

**ONTARIO WATER AND WASTEWATER  
OPERATOR LICENSING &  
FACILITY CLASSIFICATION  
PROGRAM GUIDE**

This guide contains all the information and applications necessary to apply for Facility Classification and Operator Licensing. Please read the text carefully before completing the application.

If you have any questions you can reach the Certification Office at (905) 796-2851.

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## **WATER AND WASTEWATER UTILITY OPERATOR LICENSING PROGRAM**

### **INTRODUCTION:**

Regulation 435/93 enacted July 26, 1993 created a mandatory licensing system for operators of drinking water and domestic sewage treatment facilities in Ontario. The change to a mandatory licensing from a voluntary certification program was made by regulation under section 75 of the Ontario Water Resources Act. The program establishes recognized professional standards for operators; gives greater assurance of good and safe drinking water to the residents of Ontario; provides greater protection of the aquatic environment; assures efficient and safe use of operating facility; provides for optimum utilization of public money spent on water and wastewater utilities; and increases professionalism of an important environmental occupation.

Ontario's licensing program is a mandatory program based upon the model provided by the Association of Boards of Certification (ABC). ABC is an association which provides guidance and resources to certification authorities across North American.

### **HISTORY OF OPERATOR CERTIFICATION/LICENSING IN ONTARIO:**

The voluntary program established in 1986, was designed as a bridge to work out the details of the mandatory program and allow for consultation with all of the stakeholders. The voluntary program was the product of extensive consultation with various interest groups. Beginning in 1987, with the creation of the Advisory Board of Certification, there has been direct participation in the process by a number of professional organizations and bargaining units.

The licensing program, which has been voluntary since 1986 involves over 7,000 operators across Ontario. Approximately 4,000 operators were certified under the voluntary program and 3,000 under the mandatory program. To date approximately 15,000 licences have been issued.

### **WHO IS ELIGIBLE?**

Any person may apply for a licence, but only operators who meet all of the program's requirements will be issued licences (see Table 1). Please note that operating experience in the type of facility is a requirement for a Class I, II, III and IV licence. Grade 12 or equivalent is also required.

### **ADVISORY COMMITTEE:**

An Advisory Committee on Water/Wastewater Operator Certification has been established to provide the Ministry with expert advice from operators and owners. The committee meets 2-3 times a year to advise the Ministry on policy issues and individual operator concerns. The Ministry has invited representatives from the associations and bargaining agents active in the water and wastewater industry. Your representatives are:

#### **American Waterworks Association - Ontario Section:**

Judy MacDonald (905)825-6123 ext. 7648 E-mail [macdonaj@region.halton.on.ca](mailto:macdonaj@region.halton.on.ca)

#### **Association of Municipalities of Ontario:**

Christopher Woods (519) 253-7111 ext. 383

#### **Canadian Water and Wastewater Association**

Liz Marland (613)724-4244 ext. 2245 E-mail [marlandli@rmoc.on.ca](mailto:marlandli@rmoc.on.ca)

**Canadian Union of Public Employees**

Currently no representative

**Ministry of the Environment**

Janet O'Grady (416) 314-9305 (Director)

Ben Campbell (416) 314-9331 (MOE Certification Representative)

**Municipal Engineers Association**

Bernie Kuslikus (905) 668-7721 E-mail kuslik\_b@region.durham.on.ca

**Ontario Clean Water Agency**

Ed Chin E-mail echin@ocwa.com

**Ontario Municipal Water Association**

Max Christie (613)354-9338

**Ontario Public Service Employees Union**

Marie Thomson (519) 238-8466

**Water Environment Association of Ontario**

Eldon Wallis (705) 326-1066

**Western Lake Ontario Training and Certification Group**

Peter Bziuk (519)253-7111 ext. 229 E-mail pbzuik@city.windsor.on.ca

**The Ministry will continue to involve those operators and owners who wish to offer advice on the future direction of the licensing program. The Ministry encourages you to become involved, or to contact the Committee representatives, and help shape the future of the operator profession in Ontario.**

**OPERATOR DEFINITIONS AND OPERATOR RESPONSIBILITIES:**

All operators performing operational work must be licensed. Any other person in a facility performing operational duties is also required to obtain a licence, regardless of their job classification. For example, a maintenance worker or a laboratory technician who is placed on call, and is expected to perform operational duties during this time must be licensed.

Licensed operators for the purposes of training or delegation of duties, may allow non-licensed operators to perform operational work. This is **conditional** on a licensed operator being physically with the non-licensed operator as the work is performed. The licensed operator must clearly instruct the non-licensed operator on the correct procedures. Any work performed will be the responsibility of the licensed operator.

