

# OPERATOR DIGEST

SUMMER 2018 | NUMBER 137



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

## IT'S NOW LESS THAN 2 MONTHS UNTIL THE FIRST EVER EOCP TRADESHOW AND CONFERENCE!

At the Marriot Pinnacle in Vancouver, 9-11 September



## EOCP TRADESHOW AND CONFERENCE

### ENQUIRE-LEARN-APPLY

The EOCP Tradeshow and  
Conference 2018. Designed by  
Operators, for Operators.

You said you wanted a tradeshow and  
conference for Operators when we  
surveyed you in 2016, and we listened!

The EOCP's first biennial Tradeshow  
and Conference will be a sold-out  
event with Operators from BC and YK.  
The Tradeshow is on the 9<sup>th</sup> of Sep-  
tember, with two full days of training  
on the 10<sup>th</sup> and 11<sup>th</sup>, and an optional  
exam session on the 12<sup>th</sup>.

The 'who's who' of the water/waste-  
water industry will be presenting  
more than 20 sessions spanning two  
full days. Pick and choose from three  
streams: water, wastewater, and  
leadership.

**Come early, and stay late!**  
Vancouver is beautiful in September!

**SPACE IS RUNNING OUT!**

**REGISTER NOW**

## DIRECT RESPON- SIBLE CHARGE

Often, more  
than just Chief  
Operators are  
eligible for  
DRC hours. P8



## HOW TO COMPLETE A NEW FACILITY CLASSIFICATION

Facilities are requested  
to update to the new  
Customer Relationship  
Management system  
by the end of 2018. P6

A screenshot of the EOCP website's login and registration interface. The header features the EOCP logo and the text "Environmental Operators Certification Program". The main content area is divided into two columns. The left column, titled "Sign into your account", contains fields for "EMAIL" and "PASSWORD", a "Submit" button, and links for "Remember me?" and "Forgot Password?". The right column, titled "Register", contains a paragraph explaining the registration process and a "Register" button at the bottom.

# 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**

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Burnaby, BC V5C 6N5

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**FAX:** 604 874 4794

**TOLL FREE:** 1 866 552 3627

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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.

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Allison O'Neill, Treasurer

Maurice Valcourt, Secretary

Peter Coxon, Director

Jeff Culhane, Director

Krista Derrickson, Director

Jim McQuarrie, Director

# MESSAGE FROM THE DIRECTORS AND STAFF



**Brian Dean, Chair**

**Kalpna Solanki, CEO**

Where has the time flown...it seems just a short time ago that the last issue of the Operator Digest came out!

We had an excellent election process utilizing a new module of our Customer Relationship Management system. We had seven candidates vying for three positions, with two incumbents running again. Every candidate was eminently qualified to represent the EOCP membership, so it was undoubtedly a difficult choice for our Operators to make.

At the Annual General Meeting the newly elected Directors, Krista Derrickson (incumbent), Rob Fleming (incumbent), and Allison O'Neill were appointed to the Board. Subsequently, at the July meeting of the new Board of Directors, the Board Executive was elected. The Board Executive comprises of Brian Dean, Mike Firlotte, Rob Fleming, Allison O'Neill, and Maurice Valcourt.

Along with some final 'tweaks' to our CRM system, the online 'face' of the EOCP, our website has been completely upgraded. It now provides an easy interface with the CRM – just click 'Login' in the top right corner! The new website has been designed for easy navigation, and quick access to necessary information. Check it out at <https://eocp.ca/>

Work continues on our new Facility Classification models, and the most recent CRM upgrades will allow Chief Operators to complete the classifications for Levels I to IV facilities online. As of January 2018, all facilities re/classified receive certificates with a five-year expiry. The keystone, be it for risk management plans or DRC plans is an accurate and up-to-

date facility classification. As such the EOCP requires all facilities to be classified, and to reclassify every five years or when major modifications are made – whichever occurs sooner. See page 6 for details on facility classification and page 8 for DRC plans.

Last but definitely by no means least, details are being finalized for the EOCP's first Tradeshow and Conference. Designed by Operators, for Operators, and with the theme 'ENQUIRE-LEARN-APPLY', the program is jam-packed with one and a half days of tradeshow, overlapping with two full days of training, culminating with an optional third day to catch up on exams. We are very excited about the calibre of the exhibitors and presenters at the EOCP's first biennial Tradeshow and Conference. Our technical sessions are presented by the definitive 'who's who' of the industry – government, business leaders, environmental groups, policy makers, and leading education and training providers. Register and check out the sessions here:

<https://tinyurl.com/EOCPConference>

The EOCP Board and staff recognize the importance of communication with our stakeholders through modes such as the Operator Digest, and we value your feedback. Communications to our stakeholders are critical to emphasize that the EOCP provides more than just water and wastewater classification and certification services, and is ultimately a protector of public health and the environment.

Brian Dean, Board Chair  
Kalpna Solanki, Chief Executive Officer





# EOCP TRADESHOW AND CONFERENCE

9-11 SEPT. 2018, VANCOUVER

SWS

SWWS

WT

WD

WWC

WWT

CHOOSE YOUR LEARNING STREAM,  
OR PICK & CHOOSE TOPICS  
FROM 3 DIFFERENT STREAMS!

**ENQUIRE.  
LEARN.  
APPLY.**

**Designed by Operators, for Operators.** This event will provide learning opportunities for water and wastewater sector professionals on innovative solutions and new insights to foster the prudent management of water and wastewater in British Columbia and Yukon.



