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chapter Q-2, r. 40

Regulation respecting the quality of drinking water

Environment Quality Act (chapter Q-2, ss. 31, 45, 45.2, 46, 87, 115.27, 115.34 and 124.1)

TABLE OF CONTENTS

CHAPTER I GENERAL	1
CHAPTER II FILTRATION AND DISINFECTION	4
CHAPTER III QUALITY CONTROL OF DRINKING WATER	
DIVISION I WATER SUPPLIED BY DISTRIBUTION SYSTEMS	10
§ 1. — Bacteriological control	11
§ 2. — <i>Physical and chemical control</i> CONTROL OF INORGANIC SUBSTANCES	14
CONTROL OF ORGANIC SUBSTANCES	
CONTROL OF TURBIDITY	
 § 2.1. — Control of the degree of representativeness of samples § 3. — Disinfection control	21.0.1 22
DIVISION II WATER SUPPLIED BY TANK TRUCK	26
DIVISION III METHODS, ANALYSES AND RESULTS	30
CHAPTER IV NON-COMPLIANCE OF WATER WITH THE STANDARDS OF QUALITY	34
CHAPTER V COMPETENCE REQUIRED	42.1
CHAPTER V.1 SPECIAL PROVISIONS APPLICABLE TO WATER SUPPLIED BY A DISTRIBUTION SYSTEM OR A TANK TRUCK TO CERTAIN TOURIST ESTABLISHMENTS	44.1
CHAPTER V.2 MONETARY ADMINISTRATIVE PENALTIES	44.6
CHAPTER VI PENAL SANCTIONS	45

CHAPTER VII MISCELLANEOUS AND FINAL	50
SCHEDULE 0.1	
SCHEDULE 1	
SCHEDULE 2	
SCHEDULE 3	
SCHEDULE 4	

CHAPTER I

GENERAL

1. For the purposes of this Regulation,

"correctional facility" means any facility used for the detention of persons and governed by the Act respecting the Québec correctional system (chapter S-40.1); (*établissement de détention*)

"distribution facility" means a distribution system, except equipment used to collect or treat water intended for human consumption; (*installation de distribution*)

"distribution system" means mains, a system of mains or any facility or equipment used to catch or store or to distribute water intended for human consumption, also called "waterworks system". A distribution system includes facilities or equipment used to treat water. This definition does not include, in the case of a building connected to a waterworks system, all mains supplying the building and located within the property limit. (système de distribution)

For the purposes of this Regulation, facilities used to supply water to an establishment referred to in section 1.4 whose supply source is independent from a distribution system are deemed to be a distribution system;

"drinking water" means water intended for ingestion by human beings; (eau potable)

"educational institution" means any institution providing preschool, elementary or secondary education and governed by the Education Act (chapter I-13.3) or by the Education Act for Cree, Inuit and Naskapi Native Persons (chapter I-14), a private educational institution governed by the Act respecting private education (chapter E-9.1), an institution whose instructional program is the subject of an international agreement within the meaning of the Act respecting the Ministère des Relations internationales (chapter M-25.1.1), a general and vocational college, a university, a research institute, a superior school or an educational institution of which more than one-half of the operating expenditures are paid out of the appropriations voted by the National Assembly, and for the purposes of this Regulation, includes childcare centres and day care centres governed by the Educational Childcare Act (chapter S-4.1.1); (*établissement d'enseignement*)

"enterprise" means any establishment where a commercial, industrial, agricultural, professional or institutional activity is carried on, excluding educational institutions, correctional facilities, health and social services institutions and tourist establishments; (*entreprise*)

"health and social services institution" means any health and social services institution governed by the Act respecting health services and social services (chapter S-4.2) or by the Act respecting health services and social services for Cree Native persons (chapter S-5). For the purposes of this Regulation, any other place where lodging services are provided for senior citizens or for any users entrusted by a public institution governed by any of the aforementioned Acts is also a health and social services institution; (*établissement de santé et de services sociaux*)

"Minister" means the Minister of Sustainable Development, Environment and Parks; (ministre)

"person in charge" means the operator or owner; (responsable)

"professional" means a professional, within the meaning of section 1 of the Professional Code (chapter C-26), whose order governs the practice of a professional activity referred to in this Regulation. This definition also includes any person legally authorized to practise that activity in Québec; (*professionnel*)

"raw water" means water collected to supply a drinking water distribution system and that has not undergone a potabilisation treatment; (*eau brute*)

"seasonal tourist establishment" means a tourist establishment whose usual opening period does not exceed 300 consecutive days per regular operating year; (*établissement touristique saisonnier*)

"tourist establishment" means an establishment which offers to the public restaurant services or sleeping accommodations, including the rental of camping spaces.

For the purposes of this Regulation, tourist information offices, museums, ski stations, holiday camps, outdoor recreation areas, public beaches, rest areas, golf courses, marinas and sites with guided tourist visits are deemed to be tourist establishments; (*établissement touristique*)

"water intended for human consumption" means drinking water or water intended for personal hygiene. (*eau destinée à la consommation humaine*)

The enterprises, institutions, facilities and establishments referred to in this section may also mean, as the context requires, the buildings or premises in which their activities are carried on.

Where this Regulation requires the number of persons supplied to be determined, the method in Schedule 0.1 must be used.

O.C. 647-2001, s. 1; O.C. 467-2005, s. 1; O.C. 70-2012, s. 1.

1.1. It is understood that every requirement prescribed by a provision of this Regulation relating to the layout, operation and maintenance of a water distribution system or tank truck used to distribute water, including quality control of the water supplied, is incumbent on the person in charge of the distribution system concerned or, where applicable, of the tank truck concerned, unless the context indicates otherwise or the provision so entrusts the responsibility to another person.

O.C. 70-2012, s. 2.

1.2. When a provision of this Regulation requires that water undergo a disinfection treatment, that treatment must be administered in a way that ensures at all times or, as the case may be, during the period prescribed by the provision, a constant presence of the disinfectant at the concentration, level or rate fixed by that provision, or, in the absence of such parameters, at a concentration, level or rate sufficient to ensure the elimination of pathogenic microorganisms with an effectiveness at least equal to the elimination percentage provided for in that provision.

O.C. 70-2012, s. 2.

1.3. Every document, declaration or notice the communication or sending of which is prescribed by a provision of this Regulation must be sent to the Minister by registered mail or any other means providing proof of receipt.

O.C. 70-2012, s. 2; I.N. 2016-01-01 (NCCP).

1.4. The following are public, commercial and industrial establishments referred to in the first paragraph of section 45 of the Environment Quality Act (chapter Q-2), to the extent that they are referred to in this Regulation:

— enterprises;

— correctional facilities;

- health and social services institutions;

— tourist establishments;

- educational institutions.

O.C. 70-2012, s. 2.

2. The provisions of this Regulation are neither applicable to water referred to in the second paragraph of section 1 of the Food Products Act (chapter P-29), nor to water whose use or distribution is governed by the Act respecting the Société des alcools du Québec (chapter S-13).

O.C. 647-2001, s. 2; O.C. 467-2005, s. 2; O.C. 70-2012, s. 3.

3. Any person who makes water intended for human consumption available to users must ensure that the water meets the standards of quality of drinking water defined in Schedule 1.

In particular, the person in charge of a distribution system for water intended for human consumption, as well as a person in charge of a tank truck that supplies water for the same purposes, must ensure that the water meets the quality standards referred to in the first paragraph.

Water that is brought by a distribution system or facility to the supply valve to which users have access is deemed to be made available to users. If the water is brought by a tank truck, it is deemed to be made available to users from the moment the water is delivered.

O.C. 647-2001, s. 3; O.C. 467-2005, s. 3; O.C. 70-2012, s. 4.

CHAPTER II

FILTRATION AND DISINFECTION

4. The provisions of this Chapter do not apply to a distribution system that supplies only one of the following users:

- (1) 1 residence;
- (2) 1 or more enterprises;
- (3) 1 residence and 1 or more enterprises.

The provisions become applicable to a distribution system referred to in subparagraph 2 of the first paragraph, from the earliest of the following dates occurring after 8 March 2012:

(1) the date on which a water treatment facility is installed; or

(2) the date of the first modification to the treatment facilities that treat the water.

O.C. 647-2001, s. 4; O.C. 467-2005, s. 4; O.C. 70-2012, s. 5.

5. Water made available to users must have undergone a filtration and disinfection treatment if it originates in whole or in part from surface water or from groundwater whose microbiological quality is likely to be altered by surface water. Groundwater that receives surface water migrating into the soil under such conditions that the soil cannot act as a filtering element of microbiological contaminants is deemed to be likely to be altered by surface water.

The treatment prescribed by this section must be able to eliminate at least 99.99% of viruses, 99.9% of *Giardia* cysts and 99.9% of *Cryptosporidium* oocysts.

