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# Circuit Rider Training Program (CRTP) Ontario Drinking Water License Outline



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## Summary

In Ontario, there are five different classes of certificate and licenses for operators of classified drinking water or wastewater systems, beginning at the Operator in Training Level. Operators can obtain higher levels through completing the municipal water/wastewater license exam as well as achieving necessary continuing education units (CEUs) and on the job (OJT) training hours; the highest license that can be achieved is a Class IV.

## Facility Classification

Municipal residential drinking water subsystems and wastewater facilities are required to be classified from a Class 1 to 4 facility depending on the complexity of the treatment process generally the more treatment processes available to a facility the greater the classification of the plant. The importance of a facility classification is that an operator license that can be obtained can be at most one Class higher than the plant they operate. For example, an operator working at a Class II facility water treatment plant can only achieve a Class III license from the experience gained from working at that facility. Working at a Class III or higher facility is the only way to obtain a Class IV license.

Each drinking water subsystem and wastewater facility is classified using a point system detailed outlined in Ontario Regulations (O.Reg) 128/04 and O.Reg 129/04.

Small communities can have what are known as Limited/Small Systems facilities, these are the facilities that operate from a well system with the basic need for treatment process which is usually in the form of chlorination and are not classified as a Class 1 to 4 facility.

## Operators-in-Training (OIT)

The OIT license can be obtained for all four (4) areas of water/wastewater subsystem, they are:

- Water Treatment
- Water Distribution
- Wastewater Treatment
- Wastewater Collection

A candidate looking to enter the field has the option of completing an OIT exam for a select area or has the chance to perform one (1) exam to gain their OIT in all four areas. Exams are booked at the Ontario Water Wastewater Certification Office (OWWCO) and the Operator-in-Training Examination Form must be completed and sent to OWWCO with payment information and proof of Grade 12 or equivalency. It should be noted the price does not change if you decide to complete your OIT for only one module or for all four modules. OWWCO examination forms must be sent either through mail or by fax to:

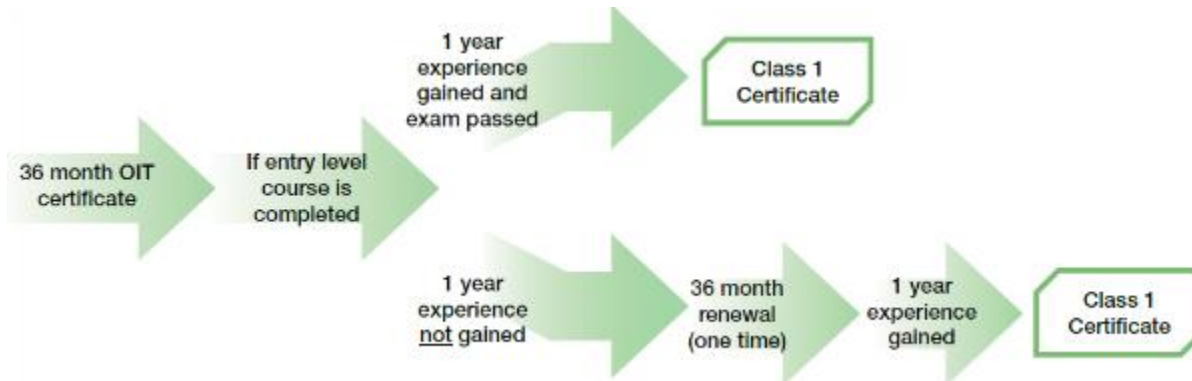
### **Ontario Water Wastewater Certification Office**

302 The East Mall, Suite 600  
Etobicoke, ON M9B 6C7  
Fax: (416) 231-2107

Once the exam is completed the candidate will complete Operator-in-Training Certification and License Issuing Form which must be faxed or mailed to OWWCO. Once obtained the OIT is given one year to gain experience to obtain their Class I if not they have to apply for a 36-month renewal which is only available once to gain the one



year working experience needed to complete the Class I. Failure to complete Class I within that timeframe will result in their OIT license being invalid and must repeat the steps once again.



