

A high-speed photograph of water splashing, with a stream of water falling from the top right and creating a large splash with many bubbles in the center. The background is a light blue gradient.

*W*ATER ACT Regulations

Proposed Water Supply and Wastewater Treatment System Regulations – *Plain Language Summary*

PrinceEdwardIsland.ca/wateract



Communities, Land
and Environment

Department of Communities, Land and Environment

Water Act Regulations - Water Supply and Wastewater Treatment

Plain language summary of key points

INTRODUCTION

The Prince Edward Island *Water Act* was passed in the legislature in the fall of 2017. The *Water Act* demonstrates the Province's commitment to protecting the Island's water resources and the ecosystems that support them. To operationalize the Act, there are three sets of regulations that are initially required to replace the previous regulations of the *Environmental Protection Act (EPA)*, including the regulations that control the establishment and operation of water supply systems and wastewater treatment systems.

The *EPA Drinking Water and Wastewater Facility Operating Regulations* will be replaced by the *WA Water Supply System and Wastewater Treatment System Regulations*. This document summarizes the *WA Water Supply System and Wastewater Treatment System Regulations* only. The other two regulations are summarized separately in other documents.

The purpose of the *Water Supply System and Wastewater Treatment System Regulations* is to outline the approval process for the establishment or modification of water and wastewater systems and to establish minimum standards for their operation, including measures for public transparency and accountability.

Highlights

- The regulations have been renamed to reflect their broader scope - in particular the approvals to construct facilities.
- The regulations consolidate approvals to construct and to operate water and wastewater systems under a single regulation. An effort has been made to take a common approach to as many elements as possible relating to the regulation of water supply systems and wastewater treatment systems.
- The practice of issuing "Certificates of Approval" for construction, modification or operational activities will be replaced by issuing "permits to construct or modify" facilities, and "licences" to operate facilities.
- The approval process has been streamlined by eliminating requirements for separate applications for water or wastewater facilities registration, classification, and authority to operate.
- Municipal wastewater effluent standards are prescribed in the regulations rather than in individual approvals to operate. Effluent standards for municipal systems will mirror federal standards under the federal *Fisheries Act Wastewater System Effluent Regulations (WSER)* as a step towards harmonization of federal and provincial requirements and administration.
- Industrial wastewater effluent standards will still be determined on a case by case basis to better reflect the different types of effluents and the environments they enter.

- Licences to operate a facility will be of fixed duration with a renewal process that includes a review of system performance. This will replace the current open ended duration for approval and *ad hoc* approach to inspection and oversight.
- Provisions for the certification of operators are updated.
- Fees for permits and licences are introduced.

PART 1 - INTERPRETATION AND APPLICATION

SECTION 1 sets out the definitions for the terms used within the regulations.

PART 2 - CONSTRUCTION OR MODIFICATION OF FACILITIES

Existing legislation requires the approval for the construction or modification of water and wastewater systems under the *Environmental Protection Act* by the issuing of “Certificates of Approval”, however specific details for the approval process are left to department policy. Under the *Water Act*, such approvals will be made under **Part 2** of these regulations.

SECTION 2 spells out the approval process for constructing or modifying water supply or wastewater treatment systems which will now take the form of permits rather than certificates of approval issued under the Act. The section includes

- the application process,
- information requirements and considerations related to application for permits,
- requirements for record drawings and letters of compliance upon completion of projects, and
- the process for the registration, classification or reclassification of the facility.

SECTION 3 describes the process for registering a water supply or wastewater treatment system, as well as for applying for the classification of a facility. Facility classification is necessary to ensure that a facility is operated by qualified individuals, and also determines certain operating requirements such as the water or wastewater sampling requirements.

SECTION 4 lists additional activities where permits are required. These are cases where it is proposed to undertake major, non-routine activities or procedures such as the removal, storage, or final disposal of sludge from a wastewater treatment facility or any other activities that may disrupt water quality or effluent quality. Permits will not be required for routine maintenance activities such as the repair of broken water mains or sewer lines, the installation of service connections, and the maintenance and replacement of equipment.

PART 3 - OPERATION OF FACILITIES and OPERATOR QUALIFICATIONS

Under the *Environmental Protection Act*, authority to operate a water supply or wastewater treatment system is granted by the issuing of a “Certificate of Approval” and much like the process for construction or modification of these facilities, specific details of the process are left to policy. These approvals have no fixed duration. Furthermore, requirements relating to the operation of these systems, such as operator certification or sampling and reporting requirements are specified in the *Environmental Protection Act - Drinking Water and Wastewater Facility Operating Regulations*. Part 3 of the new regulations will consolidate the operational considerations for water supply and wastewater treatment systems in a single regulation.

