

# OPERATOR DIGEST

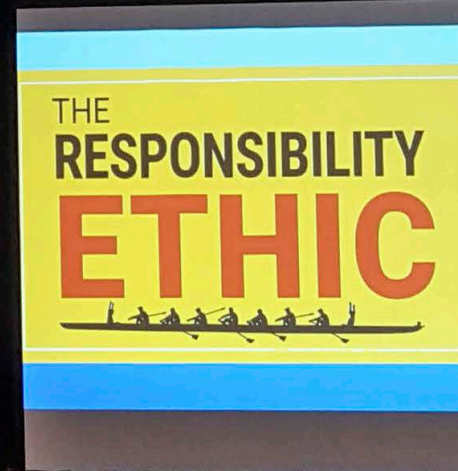
FALL 2020 | NUMBER 146



Quarterly Newsletter of the  
Environmental Operators  
Certification Program – BC/Yukon

## EOCP'S VIRTUAL CONFERENCE MEETS ALL TARGETS

Olympic medalist  
Adam Kreek's  
keynote presentation  
was a huge hit and set  
the stage for a great  
conference. Read all  
about #EOCP2020! P4



**A NEW  
LOWER  
MAINLAND  
OPERATOR  
TRAINING  
PROGRAM**

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**BUILDING  
WATER  
SYSTEMS**

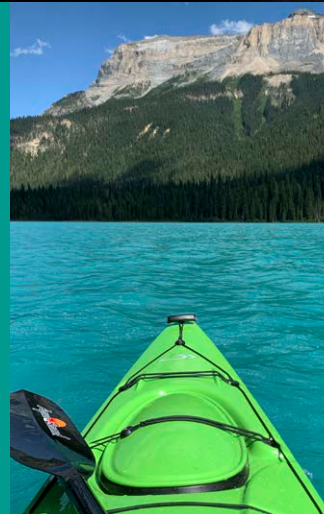
A new  
certification  
from the EOCP

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**EMERALD  
LAKE, YOHO  
PARK, BC**

Beautiful, but  
problematic for  
Water Treatment!

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**I NEED CEUS  
but we're right in  
the middle of a  
PANDEMIC**

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# OPERATOR DIGEST

The **Operator Digest** is the official newsletter of the **Environmental Operators Certification Program**.

Submissions for publication in the Digest are welcome. Please email them to the EOCP office at [eocp@eocp.ca](mailto:eocp@eocp.ca)

Changes of address, annual dues, Continuing Education Requirements, exam applications, as well as general inquiries about the program should be addressed to:

## Environmental Operators Certification Program

201 – 3833 Henning Drive,  
Burnaby, BC V5C 6N5

**PHONE:** 604 874 4784

**FAX:** 604 874 4794

**TOLL FREE:** 1 866 552 3627

**EMAIL:** [eocp@eocp.ca](mailto:eocp@eocp.ca)

**WEB:** [www.eocp.ca](http://www.eocp.ca)

**FACEBOOK:** EOCPBCY

**TWITTER:** @EOCPBCY

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The Environmental Operators Certification Program is a charter member of the Association of Boards of Certification and is a registered society with more than 4,500 active members.

## Staff

**Kalpna Solanki**, Chief Executive Officer (CEO) [ksolanki@eocp.ca](mailto:ksolanki@eocp.ca)

**Kim Eames**, Office Manager  
[keames@eocp.ca](mailto:keames@eocp.ca)

**Jenni Green**, Technical Expert  
[jgreen@eocp.ca](mailto:jgreen@eocp.ca)

**Stephanie Hall**, Exam Co-ordinator  
[shall@eocp.ca](mailto:shall@eocp.ca)

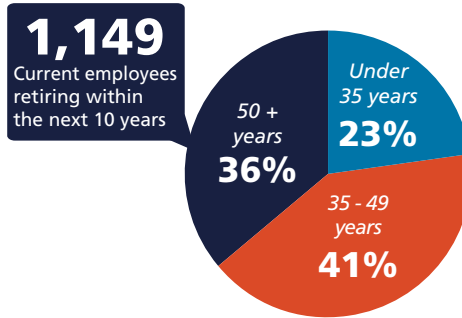
**Heather Reynolds**, Program Assistant, [hreynolds@eocp.ca](mailto:hreynolds@eocp.ca)

**Lachlan Manser**, Program Assistant  
[lmanser@eocp.ca](mailto:lmanser@eocp.ca)

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# A NEW LOWER MAINLAND OPERATOR TRAINING PROGRAM



By Laurie Therrien (BCIT), Tarynne Summers (MetroVancouver), Kalpna Solanki (EOCP)

It is amazing what a dedicated and determined group can accomplish in two years! It was the Summer of 2018 when the EOCP was approached by MetroVancouver about a certificate program for Operators. Together, they approached BCIT...

Fast-forward to Fall 2020, and preparations are underway for the first cohort of the program, with classes beginning in January 2021.

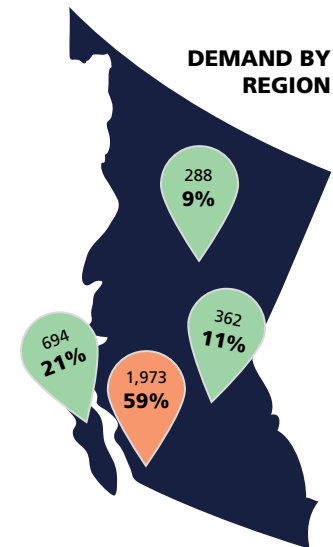
## What Happened Along the Way?

There were many, many, meetings involving the BCIT School of Construction and Environment, EOCP, Metro Vancouver and several Lower Mainland organizations including the Township of Langley, Tsawwassen First Nation, City of Surrey, City of Richmond, District of West Vancouver, and City of New Westminster. Formalized in January 2020 with a Memorandum of Understanding, MetroVan, EOCP, and BCIT laid out a vision and practical steps to achieve BCIT's Associate Certificate in the Foundations of Water and Wastewater Operations.