## Entry Level Course

For an OIT to move to a Class I license they must complete the Entry Level Drinking Water Course (ELC) and is required to renew expired OIT license (can be done only once) or obtain a Class I license. A successful completion of the ELC is valid for 10 years. The course provides new operators with the basic understanding of water characteristics, pathogens, treatment and distribution processes, and the regulations that govern water quality. This is a two-week course with week one being a self-study along with an exam operators must pass to continue to week two which is an in class teaching with hands on training. The Entry-Level Course for Drinking Water Operators covers the following subjects:

- Protecting the health of the public
- Regulations governing water quality
- Water related math and drawings
- Water characteristics and sources
- Disinfection
- Treatment
- Sampling
- Equipment
- Well operators
- Distribution
- Safety

## Operator License Upgrade

In Ontario, there are five different classes of certificates and licences for operators of classified drinking water or wastewater systems, beginning at the Operator-in-Training level. Operators can obtain a higher level Class 1, 2, 3 or 4 operator's certificate or licence by fulfilling specific experience and education requirements. Generally, the higher the class, the more experience and education is required.

This page is for operators looking to upgrade their current certificate or licence to a Class 1, 2, 3, or 4. It includes information on the steps to obtain a higher level of certification, the different requirements for each class of certification, information on the application process and fees, and the forms you are required to complete and submit.



To upgrade to a higher-level certificate or license, you must complete the following:

1. register for, and successfully pass the corresponding examination with a mark of 70% or higher
2. meet the experience and education requirements for the corresponding class of certificate or license
3. complete either the Drinking Water Certificate Application Form or the Wastewater Licence Application Form, filling out all the required information
4. submit the application, along with fee payment, for assessment.

### Conditional Drinking Water Operator License

The Director may issue a conditional operator certificate for operators holding any type and class of **municipal residential subsystem** certificate (except for an operator-in-training certificate) and for operators holding a **limited subsystem** certificate.

The Director may issue a conditional certificate if:

1. the owner or operating authority that employs or has offered to employ the applicant satisfies the Director that they cannot obtain the services of an operator of the type and class required under this regulation (for example, if an owner of a Class III water treatment subsystem is unable to find an operator holding a Class III water treatment certificate); and
2. the owner or operating authority gives both the applicant and the Director a written commitment to help the applicant comply with all the conditions of the subsystem; and
3. the required fee is paid.

### Operator License Renewal

Certificates and licences issued in Ontario are generally valid for a period of three years. If at the end of this period you would like to continue to hold the same class of certificate or license, you are required to meet specific experience and training requirements, and you must apply to renew them. There are different requirements for drinking water certificates and wastewater licences.

As an operator, you are responsible for ensuring you renew your certificates and licences before they expire. If you continue to operate while holding an expired certificate or license, you are out of compliance. As a reminder, courtesy renewal notifications are mailed to operators three months prior to a certificate or license expiring. If you do not receive your renewal notice, you are still responsible for renewing your certificate and licenses on time.

Renewal applications will only be processed within 3 months of the expiry of the current certificate or license.



To renew an existing certificate or license, you must:

- meet the experience requirements;
- meet the training requirements applicable to your type of certification;
- complete and submit the appropriate application along with the fee and supporting documentation.

### Operator in Training (OIT) License Renewal Requirements

Drinking water OIT certificates expire after 36 months. Within this three year period it is expected that you will complete the requirements to upgrade to a Class 1 certificate.

If at the expiry of your Water Treatment or Water Distribution and Supply OIT certificate(s) you know you are not able to upgrade to a Class 1, you may be eligible to request a one-time three year certificate renewal from the ministry. [Contact us](#) for further information on how to proceed with your request.

### Drinking Water License Renewal Requirements

All Class 1 – 4 drinking water certificates require the following to have been obtained within the last three years:

1. a minimum of three months of valid operational or related experience;
2. successful completion of the Mandatory Certificate Renewal Course; and,
3. completion of the set number of Director Approved Continuing Education Units (CEUs), and on-the-job practical training.

The amount of training you are required to complete over the three year period is based on the highest class of drinking water facility you operate, not the certificate you are renewing. For example, if you are renewing your Class 2 Water Distribution certificate, but you also work in a Class 4 Water Treatment subsystem, your renewal requirements will be based on a Class 4 certificate. If you hold multiple certificates, training will only be checked for one of the certificates. Your renewal notification will indicate whether training is required to be submitted with your application.