SECTION 5 requires a licence to operate a facility. Licences may be issued to the owner of a facility once a facility has been registered and classified, the fee has been paid and the owner has designated an operator-in-charge. This operator must hold an operator's certificate at a level that is equal to, or exceeds, the classification level of the facility. Licences are valid for a period of five years and may be renewed.

SECTION 6 describes the general obligation of the owner of a water supply or wastewater treatment system to designate an "operator-in-charge" for the facility, and establishes the necessary qualifications for this position. Where a facility has been re-classified to a level greater than the classification level of the operator-in-charge, a temporary permit may be issued for the remainder of the permit period.

SECTION 7 provides an exception to the general requirements for the designation of an "operator in-charge", and allows the owner of a very small water system to designate a qualified plumber to act as the operator-in-charge of the facility.

SECTION 8 provides information on the requirements for certification of system operators, including the application process and requirements for certification, and provisions for renewal, decertification, and reinstatement processes. Certification is subject to meeting education and experience requirements, payment of fees, and passing an examination.

An operator's certificate may be accepted from another jurisdiction if certification, experience, and education are considered equivalent to certification set out in Schedule B. An operator's certificate is valid for four years.

PART 4 - ASSESSMENTS AND CORRECTIVE ACTIONS

Under the current regulatory regime, inspection and assessments of the status or performance of water or wastewater systems are not dictated by any specific regulatory provision. They are carried out under policy, often on an "as needed" basis. Similarly the department has relied on rather broadly defined powers to require corrective actions for deficiencies in the performance or vulnerability of systems. Part 4 of these regulations replaces the previous *ad hoc* process for system assessments with a more consistent and predictable process.

SECTION 9 of the regulations requires the regular assessment of municipal water supply and wastewater treatment facilities. It describes the content of these reviews including compliance with required sampling, effluent quality standards, and the general infrastructure condition.

Reviews are required to determine the capacity of systems to meet any changes to the demands placed on them since the previous review. Review reports are to be signed off by an experienced engineer. Additional information or assessments may be required.

An assessment of a non-municipal system may be required as part of the approval process for modifying the facility, or in any case where the system is, or is at risk of not performing in a satisfactory manner.

Where an assessment indicates either a municipal or non-municipal system is, or may be at risk of failing to meet water quality or effluent quality standards, the owner of the system will be required to correct the deficiencies after a remediation plan has been filed and approval given. Rules governing amending a licence, or grounds to refuse a permit or licence in response to the findings of an assessment are provided.

PART 5 - WATER SUPPLY SYSTEMS

Part 5 of the regulations contains provisions that are unique to water supply systems with a focus on drinking water quality as it relates to water treatment, monitoring and reporting requirements.

SECTION 10 of the regulations describes water treatment standards for the removal of microbiological and chemical contaminants by various classes of public water supply systems. Treatment devices and water additives must be certified to the standards described in Schedule D. Water supply systems that do not currently meet the treatment standards will be required to submit a plan outlining steps to remedy the issues.

SECTIONS 11 and 12 specify that all water supply systems and semi-public drinking water supplies are to be monitored and the assessment of water quality is to be based on the Guidelines for Canadian Drinking Water Quality.

SECTIONS 13 to 16 provide the specific sampling requirements for various classes of systems. For smaller systems, including stand-alone semi-public systems, bacterial sampling is required quarterly and chemical parameters sampling every three years. Sampling frequency increases for larger systems and includes bacterial sampling and general chemical parameters. A more detailed suite of chemical parameters is required every three years. Chlorine must be monitored weekly. Regardless of system size, additional water quality sampling may be required.

SECTION 17 requires that water quality analyses must be completed by an accredited laboratory and that reporting of results to the Department must be timely.

SECTION 18 provides direction on the regular reporting obligations of system owners to their customers and to the Department. Records of water quality analyses must be maintained for five years. Results are to be considered as public information and may be made available to the public by the Department.

SECTION 19 requires system owners to report to the Minister when there are adverse bacterial or chemical results, failures in the water treatment process or where there is the potential for contaminants to enter the distribution system.