## Why is a Certificate Program for Operators Needed in the Lower Mainland?

A 2015 workforce study completed by the EOCP and BCWWA indicated some worrying trends regarding the water/wastewater workforce. The population was growing, new plants were being commissioned, existing plants were increasing capacities, and yet, the workforce was facing a 'silver tsunami'.

Although there are two excellent Operator credentialing schools in BC – Okanagan College and Thomson Rivers University – they are not located where the most urgent



need of Operators is, the Lower Mainland. Whilst students from Okanagan College and Thompson Rivers University come to the Lower Mainland for Co-Op terms, they then leave because they do not have roots in the Lower Mainland and/or the costs of relocating here are too high.

This Lower Mainland initiative has created a one-year, part-time Associate Certificate program, that will support the creation of a local pool of talent. Students will also have the opportunity for structured work experience (work-integrated learning) in their chosen field as part of the program. Through the challenges created by the pandemic, BCIT (with the sector's help) is also creating a bundle of narrated 3-D Virtual Tours, which will be presented throughout the program to provide students with immersive exposure to various water and wastewater environments during this time when fieldtrips would be problematic.

BCIT is in the midst of having the Associate Certificate formally approved as a BCIT credential which involves detailed research and planning presented at all levels, culminating with recognition by BCIT's VP Academic, Educational Council, and Board of Governors. On the development side, with EOCP's help, highly qualified Subject Matter Experts were recruited from the sector, and have been working in course development teams with BCIT's educational design experts to design a purpose-built program.

This is an excellent example of what can be achieved when industry and education collaborate!



# MESSAGE FROM THE DIRECTORS AND STAFF



**Chris Lawrence, Chair**

**Kalpna Solanki, CEO**

Where has the year gone? They say the pandemic has an impact on one's concept of time, perhaps that is what it is, but we can't believe that we are already in the last quarter of 2020!

To recap, wasn't that a conference?! Despite restrictions posed by the pandemic, not hiring any extra staff to assist with the conference, and never having coordinated a virtual conference before, the EOCP team pulled off a skookum event while meeting targets for the number of delegates and revenues. This was truly an international conference, with delegates from BC and YK, other Canadian provinces, the US, and the Caribbean!

Our keynote speaker, the Olympic medallist Adam Kreek was a huge hit with delegates. Adam's presentation was recorded and is available via EOCP's YouTube channel at <https://tinyurl.com/y5x93yca>. For those interested in Adam's book that he referenced during his presentation, 'The Responsibility Ethic', it is available via amazon.ca.

When it comes to issues related to protecting public health and the environment, we bring a great deal to the table, we are always interested in collaborating with others who have the same goals, and we worked to bring to fruition two major initiatives this year:

1. We have been working with MetroVancouver, member municipalities, Tsawwassen First Nation, and BCIT on a new Operator Training School in the Lower Mainland. While there are excellent Operator schools at Okanagan College and Thompson Rivers University, there was nothing here, in the Lower Mainland, which has the largest concentration of population in BC and the greatest need of Operators. The new Operator Training School planning is well under way with the first cohort starting the program in January 2021. Please see the article on page 2 that has more information on the new program.
2. The Building Water Systems certification arose out of a collaborative effort between the City of Vancouver, Vancouver Coastal Health, and the EOCP. A key driver was the recent outbreaks of Legionnaires' Disease, and the potential of water features such as cooling towers and ornamental fountains contributing to the growth of Legionella pneumophila. Also included here are potable building water treatment systems. There are already some training providers gearing up to provide the training that leads to this certification, and this certification will be available via the EOCP in January 2021. Please see the article on page 7 that has more information on the new certification.

Both these initiatives provide tremendous opportunities for Operators and are in the public interest, and we at the EOCP are excited to be working with our stakeholders to launch these projects.

As we get close to the end of the 2020, we are not sure what 2021 will bring. We are however resilient, and we are nimble, and we continue providing services at pre-pandemic levels, albeit with modifications in place. This is the last issue of the Operator Digest for 2020, and we look forward to connecting with you again in 2021.

In the meantime, please be kind, be calm, and be safe.

Chris Lawrence, Chair  
Kalpna Solanki, Chief Executive Officer



## WATER & WASTEWATER PROFESSIONAL TRAINING

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KWANTLEN POLYTECHNIC UNIVERSITY

# WE DID IT! - #EOCP2020

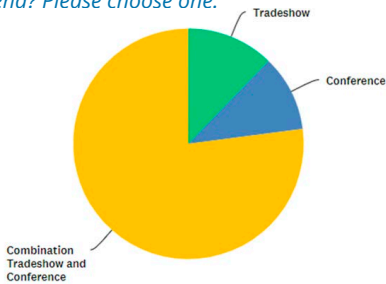
CANADA'S **FIRST** VIRTUAL CONFERENCE FOR OPERATORS

By Kalpna Solanki BSc CPHI(C) MBA

## WATER

In 2016 we conducted a survey of our Operators, and they overwhelmingly responded in favour of a conference. A conference designed specifically for Operators, not as an afterthought, but specifically FOR Operators.

*What type of special event would you like to attend? Please choose one.*



So, the EOCP team got together, and made it happen: at the age of 52, the EOCP held its first conference in 2018. Bottom left is a selfie of me with the delegates in the background: 300 people, a sold-out event. We had a tradeshow, fabulous presenters, and an awards gala...no masks, no physical distancing, great meals and drinks, and networking. We said we would regroup and refine the format, and come back in 2020, but the bottom right selfie shows how things have changed.

We thought, perhaps naively, that the pandemic would be under control by September so we reviewed all the notes we had taken from #EOCP2018 and started planning #EOCP2020 as a larger in-person conference, with 400 delegates, and four streams.

But Spring came and went, and the pandemic showed no sign of abating. So, as an organization, we pivoted to our new reality – with physical distancing, restrictions on size of gatherings, frequent handwashing, and masks. We were determined to go full steam ahead with our plans:

- 1.2 CEUs (for full attendance)
- 2 Full Days
- 4 Learning Streams
- 41 Interactive Sessions
- 400 Delegates
- 900 Minutes of Skills Development

It was no small feat going from in person to fully virtual, but we had a goal in mind: we did not want speaker after speaker sitting in front of a laptop with bad lighting and even worse sound. We wanted our virtual conference to be as close as possible to being there in person, we felt the production costs would be worth the investment to bring the best quality virtual conference feasible.