## KEYNOTE SPEAKER COLIN PERKEL

Colin Perkel has been a senior journalist with Canada's national news agency, The Canadian Press. Colin is the author of 'Well of Lies', an in-depth look at the Walkerton water tragedy where over a period of a week in May 2000, hundreds of people in Walkerton were afflicted by a deadly strain of E.coli bacteria.



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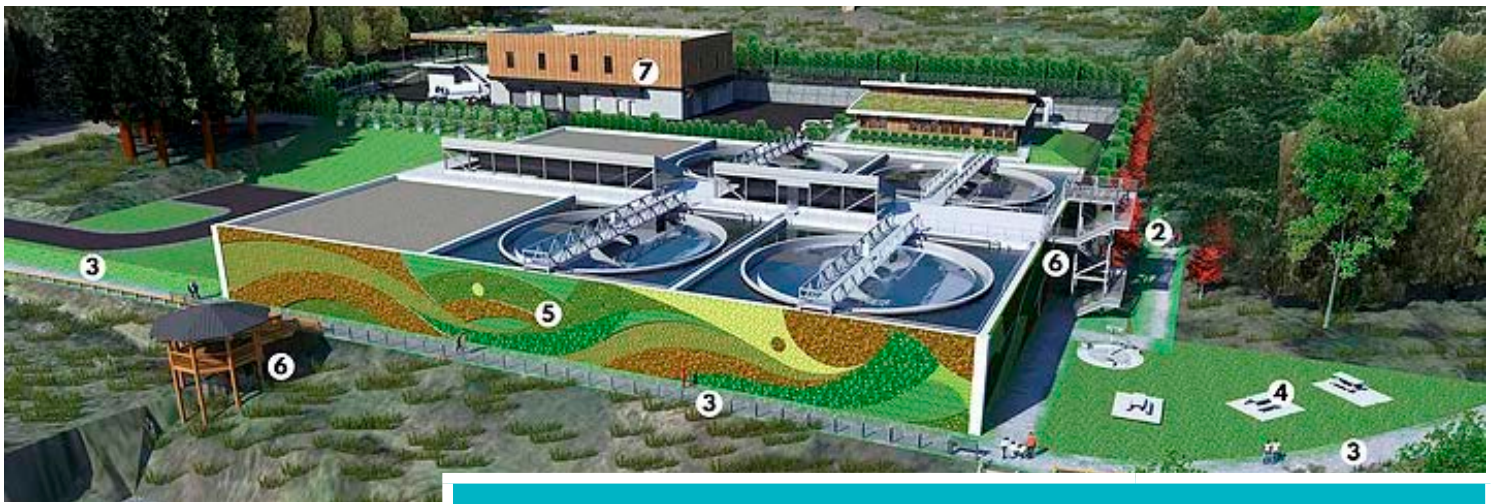
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**LIMITED SPOTS AVAILABLE!**

Register now to avoid disappointment



**EOCP TRADESHOW  
AND CONFERENCE**



# POWELL RIVER

## Route and design for new Wastewater Plant approved

This article was written by Todd Wescott and first published on [watercanada.net](http://watercanada.net)

City of Powell River Council has approved the route of the pipeline between Westview and the new Townsite wastewater treatment facility, as well as the design concept for the facility itself.

At its Thursday, May 17th meeting, councillors voted unanimously for the conveyancing route of the pipeline through Willingdon Beach Trail, as well as the natural integration theme for the design of the consolidated wastewater treatment plant.

Regarding the motion on the conveyancing route, Councillor Karen Skadsheim said there was not a lot of difference in capital cost in constructing the pipeline route along Willingdon Beach Trail, or Marine Avenue, but there was a significant difference in operating and maintenance costs. The Marine Avenue route would accrue an estimated \$2.28 million in electrical cost plus pump replacement over fifteen years versus an estimated \$712,000 for the Willingdon Beach Trail.

"I have lots of confidence that the engineers have heard us loud and clear that there is a lot of concern about the trails," said Skadsheim. While the

trail is the more sensitive route, during construction, the project will make use of technologies and procedures that will have the least impact on sensitive parts of the route, she added.

In a report to council, it was noted that the Willingdon Beach Trail alignment will require:

- A 450 millimetre High-density polyethylene (HDPE) dimension ratio (DR) 26 main through the Willingdon Beach Campsite from Campsites 13 to 18.
- A 450 millimetre HDPE DR 26 main directionally drilled from Campsite 18 to the Willingdon Beach Trail.
- A 450 millimetre HDPE DR 26 main on the Willingdon Beach Trail including a 600 millimetre diameter by 12 millimetre thick steel pipe bridge adjacent to the existing pedestrian trestle bridge.

Council then considered a motion regarding the design concept of the treatment plant itself. Skadsheim said that based on community engagement sessions and an online survey, she was recommending that council proceed to

final design of the wastewater treatment plant with a natural integration theme.

Tor Birtig, director of infrastructure, said the city had a couple of proposals for the design and one of the distinct comments received was that respondents did not want to see the wall of the treatment plant designed in the shape of the Hulks, as was the case with the heritage theme.

"They wanted something that integrated more with nature in that area," said Birtig. "We heard them loud and clear and want to move forward with the green roofs. With respect to the living wall, we heard that we should not completely enclose it with foliage, but to have various components of it either murals or concrete that has some specific design inlaid in it."