PART 6 - WASTEWATER TREATMENT SYSTEMS

Part 6 of the regulations contains provisions that are unique to wastewater treatment systems and provide specific regulatory standards that in the past were determined on a case by case basis. Included are requirements for measuring wastewater flows, effluent quality standards, required monitoring frequencies and reporting procedures. An important goal of these new regulations is to harmonize effluent standards and monitoring and reporting requirements with federal requirements under the *Fisheries Act* Wastewater System Effluent Regulations.

SECTION 20 describes how wastewater effluents must be measured. The volume of wastewater effluent forms one of the criteria for the classification of systems and resulting monitoring requirements. Larger systems, discharging in excess of 2500 m³ per day, must monitor discharge continuously within 5 years of the adoption of these regulations. The owner of an alternative wastewater treatment facility or an industrial wastewater treatment must measure and record effluent flows as a condition of their operating licence.

SECTION 21 establishes that effluent quality is to be measured at the point of discharge. Where a man-made wetland is the final stage of treatment, the point of discharge is the outfall of the wetland.

SECTION 22 prescribes standards for key wastewater quality parameters that are used to assess the impact of wastewater discharges on the environment. Previously, under the *Environmental Protection Act*, these standards were established on a case by case basis as conditions of the Certificate of Approval for the facility.

Effluent standards are included for acute lethality, total suspended solids (TSS), carbonaceous biological oxygen demand (cBOD), and ammonia. They are consistent with standards in the federal *Fisheries Act* Wastewater System Effluent Regulations (WSER). Additional standards are established for performance of effluent disinfection based on faecal coliform bacteria.

Standards for TSS and cBOD are based on average concentrations. Standards for faecal coliform bacteria, ammonia and acute lethality are established as maximum acceptable concentrations.

SECTION Section 23 of the regulations allows for the establishment of distinct effluent quality standards for industrial wastewater emitters or from facilities using alternative wastewater treatment technologies. These standards may take into consideration the unique characteristics of the wastewater being generated and the receiving environment for the effluent.

SECTION 24 allows for temporary bypasses and partially treated effluent. Permits would be issued when these are necessary to allow for maintenance or construction work on the facility or to prevent serious, longer term disruption to wastewater treatment facility.

SECTION 25 details the requirements for the frequency of monitoring effluent quality. Sampling frequency ranges from weekly for the largest systems to quarterly for smaller systems with longer hydraulic retention times such as the lagoons servicing many smaller communities. Testing requirements for intermittent wastewater treatment facilities that discharge only seasonally will be specified in their licence to operate.

Larger systems (discharging 2,500 m³ or more per year) must also test effluent for acute lethality on a quarterly basis. Where any sample is found to be acutely lethal, increased sampling frequency is required until resolved. When effluent has been determined to be acutely lethal, the owner of the system must submit a report stating i) the cause, ii) steps that will be taken to remedy the problem and iii) the timeframe for those steps to be taken.

SECTION 26 of the regulations allows for the establishment of specific, alternate effluent monitoring requirements for industrial wastewater and alternative wastewater treatment systems taking into consideration the unique characteristics of the wastewater or the receiving environment.

SECTION 27 requires that analyses must be conducted in fulfilment of these sampling requirements are conducted by an accredited laboratory and **Sections 28 and 29** outline the requirements for record keeping and public disclosure.

Wastewater treatment system owners must provide their customers with a summary of effluent analyses at least once a year. In addition, any system discharging effluent at flow rates of 100 m³ per day or more must submit results of flow measurements and effluent analyses to the

federal Environmental Regulatory Reporting Information System (ERRIS) within 14 days of receiving the results. System owners are also required to notify the Department in cases where effluent discharge rates or volumes are above allowable limits or they fail to meet effluent quality standards.

All records of effluent quality required under these regulations must be held for a minimum of five years. In addition, such records will be considered to be public information and may be made available to the public by the Department.

SECTION 30 provides the commencement date when these regulations come into force.

SCHEDULES

The regulations are supported by a number of schedules described in the table below:

Schedule	Description
A	Provides criteria by which facilities are classified as (a) water treatment; (b) water distribution; (c) wastewater treatment or (d) wastewater collection facilities
B	Prescribes the requirements for certification of operators for water and wastewater facilities based on the classification of the system they are operating
C	Sets out the chemical analysis components for drinking water quality monitoring
D	Lists the fees for activities related to the regulations
E	Provides standards for materials in contact with drinking water, devices used for treating drinking water and determination of log credits for disinfection

[*PrinceEdwardIsland.ca/wateract*](http://PrinceEdwardIsland.ca/wateract)



CANADA

Communities, Land
and Environment