Section 1 of the regulation defines an "operator" to "*mean a person who adjusts, inspects or evaluates a process that controls the effectiveness or efficiency of a facility, and includes a person who adjusts or directs the flow, pressure or quality of the water within a water distribution facility or the wastewater within a wastewater collection facility.*"

The regulation has a number of other definitions (see the glossary of terms at the end of the program guide). Some of the more important ones are listed below:

### **Operator-In-Training:**

An Operator-In-Training (OIT) is generally an operator who has less than one year of experience. An OIT licence allows operators with less than 1 year of experience to attain the experience required to become a Class I operator. Once the knowledge and experience have been obtained, operators are expected to write their Class I examination.

Becoming an Operator-In-Training requires the successful completion of the Operator in Training exam. The exam may be invigilated by superintendents, supervisors or at colleges across the province.

The Operator-In-Training Licence allows the operator to perform all regular operating duties. However, an Operator-In-Training cannot be the operator with overall responsibility for the facility as of October 1998, OIT's cannot collect Operator-In-Charge experience. **Please Note:** Anyone who performs analytical tests on Ontario Drinking Water Standards parameters that may be performed at a water works must be licensed. Their licence must be that of a Class I, II, III, or IV water treatment or water distribution operator, or a water quality analyst.

### **Operator-In-Charge:**

An Operator-In-Charge is any operator who:

- is responsible for the overall operation of a facility; or
- sets operational parameters for a facility or for a process that controls the effectiveness or efficiency of a facility; or
- directs or supervises operators in a facility.

The Operator-In-Charge is responsible for:

- taking all steps reasonably necessary to operate the processes within his or her responsibility in a safe and efficient manner;
- ensuring that processes within his or her responsibility are measured, monitored, sampled and tested in a manner that permits them to be adjusted when necessary;
- ensuring that records are maintained of all adjustments made to the processes within his or her responsibility;
- ensuring that all equipment used in the processes within his or her responsibility is properly monitored, inspected and evaluated and that records of equipment operating status are prepared and available at the end of every operating shift.

Operators-In-Charge do not need a licence at the level of the facility.

### **Operator in Overall Operational Responsibility:**

An **owner** must ensure that every facility has designated an "operator in overall operational responsibility". This operator must be licensed to the class of the facility or higher. This requirement ensures that knowledgeable, experienced staff are available at all times to provide advice to any plant operator and to respond to any emergency. For example a Class III wastewater treatment system requires an "operator in overall operational responsibility" who holds a Class III wastewater treatment licence.

A facility may identify more than one person with this responsibility (i.e. on a shift-to-shift basis, on a week-to-week basis). Owners may use a "backup" as the operator with overall operational responsibility for up to 150 days per year. These backup operators may be licensed no lower than one Class below that of the facility. Likewise, several different operators identified as the backup may be utilized, on different shifts, provided that the total number of days the backups are used is not greater than 150 per year.

### **OPERATOR LICENCES:**

There are four classes of licences that correspond to the four classes of facilities. There is also an Operator-In-Training licence for new operators. Each licence will be valid only for the type of facility for which it is issued. For example a Class I Water Treatment licence is only valid for working in a Water Treatment Plant. Holders of a water treatment facility operator's licence at any level also hold a Class I water distribution facility operator's licence. Similarly the holder of a wastewater treatment facility operator's licence at any level also holds a Class I wastewater collection facility operator's licence. This provision is included to recognize the overlap of duties operators of treatment facilities must undertake. For these Class I licences no fee is required and no licence is issued.

In order to qualify for an operator's licence a person must meet three (3) requirements:

1. Education
2. Experience
3. Successfully complete exam

The licensing requirements are described in Table 1, page 12. Subsequent pages of the guide will provide details of program requirements, substitutions allowed, and examinations. Please note that *all* operators must pass an exam to obtain a licence.

An operator must submit a completed *Operator-In-Training Application Form* (Appendix 2) or an *Exam Request Form* (Appendix 4), to the Certification Office to apply for an exam to be licensed.

The application forms will provide the Certification Office with verification of your experience and education. All applications will be reviewed and eligible candidates who pass the required examinations will be issued licences. All personal information which the Ministry collects is confidential and is protected by the *Freedom of Information and Privacy Act*.

When completing the Operator application forms please read the instructions to avoid delays in assessment. If an important piece of information is missing from your application it cannot be processed and registration for exams will not be confirmed unless payment is enclosed with your application.

As of February 1, 1994 all operators are required to hold a valid licence. No operators may operate in a facility without a licence after this date. Each licence costs \$75.00 and is valid for

three years after the date of issue. Licences will be renewed after 3 years if the operator applies for renewal.

### **Operator-In-Training Licence:**

Operators who are beginning their careers will require an Operator-In-Training licence. Unlike the class I - IV licences, the Operator-In-Training licence does not require any previous experience. However, as with all licences, an operator must have completed grade 12 or other education/experience considered equivalent by the Director. Proof of education must be provided to the Certification Office prior to writing the examination.

The examination may be written at any of the MOE examination centres or administered by a supervisor at the operators facility.

The Operator-In-Training examination exam costs \$20 and there is no fee for the licence(s). An operator-in-training study guide is available through the Certification Office and costs \$30.00. As of October 1998, all OIT licences will have an expiry date of three (3) years and a \$75.00 fee will be charged upon renewal for each OIT licence.