Skadsheim said her understanding is that the funding announcement from senior levels of government will be imminent and that there will be a narrow window of application time, and so that it would be imperative to get the design for the consolidated wastewater treatment facility concluded for submission.

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## WATER & WASTEWATER TRAINING

As a water and wastewater operator, I bring hands-on expertise and industry knowledge to the classroom. Contact me for information on EOCP - approved courses and customized, onsite training.

Scott Jameson, ASCT

Jameson Water Services Inc, Est 2007





# BETTER TRAINED BETTER PREPARED



## NETWORK YOUR WAY TO CEU FULLFILMENT

### OPERATOR CONTINUING EDUCATION (CEU) DAY & TRADE SHOW

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**Location:** Anvil Centre, New Westminster

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# HOW TO COMPLETE A NEW FACILITY CLASSIFICATION

All facilities will need to be updated on the new Customer Relationship Management (CRM) system.



Sign into your account

EMAIL

PASSWORD

Submit

☐ Remember me? [Forgot Password?](#)

Register

If you don't already have an account, you can register here to access the EOCP's Customer Relationship Management System to update your profile, check your CEUs, find courses, apply for certification, classify facilities, or apply to become a trainer.

Register

by Jenni Green, EOCP Technical Expert

By now we hope that you have registered and are becoming familiar with the Customer Relationship Management (CRM) system. As the new system continues to evolve, we want to thank everyone for their continued support and patience.

In September 2017, the EOCP launched four new facility classification models for water treatment, water distribution, wastewater treatment, and wastewater collection.

These new classification models have been very well received over the last 8 months. During the course of the year, we hope to have all facilities classified using the new models. In order to accomplish this, Chief Operators and those listed as 'person in charge' in the CRM will be receiving an email this Fall asking them to log in and complete a new facility classification.

## 1 Confirm Chief Operator

If you are a **Chief Operator**, or the **person responsible** for the facility, it is important that you confirm this on the relationships page for each facility. To make a change, right click on the 'type' field next to your name and select the appropriate position. If you are not listed as 'Chief Operator' or 'person in charge' you will not be able to submit the facility classification.

As part of the migration to our new online system, ALL facility classifications will be set to expire in June 2020, with the exception of those that have already been classified using the new models. Moving forward, all facility classifications will carry a five year validity, and owners will need to renew and update their classifications on a five year cycle or sooner if any major changes are made to the facility. This will ensure that classifications remain valid and relevant, and that operator training and certification will align.

## 2 Requesting Re-classification

A facility can apply to reclassify at any time by selecting 'Request Re-classification' from the 'Action' tab on the facilities homepage. An invoice will be generated, and you will be required to pay the classification fee before you can submit the application.

ENTITY	NAME	TYPE	TITLE	START DATE	END DATE	STATUS	CERTIFIED
	Jack Smith	Chief Operator	Senior Operator	01-01-2017		Accepted	
	Jane Doe	Operator	Operators	22-10-2007		Pending	
	Jane Doe	Operator	Utilities Operator II	24-10-2007		Pending	
	Jane Doe	Employee	Owner Prim. Contact as Billing	15-12-2015		Accepted	
	Tom Brown	Operator	Operator	07-05-2012		Pending	

Organization Specifications

DATE COMMISSIONED

FACILITY TYPE: WT

WATER SOURCE

CLASSIFICATION LEVEL: II

Facility Health Authority

AUTHORITY

DELIVERY AREA

HEALTH AREA

Facility Classification Model

Facility Classification Details Form

Clicking 'Request Re-classification' or the 'Facility Classification Details Form' button will launch the facility classification model details form and create an application. The form is completed in the same way as the old paper-based models. Simply enter values and check the boxes as they pertain to your facility. If you have any questions at all during the classification process, please get in touch with us.



At the end of the data entry, you will be able to instantly see your classification results. Please click 'next' to continue with the application. You will be asked to provide an up to date schematic of the facility, and verify the operations staff currently working at the facility. Once everything has been completed, clicking 'submit' will finalize the submission. The EOCP will review the information and be in touch with you if anything further is required.

Again, we would like to take the opportunity to thank all operators, owners, government representatives, and industry stakeholders for their continued patience and support as we launch the CRM and continue to be on the leading edge of water and wastewater certification in North America.

**EOCP | Customer Relationship Management System** Settings Logout

Home CRM Action Items Career Management Finance

**Step 1: Complete the Inventory**

**Size and Scale**

CATEGORY	SUBCATEGORY	COMPONENT	POINTS	VALUE
Minimum population			0.00	<input type="text"/>
Maximum population			0.00	<input type="text"/>
Flow during periods of normal maximum use (daily average) m <sup>3</sup> /day			0.00	8,200
Peak daily flow (largest day) m <sup>3</sup> /day			0.00	<input type="text"/>

**Treatment Works - Infrastructure Point Score**

CATEGORY	SUBCATEGORY	COMPONENT	POINTS	FACILITY POINTS
Pumping of main flow			7.00	<input type="checkbox"/>
Preliminary	Coarse Screens (Bar racks)		4.00	<input type="checkbox"/>
	Grit chambers (passive)		3.00	<input type="checkbox"/>
	Coarse Solids Reduction (Comminutor, Macerator, Grinder)		4.00	<input type="checkbox"/>

# QA

## General Questions

### Do I need to re-classify my system?

All facilities must be re-classified every five years, or following a major system change, whichever comes first. Facility classifications expire after five years.

