

The Ontario Drinking-Water Systems Regulation  
(O. Reg. 170/03)

## Guide 4: Glossary of Terms

### A Guide for Owners and Operators of Non-Municipal Year-Round Residential Drinking Water Systems

Please Note: The requirements in this Guide may be subject to change given the Ministry's intention to propose technical amendments to O. Reg. 170/03 by the end of June 2005, as outlined in the Ministry's EBR Posting – "Broad Policy Proposal for the Regulation of Drinking Water Systems in Ontario". More information on this proposal can be found on the EBR Registry at: <http://www.ene.gov.on.ca/envregistry/025314ep.htm>

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*Protecting our environment.*



Ontario

**This publication is provided for information purposes only.**

This guide is the fourth guide of a four-guide kit designed to assist owners and operators of regulated non-municipal year-round residential drinking water systems to more fully understand their responsibilities in delivering safe, clean drinking water. However, readers are advised against using this document for compliance purposes. Reference should always be made to the text of the Drinking-Water Systems Regulation (O. Reg. 170/03) and the *Safe Drinking Water Act, 2002* to ascertain an owner/operator's specific legal requirements and to determine whether or not a system is in compliance. The Act and its regulations may be obtained from Ontario's e-laws website at [www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca) or by calling the Ministry's Public Information Centre at 1-800-565-4923.

For the exact wording of technical terms and other definitions, refer to the text of the Drinking-Water Systems Regulation (O.Reg.170/03) and the other cited regulations and statutes. You can access these on Ontario's e-laws website at [www.e-laws.gov.on.ca](http://www.e-laws.gov.on.ca). For other sources of information, see the back cover of this guide.

At the end of this guide, you will find more information about other resources available, including directions on how to obtain the other guides of this kit and who you can call if you have questions about your responsibilities under the Ontario's Drinking-Water Systems Regulation (O. Reg. 170/03).

**A number of key technical and water management terms are defined in Ontario's Drinking-Water Systems Regulation (O. Reg. 170/03)**

This glossary is for guidance only. For a complete definition of some terms, it is often necessary to refer to another document where the term is fully defined. For example, for a complete definition of "nursing home," you must refer directly to the *Nursing Homes Act*.

<b>Accredited laboratory</b>	When sending drinking water samples to a laboratory for analysis, you are required to use a laboratory that is licensed for the parameter being tested. (See “list of licensed laboratories” in this Guide) A laboratory must successfully meet the requirements of the current accreditation program administered by the Canadian Association of Environmental Analytical Laboratories (CAEAL). Upon CAEAL’s recommendation, the Standards Council of Canada (SCC) may grant accreditation. A laboratory can be licensed to test only one or a few parameters, or a great variety of parameters.
<b>Certified Operator</b>	“Certified Operator” means, with respect to a subsystem, an individual who holds or is deemed to hold a certificate under Ontario Regulation 128/04 (Certification of Drinking-Water System Operators and Water Quality Analysts) that is applicable under that regulation to that subsystem or that type of subsystem, but does not include an individual who holds or is deemed to hold only a water quality analyst’s certificate or conditional water quality analyst’s certificate under that regulation.
<b>Chemical Parameters</b>	“Chemical Parameters” refers to all the chemicals that must be tested for under this Regulation. These parameters include volatile organics, inorganics, pesticides and PCBs, and do not include what are known as microbiological parameters (i.e., coliforms and general bacteria population), or operational parameters such as turbidity and chlorine residual. A complete list of chemical parameters can be found in Schedule 1 of the Ontario Drinking-Water Quality Standards Regulation.
<b>Children’s Camp</b>	“Children’s Camp” means a camp that is intended primarily for campers under 18 years of age and that is a class A camp or class B camp within the meaning of Regulation 568 of the Revised Regulations of Ontario, 1990 (Recreational Camps) under the <i>Health Protection and Promotion Act</i> .
<b>Chloramination</b>	“Chloramination” means combined chlorine residual disinfection where the combined chlorine residual is predominately in the form of monochloramine
<b>Chlorination</b>	“Chlorination” means free chlorine residual disinfection
<b>Chlorine Residual</b>	“Chlorine Residual” is the concentration of chlorine remaining in water at the end of a specified contact period, which will react chemically and biologically. It may be present as either ‘combined’ or ‘free chlorine’ – or both. The absence of chlorine residual is an immediate indication of potential water quality or treatment process concerns, and that water is not protected from contamination by microbiological organisms.
<b>Coliforms (total coliforms, <i>E. coli</i>, fecal coliforms)</b>	“Coliforms” are a group of bacteria typically found in the intestinal tracts of warm-blooded animals (including humans), as well as in plants, soil, air and water. Fecal coliforms (and in particular <i>E. coli</i> – a member of the fecal coliform group) are a specific class of bacteria that only inhabit the intestines of warm-blooded animals.
<b>Day Nursery</b>	“Day Nursery” means a day nursery as defined in the <i>Day Nurseries Act</i> .
<b>Deficiency</b>	“Deficiency” as defined in O. Reg. 172/03 means, in respect of a drinking water system, a violation of any of the following provisions is prescribed as a deficiency for the purposes of the Act, including the definition of “deficiency” in subsection 2 (1) of the Act, if, in the opinion of the Director, the violation poses a drinking water health hazard: 1. Subsection 18 (1) of the Act. 2. Schedules 1, 2 and 6 to 18 to Ontario Regulation 170/03 (Drinking-Water Systems).
<b>Delivery Agent Care Facility</b>	“Delivery Agent Care Facility” means a) a place where an emergency hostel service that receives funding under the <i>Ontario Works Act, 1997</i> is provided, b) a domiciliary hostel that receives funding under the <i>Ministry of Community and Social Services Act</i> , c) a place where a resource centre program that receives funding under the <i>Day Nurseries Act</i> is provided, or d) a place where a recreational program that receives funding under the <i>Day Nurseries Act</i> is provided.