Notwithstanding the foregoing, the filtration treatment is not mandatory where raw water that supplies the distribution system meets the following conditions:

(1) its turbidity is lower than or equal to 5 NTU (nephelometric turbidity unit), subject to the provisions of subparagraph 2 below;

(2) at least one sample of water per week is collected for a period of not less than 120 consecutive days and at least 90% of the samples have 15 *Escherichia coli* bacteria or less per 100 ml of water collected, and the average turbidity over 30 consecutive days is lower than 1 NTU;

(2.1) one sample of raw or supplied water is collected at least once a month for a period of not less than 120 consecutive days and none of the disinfection by-product analysis parameters following simulation of the treatment and distribution conditions shows a concentration greater than the standards of quality set out in Schedule 1;

(3) the quality of the water is not likely to be altered, in respect of one of the parameters provided for in subparagraph 1, 2 or 2.1, by contaminants from a source of contamination located upstream from the water catchment site.

O.C. 647-2001, s. 5; O.C. 467-2005, s. 5; O.C. 70-2012, s. 6.

5.1. The filtration and disinfection treatment prescribed in the first paragraph of section 5 must, according to the average number of *Escherichia coli* bacteria per 100 mL of sampled raw water, ensure a proven rate of

effectiveness in the elimination of pathogenic microorganisms present in raw water at least equal to the percentage indicated in the following table for each category of microorganisms:

Average number of <i>Escherichia</i>	Category of pathogenic	Elimination percentage
<i>coli</i> bacteria (per 100 ml of sampled raw water)	microorganisms	
	Virus	99.99%
≤15	Giardia cyst Cryptosporidium oocyst	99.9% 99.9%
>15 and ≤150	Virus Giardia cyst	99.999% 99.99% 99.9%
	Cryptosporidium oocyst	99 . 98
	Virus	99.9999%
>150 and ≤1,500	Giardia cyst Cryptosporidium oocyst	99.999% 99.99%
	Virus	99.99999%
>1,500	Giardia cyst Cryptosporidium oocyst	99.9999% 99.999%

For the purposes of this section, the average number of *Escherichia coli* bacteria is established on the basis of the arithmetical average of the number of bacteria appearing in the analysis results over 12 consecutive months corresponding to the highest average observed within a reference period comprised of the last 36 months.

O.C. 70-2012, s. 7.

6. Water made available to users by a distribution system supplied exclusively with raw groundwater must, if analyses revealed the presence, in at least 2 samples of raw water, of *Escherichia coli*, enterococci bacteria, F-specific coliphage viruses, pathogenic microorganisms or indicator microorganisms of fecal contamination, have undergone a disinfection treatment whose proven rate of virus elimination effectiveness is at least 99.99%.

In addition, the person in charge of a distribution system who makes such water available to users must ensure by means of a prepared notice signed by a professional that the equipment in place is in good working order and makes it possible to reach the rate of virus elimination effectiveness provided for in the first paragraph. The notice must be made available to the Minister for a period of 10 years, from the date it is signed. This section does not apply to equipment used to add disinfectant in the distribution facility.

O.C. 647-2001, s. 6; O.C. 467-2005, s. 6; O.C. 70-2012, s. 8.

7. (Replaced).

O.C. 647-2001, s. 7; O.C. 467-2005, s. 7; O.C. 70-2012, s. 8.

8. When a provision of this Regulation requires that water undergo a disinfection treatment, that treatment must be administered in a way that ensures, at the outlet of the treatment facility, a residual disinfectant content at least equal to the highest of the concentrations provided for in the following subparagraphs:

(1) a concentration of free residual chlorine of 0.3 mg/L or a concentration of chloramines of 1 mg/L, depending which disinfectant is used; or

(2) a concentration of residual disinfectant that makes it possible to reach a pathogenic microorganism elimination effectiveness at least equal to the elimination percentage provided for in section 5, 5.1 or 6.

This section does not apply to the addition of disinfectant in the distribution facility or to a distribution system that supplies only one building.

O.C. 647-2001, s. 8; O.C. 467-2005, s. 8; O.C. 70-2012, s. 9.

9. Every system or facility used to disinfect water pursuant to section 5, 5.1 or 6 of this Regulation must be equipped with standby disinfection equipment that will ensure the disinfection treatment should the main treatment system or facility break down or stop.

This section does not apply to the addition of disinfectant to the disinfection systems or facilities of a distribution system serving only one building.

O.C. 647-2001, s. 9; O.C. 467-2005, s. 9; O.C. 70-2012, s. 10.

9.1. Where, for the purpose of ensuring compliance with section 5, 5.1 or 6 or compliance with the quality standards set out in Schedule 1, the person in charge of a distribution system installs a treatment facility in a building to supply water to that building, that person must, if not the owner of the building, obtain the right to have access to that treatment facility for maintenance and water quality control. That access right must be in writing. Each party to the contract must be in possession of a copy, keep it for at least 2 years after its date of expiry and make it available to the Minister during that period.

In the case of a disinfection system or a system to remove volatile or radioactive substances, the equipment must be installed at the water inlet.

O.C. 467-2005, s. 10; O.C. 70-2012, s. 11.

9.2. In the treatment of water intended for human consumption, no person may use a chemical product that is not certified to ANSI/NSF Standard 60, Drinking Water Treatment Chemicals Health Effects, published by the American organization NSF International and by the American National Standards Institute.

That prohibition does not apply to the use of a chemical product made on the premises and entirely composed of chemical products certified under the standard referred to in the first paragraph.

O.C. 70-2012, s. 12.

CHAPTER III

QUALITY CONTROL OF DRINKING WATER

DIVISION I

WATER SUPPLIED BY DISTRIBUTION SYSTEMS

10. The provisions of this Division do not apply to a distribution system that supplies only one of the following users:

- (1) 20 persons or less;
- (2) one or more enterprises;
- (3) 20 persons or less and one or more enterprises.

O.C. 647-2001, s. 10; O.C. 70-2012, s. 13.

10.1. Every person in charge of a distribution system referred to in this Division must send to the Minister, within 30 days of the putting into service of the facility, a signed declaration containing the information provided for in Schedule 3. A modified declaration must be sent to the Minister when a facility modification that may have an effect on one of the parameters referred to in the initial declaration is made, within 30 days of the facility modification or the putting back into service of the facility if the modification made requires the service to be interrupted.

O.C. 467-2005, s. 11; O.C. 70-2012, s. 14.

§ 1. — Bacteriological control

11. The person in charge of a distribution system must, for the control of total coliform bacteria and *Escherichia coli* bacteria, collect or have samples of the water supplied collected according to the frequency determined in the following table:

Users	Minimum number of samples to collect or to have collected per month
21 to 1,000 persons	2
1,001 to 8,000 persons	8
8,001 to 100,000 persons	1 per 1,000 persons
100,001 persons and over	100 + 1 per group of 10,000 persons exceeding 100,000 persons

Where possible, those samples shall be spread in equal numbers over each of the weeks in the month; if the number of samples is less than 4, they shall be collected at an interval of at least 7 days.

O.C. 647-2001, s. 11; O.C. 301-2002, s. 1; O.C. 467-2005, s. 12; O.C. 70-2012, s. 15.

12. At least 50% of the samples prescribed by section 11 must be collected at the outermost limits of the distribution system.

The provisions of this section do not apply to a distribution system that supplies only 1 building.

O.C. 647-2001, s. 12; O.C. 467-2005, s. 13.

12.1. Where a distribution system of a municipality also supplies water to another distribution system, serving less than 500 persons and whose person in charge is not a municipality, the obligations in sections 11, 14.1, 18, 21, 39 and 40 are incumbent on that municipality for the whole system as long as they are interconnected.

It is also incumbent on the municipality, if the analyses made show the presence of *Escherichia coli* bacteria in the water, to notify the person in charge of that other system. It is incumbent on the person in charge of the distribution system that is thus supplied by a distribution system of a municipality to notify the users concerned in accordance with the requirements of section 36 and to take the corrective measures to remedy the situation. For that purpose, the person in charge of such a distribution system must provide the person in charge of the supplying distribution system with the contact information where the person in charge may be reached or the contact information of a qualified person designated by the person in charge.

In addition, it is incumbent on the person in charge of the distribution system, that is thus supplied by a distribution system of a municipality, to make sampling points that comply with the provisions of this Regulation accessible to the employees or representatives of the municipality, for the purposes of the sampling of the water supplied.

For the purposes of the first paragraph, the number of users of the distribution system thus supplied is added to the number of users of the supplying distribution system.

O.C. 70-2012, s. 16.

13. Where water supplied by a distribution system comes in whole or in part from non-disinfected groundwater having a vulnerability index for the bacteriological protection area that is greater than 100 using the DRASTIC method, the person in charge of the distribution system must collect or have a sample collected of the raw water taken or stored that supplies the distribution system at least once a month to test for the presence of *Escherichia coli* bacteria and enterococci bacteria if works or activities likely to alter the microbiological quality of the water are present within the bacteriological protection area of the catchment site established on the basis of a 200-day groundwater migration time.