### Have the small water and small wastewater facility classification models been updated?

No. At this time the small systems facility classifications remain the same. The forms can be downloaded and submitted via [eocp@eocp.ca](mailto:eocp@eocp.ca)

### Can I complete my classification for small water and wastewater systems online?

No. At this time the online submission is only available to level I to IV facilities.

### How much does it cost to re-classify my system?

Small Water, Water Distribution, Water Treatment, Wastewater collection  
 – \$50.00 + GST  
 Small Wastewater Treatment Systems  
 – \$100.00 + GST  
 Wastewater Treatment Systems  
 – Fee based on flow

Flow (m3/d)	Fees (excluding GST)
<1000	\$100 (every 5 years)
1000-1999	\$100 (annually)
2000-4999	\$200 (annually)
5000-13,999	\$400 (annually)
14,000-49,999	\$800 (annually)
>50,000	\$1600 (annually)

### Can I (re)classify online?

Yes. Level I to IV facility classification is completed through the CRM <https://crm.eocp.ca>

### Who can re-classify a facility

Through the CRM, only the person designated as Chief Operator or person in charge may apply and complete the reclassification process. If you have trouble assigning relationships to your facility, please contact [eocp@eocp.ca](mailto:eocp@eocp.ca)

### The fields on the form do not apply to my facility or I would like to make an additional note, what should I do?

If you have a specific question about the classification, or have a system function that is not represented, please contact [jgreen@eocp.ca](mailto:jgreen@eocp.ca) to discuss.

### My classification is not what I expected it to be, who should I talk to, to dispute a result?

If you have concerns with the results of your classification, please email [jgreen@eocp.ca](mailto:jgreen@eocp.ca)

<b>MORE Q&amp;A ON PAGE 10</b>	<b>WATER DISTRIBUTION</b>
	<b>WATER TREATMENT</b>
	<b>WASTEWATER COLLECTION</b>
	<b>WASTEWATER TREATMENT</b>

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# DIRECT RESPONSIBLE CHARGE:

## DRC Plans will be Mandatory as of January 2019

By Jenni Green, P.Eng

DRC experience is required for Level III and IV Operator certifications. Historically, the DRC requirement has been a bottleneck for Operators seeking higher levels of certification and for owners in establishing smooth succession planning pathways. DRC experience in facilities and systems has typically been earned by the Chief Operator or by an Operator substituting in the role.

In practice, other roles besides Chief Operators have decision-making responsibility within many facilities and systems. This gives other Operators the opportunity to acquire DRC work experience at the same time as the Chief Operator or the substitute. The EOCP offers owners an opportunity to identify when more than one Operator is earning DRC hours. In fact, depending on the facility there is an opportunity to identify multiple roles that can earn DRC at the same time. This is not well known and very few facilities have taken advantage of this opportunity.

### To be eligible for DRC, roles must:

- be in active control of the facility/system or a significant segment thereof;
- have responsibility for technical direction of the facility/system or a significant segment thereof;
- include substantial on-site duties (sufficient to have the necessary familiarity with the operation of the facility/system);
- have the mandate to make meaningful operating decisions without consultation and be accountable for those decisions.

### The responsibilities of the role must include:

- taking all steps reasonably necessary to ensure that the processes within their responsibility are operating safely and effectively;
- reviewing and establishing operational parameters for the facility;
- monitoring and evaluating the processes within their responsibility in a manner that permits them to be adjusted when necessary and maintaining appropriate records of these activities;
- as necessary, adjusting the processes within their responsibility and maintaining appropriate records of adjustments made.

'Meaningful operating decisions' means decisions that could affect water or effluent quality, safety of personnel, spills, leaks, the

integrity of network, or directly impacting public health and/or the environment. This does not mean that Operators must work entirely independently; an Operator who has the mandate to make meaningful operating decisions without consultation may still choose to consult on any decision when appropriate in their judgement. An

*Continued on page 10*



## Water and Wastewater Technology DIPLOMA



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# DO YOU KNOW YOUR COMPLIANCE OFFICER?

By J. Wilson

*Compliance Officer, Regional Operations Branch,  
Environmental Protection Division, Ministry of  
Environment and Climate Change Strategy*

Has your wastewater treatment plant been inspected recently by the BC Ministry of Environment and Climate Change Strategy. If not, here's a brief summary of the role of compliance officers, why we inspect and what you can expect when inspected.

Discharges from wastewater treatment systems are authorized by a permit under the Environmental Management Act (Act), or registration under the Municipal Wastewater Regulation (Regulation). In a file at your wastewater facility, there should be a copy of either the permit or registration, along with plans, monitoring data and reports. You likely send in monitoring data and reports on a regular basis to the ministry. But what happens after you send it in and who looks at it?

Here's where the compliance officer comes in. Compliance officers inspect to verify compliance with your permit or registration. This ensures that the requirements set to protect the environment and human health are being followed. Inspections may be carried out on site, where one of us arrives at your wastewater facility, or off site where data and reports are assessed as part of an office review.

Compliance promotion is a new role for compliance officers. This role aims to increase voluntary compliance through education, outreach and also to increase awareness of requirements. These activities include attending conferences and tradeshows, developing brochures, or providing training sessions. If you see our display booth at one of these events, please stop by, we would love to meet you.