<b>Designated Facility</b>	<p>“Designated Facility” means</p> <ol style="list-style-type: none"> <li>a) a children’s camp,</li> <li>b) a delivery agent care facility,</li> <li>c) a health care facility,</li> <li>d) a school or private school,</li> <li>e) a social care facility, or</li> <li>f) a university, a college of applied arts and technology, or an institution with authority to grant degrees.</li> </ol>
<b>Director’s Eligibility List</b>	<p>The Director’s Eligibility List is a list of out-of-province laboratories that have been approved by the Director of the Laboratory Services Branch to test Ontario’s drinking water. This list can be found on the Ministry of the Environment’s web site by clicking on the following web address: <a href="http://www.ene.gov.on.ca/envision/water/sdwa/licensedlabs.htm">http://www.ene.gov.on.ca/envision/water/sdwa/licensedlabs.htm</a> and scrolling to the bottom of the page. If you own or know of an out-of-province laboratory that would like to make an application to be included on the Director’s Eligibility list, you can access the necessary forms on the Ministry of the Environment’s web site by going to:</p> <p>Form# 1868e <a href="#">Out-of-Province Permission Letter for List of Out-of-Province Eligible Laboratories</a></p> <p>Form# 1869e <a href="#">Director's List Out-of-Province Eligible Laboratories</a></p>
<b>Distribution Sample</b>	<p>“Distribution Sample” means, with respect to a drinking water system, a water sample that is taken, in the drinking water system’s distribution system or in plumbing that is connected to the drinking water system, from a point significantly beyond the point at which drinking water enters the distribution system or plumbing.</p>
<b>Distribution System</b>	<p>“Distribution System” means the part of a drinking water system that is used in the distribution, storage or supply of water and that is not part of a treatment system.</p>
<b>Drinking Water</b>	<p>“Drinking Water” means,</p> <ol style="list-style-type: none"> <li>a) water intended for human consumption, or</li> <li>b) water that is required by an act, regulation, order, municipal by-law or other document issued under the authority of an act, (i) to be potable, or (ii) to meet or exceed the requirements of the prescribed drinking water quality standards.</li> </ol>
<b>Drinking Water System</b>	<p>“Drinking Water System” means a system of works, excluding plumbing, that is established for the purpose of providing users of the system with drinking water and that includes,</p> <ol style="list-style-type: none"> <li>a) any thing used for the collection, production, treatment, storage, supply or distribution of water,</li> <li>b) any thing related to the management of residue from the treatment process or the management of the discharge of a substance into the natural environment from the treatment system, and</li> <li>c) a well or intake that serves as the source or entry point of raw water supply for the system.</li> </ol>
<b><i>E. coli</i></b>	See “Coliforms.”
<b>Fecal Coliforms</b>	See “Coliforms.”
<b>Food Service Establishment</b>	<p>“Food Service Establishment” means food service premises, as defined in Regulation 562 of the Revised Regulations of Ontario, 1990 (<i>Food Premises</i>) under the Health Protection and Promotion Act, to which the general public is admitted, other than temporary food service premises that are operated solely in conjunction with an exhibition, fair, carnival, sports meeting or other special or temporary event</p>
<b>Free Chlorine Residual</b>	See “Chlorine Residual.”

## **Groundwater**

“Groundwater” means water located in subsurface aquifer(s) where the aquifer overburden and soil act as an effective filter that removes micro-organisms and other particles by straining and antagonistic effect, to a level where the water supply may already be potable but disinfection is required as an additional health risk barrier.