We planned for each presentation room to have space for a very small audience (staff, directors, and other speakers who arrived early or stayed late), each speaker to be introduced by a board director or staff, and each of the four rooms would have a full set up with stage, screen, podium, cameraman, and TONS of AV equipment!

Unbeknownst to us, the AV team we worked with had a state-of-the-art platform, excellent techs, and had

TRANSPORT

LEADERSHIP

WASTEWATER





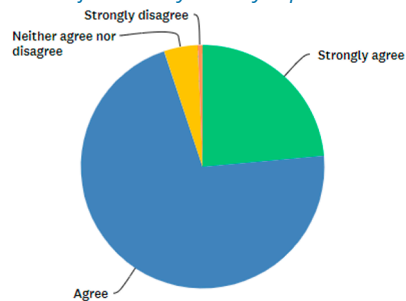


Dave Brewer of Utility Supply (West) Corporation presenting at #EOCP2020.

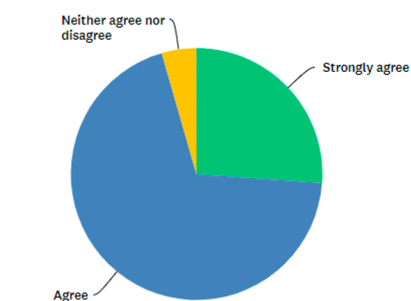
managed many virtual conferences, but nothing quite as large as ours! We met all our targets, and it certainly was a learning opportunity for all of us!

And what did the delegates think?

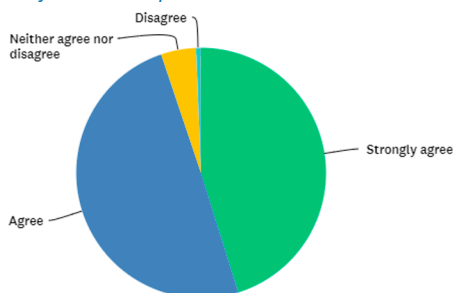
*The conference day met my expectations.*



*The conference day was well structured.*



*I would be interested in attending the EOCP's conference in September 2021.*



We also had some fabulous feedback from delegates that totally made our day!

**"The EOCP has this modern-day energy emitting from it. You're onto something really good with how you're doing business... Very happy to part of this Team."**

**"A good job for preparing and proving such a great online conference with the Covid-19 restrictions. Congrats to entire team and many thanks to the presenters."**

**"Great work EOCP team, you got this one right on!!!"**

Congratulations to the EOCP's 2020 Awards winners. Following are the announcements and press releases:

The EOCP Presents the Bert Caine Award to Jim McQuarrie: <https://tinyurl.com/bertcaine>

The EOCP Presents its Corporate Recognition Award to Integrated Water Services at the Capital Regional District: <https://tinyurl.com/corprecognition>

The EOCP Presents its Operator of the Year Award to Dean Brown at the City of White Rock: <https://tinyurl.com/operatoroftheyear>

The EOCP Presents its Innovation Award to the Drinking Water and Watershed Protection Program at the Regional District of Nanaimo: <https://tinyurl.com/yxutjqvy>

The EOCP Presents Three Okanagan College Students with Outstanding Student Awards: <https://tinyurl.com/eocpstudent>

Did everything go absolutely smoothly? Of course not! We did have a few hiccups especially with delegates having difficulty logging in on the first day. But, once again, the team and I have taken copious notes on what we can do to make things even better for #EOCP2021.

All this would not be possible without the spectacular staff team at the EOCP, and the supportive board directors - especially those who attended in person and helped out as moderators! Thank-you also to our presenters who took the changes and technology in stride.

Will our next conference be in person, hybrid, or fully virtual? At this juncture, we don't know. We do know that our circumstances have changed irrevocably - there is no going back, we can only move forward. For now, please save the dates 13th to 15th September 2021 - we will be there for you.

*Clayton Cullen of Integrated Water Services with the EOCP's 2020 Corporate Recognition Award.*

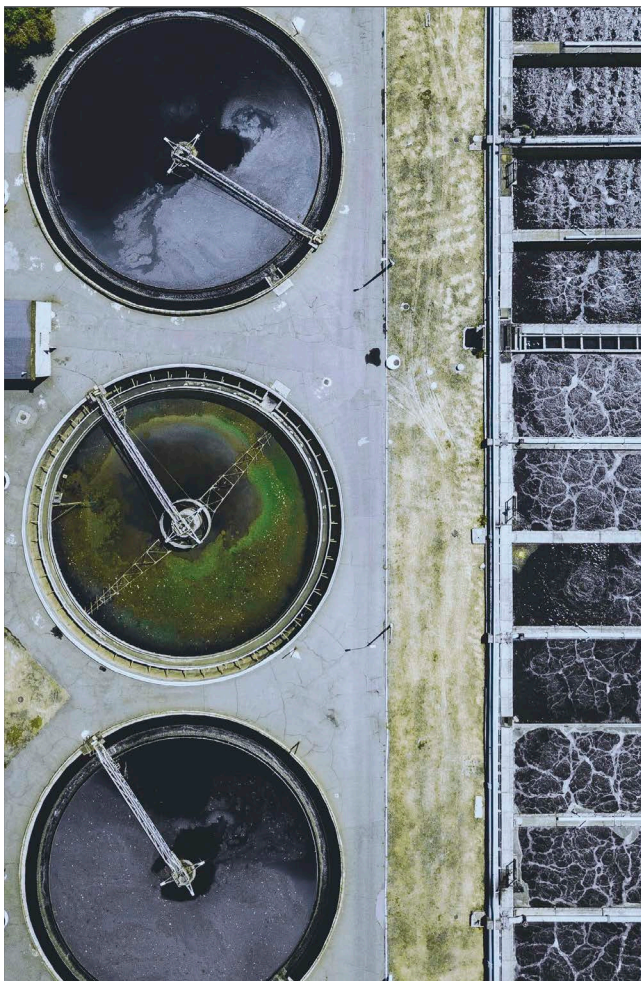




# A HUGE SHOUT-OUT TO OUR SPONSORS

who have been so generous in their support of #EOCP2020

**URBAN**  
systems



## BUILD YOUR CAREER AS A WATER AND WASTEWATER OPERATOR.

BCIT is launching a new Associate Certificate in Fundamentals of Water and Wastewater Operations starting January 2021. The program is uniquely designed to provide essential knowledge and skills for entry level jobs as Water and Wastewater Treatment Operators.