## **How do we determine who to inspect?**

Each year we review hundreds of wastewater facilities and inspect a number based on potential risk, geographic location or length of time since the last inspection. Recently, we've started industry wide audits to determine compliance with specific requirements. Inspections may also be in response to a complaint or in response to an incident.

## **How will I know if I'm being inspected?**

A compliance officer will likely contact you in advance but sometimes we may arrive unannounced. Inspections are typically during regular business hours, but may be after hours in the event of a spill or



other emergency. Office reviews of your wastewater facility's monitoring data and reports may be done at any point in time with or without notice.

## **Who can I expect from the ministry?**

A compliance officer is designated as an inspector under the Act and will lead the inspection. We may be accompanied by other ministry staff, Conservation Officers and/or any other party if necessary.

**What will we be looking at?** On-site inspections may focus on the entire wastewater facility or just one or two specific areas. In an on-site inspection, the compliance officer will observe the wastewater facility, site operations and equipment. The compliance officer may ask questions, take notes and photographs and collect samples. The inspection could also include reviewing monitoring data, waste handling and disposal information, contingency plans, or other records and reports required by your permit or the Regulation.

On every inspection, the compliance officer will confirm that your wastewater facility is classified under the EOCP and that the Operators are appropriately certified under the EOCP, as required by the Regulation or if stipulated in your permit.

## **How long will the inspection take?**

The length of the inspection varies. Site inspections of very large wastewater facilities may take a day while others may take a few hours. Inspection reports will always be provided to you at a later date.

## **How is compliance measured?**

Compliance is measured against the requirements set out in your permit or the Regulation. The wastewater facility/operation is assessed as either in or out of compliance with each individual requirement.

## **How will I receive the inspection results?**

Soon after the inspection, the compliance officer will either email or hardcopy mail an inspection report outlining the inspection results. In addition, these reports may be made available online to the public in the near future.

One thing to remember is that the compliance officer's goal is to help your facility be in compliance with the Act or Regulation. Below are a few tips to help you prepare for an inspection.

## **Tips to prepare for an inspection**

- Know your permit or regulatory requirements.
- If you have questions before, during or after the inspection – please ask.
- Designate a contact person at your facility for the compliance officer.
- Be honest and transparent to show your willingness to comply.
- Be aware of areas where waste accumulates and is stored.
- Have a site plan available.
- Organize your records and have them easily accessible.
- Conduct your own inspection – are you complying with your permit or regulatory requirements?

## WATER DISTRIBUTION

**We checked reservoirs and pump stations in the infrastructure section, do we need to check them again in the influencer section?**

Yes, please complete all fields in both sections of the form.

### Infrastructure

**We provide chlorination at our treatment plant do we need to check chlorination on this form as well?**

No, this section only applies to chlorine boosting for secondary disinfection. If you chlorinate as a means of primary disinfection you will need to apply for a water treatment classification.

### Influencers

**Should we count all wellhead pumps in the pump station section?**

No, this section is only for booster and distribution pump stations.

**Should we include all reservoirs?**

No, this section is only for clear well reservoirs which are used for the storage or treated water and providing chlorine contact time. Reservoirs which are used only for fire protection and storage do not need to be counted here.

**Should I calculate flow variation throughout the year or in a given season?**

Please provide details for flow variation within a given season (i.e., summer or winter, not between summer and winter)

**We have many of the programs listed under Operational Staff Responsibilities, but they are completed by a third-party contractor or by other departments, should we check these boxes?**

Please only check these boxes if the programs are supervised and completed by operations staff.

## WATER TREATMENT

**We have some of the land use influencers, but they do not affect water quality, should we check them?**

No, only select these influencers if the activity has a direct impact on raw water quality.

**I do not understand what you mean by watershed management factors.**

Only check these items if you have programs in place which are actively managed by the operations staff.

**We only have a single source, it is not blended or multiple, what**

**should I check?**

Do not select anything if you have a single source.

**What does batch operations mean?**

Batch operations refer to a plant which is fully automated and requires little input from Operators.

**We do some lab analysis in house and send some to a third party, should I check both boxes?**

Check only the box which applies to your day to day analysis as part of your operations, not for permit/regulatory reporting.

## WASTEWATER COLLECTION

### Influencers

**Should I calculate flow variation throughout the year or in a given season?**

Please provide details for flow variation within a given season (i.e. summer or winter, not between summer and winter)

**We have many of the programs listed under Operational Staff Responsibilities, but they are completed by a third-party contractor or by other departments, should we check these boxes?**

Please only check these boxes if the programs are supervised and completed by operations staff.

## WASTEWATER TREATMENT

### Influencers

**Should I calculate flow variation throughout the year or in a given season?**

Please provide details for flow variation within a given season (i.e. summer or winter, not between summer and winter) We are trying to understand the impact of inflow and infiltration at the plant.

**We do some lab analysis in house and send some to a third party, should I check both boxes?**

Check only the box which applies to your day to day analysis as part of your operations, not for permit/regulatory reporting.

Continued from page 8

Operator is not required to perform every task themselves; an Operator in DRC may carry out these responsibilities personally or may provide on-site supervision of Operators who do. The EOCP encourages owners and Operators with facilities classified as Level II or higher to submit DRC plans for review. Beginning January 2019, DRC Plans will become mandatory for all facilities classified as Level II or higher. This is part of an effort to improve access to higher levels of certification.