Where water supplied by a distribution system comes in whole or in part from non-disinfected groundwater having a vulnerability index for the virological protection area that is greater than 100 using the DRASTIC method, the person in charge of the distribution system must also collect or have a sample collected of the raw water taken or stored that supplies the distribution system at least once a month to test for the presence of F-specific coliphage viruses if works or human activities such as a sewer system, the spreading of septic tank sludge or a domestic waste water infiltration field likely to alter the microbiological quality of the water are present or are carried on within the virological protection area of the catchment site established on the basis of a 550-day groundwater migration time.

O.C. 647-2001, s. 13; O.C. 467-2005, s. 14.

§ 2. — Physical and chemical control

Control of inorganic substances

14. The person in charge of a distribution system must, to control the inorganic substances listed in Schedule 1, except bromates, chloramines, chlorites and chlorates, nitrites, lead and copper, collect or have

collected samples from the water supplied, in accordance with the terms and conditions provided for in the following table for each type of distribution system and substances:

Substances	Type of distribution system	Minimum number of samples	Sampling period
	Number of users		
Substances listed in Schedule 1, except lead, copper, chloramines, bromates, chlorites, chlorates, nitrates + nitrites, and nitrites	≥ 21	1	Annually, between 1 July and 1 October
Nitrates + nitrites	≥ 21	1	During each quarter beginning respectively on 1 January, 1 April, 1 July and 1 October, with a minimum interval of 2 months between the sampling dates.

For the purposes of this section, if the distribution service is not in service from 1 July to 1 October, the samples required may be taken during any other period where the system is in service, despite the provisions of the above table.

This section does not apply to a distribution system that is supplied by another distribution system subject to the control of the inorganic substances referred to in the above table, as long as both distribution systems are interconnected.

O.C. 647-2001, s. 14; O.C. 467-2005, s. 15; O.C. 70-2012, s. 17.

14.1. The person in charge of a distribution system must, to control lead and copper, collect or have collected samples from the water supplied, in accordance with the terms and conditions provided for in the following table for each type of distribution system:

Substances	Type of distribution system	Minimum number of samples	Sampling period
	Number of users		
Lead Copper	≥ 21 and ≤ 500	2	Annually, between 1 July and 1 October
	\geq 501 and \leq 5,000	5	
	\geq 5,001 and \leq 20,000	10	
	\geq 20,001 and \leq 50,000	20	
	≥ 50,001 and ≤ 100,000	30	
	≥ 100,001	50	

For the purposes of this section, if the distribution system is not in service from 1 July to 1 October, the required samples may be taken during any other period where the system is in service, despite the provisions of the above table.

If the distribution system only serves tourist establishments, educational institutions, correctional facilities or health and social services institutions, the minimum number of samples required to control lead and copper is one sample, despite the provisions of the above table.

O.C. 70-2012, s. 17; O.C. 682-2013, s. 1.

15. The person in charge of a distribution system of a type referred to in Column 1 of the following table must, to control the substance indicated in Column 2, collect or have collected samples from the water

supplied, at the minimum rate of at least 1 sample during each quarter beginning respectively on 1 January, 1 April, 1 July and 1 October of each year, with a minimum interval of 2 months between samplings.

Column 1	Column 2
Type of distribution system	Substances
Water treated by ozonation	Bromates
Water treated by chlorine dioxide	Chlorites, chlorates

This section does not apply to the distribution facilities of such a distribution system that are supplied by another distribution system subject to the control of substances referred to in the first paragraph, as long as both systems are interconnected.

O.C. 647-2001, s. 15; O.C. 467-2005, s. 16; O.C. 70-2012, s. 18.

16. (*Revoked*).

O.C. 647-2001, s. 16; O.C. 70-2012, s. 19.

17. For each of the samples collected for the purpose of testing for the nitrites and nitrates provided for in section 14, the person in charge of the distribution system referred to in section 5 must, at the time of the sampling, measure the pH of the water and enter the results in an analysis request form that complies with the model provided by the Minister.

O.C. 647-2001, s. 17; O.C. 467-2005, s. 17; O.C. 70-2012, s. 20.

17.1. If the analysis of at least 2 samples of the water made available to users, including 1 sample collected pursuant to section 17, shows that the pH value is less than 6.5 or greater than 8.5, the person in charge of the distribution system must, as soon as possible, notify the Minister and the public health director of the region concerned during business hours and inform them of the measures taken or to be taken to remedy the situation.

O.C. 70-2012, s. 21.

Control of organic substances

18. The person in charge of a distribution system that supplies chlorinated water must, for the purpose of testing for the trihalomethanes referred to in Schedule 1, collect or have collected, during a single week for each of the quarters beginning respectively on 1 January, 1 April, 1 July and 1 October, samples of the water supplied, with a minimum interval of 2 months between sampling weeks.

The sampling prescribed in the first paragraph must include the minimum number of samples provided for in the following table for each type of distribution system:

pe of distribution system	Minimum number of samples
Number of users	
≥ 21 et ≤ 5,000	1
≥ 5 001 et ≤ 100,000	4
≥ 100,001	8

Notwithstanding the preceding paragraph, if the aforementioned system supplies only a tourist establishment, a health and social services institution, an educational institution, a correctional facility or several such establishments, institutions or facilities, the person in charge of the system is required to collect only one sample of the water supplied per year for the purpose of testing for trihalomethanes, between 1 July and 1 October or, if the establishment, institution or facility is not in service between 1 July and 1 October, at any other period when it is in service.

O.C. 647-2001, s. 18; O.C. 467-2005, s. 18; O.C. 70-2012, s. 22.

19. The person in charge of a distribution system that supplies more than 5,000 persons must, for the control of pesticides and other organic substances referred to in Schedule 2, collect or have at least 1 sample of the water supplied collected annually during each of the quarters beginning on 1 January, 1 April, 1 July and 1 October, with a minimum interval of 2 months between samplings.

Where the analyses of the water samples collected pursuant to the first paragraph show that the concentration of every substance referred to in Schedule 2 is lower than 80% of the maximum concentration prescribed for each substance by Schedule 1, the person in charge of the distribution system must collect or have collected samples only once every 3 years, as long as the concentration of each substance is maintained at that level. As soon as one of the substances referred to in Schedule 2 shows a concentration that is not lower than 80% of the maximum concentration provided for in that Schedule, the samples must be taken in accordance with the provisions of the first paragraph.

This section does not apply to a distribution system supplied by another distribution system that is subject to the testing requirements for the substances listed in Schedule 2.

O.C. 647-2001, s. 19; O.C. 467-2005, s. 19; O.C. 70-2012, s. 23.

20. (*Revoked*).

O.C. 647-2001, s. 20; O.C. 70-2012, s. 24.

Control of turbidity

21. The person in charge of a distribution system must, for turbidity control purposes, collect or have at least 1 sample of the water supplied collected per month.

O.C. 647-2001, s. 21; O.C. 70-2012, s. 25.

§ 2.1. — Control of the degree of representativeness of samples

O.C. 70-2012, s. 26.

21.0.1. Subject to the sampling points whose location is prescribed by a provision of this Regulation, the person in charge of the distribution system or facility must ensure that the sampling points where samples are collected enable to obtain data representative of the quality of water for the whole network. The person in charge must also make available to the Minister, for a minimum period of 5 years, a copy of the plan showing the location of sampling points and indicating, where applicable, the civic numbers of the buildings concerned, accompanied by a document explaining how the sampling points were determined, including a description of the characteristics of each sampling point. The location plan must, in addition, identify the sectors whose hydraulic features allow to have any water contamination of the distribution system or facility confined to it.

O.C. 70-2012, s. 26.

21.1. Treatment facilities supplied exclusively with groundwater in which the analyses of at least 2 samples have revealed the presence of no *Escherichia coli* bacteria or enterococci bacteria, no F-specific coliphage viruses, pathogenic microorganisms or indicator microorganisms of fecal contamination are excluded from the application of sections 22 and 22.1.

Raw water in oxidation and disinfection treatment facilities referred to in the first paragraph must be the subject of a monthly sampling to test for the presence of *Escherichia coli* bacteria and enterococci bacteria, except if the person in charge of those facilities meets the requirements provided for in sections 22 and 22.1 and provided that those facilities make it possible to reach a rate of virus elimination effectiveness equal to or greater than 99.99%.

O.C. 70-2012, s. 27.

§ 3. — Disinfection control

22. Every disinfection treatment facility for water supplied by a distribution system must have a device that takes continuous measurements of the free residual disinfectant concentration installed at the outlet of each continuous disinfection treatment unit. The device must have an alarm system capable of warning the person in charge or a person designated by the person in charge of a breakdown or defective operation, or of non-compliance with section 8.

If the water supplied is disinfected by means of ultraviolet radiation, the treatment facility must have an alarm system capable of warning of a breakdown or defective operation, or that the lamp intensity has fallen below the required level.