Contact Andrea Dusanj at [andrea\\_dusanj@bcit.ca](mailto:andrea_dusanj@bcit.ca) to learn more.





# BUILDING WATER SYSTEMS

## A NEW CERTIFICATION FROM THE EOCP

### LEGIONELLA OUTBREAKS

– caused by improperly maintained mechanical systems such as those below

By Jenni Green, P.Eng

Legionnaires' disease afflicts and kills more people in the United States than any other reportable waterborne disease, with 52,000 to 70,000 estimated cases annually. Between 3 and 33% of infections lead to death. The name originates from a 1976 Philadelphia outbreak amongst members of the American Legion. There is no vaccine, however it is preventable. It is connected to improperly maintained mechanical systems. Reported cases of Legionnaires' disease have increased in the last ten years.

Closer to home, Surrey's 2018 Legionella outbreak resulted in 14 cases (all hospitalised), including seven in the intensive care unit with two deaths. More Canadian examples include:

- Moncton, 2019: 16 cases, 15 of whom were hospitalised;
- Quebec City, 2012: 181 cases with 14 deaths; and
- Toronto, 2005: 135 cases with 23 deaths.

Most recently, in New Westminster, health officials are still unsure what caused a woman in her 70s to be hospitalized for 28 days after contracting Legionnaires' disease this summer. The full article which was first published in the New Westminster Record on September 9, 2020, can be found here: <https://tinyurl.com/y6kxvxd>

Legionella is a genus of bacteria that includes the species *L. pneumophila* that causes a pneumonia-type illness called Legionnaires' disease and a mild flu-like illness called Pontiac fever. Legionella are present in water and soil, and multiply quickly in warm water (20-50°C)

Legionella are associated with the built environment. The bacteria can proliferate in unsatisfactorily maintained plumbing and building mechanical systems and are transmitted through inhalation of contaminated water that has been aerosolised, but not by ingestion of water. Sources include, but are not limited to, cooling towers, swimming pools, domestic water systems, ice-making machines, whirlpool spas, hot springs, and fountains.

Cooling towers, decorative water features, and non-potable water treatment systems (such as for rainwater re-use), are all implicated in Legionella outbreaks.

Examples of these systems are shown at right.

These systems need to be properly installed, routinely tested and maintained, and reported on, to ensure that corrective action takes place to help prevent outbreaks. Basic Operator training and certification will combine to reduce the number of Legionella outbreaks in BC.

This certification also encompasses potable water systems where anti-corrosives are used.

Pre-requisites for the Building Water System (BWS) Operator certification, and ongoing requirements to maintain the certification will be as follows:

#### 1. 50 hours of experience working as:

- In a relevant red seal trade e.g. plumber, boilermaker,
- Facility Maintenance Technician
- Professional engineer working in a related field
- Certified EOCP Operator
- Water treatment service provider
- Environmental Health Officer
- Drinking Water Officer
- Swimming Pool Operator

#### 2. Completion of an accredited BWS course

- Course will be two to three days long
  - Cost for course will be approximately \$750
  - Course may be in class or online
- \*Courses are currently being developed by training providers across the province. Accreditation by EOCP will take place later this year.

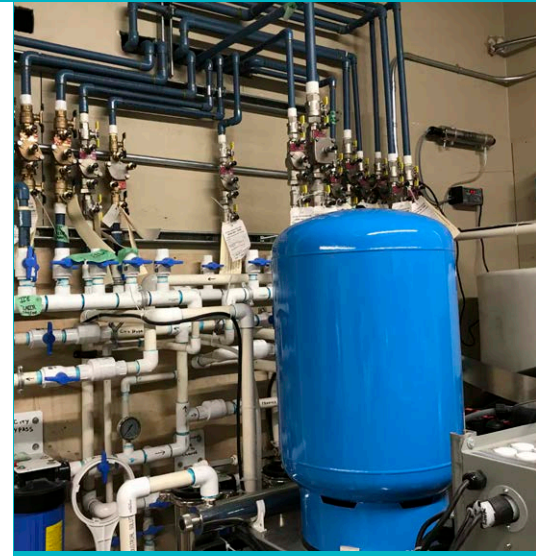
#### 3. Examination

- Web-based or paper
- \$100
- 50 questions
- 1.5 hours long

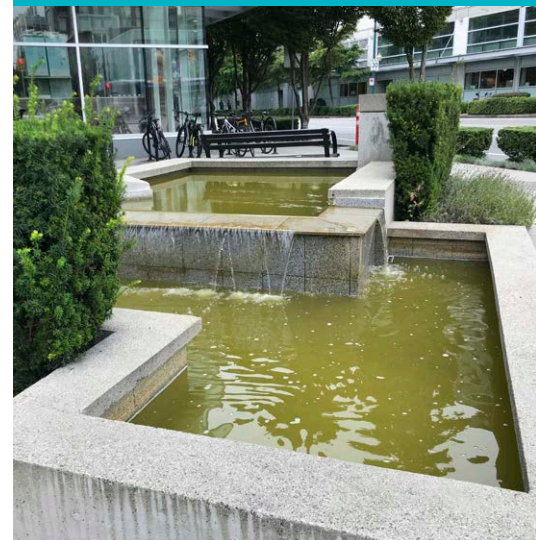
#### 4. Maintaining Certification

- Payment of EOCP annual dues (\$99)
- Completion of 1.2 CEUs (core and related) in every two-year reporting period
- (first reporting period would be 1st January 2022 to 31st December 2023)

For more information on the BWS certification, please contact the EOCP office.



1. Potable water treatment system within a building



2. Decorative Water Feature



3. Cooling Tower



# EMERALD LAKE

## YOHO NATIONAL PARK, BC

Beautiful, but problematic  
for Water Treatment!