## **Health Care Facility**

“Health Care Facility” means a facility that provides overnight accommodation and that is,

- a) a hospital within the meaning of the *Public Hospitals Act* or the *Community Psychiatric Hospitals Act*,
- b) a private hospital within the meaning of the *Private Hospitals Act*,
- c) a psychiatric facility within the meaning of the *Mental Health Act*,
- d) a nursing home within the meaning of the *Nursing Homes Act*,
- e) a home within the meaning of the *Homes for the Aged and Rest Homes Act*,
- f) an approved charitable institution within the meaning of the *Charitable Institutions Act* that is approved under section 3 of that Act as, (i) a halfway house where rehabilitative residential group care may be provided for adult persons, (ii) a home for the aged, or (iii) a home where residential group care may be provided for handicapped or convalescent adult persons,
- g) a cancer centre established by the Ontario Cancer Treatment and Research Foundation under the *Cancer Act*,
- h) a home for special care within the meaning of the *Homes for Special Care Act*,
- i) an approved home within the meaning of the *Mental Hospitals Act*,
- j) a residence for seniors or retired persons, or any other similar residence, where attainment of a mature age is a factor in being accepted for occupancy,
- k) a nursing station, health centre, clinic or other facility that receives funding through the Ministry of Health and Long-Term Care’s Underserviced Area Program, or
- l) a facility owned or leased by a person who receives funding from the Ministry of Health and Long-Term Care for one or more of the following health care support services that are provided to or are available to residents of the facility: (i) a residential treatment services program, (ii) a withdrawal management services program, (iii) a dedicated supportive housing project.

## **Heterotrophic Plate Count**

The “Heterotrophic Plate Count” (HPC) is a procedure for estimating general bacteria population (i.e., the number of live heterotrophic bacteria) in drinking water samples. Heterotrophic bacteria are those that are unable to synthesize their own food and are dependent on complex organic substances for nutrition. The HPC test can provide useful information about deteriorating water quality and also provides supporting data on the significance of coliform test results. The HPC test may be performed using the spread plate, pour plate or membrane filtration method.

## **Infiltration Gallery**

“Infiltration Gallery” means a subsurface groundwater collection system constructed with open-jointed or perforated pipes that discharge collected water into a watertight chamber.

## **Interested Authority**

“Interested Authority” means,

- a) with respect to a delivery agent care facility, the delivery agent designated under the *Ontario Works Act, 1997* or the *Day Nurseries Act* for the geographic area in which the facility is located, or any successor of that delivery agent,
- b) with respect to a health care facility, the Ministry of Health and Long-Term Care, or any successor of that ministry,
- c) with respect to a school, the Ministry of Education, or any successor of that ministry,
- d) with respect to a social care facility, the Ministry of Community, Family and Children’s Services, or any successor of that ministry, or
- e) with respect to a university, a college of applied arts and technology, or an institution with authority to grant degrees, the Ministry of Training, Colleges and Universities, or any successor of that ministry.

<b>Interim Maximum Acceptable Concentration (IMAC)</b>	The IMAC is a health-related standard established for parameters either when there are insufficient toxicological data to establish a MAC (see ‘maximum acceptable concentration’) with reasonable certainty, or when it is not feasible to establish a MAC at the desired level. The Ministry document titled “Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines” (formerly known as the Ontario Drinking Water Standards) sets IMACs and MACs for a wide range of parameters. For health-related chemical parameters that must be tested under this Regulation, IMACs and MACs are listed in Schedule 1 of the Ontario Drinking-Water Quality Standards Regulation.
<b>Large Non-Municipal Non-Residential System</b>	“Large Non-Municipal Non-Residential System” means a non-municipal drinking water system that is capable of supplying drinking water at a rate of more than 2.9 litres per second and does not serve (a) a major residential development, or (b) a trailer park or campground that has more than five service connections.
<b>Licensed Laboratories</b>	To be licensed, a laboratory must be accredited for each specific parameter that is being tested. You must select a laboratory or laboratories licensed by the Ministry of the Environment. To view the list of Ontario-based laboratories that have been licensed by the Director of Laboratory Services Branch to test Ontario’s drinking water, go to <a href="http://www.ene.gov.on.ca/envision/water/sdwa/licensedlabs.htm">http://www.ene.gov.on.ca/envision/water/sdwa/licensedlabs.htm</a> If you know of a laboratory that would like to apply for a licence, the laboratory should complete Form# 1828e <a href="#">Application for a Licence to Perform Drinking Water Testing</a>
<b>Maximum Acceptable Concentration (MAC)</b>	The MAC is a health-related standard established for parameters which when present above a certain concentration, have known or suspected adverse health effects. The length of time the MAC can be exceeded without injury to health will depend on the nature and concentration of the parameter. The Ministry document titled “Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines” (formerly known as the Ontario Drinking Water Standards) sets MACs and IMACs (see ‘Interim Maximum Acceptable Concentration’) for a wide range of parameters. For health-related chemical parameters that must be tested under this Regulation, MACs and IMACs are listed in Schedule 1 of the Ontario Drinking-Water Quality Standards Regulation.
<b>Medical Officer of Health</b>	“Medical Officer of Health” with respect to a drinking water system means the medical officer of health for the health unit in which the system is located or if none exists, the Chief Medical Officer of Health.
<b>Microbiological Parameter</b>	Contamination of water supplies by untreated sewage or poorly managed livestock manure runoff presents the greatest risk to public health from microorganisms associated with drinking water. To detect and protect against such organisms, the testing for ‘microbiological parameters’ and monitoring of chlorine residual is required (where chlorination is provided). Microbiological parameters in this Regulation include: total coliforms, <i>E. coli</i> , fecal coliforms and general bacteria population. (See ‘Coliforms’ and ‘Heterotrophic Plate Count.’)
<b>Non-Municipal Drinking Water System</b>	“Non-Municipal Drinking Water System” means a drinking water system that is not a municipal drinking water system.
<b>Non-Municipal Seasonal Residential System</b>	“Non-Municipal Seasonal Residential System” means a non-municipal drinking water system that is a seasonal system and serves (a) a major residential development, or (b) a trailer park or campground that has more than five service connections.
<b>Non-Municipal Year-Round Residential System</b>	“Non-Municipal Year-Round Residential System” means a non-municipal drinking water system that is a not a seasonal system and serves (a) a major residential development, or (b) a trailer park or campground that has more than five service connections.