**Is every facility/system required to submit a DRC plan?** As of January 2019, it will be mandatory for all facilities classified Level II and higher to submit a DRC plan.

**Do I need to reclassify my facility or system in order to submit a DRC plan?**

No. If you hold a current facility classification of Level II or higher, you can contact the EOCP at any time to submit your plan. Keep in mind that all facilities should be classified using the new facility classification models by June 2020.

**How many Operators in a facility/system can be earning DRC at one time/ on one shift? Are there maximums or minimums set by EOCP?** There are no prescribed maximums or minimums, but each role earning DRC must satisfy the requirements in the definition above and must be documented in a DRC plan which is reasonable and meets the EOCP criteria.

**Who signs off on the DRC plan?** The DRC plan must be signed off by

- someone who is familiar with the facility/ system (normally the Chief Operator), and
- someone with managerial responsibility for the facility/system (normally the owner or manager)

**Who approves the DRC plan submitted by a facility?** The DRC plan is reviewed by the EOCP for compliance (i.e. that it is clear, complete and reasonable) but approval is given by the Chief Operator and facility/ system management. The EOCP does not prescribe staffing decisions at facilities.

**How should DRC hours be reported against a plan?** When a DRC plan has been submitted to the EOCP, the actual DRC experience earned should be reported annually, for all Operators.

**Can the DRC plan be applied retroactively?** Yes. If a role has been identified as eligible for DRC experience, then someone who has been working in that role can claim DRC experience for as long as they have been performing that role.

Please contact Jenni Green [jgreen@eocp.ca](mailto:jgreen@eocp.ca) if you have questions about the DRC program.





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Yukon College knows everything depends on water, and is committed to helping you gain the skills needed to work in the drinking water and water sanitation sectors.

Our Yukon Water and Wastewater Operator Program (YWWOP) offers a range of courses designed to meet the needs of new and prospective Operators, as well as current Operators working within governments (e.g. municipal, territorial, First Nation) and the private sector (e.g. mining, water delivery, plumbing). Our courses are relevant to anyone involved with or interested in water and wastewater.

Core courses are designed to prepare the participant to challenge a related **Environmental Operator Certification Program (EOCP)** certification exam.

Elective courses are designed to develop technical skills and workplace essential skills, and offer **Continuing Education Units (CEUs)**.

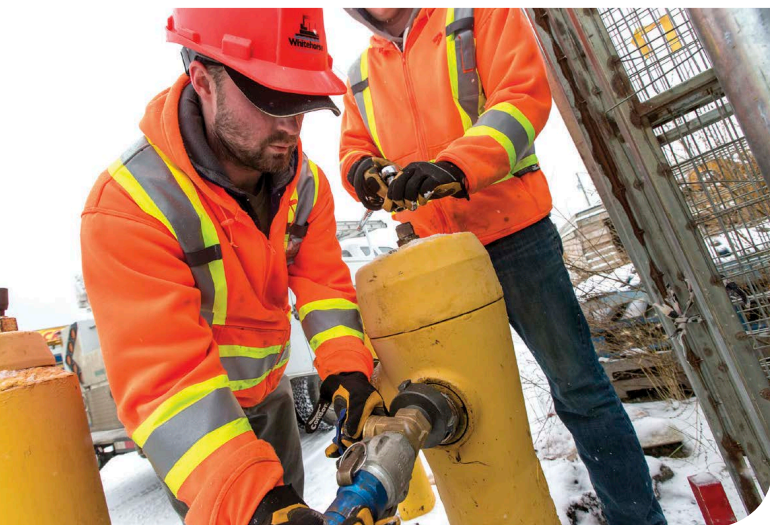
## **ELECTIVE COURSES INCLUDE:**

- Polyethylene Pipe Fusion
- Cross Connection Control
- Chlorine
- Passive Wastewater Treatment
- SCADA and Control Systems in Yukon
- Water Quality Monitoring and Recordkeeping
- Emergency Response Plan
- Source Water Protection

## **INFORMATION:**

867.668.8798 or  
[ywwop@yukoncollege.yk.ca](mailto:ywwop@yukoncollege.yk.ca)  
[yukoncollege.yk.ca/ywwop](http://yukoncollege.yk.ca/ywwop)

YWWOP classes and EOCP exam sessions can be facilitated at any Yukon College campus or surrounding NWT and Northern BC community on an on-demand basis. Alternatively, YWWOP classes are available through web-conferencing (FUZE).



All photos by Fritz Mueller Visuals



# CONGRATULATIONS KIM!

Kim Eames celebrates fifteen years at the EOCP this year and has seen numerous changes during that time. Here is her perspective!

## How did you end up working at the EOCP?

A former EOCP Board member told me about an office assistant position at the EOCP. I happened to be looking for a change so I did some research and was happy to discover that it was a non-profit organization. I was struck by an aspect of the mission statement: "to protect human health and the environment". I feel lucky to be working for such an amazing organization, and that being part of it means I am helping to make the mission statement get realized.

## What do you like about the work?

I get to work with an extraordinary staff and board. As the certification board we are part of an Operator's career path, and get to see the joy that Operators express when they have written and passed our certification exams. It is a privilege to be part of such an important industry, and even though most of the public don't think about where their water comes from or where it goes, water and wastewater Operators are protectors of our health and environment. I enjoy seeing Operators at conferences and events, and when they come to the office to take their exams. EOCP staff also get the opportunity to meet Operators and take tours of their water and wastewater treatment facilities.

