retired member Gary continues to serve the organization as a volunteer with the SWWA Scholarship Committee.

On behalf of the SWWA, we thank Gary for his years of service and continued volunteerism.



conference 2023





Session Recap: Mastering a Comeback - Moving from Stressed to Resilient with

jeannette austin

Jeannette Austin is currently the Executive Director for the APWA AB Chapter. She is also the principal owner of Excello Consulting specializing in strategic planning, facilitation, management coaching and training. She is business partners with her son in an HVAC Company as well.

Her background includes over 15 years of municipal government experience in Alberta holding positions such as Director of Operations and Director of Community Services for municipalities in Alberta. In addition, Jeannette has retail management experience with both small and large companies within Alberta and British Columbia.

She holds her Local Government Administration from the University of Alberta and her Recreation Administration from Mount Royal University and is a continual learner.

Jeannette spoke about how some have struggled to pivot and excel during the pandemic, and now that life is moving ahead, we are struggling to move forward both personally and professionally.

She provided skills, and tools for managers and individuals to move forward and succeed during any crisis. This included how the effects of the pandemic and other stressors on our mental and physical health spill over into our organizations which affects not only the manger but their co-workers, employees, and families.

Her workshop helped to equip attendees to develop the skills and tools by "Ready & Resilient" now and in the future.

Other key learnings were:

- How to understand the different types of stress and where we see them in our daily lives.
- How to identify and deal with physical, social, institutional, and major life stress.
- Tools to deal with daily stress, self-talk and anticipatory stress, checking in with your personal factor wheel.
- How to implement a workplace that supports the personal factor wheel and wellbeing of your co-workers and staff and a plan to treat mental health as an asset failure



kerry friesen

SWWA Lifetime Membership

Kerry Friesen is this year's recipient for the Dave Clark Award. Kerry has been in the industry for 35 years and currently works for the Hamlet of Cedar Villa Estates as an operator/manager. On his nomination form for the award, he was noted to be exceptional in handling all facets of his daily tasks and ensures compliance to all WSA regulations. The plant Kerry works with is an older one that requires a significant amount of work to keep operating smoothly. The plant is currently being upgraded and Kerry has worked hard to ensure the project is executed with little to no disruptions to the service supplied to the residents all while remaining in compliance with the regulations.



25 booths still available for the **SWWA November 2024 Trade Show**

Register online at:
<https://www.swwa.ca/booth-registration/trade-show>
There are still conference sponsorship options - connect with Calle at: office@swwa.ca

ready and resilient



**Waterworks & Sewage Works
Quick Reference Guide**

Drinking Water



Wastewater



The Waterworks and
Sewage Works Regulations



Environment Officer	
24-hour Upset Reporting Line	1.844.536.9494
24-hour Spill Report Line	1.800.667.7525
Approvals	wsa.engineeringandapprovals@wsask.ca
Standards	wsascienceandlicensingstandards@wsask.ca
Client Services - General Inquiry Line	1.866.727.5420
	client.service@wsask.ca

Drinking Water
Standards & Objectives



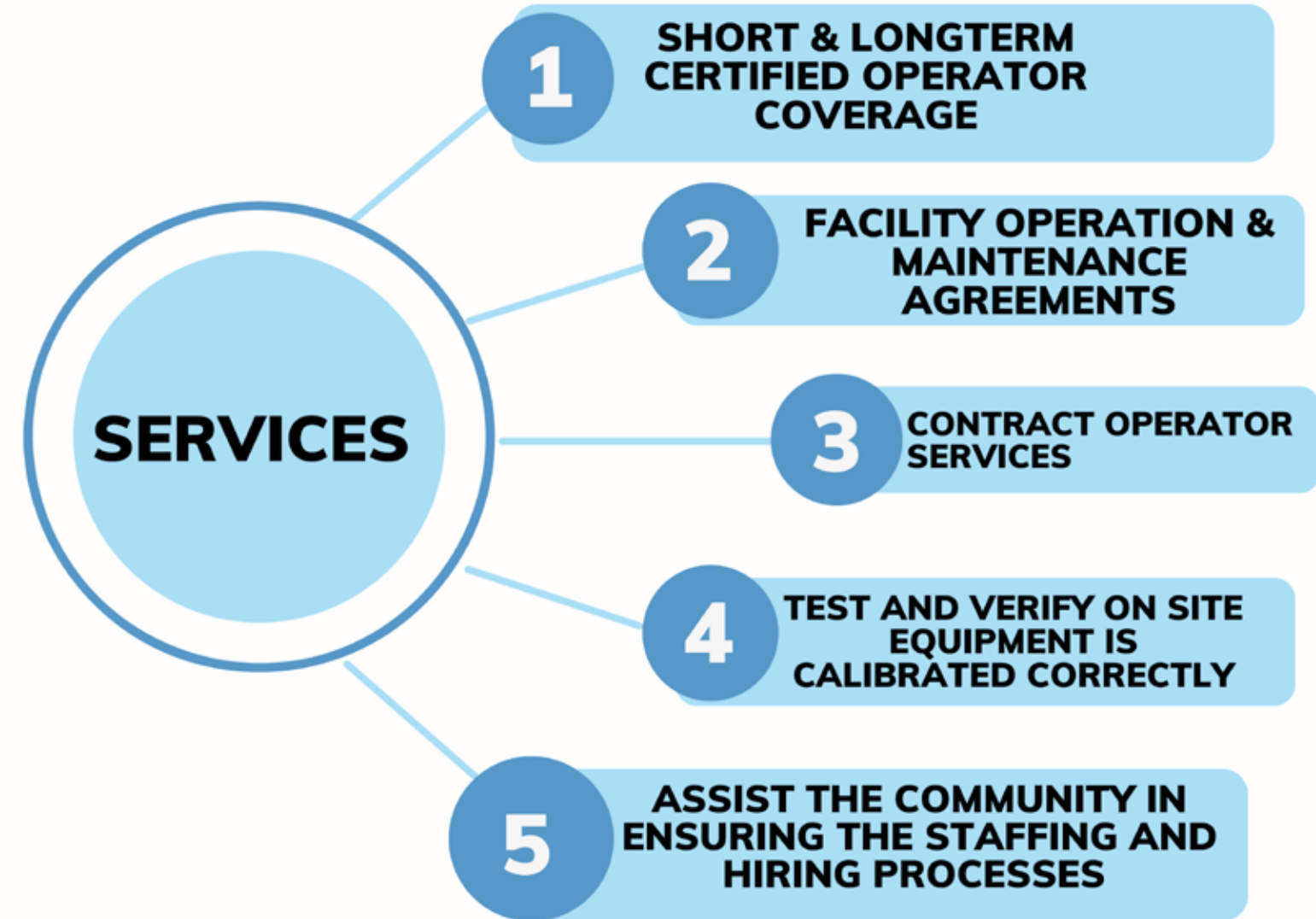
Upset Reporting



Use of Chemicals in
Drinking Water Treatment



Advanced
MUNICIPAL SOLUTIONS



Visit AMS online at www.amssk.ca