<b>Ontario Drinking Water Quality Standards</b>	“Ontario Drinking Water Quality Standards” means Ontario Regulation 169/03 (Ontario Drinking-Water Quality Standards).
<b>Ontario Regulation 128/04 – Certification of Drinking-Water System Operators and Water Quality Analysts</b>	Made under the <i>Safe Drinking Water Act</i> , this Regulation establishes professional standards for operators and water quality analysts. It is also intended to give greater assurance of safe drinking water to the residents of Ontario through ensuring that operators have the education, experience and knowledge to perform these responsibilities effectively.
<b>Ontario Regulation 459/00</b>	The <i>Safe Drinking Water Act, 2002</i> replaces the Drinking Water Protection Regulation (O. Reg. 459/00) and the Drinking Water Protection Regulation for Designated Facilities (O. Reg. 505/01). O. Reg. 459/00 was revoked on June 1, 2003. Made under the OWRA, and part of Operation Clean Water, O. Reg. 459/00 is a comprehensive action plan to give Ontario residents the cleanest and safest drinking water possible. The Regulation, which puts into law the Ontario Drinking Water Quality Standards (see ‘Ontario Drinking Water Quality Standards’), applies to water treatment and distribution systems that currently require approval under the OWRA, including municipal water works and other large systems.
<b>Ontario Regulation 505/01</b>	The <i>Safe Drinking Water Act, 2002</i> replaces the Drinking Water Protection Regulation (O. Reg. 459/00) and the Drinking Water Protection Regulation for Designated Facilities (O. Reg. 505/01). O. Reg. 505/01 was revoked on June 1, 2003. Made under the OWRA, and part of Operation Clean Water, O. Reg. 505/01 is the government’s province-wide effort to improve water quality and delivery in the province. This Regulation strengthens the protection of populations that are less resistant to contaminants in drinking water. It applies to schools, day nurseries, nursing and retirement homes and social and health care facilities in the broader public sector and private sector that have their own water supply system. Populations more sensitive to contaminants include: infants, children, pregnant women, the elderly, and those with compromised immune systems.
<b>Parameter</b>	“Parameter” refers to a measurable or quantifiable characteristic or feature. This Regulation requires a number of microbiological and chemical parameters to be tested for in a water sample analysis (see ‘chemical parameters’ and ‘microbiological parameters’). Schedule 1 of the Ontario Drinking-Water Quality Standards Regulation lists all of the chemical parameters that must be tested for, and specifies acceptable concentrations for those that are health-related. A description of individual parameters relevant to this Regulation can be found in the Ministry document titled “Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines” (formerly known as the Ontario Drinking Water Standards).
<b>Point of Entry Treatment Unit</b>	“Point of Entry Treatment Unit” means, <ul style="list-style-type: none"> <li>a) is designed to provide primary disinfection,</li> <li>b) is installed in a drinking water system at or near where water from the system enters a building or other structure, and</li> <li>c) is connected to the plumbing associated with the building or other structure.</li> </ul>
<b>Plumbing</b>	“Plumbing” means a system of works, that comprise a ‘water system’ for the purposes of the definition of “plumbing” in subsection 1(1) of the <i>Building Code Act, 1992</i> , other than equipment installed in plumbing to treat water, and (b) that are connected to a drinking water system.
<b>Primary Disinfection</b>	“Primary Disinfection” means a process or series of processes intended to remove or inactivate human pathogens such as viruses, bacteria and protozoa in water.