I appreciate the variety of work I do including reviewing Operator applications, attending EOCP Board meetings, participating in the EOCP digest publication, and the day to day administrative work.

I also am involved with the Canadian Water and Wastewater Operator Certification Committee where we meet biennially with the other provinces and territories to review the Canadian certification and classification Best Practices that were developed by the committee, and to ensure we are all on the same path. It is great to be part of a positive collaborative effort between the provinces and territories.

## What changes have you seen in the industry and at the EOCP over the past 15 years?

The EOCP is in a tremendous period of growth and change, and it is exciting to be part of it.

When I started, Operators who held water treatment, water distribution, and wastewater collection certifications did so on a voluntary basis, or because individual employers made it a requirement. Mandatory certification for water Operators came into legislation in 2003 and in 2012 for wastewater collection Operators. Continuing education requirements came into effect in 2004. This is a requirement for all jurisdictions in Canada as a result of the Walkerton e-coli outbreak.

Now, there are more training organizations and more options for Operators to receive their training. There are more people coming into the program and more Operators writing exams for higher certification levels.

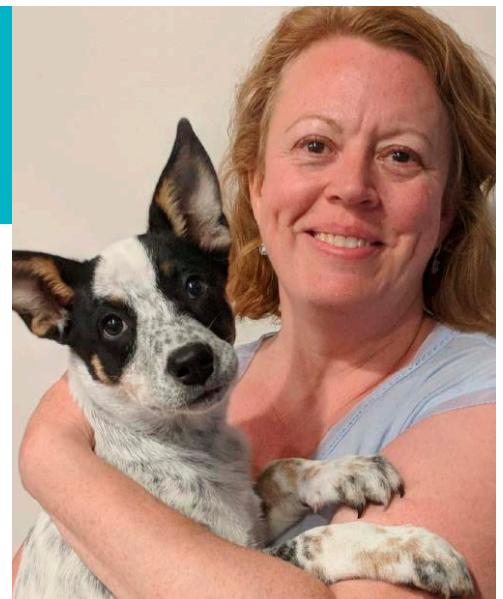
The EOCP participated in the Workforce Strategy project and it was determined that more than 50% of the workforce will need to be replaced over the next ten years due to retirement, attrition and job growth. Even though this is the case, the number of Operators in BC and Yukon has increased, there were approximately 3,000 Operators in the program when I started with EOCP, and now there are almost 5,000 certified Operators.

More women are also coming into the industry. When I started, women made up about 2% of the certified Operators in the program and now they make up 4%. Two of the nine EOCP Board members are now women.

At the EOCP, staff has increased from 2 to 5 since 2003, including our CEO and Technical Expert. We now have a new Customer Relationship Management system (CRM) which is the biggest undertaking in EOCP history. This is a big change from the database that was in use when I started with EOCP.

We have always offered more certification exam sessions than other jurisdictions, and the number of sessions offered increases each year. We also began offering web-based exams in 2014, which allows Operators to know their exam result before they leave the exam room. We also have lowered the number of days to rewrite exams from 60 days to 30 days.

In 2015 we made a change to the water



treatment definition to bring us in line with the other certification jurisdictions in Canada. This has increased the number of water treatment Operators and facilities in BC and Yukon. The EOCP now also has new facility classification models, developed in collaboration with the Ministry of Environment and Climate Change Strategy and the Ministry of Health, and it is our goal to reclassify all the facilities in our CRM by 2020.

Changes to Direct Responsible Charge (DRC) were also made in 2016. Water distribution and wastewater collection Operators now have the same two year DRC requirement as water treatment and wastewater treatment Operators. In addition, we began accepting DRC plans in 2016 which enables more Operator at one time to earn DRC hours.

The EOCP Board election is now done electronically and Operators can cast their votes online. This has helped to increase the number of Operators who participate in the election process. We have also moved our AGM to an electronic format which means Operators from all over BC and Yukon can attend the AGM, and this has also increased the number of attendees at our annual meeting.

We have increased communication with Operators and other stakeholders, and we are listening. The EOCP is putting on its first biennial tradeshow and conference in September 2018. This conference is an event designed by Operators, for Operators. The sessions are interactive and will apply directly to water and wastewater Operators.

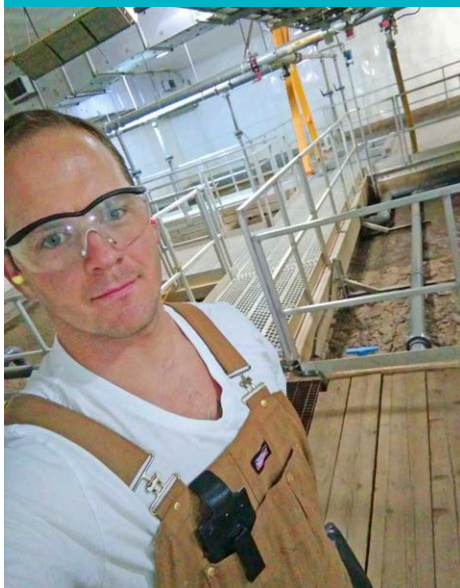
I look forward to seeing the changes that will take place in the industry and at the EOCP in the the coming years.