If you plan on renewing a drinking water certificate, start by finding the highest class of drinking water facility you operate in the table below (regardless of the type) to see what your renewal requirements are.

Additionally, every drinking water operator must complete the Mandatory Certificate Renewal Course within each renewal period. This course is coordinated by the Walkerton Clean Water Centre (WCWC) and is available in two formats: classroom and correspondence. The course content is changed every three years and is meant



to ensure that all operators are kept up to date on emerging issues within the industry. This course will count as part of the Director Approved CEU requirements as 0.7 continuing education units (CEUs) or 7 hours

Director Approved CEUs: only courses on the Director Approved Course Listing may be used to meet the requirements for Director Approved CEU training. Copies of your certificates of completion for these courses must be submitted along with your renewal application. Wastewater training cannot be used to renew drinking water certificates.

On-the-Job Training: on-the-job training must be documented and verified by your manager or supervisor if it is to be included in your renewal application. This can be done on the training record supplied with the application form, or on a signed training log, record or letter from your employer or training provider. If you do not have enough on-the-job training, you may substitute excess Director Approved CEU training to meet the requirements. Please note that 0.1 Director Approved CEU = 1 hour of on-the-job training.

## Walkerton Clean Water Centre and First Nations

With the partnering between Keewaytinook Okimakanak/Northern Chiefs Council (KO) and the Walkerton Clean Water Centre (WCWC) first nation operators who operate a water treatment plant in a First Nation community can register for the ELC for free through this program. Travel and accommodations are also reimbursed with sufficient receipts submitted; as of May 7, 2021 the locations available for this training are Dryden, Walkerton, Timmins, and Thunderbay. Due to COVID space limitations are set to a max occupancy of 10 so space is limited and is recommended that they check <https://wcwc.ca/first-nations-zone/> for details on dates and times and complete the registration form found to book a spot for their operators.

## Circuit Rider Training Program

At Ontario First Nation Technical Service Centre (OFNTSC) we employ the Circuit Rider Training Program (CRTP) by utilizing certified operators to give training to operators at First Nation communities. These trainings that are provided are Director approved courses that count for CEUs that are necessary for upgrading and renewing license. The use of the CRTP allows operators to receive training within their own communities, reducing the need for downtime and coverage as the operator is generally onsite while receiving training. At the end of training, they will obtain a certificate of proof of completion with the allotted CEU hours obtained from the course. OFNTSC will also help maintain and keep track of CEU and OJT hours to ensure operators have the necessary amount when it comes to upgrades or renewals and will work with operators who find they are missing necessary training hours.



## Appendices

### Appendix A. Upgrading and Renewing Licence

<i>Class I</i>	Education or CEUs	For Drinking Water certificates, completion of the Entry Level Drinking Water Operator Course (ELC).
	Operating Experience	1 year operational experience (no substitutions are allowed).
<i>Class II</i>	Operating Experience	3 years operational experience
	Experience Substitutions	Up to 50% of the operational experience requirements (1 year 6 months) can be substituted by using CEUs
<i>Class III</i>	Education or CEUs	2 years of relevant post-secondary education (90 CEUs)
	Operating Experience	4 years operational experience
	OIC Experience	2 years in a Class 2, 3, or 4 system
	Experience Substitutions	Up to 50% of the operational experience requirements (2 years) can be substituted by using CEUs above the minimum 90 required OR using experience gained in a different type of system at a ratio
	CEU Substitutions	Up to 50% of the CEU requirement (45 CEUs) can be substituted by using OIC experience above the minimum 2 years required
<i>Class IV</i>	Education or CEUs	4 years of relevant post-secondary education (180 CEUs)
	Operating Experience	4 years operational experience
	OIC Experience	2 years in a Class 3, or 4 system
	Experience Substitutions	Up to 50% of the operational experience requirements (2 years) can be substituted by using CEUs above the minimum 180 required OR using experience gained in a different type of system at a ratio
	CEU Substitutions	Up to 50% of the CEU requirement (90 CEUs) can be substituted by using OIC experience above the minimum 2 years required

All classes of certification, regardless of the level, require the following:

1. proof of grade 12 or equivalent (if not previously submitted);
2. successful completion (70% or higher) of the relevant exam; and
3. operational experience gained under a valid certificate/license.
4. The CEUs and OJTs required are also listed as follows:





## Appendix B. Operational Training Hours for Renewal

Highest Class of System You Operate	Continuing Education Units (CEU's)	On-the-Job-Practical Training (OJT's)	Total Hours During the Three Year Period
Class I	21	69	90
Class II	36	69	105
Class III	42	78	120
Class IV	42	108	150

## Appendix C. Accepted OJT

### Types of Activities Accepted as On-the-Job Practical Training Class I to IV Operator and Water Quality Analyst Certificates

#### Accepted

- Instruction/discussions on health and safety
- Facilitated review of emergency procedures within the place of work, risk assessment, contingency planning
- Demonstrations and/or instruction on operational duties including health and safety provided by suppliers, supervisors or other operators
- Facilitated review of operating procedures or the DWQMS operational plan
- Training on workplace procedures or equipment
- On-line or computer-based training
- Viewing of videos with a facilitator
- Attending Ontario Water Works Association/ Ontario Municipal Water Association technical committees on subjects dealing with research, operational processes or regulatory issues (maximum 12 hours per certificate cycle)
- Providing instruction or presentations to other operators on approved subjects (preparation time is not allowed)

#### Not-Accepted

- Business meetings
- Time spent performing the duties of a drinking water operator or water quality analyst outside of a structured learning event
- Time spent conducting or participating in an inspection
- Non-facilitated viewing of videos, operating procedures or trade magazines
- Professional writing (e.g. reports, operating procedures, journal or magazine articles, etc.)
- Participation in general committees
- Mentoring/Job-shadowing (although training on workplace procedures or equipment during a job-shadow may be counted if properly documented)



## Appendix D. Circuit Rider Training Director Approved CEU Courses

ID	COURSE	CEU
108	Operator in Training Manual for First Nations Water and Wastewater Plant Operators	3.7
270	Confined Space Training Awareness and Entry Procedures	2.5
271	Basic Mathematics	2.5
1603	Water Distribution Class One prep course	3.5
2384	Introduction to Circuit Rider Training Program Miscellaneous	0.2
2385	Plan Reading	0.2
2386	Chemicals Used in Water Treatment	2.5
2387	Operate and Maintain Pumps and Motors	2.5
2388	Operate & Maintain Filters	2
2389	Operate & Maintain Water Distribution System	2
2390	Intake and Groundwater Wells	1.2
2391	Operate & Maintain Valves	2.5
2392	Controls & Instruments	1.8
3225	Basic Applied Chemistry For Water And Wastewater Treatment	1.1
3226	Watershed Monitoring and Source Water Protection	0.3
3227	Preparation of Budgets	0.4
3228	Drinking Water Monitoring & Safe Drinking Water Requirements	0.2
3229	Basic Applied Mathematics for water and wastewater plants	1.8
3230	Record Keeping	0.6
3231	Controls and Equipment	0.4
3342	Water Treatment Class One	2.8
3343	Operate and Maintain Disinfection Systems	0.5
3462	Occupational Health & Safety	0.8
3795	Operate And Maintain Coagulation And Chemical Feed Systems	0.4
3796	Chemical and Bacteriological tests in a Water Plant	1.1
3944	Basic Electricity	0.9
5027	Groundwater Wells	0.7
5752	Fundamentals of Maintenance Management Systems	1.4



5753	Operation & Maintenance of Fire Hydrants	0.7
6593	Water Main Breaks and Repairs	1.4
7333	Standard Operating Procedures, Flow Charting & Logbooks	0.7
8213	Conventional Water Treatment Basics	2.1
8313	Water Distribution System Emergencies for FN Operators	1.4
8493	Emergencies Response Plan for FN Operators	0.7
8494	Pump in a Box	1.4
8914	Operator in Training Prep Course	2.8
8915	Introduction to Membrane Filtration	0.7
9293	Acts & Regulations for FN Water and Wastewater Operators	0.7
9396	Water Distribution Class One prep course	2.8
9513	O&M of Coagulation and Chemical Feed Systems	0.7
9514	Fundamentals of Maintenance Management Systems	0.7
10296	Maintenance of Drinking Water Cisterns	0.6
10297	Trucked Water Delivery to First Nations South of 60	0.6