Filters In Series Going From 10  $\mu\text{m}$  to 5  $\mu\text{m}$  to 1  $\mu\text{m}$  to 0.35  $\mu\text{m}$ .

By Kalpna Solanki BSc CPHI(C) MBA

On a recent visit to Emerald Lake, I was admiring the stunning blue colour of the lake, located in the pristine wilderness of Yoho National Park. Being in the industry, I thought: "I wonder where the resort gets its water from, and where its wastewater goes to?". Yes, not a question every tourist asks!

Speaking to a fellow diner at the restaurant led to an introduction to the Development Manager at Canadian Rocky Mountain Resorts, which then led to an introduction to an EOCP certified Operator, Chris Peters, which resulted in a tour of both the water and wastewater facilities!

The incredible vivid turquoise colour of the water is due to powdered limestone, and it is this same limestone that wreaks havoc with water treatment systems. The water intake in the lake is around 15 metres below the surface and is gravity fed into a cistern with a capacity of 50m<sup>3</sup> under the treatment facility.

Turbidity of the water is usually around 15 NTU in the Summer and 0.3 NTU in the Winter, with approximately 50% of the particulate matter being less than 1  $\mu\text{m}$  in size. To deal with this, the original water treatment system comprised of a 5  $\mu\text{m}$  filter and UV. The company running Emerald Lake Lodge was advised that the filter did not remove enough of the fine particulates and the high turbidity resulted in a drinking water advisory. Until a new system could be designed and engineered, measures were put in place to truck in potable water which is no mean feat when running a resort.

A system was designed and implemented with 0.45  $\mu\text{m}$  and 0.1  $\mu\text{m}$  filter cartridges, and an automatic backwash cycle. In theory this would be perfect. In practice, not so, as the fine particulate clogged up the filters so quickly that the backwash system was using up more water than it was producing.



A new water treatment system was then designed and implemented consisting of filters in series going from 10 µm to 5 µm to 1 µm to 0.35 µm. Subsequently, the water is treated with sodium hypochlorite, goes to a contact chamber, and then is stored in two reservoirs with a total capacity of just over 11 m<sup>3</sup>. A SCADA system is in place to monitor processes.

Although the property is not huge, due to elevation changes, there are 7 lift stations between the resort and the wastewater treatment facility. The wastewater treatment system comprises of four septic tanks in series with an MBR plant with two treatment trains. Coagulant is used for phosphorus removal, UV is used to treat the effluent, and discharge is to the Emerald River.

Just prior to my visit the effluent quality was not meeting regulatory standards and the membranes needed to be pulled out for repair/replacement. Since there was no doorway large enough for this process, the roof of the wastewater treatment facility needed to be taken off.

Chris Peters, the Systems Operation Manager, started working at the resort in 2018, and was not at that time an Operator. In 2019 he successfully completed the requirements to write, and passed his SWS and SWWS exams, and is now a certified Operator.

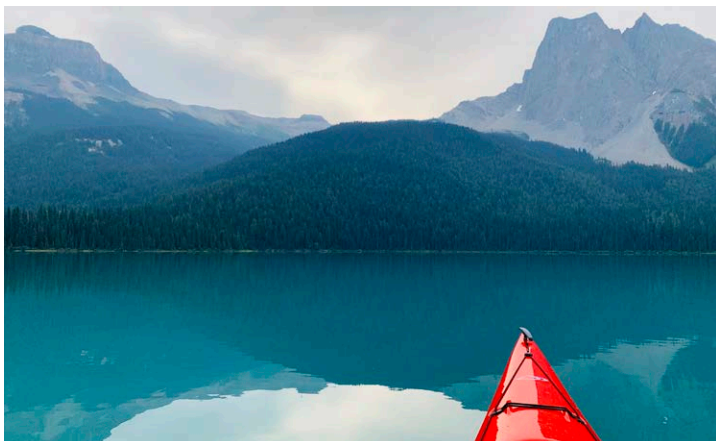
Chris had to teach himself the roles and responsibilities of an Operator as there was no Operator there when he started working there! Fortunately, he has a knack for being a quick study, and continually learns on the job. This, and being self-motivated are especially important qualities considering the remote location of Emerald Lake Lodge, especially in the Winter.

In addition to being the Operator of the SWS and SWWS at Emerald Lake Lodge, he is also the maintenance manager there with a team of around 20 staff overseeing everything including resort maintenance, grounds maintenance, shipping and receiving, and snow removal in the Winter.

Some other unique features of Emerald Lake Lodge: it produces all its own electricity, has a cogen system to capture heat from its propane powered turbines, and has a hot water heating system throughout the resort.

Some of the challenges of the position involve working in an industry where management does not always understand the need for equipment and the restrictions posed by regulations. In addition, being a privately run resort on Parks Canada land brings its own set of complications.

I am glad I asked around, and was introduced to the people at Emerald Lake Lodge. Now, I too have learned about the water and wastewater facilities there!



**Chris Peters** at the SCADA System of the Emerald Lake Resort Water Treatment Facility. Chris answered some additional questions below:

### **What makes it a good day at work?**

For me it would be when I've learned something I didn't know in the morning, and if I happened to have fixed something too, well that's a bonus!

### **What are some things you are working on to improve the facilities?**

Due to the fact that normally I'm the only certified Operator, alarm systems and other engineering controls are my main focus. They allow me to sleep easier and stay focused in other areas without requiring frequent checkups and in-depth inspections. This gives me time to focus on other large-scale improvements. You cannot depend on reliable labour in an industry where the workforce is quite transient, so you have to engineer around that.

### **What are your recommendations for anyone thinking of becoming an Operator?**

I would say the most important thing is to be open to learning new things always. My most valuable employees have not been the ones with the most experience and education but rather the ones who were always willing to learn new things and step out of their comfort zone. There is a huge amount to be learned in this industry, and I'm always hiring!