In addition, every disinfection treatment facility that treats water supplied by a distribution system referred to in section 5 must have a device that takes continuous measurements of the turbidity of the water installed downstream of each filtration unit, or in the absence of filtration, at the outlet of the facility. The device must have an alarm system capable of warning of a breakdown or defective operation, or of non-compliance with this Regulation as regards turbidity.

The person in charge of a distribution system supplying water to 20,000 persons or less that has a disinfection treatment facility must, for the purposes of the first paragraph and for each 4-hour period, enter

each day in a record the lowest concentration of free residual disinfectant measured in that period, the measurement of water volume and flow rate in the disinfection reserve or reserves corresponding to the lowest free residual disinfectant concentration and, in the case referred to in the third paragraph, the measurement of turbidity. Where chloramines are used, the person in charge must enter each day in the record the lowest concentration of combined residual disinfectant. The water temperature must also be measured by the person in charge and entered in the record each day, as must the water pH if chlorine is used as a disinfectant. The date and the names of the persons taking the measurements must also be entered in the record. The person in charge must sign the record, keep it for a minimum period of 5 years from the date of the last entry and make it available to the Minister.

Every water disinfection treatment facility forming part of a distribution system supplying water to more than 20,000 persons must have a continuous calculation software that enables to determine the elimination rate reached by the facility of the viruses and other microorganisms referred to in sections 5, 5.1 and 6. It must also have an alarm capable of warning at all times the person in charge or the person designated by the person in charge that the facility does not reach the elimination rate of viruses and other microorganisms prescribed by those sections. In addition, the person in charge of such a facility is required to keep and make available to the Minister, for a minimum period of 5 years, the data used for the calculation of the elimination rate of viruses and other microorganisms reached. The data kept must show the elimination rate reached by the facility by at least 1 reading for each 15-minute period.

O.C. 647-2001, s. 22; O.C. 467-2005, s. 20; O.C. 70-2012, s. 28.

22.0.1. The person in charge of a distribution system serving more than 1,000 persons with water that originates in whole or in part from surface water or groundwater whose microbiological quality is likely to be altered by surface water must collect or have collected a sample of raw water so that the number of *Escherichia coli* bacteria may be checked according to the frequency determined in the following table:

Users concerned	Sampling frequency	
\geq 1,001 and \leq 5,000	At least once a month	
≥ 5,001	At least once a week	

O.C. 70-2012, s. 29; O.C. 699-2014, s. 1.

22.0.2. The person in charge of a municipal distribution system serving more than 500 persons and at least one residence with water that originates in whole or in part from surface water must, for the purposes of controlling the total phosphorus, take or cause to be taken at least one sample of raw surface water during the period from May to October, with at least a 2-week interval between each sampling.

That person must also install a device to continuously measure the turbidity of raw water and take turbidity measurements and keep a record for that purpose. The provisions provided for in the fourth paragraph of section 22 apply, by making the necessary modifications to the provisions for taking measurements in the record.

If the water of more than one surface water withdrawal site gets mixed in the treatment facility, the obligations in the first and second paragraphs of this section apply to each of the withdrawal sites.

O.C. 699-2014, s. 2.

22.0.3. Sections 22.0.1 and 22.0.2 do not apply to territories north of the 55th parallel.

O.C. 699-2014, s. 2.

22.0.4. The person in charge of a municipal distribution system serving more than 500 persons and at least one residence with water that originates in whole or in part from surface water must keep a record containing observations about events likely to cause a water shortage, an obstruction or breakage of the withdrawal site or a failure in the screening system, the coagulation system, the sedimentation system, the filtration system, the disinfection system or the treatment system as a whole.

The observations referred to in the first paragraph include the following events:

- (1) natural or man-made events;
- (2) the proliferation of algae, cyanobacteria and aquatic plants;
- (3) suspected or measured increases in ammonia nitrogen.

The observations recorded must make it possible to locate the problem, to situate it in time and to assess its effect on the operation of the withdrawal site or treatment facility.

If the water of more than one surface water withdrawal site gets mixed in the treatment facility, a separate record must be kept for each withdrawal site.

The person in charge must sign the record when entering observations, preserve it for a minimum period of 15 years from the date of the last entry and keep it available to the Minister.

O.C. 699-2014, s. 2.

22.1. For the purposes of section 22, the following adaptations are permitted for a distribution system that has a disinfection treatment facility that only supplies populations served by tank trucks north of the 55th parallel or a population of 500 persons or less, and for 1 or more health and social services institutions, educational institutions, correctional facilities or tourist establishments:

(1) no continuous measurement equipment is required;

(2) the measurements may be taken by means of daily sampling over not fewer than 5 days per week; the alarm system installed may be limited to warning of a breakdown or defective operation of the disinfection treatment facility;

(3) for the purposes of the third paragraph of section 22, the measurements may be taken by means of daily sampling over not fewer than 5 days per week and the alarm system is not required; and

(4) the entries in the record may be made at each sampling for all the measurements taken.

O.C. 467-2005, s. 20; O.C. 70-2012, s. 30.

23. The person in charge of a distribution system that supplies chlorinated water must, during each sampling collected pursuant to section 11, measure the concentration of free residual disinfectant in a water sample collected for that purpose and enter the result in the analysis request form that complies with the

model provided by the Minister. Where the water supplied is chloraminated water, the person in charge must measure the concentrations of free and total residual disinfectant.

O.C. 647-2001, s. 23; O.C. 467-2005, s. 21; O.C. 70-2012, s. 31.

24. (*Revoked*).

O.C. 647-2001, s. 24; O.C. 467-2005, s. 22.

25. (*Revoked*).

O.C. 647-2001, s. 25; O.C. 467-2005, s. 22.

DIVISION II

WATER SUPPLIED BY TANK TRUCK

26. The provisions of Chapter II and those of Division 1 of this Chapter, except those of sections 12 and 14.1, apply, with the necessary modifications, to the water intended for human consumption supplied by a tank truck to more than 20 persons. Therefore, the person in charge of the tank truck is bound by the same obligations as those incumbent on the person in charge of a distribution system under the above-mentioned provisions. The samples to be collected under those provisions are collected at the outlet of the tank.

In the territories located north of the 55th parallel, the samples collected pursuant to sections 11, 14, 15 and 18 must be collected at the outlet of the reservoir where the tank truck is supplied with water.

Sections 21 and 23 do not apply to water supplied by a tank truck north of the 55th parallel.

O.C. 647-2001, s. 26; O.C. 467-2005, s. 23; O.C. 70-2012, s. 32.

27. The person in charge of a tank truck that supplies water intended for human consumption must ensure that the water used to fill the tank complies with the standards of quality set out in Schedule 1. The person in charge must also ensure that all the water transfer operations are performed under such sanitary conditions that the water quality is not affected.

In addition, the water contained in the tank must at all times have a concentration of free residual chlorine equal to or greater than 0.2 mg/L.

O.C. 647-2001, s. 27; O.C. 467-2005, s. 24; O.C. 70-2012, s. 33.

28. The person in charge of a tank truck who supplies drinking water must, at least once a day, measure the quantity of free residual chlorine in a water sample collected at the outlet of the tank.

In addition, the owner or operator must maintain a record in which the date and results of the measurements prescribed above are entered along with the names of the persons who took them, and the origin of the water. That data must be kept for a minimum of 5 years and be made available to the Minister.

This section does not apply to the territories located north of the 55th parallel.

O.C. 647-2001, s. 28; O.C. 467-2005, s. 25; O.C. 70-2012, s. 34.

29. The tank of a vehicle used to supply water intended for human consumption may not be used or have been used to transport substances unfit for human consumption.

If the tank is used or has been used to transport substances other than water, the person in charge of the tank must ensure that the tank is first cleaned and disinfected, as well as the pipes, pumps and other

equipment that were used to transfer those substances, before being assigned to the transportation of water intended for human consumption.

In addition, the tank must have been designed or adapted for the transportation of water intended for human consumption and be kept in a state of maintenance, cleanliness and salubrity that is not likely to contaminate the water during transportation or transfer.

O.C. 647-2001, s. 29; O.C. 70-2012, s. 35.

DIVISION III

METHODS, ANALYSES AND RESULTS

30. Every person who is bound by a provision of this Regulation to collect or have collected a water sample for analysis purposes must ensure that the samples are collected and kept in accordance with the provisions of Schedule 4. That person must also ensure that the samples are shipped to the analytical laboratory as soon as possible.

Every person who collects a water sample pursuant to this Regulation must sign the analysis request form that complies with the model provided by the Minister to certify that the sampling, preservation and sending of the sample to the laboratory accredited by the Minister under section 118.6 of the Environment Quality Act (chapter Q-2) have taken place in compliance with the provisions of this Regulation.

The person in charge of the distribution system must keep a copy of the analysis request form sent to the accredited laboratory for a minimum of 2 years and make it available to the Minister.

O.C. 647-2001, s. 30; O.C. 467-2005, s. 26; O.C. 70-2012, s. 36.