<b>Private Residence</b>	<p>“Private Residence” means a dwelling place occupied for an extended period of time by the same persons, if,</p> <ul style="list-style-type: none"> <li>a) the residents have a reasonable expectation of privacy,</li> <li>b) food preparation, personal hygiene, and sleeping accommodations are not communal in nature, and</li> <li>c) any use of the dwelling place by a resident for a home occupation, trade, business, profession or craft is secondary to the use of the dwelling place as a residence and does not use more than 25 per cent of the indoor floor area.</li> </ul>
<b>Procedure for Corrective Action for Systems Not Currently Using Chlorine</b>	<p>“Procedure for Corrective Action for Systems Not Currently Using Chlorine” means the document of that name, originally dated April 16, 2003, published by and available from the Ministry, as amended from time to time.</p>
<b>Procedure for Disinfection of Drinking Water in Ontario</b>	<p>“Procedure for Disinfection of Drinking Water in Ontario” means the document of that name, originally dated April 16, 2003 and amended June 1, 2003, published by and available from the Ministry, as amended from time to time.</p>
<b>Professional Engineer</b>	<p>A “Professional Engineer” means a professional engineer as defined in the <i>Professional Engineers Act</i>.</p>
<b>Professional Hydrogeologist</b>	<p>A “Professional Hydrogeologist” means a hydrogeologist who is a member of the Association of Professional Geoscientists of Ontario.</p>
<b>Provincial Officer</b>	<p>A “Provincial Officer” is a peace officer who has been granted the authority under the <i>SDWA</i> to enforce the provisions of the Regulation. The authority given under the Act allows the officer to investigate offences and prosecute any person whom the provincial officer reasonably believes is guilty of an offence under the Act. Under Regulation 170/03, provincial officers are given the authority to post warning notices, as required, if the owner of the water treatment or distribution facility fails to do so.</p>
<b>Public Facility</b>	<p>“Public Facility” means,</p> <ul style="list-style-type: none"> <li>a) a food services establishment,</li> <li>b) a place that operates primarily for the purpose of providing overnight accommodation to the traveling public,</li> <li>c) a trailer park or campground,</li> <li>d) a marina,</li> <li>e) a church, mosque, synagogue, temple or other place of worship,</li> <li>f) a recreational camp,</li> <li>g) a recreational or athletic facility,</li> <li>h) any place, other than a private residence, where a service club or fraternal organization meets on a regular basis, or</li> <li>i) any place where the general public has access to a washroom, drinking water fountain or shower; but does not include a designated facility.</li> </ul>
<b>Public Health Inspector</b>	<p>“Public health inspector” means a public health inspector of a board of health, certified by the Canadian Institute of Public Health Inspectors.</p>
<b>Raw Water</b>	<p>“Raw Water” means water that is in a drinking water system or in plumbing that has not been treated in accordance with,</p> <ul style="list-style-type: none"> <li>a) the prescribed standards and requirements that apply to the system, or</li> <li>b) such additional treatment requirements that are imposed by the licence or approval for the system, if the system is licensed or approved under this Act.</li> </ul>
<b>Raw Water Supply</b>	<p>“Raw Water Supply” means water outside a drinking water system that is a source of water for the system.</p>

<b>Resample and Test</b>	<p>“Resample and Test” means,</p> <ul style="list-style-type: none"> <li>a) with respect to corrective action that arises from the test of a water sample for a microbiological parameter, (i) take a set of drinking water samples, at approximately the same time, with (A) at least one sample from the same location as the sample that gave rise to the corrective action, (B) at least one sample from a location that is a significant distance upstream from the location described in sub-subclause (A), if that is reasonably possible, and (C) at least one sample from a location that is a significant distance downstream from the location described in sub-subclause (A), if that is reasonably possible, and (ii) conduct, on the samples taken under subclause (i), the same test that gave rise to the corrective action; or</li> <li>b) with respect to corrective action that arises from the test of a water sample for a parameter that is not a microbiological parameter, (i) take a water sample from the same location as the sample that gave rise to the corrective action, and (ii) conduct, on the sample taken under subclause (i), the same test that gave rise to the corrective action.</li> </ul>
<b>School</b>	<p>“School” or “private school” means a school or private school as defined in the <i>Education Act</i>.</p>
<b>Seasonal System</b>	<p>“Seasonal System” means a drinking water system that, (a) does not operate for at least 60 consecutive days in every calendar year, or (b) does not operate for at least 60 consecutive days in every period that begins on April 1 in one year and ends on March 31 in the following year.</p>
<b>Secondary Disinfection</b>	<p>“Secondary Disinfection” means a process or series of processes intended to provide and maintain a disinfectant residual in a drinking water system’s distribution system, and in plumbing connected to the distribution system, for the purposes of,</p> <ul style="list-style-type: none"> <li>a) protecting water from microbiological re-contamination,</li> <li>b) reducing bacterial regrowth,</li> <li>c) controlling biofilm formation, and</li> <li>d) serving as an indicator of distribution system integrity, and includes the use of disinfectant residuals from primary disinfection to provide and maintain a disinfectant residual in a drinking water system’s distribution system for the purposes described in clauses (a) to (d).</li> </ul>
<b>Service Connection</b>	<p>“Service Connection” means, (a) a point where a drinking water system connects to plumbing, or (b) in a trailer park or campground, a fixture that allows a trailer or other vehicle to connect to the trailer park’s or campground’s drinking water system.</p>
<b>Service Pipe</b>	<p>“Service Pipe” means the pipe portion of a drinking water system that extends from a watermain to the property line of a property serviced by the watermain.</p>
<b>Small Non-Municipal Non-Residential System</b>	<p>“Small Non-Municipal Non-Residential System” means a non-municipal drinking water system that is not capable of supplying drinking water at a rate of more than 2.9 litres per second, serves a designated facility or public facility and does not serve (a) a major residential development, or (b) a trailer park or campground that has more than five service connections.</p>