### **Conditional Licence:**

A conditional licence may be issued by the Director in some limited cases. These cases include:

1. As a result of a facility upgrade or expansion which changes the classification level of the facility by at least 2 levels, and no existing operators are licensed to a level of the new classification.
2. In small, isolated communities where a person with the proper qualifications can not be obtained.
3. A conditional licence will be valid only in a single facility and may require the operator to complete training, exams or other requirements.

The owner of the facility must request a conditional licence from the Director.

### **Small Water System Operator Licence:**

All drinking water systems which are capable of producing more than 50,000 L per day (7.6 Imp Gallons per minute) must be operated by licenced water operators. In recognition of the limited operating needs of small water systems, the Ministry of the Environment has introduced a new type of licence for operators of these systems. **Please refer to page 7 for further details of the small water system licence.**

### **RENEWAL OF LICENCE:**

It is standard practice for the Certification Office to issue a renewal notice and application to operators sixty (60) days prior to the expiration date of a licence. If an application for renewal is **NOT** returned to the Certification Office in time to allow for processing and return mail, the licence may become invalid. **It is the operators responsibility to notify the Certification Office of any change of address which may delay or prevent delivery of the renewal forms.** Upon renewal the operator will receive a new licence. The expiry date will be printed on the new licences.

Operators who have not obtained any operating or "related" experience in the previous five years,

may not renew a licence. These operators may elect to write the appropriate class of exam, and if they pass will be allowed to renew their licence. Related experience includes supervisory, lab or maintenance.

**LICENCE UPGRADES:**

An operator who is currently licensed may wish to obtain a licence at a higher class. To upgrade the licence to the higher class the operator must pass the appropriate Class exam, meet the experience and education requirements (see Table 1). An operator may obtain a licence only one class higher than they currently hold. For example a Class II operator cannot obtain a Class IV licence, without first obtaining a Class III licence. An operator may only obtain a licence one class higher than the classification of the facility they operate. The grade 12 requirement is waived for operators who were grandparented in 1990 and 1994.

<b>Small Water System Operator Certification</b>
All drinking water systems which are capable of producing more than 50,000L per day (7.6 Imp Gallons per minute) must be operated by licensed water operators. In recognition of the limited operating needs of small water systems, the Ministry of the Environment has introduced a new type of licence for operators of these systems. Previously, operators of small systems were required to obtain a regular Class 1 Water Treatment licence. The requirements for obtaining a Class 1 licence are suitable for a municipal treatment operator but are not aa appropriate for operators of small systems. The new class of licence will allow operators or small systems to obtain a relevant licence.

<b>Who is eligible for a Small Water System Operator Licence? *</b>	
<b>Privately Owned Systems</b>	<b>Very Tiny Municipal Systems</b>
<p>If the water system meets ALL of the following criteria, an operator may apply for a Small Water System Operator Licence.</p> <ul style="list-style-type: none"> <li>• the population supplied by the water system is less than 500 (or equivalent); and</li> <li>• the water system does not use any treatment other than disinfection, water softening or disposable cartridge filtration systems; and</li> <li>• all previous water tests in the past 5 years have shown excellent raw water quality; and</li> <li>• the water supply system is located on private property and is privately owned.</li> </ul> <p>Typically, this would include water systems</p>	<p>If the water system meets ALL of the following criteria, an operator may apply for a Small Water System Operator Licence.</p> <ul style="list-style-type: none"> <li>• the population supplied by the water system is less than 100; and</li> <li>• the water system does not use any treatment other than disinfection, water softening or disposable cartridge filtration systems; and</li> <li>• all previous water tests in the past 5 years have shown excellent raw water quality.</li> </ul> <p>Typically, this would include municipal water systems supplying small hamlets, subdivisions or villages.</p>

supplying resorts, campgrounds, trailer parks and privately owned communal water works.

\* If you do not meet all of the above conditions, you may be required to obtain a regular water treatment operator licence.

**Licence Requirements:**

- Must be presently employes as an operator of a small water system.
- Must verify grade 10 or equivalent education.
- Must successfully pass the Small Water System Exam.

Cost: The Small Water System Exam costs \$50.00. A licence (valid for three years) costs \$75.00. The licence obtained will be valid only in the water system(s) which the operator is presently operating.

**Recommended Exam Study Materials:**

The exam consists of 75 multiple choice questions. Topics include water quality, disinfection, wells and pumps, water testing, and distribution. The ***Small Seasonal Drinking Water Systems*** manual is recommended for preparing for the exam. Copies can be obtained from the certification office for \$30.00. Other more detailed manuals may also be used.