31. The water samples collected pursuant to subparagraph 2 of the third paragraph of section 5, sections 11 to 14.1, the first paragraph of section 15, sections 18 to 21.1, 22.0.1, the first paragraph of section 22.0.2, sections 26, 39, 40, 42 and 53.0.1 must be sent for analysis to laboratories accredited by the Minister under section 118.6 of the Environment Quality Act (chapter Q-2). The analysis request forms complying with the model provided by the Minister must also be sent with the samples.

When there is no laboratory accredited for the analysis of a substance referred to in Schedule 1, the water samples collected pursuant to this Regulation must, for analysis purposes, despite the provisions of the first paragraph, be sent to a laboratory that complies with standard ISO/CEI 17025, General requirements for the competence of testing and calibration laboratories, disseminated jointly by the International Organization for Standardization and the International Electrotechnical Commission.

North of the 55th parallel, any Northern village constituted under the Act respecting Northern villages and the Kativik Regional Government (chapter V-6.1) is considered to be a laboratory accredited by the Minister under section 118.6 of the Environment Quality Act.

O.C. 647-2001, s. 31; O.C. 467-2005, s. 27; O.C. 70-2012, s. 37; O.C. 682-2013, s. 2; O.C. 699-2014, s. 3.

32. The water samples collected pursuant to section 17, section 17.1, the fourth paragraph of section 22, section 23, section 27 or the first paragraph of section 28 must be analyzed in accordance with the methods described in the latest version of the Standard Methods for the Examination of Water and Wastewater, published by the American Water Works Association (AWWA), the Water Environment Federation and the American Public Health Association (APHA).

The person who analyses the sample must certify that the analysis was carried out in accordance with those methods. The certification is to be made on the analysis request form furnished by the Minister, which must be kept and be made available to the Minister for a minimum of 2 years.

O.C. 647-2001, s. 32; O.C. 467-2005, s. 28; O.C. 70-2012, s. 38.

33. The laboratory shall send to the Minister using an information technology medium furnished to the laboratory by the Minister, the results of the analyses of the water samples referred to in section 31 and the data entered in the analysis request forms received under that section, within 10 days of the sampling in the case of samples for the control of microorganisms, residual disinfectant concentration or turbidity or, in the case of samples for the control of other parameters, within 60 days of the sampling.

Where the laboratory analyzes a greater number of water samples from a distribution system than the number of samples required by the provisions of this Regulation, the laboratory is required to send to the Minister the results of the analyses of all the samples collected.

Every person in charge of a distribution system or a tank truck referred to in this Regulation must keep and make available to the Minister a copy of every analysis report by an accredited laboratory of a water sample from that system or tank truck for 2 years from the date of the analysis report.

O.C. 647-2001, s. 33; O.C. 467-2005, s. 29; O.C. 70-2012, s. 39.

CHAPTER IV

NON-COMPLIANCE OF WATER WITH THE STANDARDS OF QUALITY

34. The second, third, fourth, fifth and sixth paragraphs of section 35 and sections 36 to 41 do not apply to a distribution system supplying 1 residence only.

Sections 39 and 40 do not apply to a distribution system to which section 10 does not apply.

O.C. 647-2001, s. 34; O.C. 467-2005, s. 30; O.C. 70-2012, s. 40; O.C. 699-2014, s. 4.

35. The laboratory that analyzes water made available to users or carries out an analysis pursuant to section 21.1 must immediately communicate the results to the person in charge of the distribution system or, as the case may be, the person in charge of the tank truck where the sample was collected, where the result of the analysis shows the presence of one of the following microorganisms:

— fecal coliform bacteria;

- Escherichia coli bacteria;
- enterococci bacteria;
- F-specific coliphage viruses;

- pathogenic microorganisms or indicator micro-organisms of fecal contamination.

The laboratory must immediately communicate to the Minister, the Minister of Agriculture, Fisheries and Food and the public health director of the region concerned the result of any analysis showing the presence of one of the microorganisms referred to in the first paragraph.

If the analysis made by the laboratory shows that the water sample collected contains one of the following microorganisms or substances, the laboratory must communicate as soon as possible during business hours to the persons referred to in the first paragraph, the Minister and the public health director of the region concerned the result of its analysis:

- total coliform bacteria;
- trihalomethanes in concentration greater than 80 μ g/L;
- haloacetic acids in concentration greater than 60 μ g/L.

The analysis result, pursuant to the second paragraph, must be communicated to the Minister by telephone and electronic mail during business hours or by telephone to the Service d'Urgence-Environnement outside business hours.

Where an analysis result shows that a water sample contains more than 5 mg/l of nitrates + nitrites (expressed as N), the laboratory must send the result, as soon as possible and during business hours, to the Minister and to the person in charge of the distribution system or tank truck concerned.

The fifth paragraph also applies where an analysis result shows that a water sample fails to comply with a standard of quality set out in Schedule 1. The laboratory must also send that result to the public health director of the region concerned.

O.C. 647-2001, s. 35; O.C. 467-2005, s. 31; O.C. 70-2012, s. 41; O.C. 699-2014, s. 5.

35.1. In the event of a failure of the coagulation system, the sedimentation system, the filtering system, the disinfection system or the entire treatment system, the person in charge must immediately inform the Minister and indicate to the Minister the action taken or to be taken to remedy the situation.

The person in charge of a distribution system that has a disinfection treatment facility who, pursuant to section 22 or 22.1, notices that the standards set out in section 8 or in section 5 of Schedule 1 are not complied with or who, in the case of a treatment facility referred to in the fifth paragraph of section 22, notices an elimination rate of microorganisms lower than the rates provided for in section 5 or 5.1, must immediately take remedial measures and so inform the Minister as soon as possible during business hours.

Where the failure is likely to compromise compliance with the water quality standards, the person in charge of the distribution system referred to in the first or second paragraph must immediately inform the system's users that the water is considered unfit for consumption. The person in charge must also inform the public health director of the region concerned.

O.C. 467-2005, s. 32; O.C. 70-2012, s. 42.

36. Where the water available to users does not comply with any of the standards of quality set out in Schedule 1 or contains more than 80 μ g/L of trihalomethanes or 60 μ g/L of haloacetic acids, the person in charge of the distribution system or, as the case may be, of the tank truck from where the water originates must, on being so informed, notify the Minister and the public health director of the region concerned of the measures taken or to be taken to remedy the situation and, where applicable, to protect users from any risks involved. Where the water does not comply with the lead-related standard, the notice must be sent as soon as possible during business hours and mention the measures that the person in charge has taken or intends to take to locate the lead pipes of the distribution system. Where the water was collected from a distribution system that is supplied by a distribution system referred to in section 12.1, the person in charge of the supplying distribution system that is supplied by the supplying distribution system. The latter is required to notify the Minister of the measures taken or to be taken or to be taken to remedy the supplying distribution system.

If the water contains fecal coliform bacteria or *Escherichia coli* bacteria, the person in charge of the distribution system or, as the case may be, of the tank truck is also required on being so informed to notify the users concerned using the media, by sending individual written notices or by any other appropriate means to reach the users concerned, that the water at their disposal is unfit for human consumption and of the precautions to be taken. Where the users concerned include health and social services institutions, educational institutions or correctional facilities, they must be notified individually.

In the case of a distribution system serving exclusively an enterprise, an educational institution, a correctional facility, a health and social services institution or a tourist establishment, the notice referred to in the second paragraph is given as provided in section 38.

The notices to be given to users shall be given at least once every 2 weeks and until it is shown, in accordance with section 39, that the water supplied is free from total coliform bacteria and complies with the standards of quality established in Schedule 1 with respect to other analyzed microorganisms. The person in charge of the distribution system or, as the case may be, the person in charge of the tank truck must immediately send to the Minister and the public health director a signed declaration whereby the person in charge declares that the notices prescribed by this section were given in accordance with the terms and conditions provided therein by indicating the dates of the notices, the sectors concerned and the method used to give the notices.

For the purposes of this section, "users in question" means, in the case of a distribution system, all those persons who, considering the hydraulic features of the system, are likely to be supplied with contaminated water.

O.C. 647-2001, s. 36; O.C. 467-2005, s. 33; O.C. 70-2012, s. 43.

36.0.1. The person in charge of the distribution system or the tank truck concernedmust notify, as soon as possible and during business hours, the person in charge of the water withdrawal facility of the receipt of an analysis result from the laboratory when a result shows that the water contains more than 5 mg/l of nitrates + nitrites (expressed as N) at least twice over a 2-year period.

This section does not apply to a person in charge of a distribution system or tank truck serving a tourist establishment exclusively.

O.C. 699-2014, s. 6.

36.1. The notice prescribed by the provisions of the second paragraph of section 36 must include a requirement to boil water for at least 1 minute before ingesting it and warn users of the danger of using unboiled water to prepare beverages and food, wash fruit and vegetables to be eaten raw, make ice cubes and brush their teeth.

O.C. 70-2012, s. 44.