**Social Care Facility**

“Social Care Facility” means,

- a) a facility designated by the regulations under the *Developmental Services Act* as a facility to which that Act applies,
- b) a residence licensed as a children’s residence under the *Child and Family Services Act*,
- c) a facility where child development services, child treatment services, child welfare services, community support services or young offenders services, within the meaning of the *Child and Family Services Act*, are provided, unless the facility is located in a private residence,
- d) a facility where child and family intervention services, within the meaning of Regulation 70 of the Revised Regulations of Ontario, 1990 (General) under the *Child and Family Services Act*, are provided, unless the facility is located in a private residence,
- e) a place where an emergency shelter service that receives funding under the *Ministry of Community and Social Services Act* is provided, unless the place is located in a private residence,
- f) a day nursery,
- g) an Ontario Early Years Centre or a satellite program of the Ontario Early Years Centre that receives funding under the *Ministry of Community and Social Services Act*,
- h) a sheltered workshop that receives funding under the *Developmental Services Act* or the *Ministry of Community and Social Services Act*,
- i) a place where a supported employment program that receives funding under the *Developmental Services Act* or the *Ministry of Community and Social Services Act* is provided,
- j) a place where an adults’ community support service that receives funding under the *Developmental Services Act* is provided, unless the place is located in a private residence,
- k) a place where an employment preparation, training and job placement program that receives funding under the *Developmental Services Act* or the *Ontario Disability Support Program Act, 1997* is provided,
- l) a place where a violence against women program that receives funding under the *Ministry of Community and Social Services Act* is provided, unless the place is located in a private residence,
- m) a place where an aboriginal healing and wellness program funded under the Aboriginal Healing and Wellness Strategy is provided.

**Subsystem**

“Subsystem” means a distribution subsystem, distribution and supply subsystem, water treatment subsystem, limited groundwater subsystem or limited surface water subsystem; as defined in Ontario Regulation 128/04 (Certification of Drinking-Water System Operators and Water Quality Analysts).

**Surface Water**

“Surface Water” means water bodies (lakes, wetlands, ponds – including dug-outs), water courses (rivers, streams, water-filled drainage ditches), infiltration trenches, and areas of seasonal wetlands.

**Total Coliforms**

See “Coliforms.”

**Trained Person**

“Trained Person” means, (a) an individual who holds or is deemed to hold a certificate under Ontario Regulation 128/04 (Certification of Drinking-Water System Operators and Water Quality Analysts), other than an individual who holds or is deemed to hold only a water quality analyst’s certificate or conditional water quality analyst’s certificate under that regulation, or (b) a person who, in the preceding 36 months, successfully completed a course approved by the Director that relates to the operation and routine maintenance of drinking water systems.

**Turbidity**

“Turbidity” is a measure of the clarity of water. ‘Turbidity’ or ‘cloudiness’ in water is caused by the presence of tiny suspended particles of matter such as clay, silt, spores, plankton and other microorganisms. Particles can shield microorganisms from being killed by disinfectants such as chlorine or ultra-violet light.

## Overview of the Drinking-Water Systems Regulation

**The following is a brief overview of the Drinking-Water Systems Regulation.  
The Drinking-Water Systems Regulation has 16 sections and 24 schedules:**