# H<sub>2</sub>O/20

## SHARED PERSPECTIVES, CLEAR VISION

### BCWWA 2020 VIRTUAL CONFERENCE & TRADE SHOW

NOVEMBER 3 - 4, 2020

## BCWWA 2020 VIRTUAL CONFERENCE & TRADE SHOW

NOVEMBER 3 - 4, 2020 | ONLINE

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Full Conference Delegate (Non-Member) - \$479  
Small Water Systems - \$149

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As a registered attendee you can fast track your career and accreditations by taking advantage of our on-demand education sessions to earn even more CEUs or pro-d hours than you would at a regular in-person conference. This year you can earn over **3 CEUs** all from the comfort of your home or office!



# A NEW MODEL FOR FACILITY FEES

- Starting 1 July 2021 -

By Kalpna Solanki BSc CPHI(C) MBA

Through its 54-year history, the EOCP has been working diligently on a world-class classification and certification program, and:

- Enables facilities to meet legislated classification requirements;
- Enables accurate facility classification that then determine the certification level of Operator/s required;
- Increases the ability of a facility to meet or exceed its operating permit requirements which reduces exposure to potential risks from non-compliance;
- Organizes facility information in a useful manner;
- Provides support during the classification process for new and existing facilities;
- Maintains a historical record of facility status/classification;
- Maintains a historical record of employment history for a facility;
- Provides support during the development of Direct Responsible Charge (DRC) Plans for Level II-IV facilities;
- Helps set targets for staff training and succession planning;
- Maintains and promotes a high level of professionalism, and code of ethics and professional standards for Operators;
- Provides a network of dedicated Operators, technical experts, and other staff that can be contacted for assistance;
- Maintains the largest repository of information in BC and YK on facilities and the Operators who work there that is available 24/7.

The EOCP has managed to continue this work without any increase in facility fees for more than 27 years. However, due to an increase in costs, an increase in services, and to ensure sustainability of the organization, a new annual fee model has been developed.

Currently, the fees range from \$50 to \$1,600; some are payable annually, some are payable every five years. The new models are more equitable and transparent, and fees are payable every year.

There will no longer be any reclassification fees. However, to ensure facility information is up-to-date, facilities will be required to reclassify every five years or when any major changes are made to the facility – whichever occurs sooner.

Facility Level	Facility Type					Count of Facilities
	WT	WD	WWC	WWT		
I	\$100	\$100	\$100	\$100	Increase	39
II	\$200	\$200	\$200	\$200	Same	97
III	\$300	\$300	\$300	\$300	Decrease	90
IV	\$400	\$400	\$400	\$400		<b>226</b>


We have completed a scenario analysis using several organizations and find that under the new models, some organizations will pay less, some will pay the same, and others will pay more:

If your facility has undergone a reclassification in 2020 and was charged a fee, that fee will be discounted from your invoice when the new fee model goes into effect on 1 July 2021.

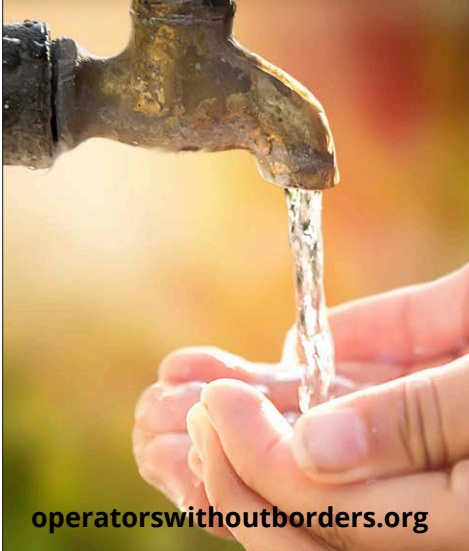
**Programming changes will be made to the EOCP's Customer Relationship Manager to:**

- Send invoices out automatically, every year on 1 July;
- Send each facility an email every five years after its last classification as a reminder to reclassify the facility.


Please note that SWS and SWWS fees will not be undergoing any changes.



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# I NEED CEUS, BUT WE'RE IN THE MIDST OF A PANDEMIC!

By Kalpna Solanki BSc CPHI(C) MBA

Across Canada, every certification jurisdiction requires its Operators to complete a certain number of CEUs to maintain certification, and EOCP is no different. While this is in accordance with the Best Practices of the Canadian Water and Wastewater Operator Certification Committee, some jurisdictions have two-year reporting periods, while others have longer reporting periods. But for all, the CEUs required average out to 1.2 CEUs per year for Operators holding Level I-IV certifications with the only exception being Ontario where more CEUs are required the higher your level of certification.

## At the EOCP, the CEUs needed per two-year reporting period are:

- Bulk Water Delivery (BWD): 0.6 CEUs
- Small Water System (SWS), Small Wastewater System (SWWS), Building Water System (BWS): 1.2 CEUs
- Levels I-IV: 2.4 CEUs

## The EOCP has NOT changed its requirements for CEUs during this pandemic for several reasons:

1. Continuing professional development is a fundamental tenet of Operator certification throughout North America, and many professions are moving towards the model of mandating ongoing professional development;
2. We are only part way through the first year of a two-year reporting period, leaving plenty of time to complete your CEU requirements;
3. Some training providers have had distance learning options for many years;
4. Many training providers have adapted to our new reality and provide virtual training and/or training in person with COVID-19 safety protocols;
5. The EOCP and other organizations have annual conferences that also provide opportunities to learn and accumulate CEUs.

## Reaching out to organizations, this is what they had to say:

With the introduction of the lockdown in March 2020, a lot of utilities had staff working limited shifts (one day at home each week so staff did not work together)



*Okanagan College Water Engineering Technology students working together with PPE.*

but Sun Peaks asked that they take courses online. Several courses taken were either free or had minimal costs. We held training sessions via Microsoft Teams and recorded them for future use. After a few glitches, the training went well. Staff used computers or tablets that were provided by the Municipality and supported this initiative as the courses were all good for CEUs and enabled staff to remain compliant with EOCP's requirements.

### – Pat Miller, formerly at Sun Peaks Mountain Resort Municipality

At BCMSA we have altered our training in two ways: right away, we modified all the courses to be delivered virtually via Zoom or MS Teams. That has been very well received and attended by many municipalities. When the Province entered Phase 3, we established strict safety protocols for face to face training sessions. The first few were a bit nerve wracking as a trainer, but we are firm in maintaining sanitation and distance protocols; if the municipality is unable to maintain these protocols, we would evoke our right to refuse unsafe work. Thankfully that hasn't been necessary.