**More Information:**

Contact the Certification Office for further information on the Small Water System Operator Licence:  
Ontario Environmental Training Consortium  
37 George Street North, Suite 206  
Brampton, Ontario L6X 1R5  
(905) 796 - 2851 ext. 2225  
[vpplant@oetc.on.ca](mailto:vpplant@oetc.on.ca)

**EXAMINATIONS:**

**Eligibility:**

Applicants may write examinations one class higher than the class of licence that they hold. An operator can only obtain a licence one class higher than the classification of the facility they operate. The licence cannot be issued until the person meets both the experience and education requirements. To apply to write an examination complete the *Examination Request Form (Appendix 4)*.

Examination application(s) and payment(s) must be received by the Certification Office, at least four (4) weeks prior to the examination date requested. Applicants will receive an examination confirmation letter to confirm their registration and licence eligibility requirements. You will receive your examination mark(s), in the mail, within 30 days after the exam date. Exam marks cannot be given over the phone.

If an applicant fails to attend a scheduled examination, without informing the Certification Office at



least two weeks (10 business days) before the date of the exam, he/she will forfeit the examination fee. Rescheduling or canceling the same exam three times, will also result in the loss of your exam fee.

All applicants who have canceled scheduled examination sittings must reapply before an examination will be rescheduled. All applicants who forfeit examination fees must submit a new cheque and *Examination Request Form*, when applying to write a new exam.

### **Locations:**

The Certification Office will notify operators of scheduled examinations in the **Ontario Certification News**. Every licensed operator and classified facility will receive a copy. In the spring and fall exams are held at various locations across the province including **Barrie, Belleville, Kenora, Kingston, London, North Bay, Ottawa, Sault Ste. Marie, Sudbury, Timmins, Thunder Bay and Windsor**. Examinations are also held at Humber College in **Toronto** on the third Monday of each month, except during July and August.

Examinations may also be held on site upon request of the facility owner. Employers are responsible for arranging for an invigilator who will be approved by the MOE. Employers will be required to pay any facility or invigilation costs for these sessions. Notify the Certification Office to schedule your special exam request. A minimum of three (3) months notification is required. Please note, applicants for special exam sites are on a first come first served basis. The Certification Office can only accept minimal amount of special exams per year.

### **OWNER RESPONSIBILITIES:**

Under the *Ontario Water Resources Act* an owner is defined as "*a municipality or person having the authority to construct, maintain, operate, repair, improve or extend water works or sewage works*".

Facility owners have been given a number of responsibilities under the regulation. These include:

- Filing an application with the Director for the classification of the facility
- Ensuring that every operator holds the appropriate licence applicable to that type of facility or a licence as an operator in training
- Ensuring that responsibility for the overall operation of the facility is placed with an operator who holds a licence that is applicable to that type of facility, and that is of the same class as or higher than the class of the facility. The owner of the facility cannot permit responsibility for the overall operation of a facility to be placed with an operator who holds an Operator-In-Training licence.
- Notifying the Director without delay if the owner relies on a temporary substitute for more than 60 days in any twelve month period
- Ensuring that the classification certificate is conspicuously displayed at the facility or at premises from which the operation of the facility are managed
- Ensuring that a copy of the licence of every licensed operator who is employed in the facility is conspicuously displayed at the operators's workplace, or at premises from which the operation of the facility is managed
- Ensuring that operators of a facility have ready access to comprehensive operation and maintenance manuals that contain plans, drawing and process descriptions sufficient to the safe and efficient operation of the facility. The owner shall ensure that the manuals are reviewed and updated at least once every two years.
- Ensuring that records are maintained for the amount of time each operator works as an operator in charge, as of October 1998, OIT's cannot gain OIC experience

- Ensuring that logs or other record-keeping mechanisms are provided to record information concerning the operation of the facility
- Ensuring that logs and other record-keeping mechanisms are accessible in the facility for at least two years after the last entry
- Ensuring that every operator employed in the facilities is given at least forty hours of training every year, and that records are kept of this training (see the section of training for more details)

### **Training:**

Regulation 435/93 requires that owners provide every operator with 40 hours of training during every 12 month period. The owner may use any type of training period (i.e. calendar or fiscal as long as it is consistent for all employees). Training may include formal classroom training, hands-on training, conferences or seminars. It can include training on new or revised operating procedures, reviews of existing operating procedures, safety training, computer training and training in related environmental/technical areas.

Training may not be averaged over a number of years (for instance if an operator received 50 hours of training one year, he/she could not be given only 30 hours the next year). Training hours may not be averaged between employees. Training records must be kept by the employer stating the employee name, employee's position, amount of time, date, and topics for each employee in a training session. Copies of these records must be submitted to the Director when requested to do so by the Director.

### **Facility Logs:**

The owner of a facility must ensure that logs or other record-keeping mechanisms are provided to record information concerning the operation of the facility. The only persons allowed to make entries into the log are the operator-in-charge, or those authorized to make an entry by the owner or an operator-in-charge. Entries in the logs shall be made chronologically. All persons making an entry into the log shall do so in a manner that permits the person to be clearly identified as the maker of the entry.