### Sections

- Section 1 **Interpretation: general.** This section defines terms used in the Regulation. This includes a definition for “designated facilities” which is an expanded definition from the one found in Ontario Regulation 505/01 and now includes children’s camps. The definition of each category of drinking-water system is also included.
- Section 2 **Interpretation: groundwater under the direct influence of surface water.** This section defines whether a drinking-water system’s raw water supply is deemed to be groundwater under the influence of surface water for the purposes of O. Reg. 170/03.
- Section 3 **Interpretation: Open designated facilities and public facilities.** This section defines when schools, designated facilities and public facilities are “open.”
- Section 4 **Application.** This section includes a table of the categories of drinking-water systems and the schedules that apply to the drinking-water systems that are covered by Ontario Regulation 170/03.
- Section 5 **Exemptions: residential systems.** This section provides some exemptions for non-municipal year-round residential drinking-water systems that obtain all of their water from a drinking-water system that is regulated under O. Reg. 170/03 and that provides secondary disinfection.
- Section 6 **Exemptions: non-residential systems connected to other systems.** This section provides some exemptions for non-residential systems that are connected to and receive water from a drinking-water system that is regulated under O. Reg. 170/03 and that provides secondary disinfection.
- Section 7 **Exemptions: non-residential systems that receive transported water.** This section provides some exemptions for non-residential systems that receive transported water from a drinking-water system that provides proper secondary disinfection, if certain requirements are met.
- Section 8 **Exemptions: warning notices for systems.** This section provides exemptions from the requirements of O. Reg. 170/03 for certain drinking-water systems if signs are posted in accordance with the requirements described in this section. These systems include those that do not use electricity as well as small non-municipal non-residential systems that use electricity and also do not serve any designated facilities or food service establishment that rely on the system for the supply of potable water (under the Food Premises Regulation, Regulation 562). This section also describes sunset dates for these exemptions that apply to most of the systems affected and after which those systems will have to comply with all of the requirements of the Regulation, including testing and treatment requirements.
- Section 9 **Exemptions from approval requirements of the *Safe Drinking Water Act, 2002*.** This section provides an exemption for municipal non-residential systems and some municipal residential systems from having to obtain an approval under Part V of the *Safe Drinking Water Act, 2002*.
- Section 10 **Revocation of the *Ontario Water Resources Act (OWRA)* approvals for non-municipal systems.** This section sets out when approvals granted under the OWRA for non-municipal systems are revoked.
- Section 11 **Annual Reports.** This section outlines the requirements with respect to submitting an annual report for all municipal and regulated non-municipal systems and includes the deadline for submitting these reports to the Director (Ministry of the Environment), based on the category of drinking-water system.

- Section 12 **Information to be available.** This section sets out a number of requirements for making information available for inspection by a provincial officer or any member of the public.
- Section 13 **Retention of records.** This section sets out the specific periods that different reports must be kept by the owner of a drinking-water system.
- Section 14 **Forms.** This section provides the Director (Ministry of the Environment) with authority to require any written notices, warning notices, records or reports to be provided or approved by the Director. In addition, it allows the Director to specify the electronic format in which any document or record may be submitted in connection with the Regulation.
- Section 15 **Purpose of notice to interested authorities.** This section explains that the notice given to interested authorities is to provide them with information relating to compliance with O. Reg. 170/03.
- Section 16 **Commencement.** This section indicates that O. Reg. 170/03 comes into force on June 1, 2003.

## Schedules

- Schedule 1-2 **Treatment Equipment.** These two schedules contain performance-based criteria which enables owners of non-municipal systems and specified municipal systems to choose the technology that meets the required performance. Includes deadlines for meeting the requirements for provision of treatment equipment by drinking-water category.
- Schedule 3 **Point of Entry Treatment.** This schedule provides an exemption from the requirement for secondary disinfection if a drinking-water system uses a point of entry treatment approach and also meets specific criteria.
- Schedule 4-5 **Relief from Schedule 1 and Schedule 2.** These two schedules allow owners of drinking-water systems with high quality groundwater to apply to the Director (Ministry of the Environment) for relief from the requirements for provision of treatment equipment (i.e., disinfection). The application must contain a risk analysis and management plan to show that the source water is of high quality. The approval for relief from all treatment requirements will be reviewed every five years.
- Schedule 6-15 **Operational Checks, Sampling and Testing.** These 10 schedules outline the requirements to perform regular operational checks of all water treatment equipment, and sample and test for microbiological and chemical parameters for the various categories of drinking-water systems.
- Schedule 16 **Reporting Adverse Test Results and Other Problems.** This schedule outlines adverse test results and other problems which require immediate notification under section 18 of the SDWA. It sets out strict notification requirements including a requirement to notify the Spills Action Centre (SAC) and the Local Medical Officer of Health summarizing the actions taken to correct the adverse test result.
- Schedule 17-18 **Corrective Action.** These two schedules outline corrective actions for different types of adverse test results and other problems observed for different categories of systems. Schedule 18 also references a more detailed procedure related to corrective actions for systems that are not currently using chlorine.
- Schedule 19 **Warning Notice of Potential Problems.** This schedule requires owners and operating authorities of drinking-water systems (other than large municipal systems) to post a warning notice if they are not complying with the microbiological testing, did not carry out corrective actions as stipulated, or are required by a corrective action step to notify all users of the system to use an alternate source or boil the water before use.
- Schedule 20 **Engineers' Reports (municipal residential).** This schedule outlines the requirement for large and small municipal residential systems to prepare an Engineer's Report. This report must be prepared by a professional engineer in accordance with the document "*Terms of Reference for Engineers' Reports for Water Works*" (dated August 2000).
- Schedule 21 **Engineering Evaluation Reports (municipal non-residential; non-municipal residential; non-municipal non-residential).** This schedule outlines the requirement to prepare an Engineering Evaluation Report. This report must be prepared by a professional engineer certifying that

all equipment necessary to comply with requirements for treatment and operational checks is being provided.