### – Cathy Cook, BCMSA

Safety is paramount to both Operators and instructors, so to reduce the risk of transmission, our organization in conjunction with the municipality focused on implementing physical distancing, hand hygiene, cleanliness of surroundings, physical barriers such as PPE, and

elimination of shared surfaces or objects as much as possible. The main noticeable change was adhering to the Canada-wide public health guideline of two metre physical distance between each person by calculating the classroom area needed which meant that the learning space had to be large enough or the number of participants would need to be limited. In addition, all group activities were eliminated, instead a large discussion was facilitated while the participants remained seated in their assigned areas. In the most recent rendition of the course, a portion of the instruction was based outdoors to further reduce risk of transmission. The following are additional steps that were taken:

- All training materials and exams were packaged and transported 72 hours in advance in individual envelopes
  - Learning space was cleaned/sanitized the day before the course
  - Municipality provided sanitizer for everyone.
  - Gloves were used to instruct and touch surfaces of equipment belonging to the municipality
  - Equipment was wiped with disinfectant wipes between users
  - All training material envelopes were placed on the attendee's desk using gloves the day before the training
  - Attendees provided their own writing utensils
  - Attendees brought their own lunch
- Ashwin Mohan, Hetek Solutions



We are doing online theoretical education combined with carefully controlled in-person practical training. It's a lot of work and attention to detail for both the instructors and students but we are all making it work.

– **Allison O'Neill, Okanagan College**

The COVID-19 pandemic has presented BC Plant Health Care with a number of opportunities for growth and advancement. We have been willing to continue providing high quality training courses throughout this challenging time. Regarding in-person synchronous classes, we have been following provincial recommendations for physical distancing and mask wearing where this is not possible. To accomplish this, we have been working with reduced class and learning pod sizes. We have also been limiting points of contact by involving more pieces of equipment, using roll calls in lieu of sign in sheets, and sanitizing tools and props when necessary. Further to these measures, we administer self-assessments at the beginning of every class, where our COVID protocols are reviewed, and giving attendees an opportunity to discuss with us their safety. Finally, we have been offering



*Allison O'Neill of Okanagan College, with PPE on, is ready to conduct in-person practical training.*

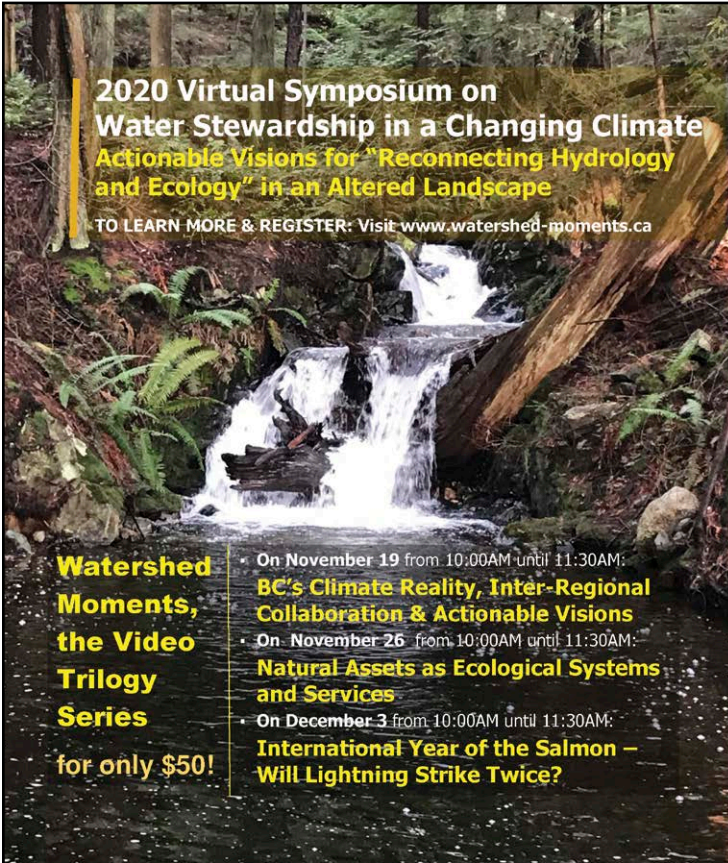
asynchronous on-line learning courses to provide opportunities for people to learn without exposing them to additional risk.

– **Thomas Walz, BC Plant Health Care**

The above, just a few of the comments received, show that similar to the EOCP

modifying its operations to provide services to Operators in safe manner, training providers have pivoted to this new reality, and have made many modifications to their training methods to ensure Operators have access to training to maintain their CEUs and/or complete the education needed to write higher levels of certification exams. To make it easier for Operators to find courses that are virtual, we are asking training providers to indicate this in the EOCP's CRM, thus Operators can now use the 'Location' tab to search for virtual courses.

The regulations stipulate the need for Operators to be certified, and certification needs completion of the required number of CEUs. We do not know how long this pandemic will last but do know that provision of safe drinking water and wastewater management will remain essential. Part and parcel of that is the requirement to complete the required CEUs, and fortunately, training providers appear ready, willing, and able to provide Operator training in a safe manner.