37. Where another distribution system is connected to his system and where users of that system are also likely to be supplied with water that does not meet one of the parameters set out in Schedule 1, or a tank truck is supplied with drinking water directly by his system, the person in charge of the distribution system referred to in the first or second paragraph of section 36 must also immediately notify the person in charge of that other system or, as the case may be, the person in charge of the vehicle of the problem. If the presence of fecal coliform bacteria or *Escherichia coli* bacteria is detected, the persons in charge of those systems must, on being so informed, notify the users as provided in the second, third and fourth paragraphs of section 36.

O.C. 647-2001, s. 37; O.C. 467-2005, s. 34; O.C. 70-2012, s. 45.

38. The person in charge of an educational institution, a health and social services institution or a tourist establishment supplied by a distribution system or by a tank truck that was the subject of a notice given pursuant to the second paragraph of section 36 must, as soon as he is informed that the water at the disposal of users is unfit for consumption, post a notice at each place in the institution where the water is made available for consumption purposes and interrupt any water service from drinking fountains supplied by the distribution system or tank truck.

If the distribution system or the tank truck that is the subject of a notice given pursuant to the second paragraph of section 36 supplies a correctional facility or an enterprise, the person in charge of the facility or enterprise must, as soon as he is aware of the notice, notify the users thereof within the facility or enterprise.

O.C. 647-2001, s. 38; O.C. 70-2012, s. 46.

39. If the water available to users that originates from a distribution system or tank truck does not comply with one of the bacterial parameters set out in Schedule 1, or if a distribution system is supplied by another

distribution system for which a boil advisory has been issued pursuant to section 36, the person in charge of the system or the person in charge of the tank truck is required, over 2 days separated by less than 72 hours, to collect or have collected the minimum number of samples as determined in the table below:

Users concerned	Minimum number of samples per day
<u>≤ 200</u>	1
\geq 201 and \leq 500	2
\geq 501 and \leq 5,000	4
\geq 5,001 and \leq 20,000	1 per 1,000 persones
≥ 20,001	20

In the case of disinfected water, he must also measure in each of the collected samples the quantity of free residual disinfectant and enter the result of those measures in an analysis request form that complies with the model provided by the Minister. If the water is disinfected using chloramines, the person in charge must also measure, in each sample collected, the quantity of free and total residual disinfectant and enter the result on the form.

In the case of non-disinfected water for which analyses revealed the presence of fecal coliform bacteria or *Escherichia coli* bacteria, at least 2 samples of the raw groundwater taken or stored that supplies the system must be collected per day as soon as possible as of the time the person in charge is informed of such presence, separated by at least 2 hours, for at least 1 day to test for the presence of *Escherichia coli* bacteria and enterococci bacteria.

Where the person in charge of the distribution system or the person in charge of the tank truck from which the water sample comes does not have access by road to an accredited laboratory, the sampling prescribed by this section may be carried out during the same day provided that there is an interval of at least 2 hours between each sampling.

Water supplied by the distribution system or tank truck referred to in the first paragraph may be considered as again complying with the bacteriological parameters indicated in Schedule 1 only if the analysis of the samples collected under that paragraph has shown a complete absence of total coliform bacteria and compliance of the water with the aforementioned parameters regarding other analyzed bacteria. If a distribution system is supplied by another distribution system, the water supplied by the first distribution system may be considered to be in compliance with the above-mentioned standards again only if the analysis of water samples collected from the supplying distribution system shows that the water supplied meets those standards. If the analysis of a sample of raw water collected in accordance with this section shows that the water contains *Escherichia coli* bacteria or enterococci bacteria, the boil advisory may not be lifted without the necessary remedial measures having been implemented.

The samples collected pursuant to this section are subtracted, for the sampling month in which they are collected, from the minimum number of samples that the person in charge must collect each month under section 11, provided the samples were collected in accordance with the requirements of that section.

O.C. 647-2001, s. 39; O.C. 467-2005, s. 35; O.C. 70-2012, s. 47; O.C. 682-2013, s. 3.

39.1. If raw water contamination is detected pursuant to section 13, 21.1 or 39 or non-disinfected water reveals the presence of fecal contamination, the person in charge of the system must immediately notify the Minister and the public health director of the region concerned and indicate to them the measures taken or to be taken to remedy the situation.

Should the analysis of a sample of raw water collected in accordance with section 39 show the presence of *Escherichia coli* bacteria or enterococci bacteria, F-specific coliphage viruses, pathogenic microorganisms or indicator microorganisms of fecal contamination, the advisory to boil water before ingesting it or to take any other precautionary measure must be maintained as long as the necessary remedial measures are not taken.

O.C. 467-2005, s. 36; O.C. 70-2012, s. 48.

40. If the water put at the disposal of a user that originates from a distribution system or tank truck does not comply with one of the parameters for organic or inorganic substances, radioactive substances or activities, or turbidity, set out in Schedule 1, the person in charge of the distribution system, or the person in charge of the vehicle must, over 2 days separated by less than 72 hours, collect or have at least 1 sample per day collected for the purpose of testing the water supplied for those parameters. In the case of a standard based on the average of quarterly sampling and in the case of an exceedance of the standard of quality of drinking water relating to lead, the 2-day sampling requirement is replaced by the requirement to certify to the Minister the efficiency of the necessary remedial measures.

Water supplied by that distribution system or vehicle may be considered as again complying with the aforementioned parameters only if the analysis of the samples collected has shown that compliance.

The provisions of the fourth paragraph of section 39 also apply, with the necessary modifications. The water samples collected under this section may not be taken into account for the purposes of the sampling prescribed by sections 14, 15, 19 and 21.

O.C. 647-2001, s. 40; O.C. 467-2005, s. 37; O.C. 70-2012, s. 49.

41. As soon as the analysis of the samples collected in accordance with sections 39 and 40 shows that the water supplied by a distribution system or a tank truck that was the subject of a notice given pursuant to section 36 is again in compliance with the standards of quality set out in Schedule 1 and is free from total coliform bacteria, the person in charge of the system or tank truck must, in accordance with the terms and conditions in that section, so notify any person or institution that had to be notified by the person in charge.

O.C. 647-2001, s. 41; O.C. 70-2012, s. 50.

42. Where the person in charge of a distribution system or, as the case may be, the person in charge of a tank truck has reasons to suspect that the water intended for human consumption available to users does not comply with any of the standards of quality set out in Schedule 1 or section 17.1, the person in charge must immediately collect or have collected the water samples necessary for testing the water and have them analyzed.

The person in charge must also take appropriate measures to test for the presence and concentration of radioactive substances as soon as the person in charge has reasons to suspect that the water made available to users has a gross alpha activity greater than 0.5 Bq/L or a beta activity greater than 1 Bq/L.

O.C. 647-2001, s. 42; O.C. 467-2005, s. 38; O.C. 70-2012, s. 51.

CHAPTER V

COMPETENCE REQUIRED

42.1. In this Chapter, "certificate of qualification" and "competency certificate" mean the document issued respectively by the Minister of Employment and Social Solidarity or the Commission de la construction du Québec certifying that the person identified therein and holding the certificate has successfully completed professional training valid for the relevant class of facilities, authorizing the person to perform the operations, monitoring or work provided for in sections 44 to 44.0.2 on that class of facilities.

O.C. 70-2012, s. 52.

43. The provisions of this Chapter do not apply to a distribution system or tank truck that supplies only:

- (1) 20 persons or less;
- (2) one or more enterprises;
- (3) 20 persons or less and one or more enterprises.

The provisions do not apply either, from 8 March 2012 to 8 March 2013, to a distribution system whose person in charge is not a municipality.

O.C. 647-2001, s. 43; O.C. 467-2005, s. 39; O.C. 70-2012, s. 53.

44. All the duties relating to the operation and monitoring of a catchment, treatment or distribution facility for water intended for human consumption, including the duties relating to the supply of such water by a tank truck, must be carried out by a certified person or under the supervision of such a person.

If the installation or tank truck referred to in the first paragraph is under the responsibility of a municipality and serves at least 1 residence, all the duties relating to the operation and monitoring of such a facility or, as the case may be, to the supply of water by such a tank truck, must be carried out by a certified person.

All maintenance and repair work on a distribution facility of water intended for human consumption, as well as all the stages involved in putting distribution facilities into service after repair or extension work, must be performed by a certified person or under the immediate supervision of such a person.

For the purposes of the first, second and third paragraphs of this section, a person is certified in respect of the relevant class of facilities referred to in those provisions if the person

(1) holds a diploma, a certificate or an attestation stating that the person has successfully completed training in the treatment and distribution of drinking water for the relevant class of facilities that is recognized by the Minister of Education, Recreation and Sports or the Minister of Higher Education, Research, Science and Technology; or

(2) holds a certificate of qualification or attestation of experience stating that the person has successfully completed training as drinking water operator for the relevant class of facilities given under a training program established by the Minister of Employment and Social Solidarity under section 29.1 of the Act respecting workforce vocational training and qualification (chapter F-5).