- Schedule 22 **Summary Reports for Municipalities (municipal residential).** This schedule establishes a timetable for summary reports to be prepared related to municipal residential drinking-water systems regarding any approvals, or orders that the system failed to meet.
- Schedule 23 **Inorganic Parameters (all systems).** This schedule provides a list of 9 inorganic parameters for the purposes of Regulation 170/03.
- Schedule 24 **Organic Parameters (all systems).** This schedule provides a list of 56 organic parameters for the purposes of Regulation 170/03.

### **This is the fourth guide in a four-guide kit.**

The Ontario Ministry of the Environment has prepared a series of guides for regulated non-municipal year-round residential drinking water systems. If you do not have a copy of the relevant guide, please contact the nearest Ministry office for a copy, download an electronic version from the Ministry's website at [www.ene.gov.on.ca](http://www.ene.gov.on.ca), or call our Public Information Centre at 1-800-565-4923. See the back page of this guide for other sources of information.

#### **Guide 1, Does the Regulation Apply to Me?**

#### **Guide 2, Meeting my responsibilities under O. Reg. 170/03.**

- Non-Municipal Year-Round Residential Systems

#### **Guide 3, How to Collect Drinking Water Samples**

#### **Guide 4, Glossary of Terms**

Note: reference should always be made to the text of the Drinking-Water Systems Regulation (O. Reg. 170/03), the *Safe Drinking Water Act*, 2002, and the other related regulations and procedures to ascertain an owner/operator's specific legal requirements.

### **Obtain the specific information you need to meet your regulatory responsibilities.**

The Ontario Ministry of the Environment has prepared a series of guides to help you meet your regulatory responsibilities under the Drinking-Water Systems Regulation (O. Reg. 170/03). Titles in this kit will help you:

- determine whether the system you own or operate is regulated under O. Reg. 170/03;
- provide more detailed information on non-municipal year-round residential drinking water systems;
- show you how to collect samples and have them analyzed; and
- provide definitions of key technical and water management terms.

If you do not have a copy of the relevant guide, please contact the nearest Ministry office for a copy, or download an electronic version from the Ministry's website at [www.ene.gov.on.ca](http://www.ene.gov.on.ca). See the back cover of this guide for details.

## How do I obtain the documents and contact information I need?

<p><b>How can I obtain a copy of the Drinking-Water Systems Regulation and additional information on my regulatory responsibilities?</b></p>	<p>Visit the Ministry website at <a href="http://www.ene.gov.on.ca">www.ene.gov.on.ca</a>, click on “Water” then scroll down the page and click on “Drinking-Water Systems Regulation – Information Page” (<a href="http://www.ene.gov.on.ca/envision/water/sdwa/dwsr.htm">http://www.ene.gov.on.ca/envision/water/sdwa/dwsr.htm</a>). This will take you to a full page of links to key documents, technical updates, laboratory licencing information, legislation and regulations, forms, general information and related documents. Or contact the Ministry’s Public Information Office toll-free at 1-800-565-4923, or at 416-325-4000 in Toronto.</p>
<p><b>How do I find a licensed laboratory for analyzing my drinking water samples?</b></p>	<p>Check the Ministry website for a list of laboratories licensed to perform drinking water testing under the <i>Safe Drinking Water Act</i>, available at: <a href="http://www.ene.gov.on.ca/envision/water/sdwa/licensedlabs.htm">http://www.ene.gov.on.ca/envision/water/sdwa/licensedlabs.htm</a>. You can also call the Ministry of the Environment Laboratory Licensing Administrator at 416-235-6370.</p>
<p><b>How do I contact the Local Medical Officer of Health or the Public Health Unit for my community?</b></p>	<p>Check the “Blue Pages”, under the heading “Health”, in your local telephone directory for the listing of your public health unit. You can also visit the website of the Ministry of Health and Long-Term Care (MOHLTC) at <a href="http://www.health.gov.on.ca">www.health.gov.on.ca</a>, or call the MOHLTC info-line at 1-800-268-1154, or 416-314-5518 in Toronto.</p>
<p><b>Where can I find the nearest local or regional office of the Ministry of the Environment?</b></p>	<p>Check the “Blue Pages”, under the heading “Environment”, in your local telephone directory. You can also visit the Ministry website at <a href="http://www.ene.gov.on.ca">www.ene.gov.on.ca</a> and look under the heading “About the Ministry” on the home page. Or contact the Ministry’s Public Information Office toll-free at 1-800-565-4923, or at 416-325-4000 in Toronto.</p>
<p><b>Where can I find more information on training and certification of system operators?</b></p>	<p>Contact the Ontario Environmental Training Consortium (OETC) through its website at <a href="http://www.oetc.on.ca">www.oetc.on.ca</a>, or by telephone at 905-796-2851. For more information, the new Certification of Drinking-Water System Operators and Water Quality Analysts Regulation (O. Reg. 128/04) is available at: <a href="http://www.e-laws.gov.on.ca/DBLaws/Regs/English/040128_e.htm">http://www.e-laws.gov.on.ca/DBLaws/Regs/English/040128_e.htm</a>.</p>