Log entries for each operating shift should contain:

- date, time period and the number or designation of the shift
- names of all operators on duty during the shift
- any departures from normal operating procedures and the time they occurred
- any special instructions that were given during the shift to depart from normal operating procedures and the person who gave the instructions
- any unusual or abnormal conditions that were observed in the facility during the shift, any action that was taken, and any conclusions drawn from the observations
- any equipment that was taken out of service or ceased to operate during the shift, and any action taken to maintain or repair equipment during the shift

**FACILITY CLASSIFICATION:**  
**Facilities That Require Classification:**

The first step in the licensing process is the classification of the water/wastewater system. An operator may not obtain a licence until the facility has been classified.

The plants and systems in the program are divided into four types of facilities:

**Water Treatment**  
**Water Distribution**  
**Wastewater Treatment**  
**Wastewater Collection**

In addition to the above four types of facilities a Water Treatment facility maybe classified as a Small Water System. Please refer to page 7 for further information.

Generally, any drinking water plant, domestic sewage treatment plant, water distribution system, and sewage collection system requiring a Certificate of Approval from the Ministry of the Environment are included in the program. Specifically, any water works capable of supplying water for human consumption at a rate greater than 50,000 litres per day must be classified. Privately owned waterworks used to supply five or fewer private residences do not need classification.

Any domestic sewage works treating primarily domestic wastewater, which discharges directly or indirectly to surface water must be classified. Privately owned sewage works serving five or fewer private residences, or those which discharge into a sanitary sewer, do not need classification.

**Seasonal Campgrounds/Resorts/Cottage Developments:**

Campgrounds or Resorts which are capable of producing less than 50,000 litres of water a day (7.6 imperial gallons per minute) do not require a classification or licensed staff. Campground and Resort drinking water systems which are operated seasonally and are capable of producing more than 50,000 but less than 200,000 litres of water per day may be partially exempt from classification and licensing requirements. To be eligible the campground or resort must:

1. be seasonal: closed for a total of at least one month per year, **and**,
2. have had no water quality problems, **and**,
3. not treat water except by disinfection, the use of softening devices, or disposable cartridge filters, **and**,

the operator/owner that is responsible for the operation of these systems must complete a course entitled "*Operation and Maintenance of Seasonal Drinking Water Systems*" to be eligible for this exemption. To obtain more details about this course, contact Val Plant at OETC (905)796-2851 ext.2225. Campgrounds with water systems capable of producing over 200,000 litres must be classified and be operated by licenced operators.

**Basis For Classification of Facilities:**

Each type of facility requiring classification is classified as Class I, Class II, Class III, and Class IV facilities. The classification is determined using a point system which takes into account such characteristics as size, population served, process and technological complexity, and the state of the water source or the sensitivity of the receiving water, when applicable. A Class I plant will be a fairly simple operation such as sewage treatment plant with only lagoons. A Class IV plant will

be a large complex operation, such as one with a three-step sewage treatment system.

An application for the classification of a facility is included at the end of this Guide (Appendix 1). In this form you will find a separate 'schedule' for each of the four types of facilities. There is also a general information page. An authorized representative of the facility owner must complete and submit the classification application. All applications will be reviewed and a classification level assigned, based upon the classification criteria in Schedule 1 of O. Reg. 435/93. A certificate of classification will be sent to the owner of the facility, once it has been assigned a class.

**NOTES :**

(A) A ground water supply with only "in-line" preventive chlorination and or adjustments such as pH control or iron sequestering is usually considered a water distribution system and not a water treatment facility.

(B) A water distribution system which is located on private property and does not provide its own on-site ground water source is considered a plumbing system. Plumbing systems do not require classification or licensed operators. Special procedures are used for classifying small private water systems which only use preventative chlorination, pH control or iron sequestering.

(C) A wastewater collection system which is located on private property is considered a plumbing system. Plumbing systems do not require classification or licensed operators.

(D) Water systems supplying resorts, campgrounds, trailer parks and privately owned communal water works as well as very small municipal water systems supplying small hamlets, subdivisions or villages may be eligible to be classified as a Small Water System. Please refer to page 7 of the Program Guide for further information or contact Vicki Purvis at (905)796-2851 ext.2221 for further information.

**TABLE 1 - QUALIFICATIONS FOR OPERATORS' LICENCES**

<b>Class</b>	<b>Education</b>	<b>Experience</b>	<b>Examination</b>	<b>Other Comments</b>
<b>Operator in Training</b>	Grade 12 or equivalency	No requirement	Pass - 70%	Note: Operators may only advance one level at a time.
<b>Class I</b>	Grade 12 or equivalency	1 year of experience as an operator in that type of facility	Pass - 70%	Substitutions do not apply, operators must have one (1) full year of valid operations experience.
<b>Class II</b>	Grade 12 or equivalency	3 years of experience as an operator in that type of facility <sup>1</sup>	Pass - 70%	Operators must have a Class I licence for that type of

				facility in order to apply for a level 2 upgrade.
<b>Class III</b>	Grade 12 or equivalency, and 2 yrs.(90CEU's) of additional related education or training.	4 years of experience as an operator in that type of facility with at least 2 years as OIC in Class II, III or IV facility <sup>1</sup>	Pass - 70%	Operators must have a Class II licence for that type of facility in order to apply for a level 3 upgrade.
<b>Class IV</b>	Grade 12 or equivalency, and 4 yrs.(180CEU's) of additional related education or training.	4 years of experience as an operator in that type of facility with at least two years as OIC in Class III or IV facility <sup>1</sup>	Pass - 70%	Operators must have a Class III licence for that type of facility in order to apply for a level 4 upgrade.