For the purposes of the third paragraph, a person who holds a competency certificate issued by the Commission de la construction du Québec and stating that the person has successfully completed training as water system worker provided by the Commission is also a certified person.

A person who holds a diploma, a certificate, an attestation or a certificate of qualification issued in Canada but outside Québec attesting that the person has successfully completed, for the relevant class of facilities, training equivalent to any training described in the fourth and fifth paragraphs and recognized by the

competent authorities of another province or a territory of Canada, is also a certified person for the operations or monitoring referred to in the first and second paragraphs or for work referred to in the third paragraph.

A person who holds a diploma, a certificate, an attestation or a certificate of qualification issued outside Canada, in the territory of a State that is a party with the Gouvernement du Québec to an agreement for the mutual recognition of vocational qualifications applicable to that class of facilities, attesting that the person has successfully completed, for the relevant class of facilities, training equivalent to any training described in the fourth and fifth paragraphs, is also a certified person.

The certification requirement or supervision required by a certified person also applies to any person that is put in charge, by the person in charge of the distribution system or a person under the latter person's authority, of collecting water for analysis, unless the person is employed by a laboratory accredited for sampling purposes by the Minister under section 118.6 of the Environment Quality Act (chapter Q-2).

O.C. 647-2001, s. 44; O.C. 467-2005, s. 40; O.C. 70-2012, s. 54; S.Q. 2013, c. 28, s. 205.

44.0.1. A person must, when performing an operation, monitoring or work for which section 44 prescribes a certification requirement or, as the case may be, where such person supervises another person who performs such an operation, monitoring or work, carry a valid certificate of qualification issued by the Minister of Employment and Social Solidarity under a training and qualification program established under section 29.1 of the Act respecting workforce vocational training and qualification (chapter F-5) or, as the case may be, a competency certificate issued by the Commission de la construction du Québec, corresponding to the class of facilities or work for which the person is certified, and show the certificate upon request.

If the person referred to in the first paragraph holds a diploma, a certificate, an attestation or a certificate of qualification issued outside Québec, the person must carry and show upon request a valid certificate of qualification for the relevant class of facilities, issued by the Minister of Employment and Social Solidarity, or in the case of a water system worker, a competency certificate issued by the Commission de la construction du Québec.

O.C. 70-2012, s. 55.

44.0.2. Every person who employs a person who performs a task related to the operation and monitoring of a facility, excluding a municipal facility, for the catchment, treatment or distribution of water intended for human consumption, must ensure that the person is certified within the meaning of the fourth, sixth or seventh paragraph of section 44, unless the person acts under the supervision of another person that is known to be certified under the same provisions. The foregoing also applies where the facility is a municipal facility that serves no residence.

If the facility in question is a municipal facility and serves at least one residence, the person must ensure that the person who performs a task related to the operation and monitoring of that facility is certified within the meaning of the fourth, sixth or seventh paragraph of section 44, whether or not the person is under the supervision of a certified person within the meaning of those provisions.

The person must also ensure that any person employed to perform or to immediately supervise any work or act referred to in the third paragraph of section 44 is a certified person within the meaning of the fourth, fifth, sixth or seventh paragraph of section 44.

A person other than the person in charge of a laboratory accredited for sampling purposes under section 118.6 of the Environment Quality Act (chapter Q-2) who employs a person to collect water samples from a facility described in the first paragraph of section 44 must ensure that the person is certified within the meaning of the fourth, sixth or seventh paragraph of section 44, except if that person acts under the supervision of another person for whom the person who employed that person ensured that the person is also certified within the meaning of the same provisions.

It is incumbent on the person who must, under this section, ensure that the person employed or to whom a task is entrusted is certified to obtain a copy of the certificates of qualification or competency certificates referred to in section 44.0.1, to keep them for a period of 2 years and make them available to the Minister during that period of time.

O.C. 70-2012, s. 55; O.C. 682-2013, s. 4.

CHAPTER V.1

SPECIAL PROVISIONS APPLICABLE TO WATER SUPPLIED BY A DISTRIBUTION SYSTEM OR A TANK TRUCK TO CERTAIN TOURIST ESTABLISHMENTS

O.C. 467-2005, s. 41; O.C. 70-2012, s. 56.

44.1. Despite section 3 of this Regulation, the person in charge of a distribution system or, as the case may be, the person in charge of a tank truck may supply, for personal hygiene purposes, water that does not meet the standards of quality set out in Schedule 1, as of the date of receipt by the Minister of a written notice informing that the water is not intended to be used as drinking water, provided that the system or tank truck serves one of the following establishments, exclusively:

- (1) a seasonal tourist establishment;
- (2) a tourist establishment located in

— the territory not organized into a local municipality, including the unorganized territory amalgamated with one of the municipalities of Rouyn-Noranda, La Tuque or Senneterre, as it was delimited the day before the amalgamation;

— a territory inaccessible by roads;

— the James Bay territory as described in the schedule to the James Bay Region Development and Municipal Organization Act (chapter D-8.2);

- the territory located north of the 55th parallel; or

— the territory of Municipalité de Côte-Nord-du-Golfe-du-Saint-Laurent, the municipalities of Blanc-Sablon, Bonne-Espérance, Gros-Mécatina and Saint-Augustin, and the territory of any other municipality constituted under the Act respecting the municipal reorganization of the territory of Municipalité de Côte-Nord-du-Golfe-du-Saint-Laurent (1988, chapter 55, amended by 1996, chapter 2).

From the date of receipt of the notice by the Minister, the person in charge is subject only to the obligations provided for in this Chapter.

O.C. 467-2005, s. 41; O.C. 70-2012, s. 57.

44.2. The person in charge of a distribution system or, as the case may be, of a tank truck referred to in section 44.1 must install and maintain in place or, if that person is not the owner of the establishment where the water is supplied, ensure that the person in charge of the establishment installs and maintains in place, at taps to which users have access, pictograms to inform them that the water is not drinkable. The pictograms must measure at least 10 cm by 10 cm and show a glass of water placed in a red circle crossed by an oblique red line. They must be placed so as to be visible at all times and be manufactured in a way that prevents alterations.

Where such pictograms are installed in a building that includes premises intended for storage, display or commercial preparation of food governed by the Food Products Act (chapter P-29), the person in charge of

the distribution system or tank truck or, as the case may be, the person in charge of the establishment must immediately so inform the Minister of Agriculture, Fisheries and Food.

O.C. 467-2005, s. 41; O.C. 70-2012, s. 58.

44.3. The person in charge of a distribution system or tank truck referred to in section 44.1 supplying more than 20 persons south of the 50th parallel must also, each month and with a minimum of 10 days between samplings, collect at least 1 sample of the water used for personal hygiene to test for the number of *Escherichia coli* bacteria present.

The person must also enter in a record the date and the name of the person who collected the sample and the number of *Escherichia coli* bacteria present in the sample. The paper copy of the record must be made available to the Minister for a minimum of 5 years after the date of the last entry.

O.C. 467-2005, s. 41; O.C. 70-2012, s. 59.

44.4. The water samples collected pursuant to section 44.3 must be sent for analysis to laboratories accredited by the Minister under section 118.6 of the Environment Quality Act (chapter Q-2). The person in charge of a distribution system or tank truck referred to in section 44.1 must keep a copy of the analysis request furnished by the accredited laboratory and the analysis report for a minimum of 5 years and make them available to the Minister.

The laboratory which, at the request of the person in charge of the distribution system or tank truck, analyzes the water samples collected pursuant to section 44.3 is, within the scope of such mandate, subject only to the obligations provided for in this Chapter.

O.C. 467-2005, s. 41; O.C. 70-2012, s. 60.

44.5. If the presence of more than 20 *Escherichia coli* bacteria per 100 ml is detected in a sample collected pursuant to section 44.3, the person in charge of a distribution system or, as the case may be, of a tank truck must immediately implement the necessary remedial measures or cease supplying the water. As well, the person must immediately inform the Minister and the public health director of the region concerned and describe the remedial measures implemented.

O.C. 467-2005, s. 41; O.C. 70-2012, s. 61.

CHAPTER V.2

MONETARY ADMINISTRATIVE PENALTIES

O.C. 682-2013, s. 5.