## OPERATOR PROFILE

**Jesse Johnston**

Operator in Training (OIT)



**How did you become an Operator in Training?** I suffered an injury two years ago that required consecutive surgeries to repair, and I am also a single father. Due to the long term period of recovery, I looked at my previous career interests, work experience, education, and industry growth for a long-term career that had a purpose to the community I worked in. After considerable research, I explored a Water and Wastewater Treatment Technology Diploma course through Thompson Rivers University, and looked into the water and wastewater utility industry across Canada. After researching the field I decided on becoming an Environmental Operator. There are serious issues surrounding environmental protection and ensuring communities have safe and clean drinking water. I felt that this was an important issue I could dedicate myself to for my career. My long-term dream is to eventually move into environmental engineering and engineering civil utility networks. After a year of study at Thompson Rivers University I applied to and was accepted for an Operator In Training position with CORIX at Panorama Resort close to Invermere B.C. I am continuing my education through correspondence while working with CORIX.

**What do you enjoy most about your work?** Everything! Because I am doing what I have envisioned as part of my future career, this is another piece of my journey to fulfill a dream I set in motion two years ago. However beyond that,

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**Drew DeFrias**  
Graduated  
2016

**Andrew Hunt**  
Graduated  
1994

Iona Wastewater Treatment Plant

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To learn more about our co-op students and program, email [coop@okanagan.bc.ca](mailto:coop@okanagan.bc.ca)



LN4090

the people I work with are amazing, the location is fantastic, and the views when I do water rounds at the resort are definitely a perk of this job.

**What do you find most challenging about your work?** Walking into a new water or wastewater treatment plant and learning that plant's specific process, equipment, and history is definitely a challenge. It gives you an idea of the scope of your work, the issues facing the plant or community, whether operational, financial, mechanical, etc. and learning the

processes specific to that plant. Regardless of education or operator knowledge, every plant is its own entity and operates in its own specific way. Learning those plant specific processes are definitely the greatest challenge I face as an Operator.

**Can you tell me about what initiatives you are involved in?** Well it is early days on the job, so I think my focus is on learning the operation of the location I am stationed at. However, during the first week of June, my colleagues and I will be

*Continued on page 14*



Continued from page 13

cleaning our filtration membranes in the wastewater plant, which will be a learning opportunity.

**What can you tell us about working as an environmental operator?** For me it is a step towards the goals and dreams I have set for myself. I love it! It is an important position for the communities I serve, which in itself gives a serious sense of job satisfaction and responsibility.

**What are the some of the opportunities in the field of environmental operators?**

Opportunities are only limited by your ambition and determination in this industry.

**What do you do when you are not working?** I am completing my second year of university while working, and I regularly

workout at the gym. However, outside of that, the Kootenay region is amazing for natural attractions. Visiting all the hot springs and provincial parks in the region

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**EOCP would like to thank Ulli Holdenried for attending the EOCP AGM on June 21, 2018.**

He is the recipient of a \$100 gift card and is the first Operator to have an EOCP "No Operator No Water" tee-shirt.

Ulli is a certified Level IV Wastewater Treatment Operator working for Metro Vancouver.

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# STATISTICS

January to June 30, 2018



# EOCP

Environmental Operators  
Certification Program

A new CEU reporting period began on January 1, 2018. The figures in the Operator certification report reflects those Operators who have met their certification requirements for the 2016 -2017 reporting period, as well as having paid their 2018 Operator dues.

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.

## FACILITY CLASSIFICATION as of June 30, 2018

Classification	IV	III	II	I	Other	Total
WT	19	40	125	61		245
WD	35	57	177	158		427
WWC	12	21	80	114		227
MWWT	25	31	108	77		241
IWWT	2	1	5	1		9
SWS					885	885
SWWS					258	258
Total	91	149	490	403		2,292

## Exams

- **294** Operators wrote certification exams in 55 sessions between April 1, 2018 and June 30 2018.

## Facilities

- **37** new facilities were classified between April 1, 2018 and June 30 2018.

## OPERATOR CERTIFICATION as of June 30, 2018

Classification	IV	III	II	MUII	I	MUI	OIT	Total
WT	49	75	169	6	262	8	39	608
WD	69	144	575	11	555	16	37	1,407
WWC	12	48	319	8	451	11	32	881
MWWT	101	87	158	5	182	14	32	579
IWWT		2	15		12			29
BWD								36
SWS								542
SWWS								193
Total								4,275

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## WHO'S ON THE MOVE

### Tyrone McCabe

Manager of Utilities,  
Thompson-Nicola  
Regional District



Tyrone McCabe recently joined the Thompson-Nicola Regional District as the Manager of Utility Services. He has more than 15 years of experience in utilities, in both the public and private sector, and is currently certified as a Level III Water Treatment, Level III Wastewater Treatment and Level II Water Distribution Operator. Teaching occasionally for MTS and the BCWWA, he strongly believes in continuous improvement and life-long learning, sharing experience with others and imparting knowledge where possible. He is looking forward to sharing his experience and expertise with 'The Region of BC's Best'.

Tyrone is accountable for leading and managing a group

of full-time and contract Operators - spanning from Blue River to Spences Bridge to Pritchard, this group is responsible for the operations and maintenance of 11 community water systems and two community wastewater systems. Servicing this broad geographical region is challenging and many system improvements are under way, including a universal water metering program. Utility system master plans are in place, guiding the improvements for each system, promising exciting and rewarding times ahead for the TNRD Utility Services group.

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