<sup>1</sup>*Certain related experience may be substituted for up to 50% of the experience requirement for a Class II,III, or IV licence.*

**NOTE:**

(A) 10 hours of training equals 1 Continuing Education Unit (CEU); 45 CEU's = 1 year of post secondary education.

(B) Professional Engineers need 85% to pass an examination.

**EXPERIENCE / EDUCATION SUBSTITUTIONS:**

Some substitutions are permitted for the requirements in Table 1. Substitutions may be made for up to one-half of the experience requirements for class II, III, or IV licences. Similarly there are some substitutions permitted for up to one-half of the post secondary education or training requirements for class III, or IV licences. The following information is a list of the substitutions that will be considered.

**Experience Substitutions:**

Experience gained in other jobs may help an operator perform their duties. The Licensing Program recognizes other types of experience, based on the following rules.

1. Class I **No substitution permitted.** (This will ensure that a Class I operator has actually worked in the type facility for which he/she has a licence.)
2. Class II, III or IV Substitution may be made for up to one-half of the required experience. For example, a Class II licence requires 3 years of operating experience. An operator may substitute up to 1 1/2 years of those 3 years.

Eligible substitutions are listed below:

- a. Relevant formal post secondary school education (Community College, Trade School, University) may be substituted for operating or OIC experience. One year of post secondary education is equal to one year of experience or 45 CEU's (1 CEU equals 10 hours of training).
- b. Specialized operator training courses, seminars, workshops, technical conferences or in-service training may be substituted for experience requirements. Please note all training must be verified by a certificate, transcript, or letter from the trainer.
- c. Partial credit toward operating experience may be given for experience in other types of facilities, or in other job functions within a facility (ask the Certification Office for a list of substitutions). For example, some operating experience in wastewater treatment plant can be used when you apply for a Class II, III or IV water treatment plant. Other allowable substitutions include laboratory work, maintenance work, or other specified trades.

**NOTE: Any education used to meet the experience requirement cannot be applied to meet the educational requirement.**

#### **Education Substitution:**

Operating experience may be used to partially meet the education requirements.

- a) A year of valid operating experience may be substituted for two (2) years of grade school, without limitation.
- b) A year of valid operating experience may be substituted for one (1) year of secondary school, without limitation.
- c) A maximum of one (1) year of OIC experience in a Class II (or higher) facility may be substituted for one (1) year of post secondary education to meet the Class III education requirement.
- d) A maximum of two (2) years of OIC experience in a Class III (or higher) facility may be substituted for two (2) years of post secondary education to meet the Class IV education requirement.

**NOTE: Any experience used in substitution for educational requirements cannot also be applied to meet the experience requirements.**

The above education substitutions would allow an operator to obtain Class IV experience with a minimum of 2 years (90 CEUs) post secondary education/training, provided the operator has enough OIC experience.

**Experience Exemption of Professional Engineer:**

A Professional Engineer accredited in Ontario, may obtain a licence without meeting the necessary operating experience requirements. In order for the experience to be waived the professional engineer must obtain a mark of 85% or higher on the appropriate operator licensing exam.

**NOTE: Once a Professional Engineer gives up their Peng. status for a licence, they cannot revert back to using their Peng. status for that licence. They have to go through the same procedures and have the same experience and qualifications as an operator to obtain their licence.**

**Study Materials:**

The following pages provide a summary of the study material available for preparation to write operator licensing exams. Operators should refer to the *Resource Guide for Water and Wastewater Facility Operators* for additional information on contents, price and ordering information of guides, manuals and course and reference listings.

Operator Need-To-Know information is available for each exam. The guides were created to help trainers, supervisors and operators determine what topics to review while studying for operator certification exams. The guides break each exam into numerous topics and indicate the level of knowledge required for each exam.

The Certification Office also have videos available to help operators prepare to write exams. The video is entitled "*Secrets to Success: How To Prepare For Operator Certification*" This video is designed for operators who have not written exams for many years. It provides tips on how to study, and how to write exams. Your supervisor may borrow the video from the Certification Office.

To obtain the Resource Guide, Operator Need-To-Know, or Secrets to Success video (which are all free of charge), contact the Certification Office (905) 796-2851 ext.2222.