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# STATISTICS

1st July to 30th September 2020



# EOCP

Environmental Operators  
Certification Program

## EXAM STATISTICS



**187** exams  
taken

**63** exam  
sessions

## FACILITIES



**170** facilities  
re/classified

## CONTINUING EDUCATION UNITS (CEUs)

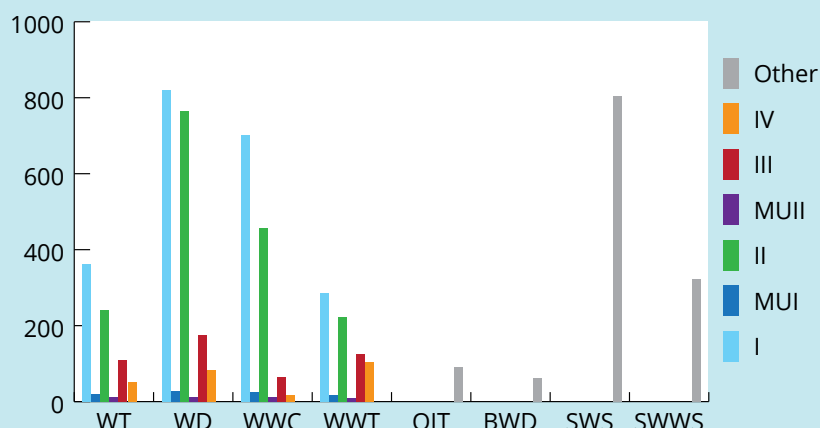
**281** Operators  
submitted CEUs

**626** CEUs were  
earned

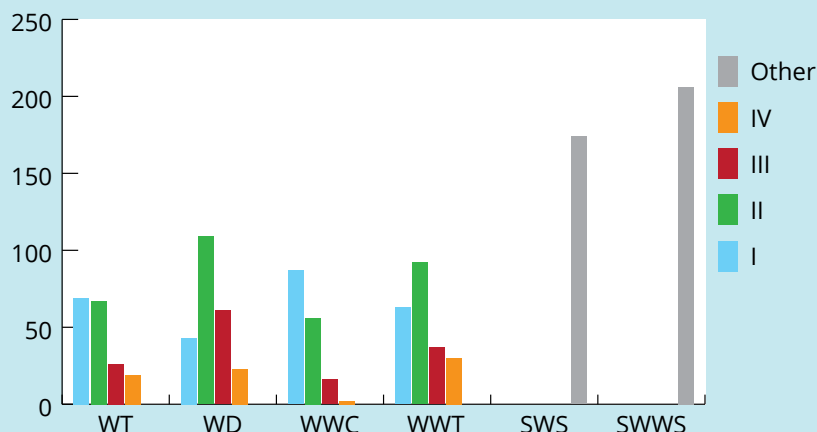
## DEFINITIONS

WT	Water Treatment
WD	Water Distribution
WWC	Wastewater Collection
WWT	Wastewater Treatment
OIT	Operator In Training
BWD	Bulk Water Delivery
SWS	Small Water System
SWWS	Small Wastewater System
MU	Multi Utility

Operator Certification (July to Sept. 30 2020)



Facility Certification (July to Sept. 30 2020)



Those of you who have not submitted course completion certificates for the 2018 – 2019 period should do so as soon as possible. You can check your status by logging into your profile at <https://crm.eocp.ca/> and clicking on **ACCOUNT** to see if your dues have been paid, and **CEU** under the **LEARNING STATUS** tab to confirm that your CEUs have been met. **If your CEUs have not been met or your 2020 dues have not been paid your status will be red flagged and you will be listed as not certified.**

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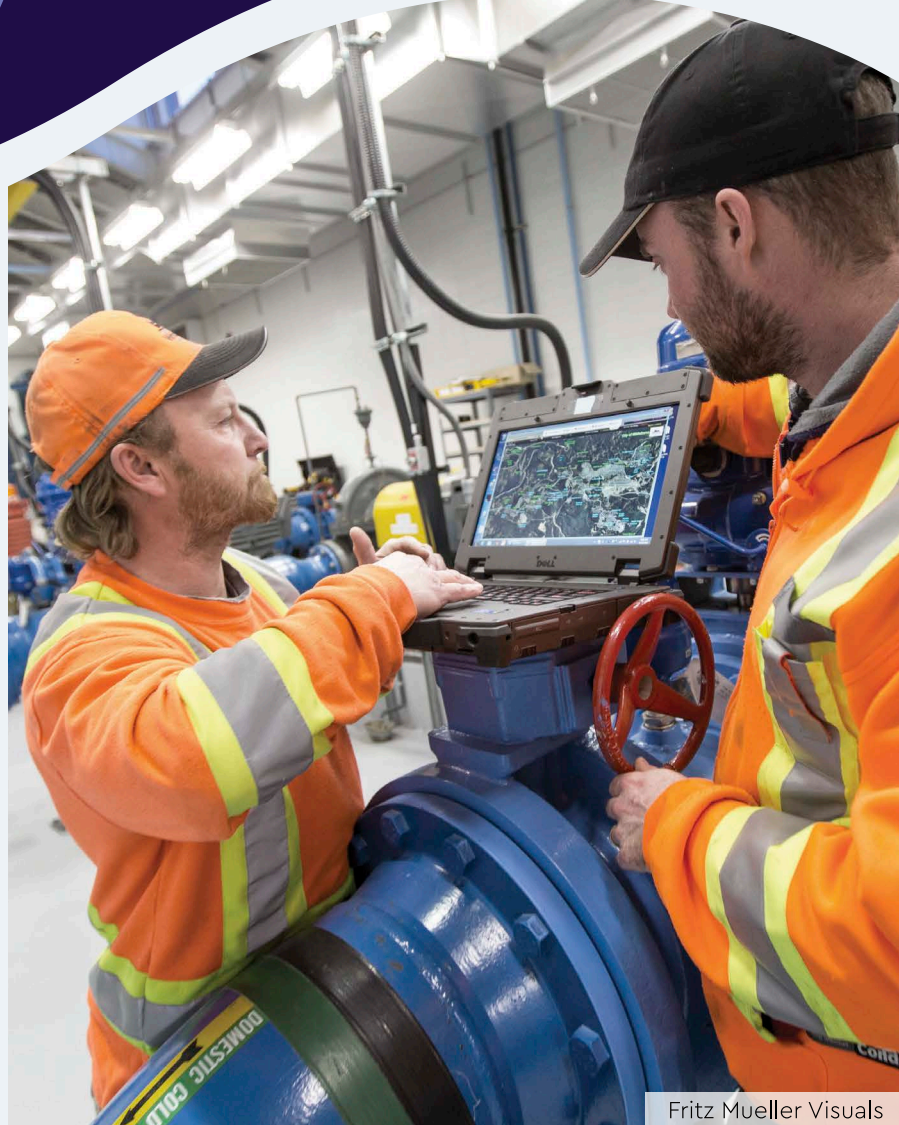
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