**Study Materials Available Through The Certification Office**

Operator-In-Training Examination Study Guide.....\$30.00

- Prepared by Ontario Municipal Water Assoc. & Ministry of the Environment
- study guide covers all four categories in one manual

Alberta Water & Wastewater Operations Manual Level 1.....\$85.00

- Prepared by Western Canada Water & Wastewater Assoc.
- manual covers all four level 1 categories (WT,WD,WWT,WWC)

Alberta Water & Wastewater Operations Manual Level 2.....\$85.00

- Prepared by Western Canada Water & Wastewater Assoc.

- manual covers Water Treatment and Wastewater Treatment level 2

**Sample Examination Questions**

Operator Certification Study Guide.....\$40.00

- Prepared by the American Water Works Assoc. (AWWA)

- guide covers sample questions, level 1-4, in Water Treatment & Water Distribution

Certification Study Guide for Wastewater Treatment Personnel.....\$50.00

- Prepared by the Water Environment Federation (WEF)

- guide covers sample questions, level 1-4, in Wastewater Treatment

Certification Study Guide for Collection Systems Personnel.....\$50.00

- Prepared by the Water Environment Federation (WEF)

- guide covers sample questions, level 1-4, in Wastewater Collection

**Ministry of the Environment Study Material**

Mathematics for Water & Wastewater Operations.....\$25.00

**California State University Correspondence Courses**

California State offers a variety of water & wastewater correspondence courses for operators and managers. Upon completion of each course you will receive a Certificate of Completion plus you earn Continuing Education units (CEU's), per course. For further information contact California State University (CSU), at (916)278-6142 or visit their website at <http://www.owp.csus.edu>

**HOW DO I GET MORE INFORMATION:**

If you require more information or would like to would like to receive a Program guide, Resource Guide, Need-To-Know, copies of O. Reg 435/93, or order manuals, please contact the Certification Office:

Ontario Environmental Training Consortium  
37 George Street North, Suite 206  
Brampton, Ontario  
L6X 1R5

Call (905) 796-2851  
Fax (905) 796-8744



## **Certification Office Staff**

**Vicki Purvis** -- Certification Manager, Facilities and Upgrades(905)796-2851 ext.2221 or e-mail [vpurvis@oetc.on.ca](mailto:vpurvis@oetc.on.ca)

**Val Plant** -- Facilities, OIT exams, Levelled Exam Marks (905)796-2851 ext.2225 or e-mail [vplant@oetc.on.ca](mailto:vplant@oetc.on.ca)

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**Sharon Martino** -- General Information, Order Forms, Financial (905)796-2851 ext.2222 or e-mail [smartino@oetc.on.ca](mailto:smartino@oetc.on.ca)

## **FEE STRUCTURE**

The appropriate fees must be enclosed with your applications. Please make cheques or money orders payable to "**Ontario Environmental Training Consortium**" or "**OETC**". Note, examination registration, renewals, upgrades, or study material ordering will **NOT** be processed unless payment is received with your application. Applications paid for by VISA will only be processed if all of the information found on the application is filled out.

**Level 1-4 Certification Exams      \$50/per exam**

**Issuing of Upgrade Licences      \$75/per licence**

**Renewal of all Licences (valid for 3 years)\*      \$75/per licence**

**Operator-In-Training Examination      \$20 (licence(s) is included)**

**Facility Application Forms & Licences      no charge**

\* As of October 1998, Operator-In-Training licences have an expiry date of 3 years as per O. Reg. 435/93.

When applying for any of the above examinations or licences, please ensure that all documentation, fees, and verification forms are fully completed. Verification of employment (experience forms) must be signed by an authorized representative of the employee.

## **HOW TO COMPLETE APPLICATION FORMS**

Type or print all information clearly, using a pen only. Please keep a copy of all forms submitted. Application forms, supporting documents and fees are to be forwarded to:

**Ontario Environmental Training Consortium (OETC)  
37 George Street North, Suite 206  
Brampton, Ontario  
L6X 1R5**

### **Facility Classification Application Form** (Appendix 1)

If you are applying to have a facility classified or reviewed, complete Appendix 1. Then, complete the classification date sheet (Appendix 1 schedule 1-4), which is applicable to the facility you are classifying.

### **Operator-In-Training (OIT) Application Form** (Appendix 2)

Complete the Operator-In-Training form (Appendix 2), when applying for an OIT exam. Submit the \$20.00 examination fee plus proof of Grade 12 or equivalency to the certification office for registration. If you are interested in purchasing an OIT study guide, submit \$30.00. Please make note on your cheque or on the application form, that you are purchasing an OIT study guide. The certification office will purloinate the study guide to your home address.

### **Water Treatment / Water Distribution Experience Form** (Appendix 3a)

Complete this form to update and verify your eligibility for a licence upgrade in water treatment or water distribution. Your experience must be signed by your present employer. Your present employer cannot sign for any previous work done through a different employer. If an operator works at a variety of facilities please list all of the facilities on a separate piece of paper and attach it to your experience form. **Note, it is an offence under the "Ontario Water Resources Act" to provide false information.**

### **Wastewater Treatment / Wastewater Collection Experience Form** (Appendix 3b)

Complete this form to update and verify your eligibility for a licence upgrade in wastewater treatment or wastewater collection. Your experience must be signed by your present employer. Your present employer cannot sign for any previous work done through a different employer. If an operator works at a variety of facilities please list all of the facilities on a separate piece of paper and attach it to your experience form. **Note, it is an offence under the "Ontario Water Resources Act" to provide false information.**

### **Examination Request Form** (Appendix 4)

Complete this form when requesting to write level 1-4 examinations. Submit the examination fee (\$50.00/exam), the examination request form and appropriate experience form (appendix 3a or 3b) to the certification office. Please note, registration will not be confirmed until payment is received. Your exam request form and fees must be received by the certification office 4 weeks prior to the scheduled exam date.

**The certification office will send you an examination confirmation letter. This letter will confirm the following details:**

1. **what exam you are writing (i.e. WT2)**
2. **the date and time the exam is scheduled for**
3. **where you are writing the exam (map included)**
4. **what materials you need to bring with you to the exam (personal photo ID and calculator)**
5. **licence eligibility requirements - the office will give you detailed description as to what you need to submit in order to have the licence issued upon passing the examination.**

It is important to keep your confirmation letter. After you write your examination you will receive your marks by mail within four (4) weeks of writing. **The certification office cannot give exam marks over the phone.** Upon successful completion of the exam (pass is 70%), refer to your confirmation letter and then submit the appropriate documentation and fees (\$75.00 issuing fee per license).

### GLOSSARY OF TERMS

"additional education/training"	Additional training or education beyond grade 12, which is required to obtain a Class III or Class IV license.
"category"	Refers to the type of facility, there are four different types of categories. Wastewater treatment (WWT), wastewater collection (WWC), water treatment (WT) and water distribution (WD).
"certificate"	1) "Certificate of Classification" is the document which validates the facility class and category.  2) The document previously issued under the Voluntary Certification Program to operators who had met all of the voluntary program requirements. These certificates are now considered valid licenses (see definition of license).
"CEUs"	Continuing Education Units - One CEU is equal to 10 hours of direct contact training. 45 CEUs equals one (1) year of post secondary education.
"class"	Refers to the level of a facility or level of a licence. There are four classes; Class I, Class II, Class III and Class IV.
"Director"	The Ministry of the Environment (MOE) employee, designated by the Minister, who is responsible for implementation of the Regulation (or parts of the Regulation)
"facility"	A wastewater treatment facility, a wastewater collection facility, a water treatment facility or a water distribution facility.
"grandparenting"	A limited time program which allowed operators to become licensed at the level of their facility, without meeting the education and examination requirements. Operators were still required to meet the experience requirements. There have been two grandparenting events: <b>Voluntary Grandparenting</b> : Deadline was October 1, 1990.  <b>Mandatory Grandparenting</b> : Deadline was February 1, 1994. Operators who were grandparented under this program are required to write an exam at the level of their licence. Operators who do not pass the exam will be issued a licence one class lower when they renew.

<b>"licence"</b>	An official document which confirms that the identified person can legally operate that type of facility within the Province of Ontario.
<b>"operator"</b>	A person who adjusts, inspects or evaluates a process that controls the effectiveness or efficiency of a facility, and includes a person who adjusts or directs the flow, pressure or quality of the water within a water distribution facility or the wastewater within a wastewater collection facility.
<b>"operator-in-charge" (OIC)</b>	An operator who, <ul style="list-style-type: none"> <li>(a) has responsibility for the overall operation of a facility, or</li> <li>(b) sets operational parameters for a facility or for a process that controls the effectiveness or efficiency of a facility, or</li> <li>(c) directs or supervises operators in a facility.</li> </ul>
<b>"operator-in-training" (OIT)</b>	A class of licence which does not require any operating experience to obtain.
<b>"operator in overall responsibility"</b>	An operator who is licensed at or above the class of the facility and has been designated by the owner to be responsible for all operational decisions at the facility for a set period of time.
<b>"owner"</b>	A municipality or person having the authority to construct, maintain, operate, repair, improve or extend water works or sewage works.
<b>"professional engineer"</b>	A professional engineer as defined in the <u>Professional Engineers Act</u> .
<b>"upgrade"</b>	The process where an operator obtains a higher class licence that he/she currently possesses.
<b>"wastewater collection facility"</b>	The part of a sewage works that collects or transmits sewage but does not include the part of the sewage works that treats or disposes of sewage.
<b>"wastewater treatment facility"</b>	The part of a sewage works that treats or disposes of sewage but does not include the part of the sewage works that collects or transmits sewage.
<b>"water distribution facility"</b>	The part of a water works that supplies or distributes water but does not include the part of the water works that collects, produces or treats water.
<b>"water treatment facility"</b>	The part of a water works that collects, produces or treats water but does not include the part of the water works that supplies or distributes water.