44.6. A monetary administrative penalty of \$250 in the case of a natural person or \$1,000 in other cases may be imposed on any person who fails

(1) to send any document, declaration or notice referred to in section 1.3 in the manner prescribed by that section;

(2) to be in possession of a copy of the contract referred to in section 9.1, keep it for at least 2 years or make it available to the Minister;

(3) to send to the Minister a declaration or a modified declaration in the cases, within the periods and on the conditions provided for in section 10.1;

(4) to enter the results obtained pursuant to section 17 or 23 on the forms provided for therein;

(4.1) to keep a record containing the information prescribed by section 22.0.4;

(5) to sign the form referred to in the second paragraph of section 30 in the cases provided for therein or to keep or make available to the Minister a copy of the form during the period provided for in the third paragraph of that section;

(6) to send the analysis request forms with the samples referred to in the first paragraph of section 31;

(7) to certify compliance of the analysis referred to in the second paragraph of section 32, to keep the certification or to make it available to the Minister during the period provided for in that section;

(8) to keep a copy of the report referred to in the third paragraph of section 33 or to make it available to the Minister during the period provided for in that section;

(9) to enter the results obtained pursuant to the second paragraph of section 39 on the form provided for therein;

(10) to carry or to show upon request a valid certificate of qualification or competency certificate complying with section 44.0.1 in the cases provided for therein;

(11) to obtain or to keep or to make available to the Minister during the period of time provided a copy of the certificates of qualification or competency certificates referred to in the fifth paragraph of section 44.0.2;

(12) to comply with the conditions relating to the size and appearance of the pictograms referred to in the first paragraph of section 44.2;

(13) to enter in a record the information prescribed by the second paragraph of section 44.3, to keep the record on paper or to make it available to the Minister for 5 years in accordance with that paragraph;

(14) to keep a copy of the analysis request and the report referred to in the first paragraph of section 44.4 or to make them available to the Minister during the period provided for in that section;

(15) to comply with the periods or frequencies provided for in the third paragraph of section 53 or the second paragraph of section 53.0.1 for sending to the Minister the attestations or reports referred to therein, as the case may be;

(16) to provide a copy of the report referred to in the second paragraph of section 53.3 to the user requesting a copy in accordance with that paragraph;

(17) to comply with the requirements provided for in the third paragraph of section 53.3 relating to the posting of the report or the notice referred to therein.

O.C. 682-2013, s. 5; O.C. 699-2014, s. 7.

44.7. A monetary administrative penalty of \$350 in the case of a natural person or \$1,500 in other cases may be imposed on any person who fails

(1) to make available to the Minister for a period of 10 years, from the date it is signed by a professional, the notice referred to in the second paragraph of section 6;

(2) to obtain an access right in writing in the cases and on the conditions provided for in section 9.1;

(3) to make available to the Minister, for a minimum period of 5 years, a copy of the plan and the document of explanation referred to in section 21.0.1, including the information provided for in that section;

(4) to enter each day in a record the information prescribed by the fourth paragraph of section 22 or the second paragraph of section 22.0.2, to sign the record or to keep it for a minimum of 5 years or to make it available to the Minister;

(5) to keep or to make available to the Minister, for a minimum period of 5 years, the data prescribed by the fifth paragraph of section 22;

(5.1) to keep or to make available to the Minister the record provided for in section 22.0.4 for a minimum period of 15 years;

(6) to maintain a record containing the information prescribed by the second paragraph of section 28 or to keep or to make available to the Minister such a record for a minimum period of 5 years;

(7) to send to the Minister the results of the analyses referred to in the first paragraph of section 33 within the periods and on the conditions for sending provided for therein;

(8) to immediately send to the Minister and the public health director the declaration provided for in the fourth paragraph of section 36;

(8.1) to send to the person in charge of the water withdrawal facility the analysis result provided for in the first paragraph of section 36.0.1 within the periods and on the conditions for sending provided for therein;

(9) to comply with the requirements of section 36.1 regarding the content of the notice referred to therein;

(10) to immediately inform the Minister of Agriculture, Fisheries and Food in the cases provided for in the second paragraph of section 44.2;

(11) to make available to the Minister for at least 5 years the attestation referred to in section 53.2;

(12) to complete annually the report referred to in the first paragraph of section 53.3 in accordance with what is provided for therein;

(13) to keep the report referred to in the second paragraph of section 53.3 or to make it available to the Minister for a minimum period of 5 years.

O.C. 682-2013, s. 5; O.C. 699-2014, s. 8.

44.8. A monetary administrative penalty of \$500 in the case of a natural person or \$2,500 in other cases may be imposed on any person who fails

(1) to notify any person or institution that had to be notified pursuant to section 36 when the situation referred to in section 41 occurs;

(2) to comply with the conditions provided for in section 44.1 relating to the possibility of supplying water referred to therein for personal hygiene purposes;

(3) to collect according to the frequency and on the conditions provided for in the first paragraph of section 44.3 the water samples prescribed therein;

(4) to send for analysis the samples referred to in the first paragraph of section 44.4 to a laboratory accredited by the Minister in accordance with that section;

(5) to send to the Minister the reports prescribed by the second paragraph of section 53.0.1 containing the information provided for therein.

O.C. 682-2013, s. 5.

44.9. A monetary administrative penalty of \$750 in the case of a natural person or \$3,500 in other cases may be imposed on any person who fails

(1) to ensure, by means of a prepared notice signed by a professional, that the equipment in place meets the requirements provided for in the second paragraph of section 6;

(2) to administer a water disinfection treatment in accordance with the conditions provided for in section 8 in the cases provided for therein;

(3) to equip with standby disinfection equipment complying with section 9 the disinfection systems referred to therein;

(4) to comply with the conditions provided for in section 9.2 relating to the products used for the treatment of water intended for human consumption;

(5) to collect or have collected the water samples referred to in section 11 according to the frequencies and on the conditions provided for therein;

(6) to collect at least 50% of the samples referred to in section 11 on the conditions provided for in section 12;

(7) to provide the person in charge of the supplying distribution system with the contact information prescribed by the second paragraph of section 12.1;

(8) to make sampling points referred to in the third paragraph of section 12.1 accessible to the employees or representatives of a municipality, for the purposes of sampling the water supplied;

(9) to collect or to have collected the water samples referred to in section 13 in the cases, on the conditions and according to the frequencies provided for therein;

(10) to collect or to have collected the water samples prescribed by the first or second paragraph of section 14 or 15 according to the frequencies and on the conditions provided for therein;

(11) to collect or to have collected samples from the water supplied in accordance with the terms and conditions provided for in the first paragraph of section 14.1;

(12) to measure the pH of the water for the samples referred to in section 17;

(13) to collect or to have collected the water samples prescribed by the first, second or third paragraph of section 18 or section 19 or 21 according to the frequencies and on the conditions provided for in those sections;

(14) to ensure that the sampling points where samples are collected enable to obtain data representative of the quality of water for the whole network in accordance with section 21.0.1;

(15) to collect or to have collected the monthly samples prescribed by the second paragraph of section 21.1;

(16) to equip every disinfection treatment facility that treats water supplied by a distribution system with the devices prescribed by the first, second or third paragraph of section 22 and complying with the requirements provided for therein;

(17) to measure daily the flow rate, volume, temperature and pH of the water in the accordance with the fourth paragraph of section 22;

(18) to equip a facility referred to in the fifth paragraph of section 22 with software that allows for continuous calculation and an alarm in accordance with that paragraph;

(18.1) to install a device to continuously measure the turbidity of water provided for in the second paragraph of section 22.0.2;

(19) to collect or to have collected the water samples prescribed by the first paragraph of section 22.0.1 or the first paragraph of section 22.0.2 according to the frequencies and on the conditions provided for therein;

(20) to measure the quantity of free residual disinfectant or, as the case may be, the free and total residual disinfectant, in the samples referred to in section 23;

(21) to collect the samples required by section 26 in accordance with the conditions provided for therein;

(22) to ensure, in the case of tank trucks, that the water transfer operations are performed under such sanitary conditions that the water quality is not affected in accordance with the first paragraph of section 27;

(23) to ensure that the water referred to in the second paragraph of section 27 meets the concentration of chlorine prescribed therein;

(24) to measure daily the quantity of free residual chlorine in the samples referred to in the first paragraph of section 28;

(25) to comply with the conditions prior to the transportation of water intended for human consumption provided for in the second or third paragraph of section 29;

(26) to ensure that the samples referred to in the first paragraph of section 30 are collected and kept in accordance to the provision of Schedule 4 or shipped to the analytical laboratory as soon as possible in accordance with that section;

(27) to send for analysis the samples referred to in the first paragraph of section 31 to a laboratory accredited by the Minister in accordance with that section;

(28) to analyze the water samples referred to in the first paragraph of section 32 in accordance with the methods prescribed therein;

(29) to give to users the notices prescribed by the fourth paragraph of section 36 according to the frequency and the conditions provided for therein;

(30) to collect or to have collected the minimum number of water samples prescribed by the first paragraph of section 39 according to the frequencies and the conditions provided for therein or provided for in the third or fourth paragraph of that section;

(31) to measure the quantity of free and total residual disinfectant in the samples referred to in the second paragraph of section 39;

(32) to collect or to have collected the water samples according to the frequencies and the conditions provided for or to certify to the Minister, where applicable, the efficiency of the necessary remedial measures in the cases provided for in the first paragraph of section 40;

(33) to take the measures relating to the collection of samples, their analysis and the verifications prescribed by the first or second paragraph of section 42 in the case provided for therein;

(34) to ensure that the duties referred to in section 44 are carried out by a person certified within the meaning of that section or under the supervision of such a person;

(35) to ensure that a person employed to perform a task referred to in the first, second, third or fourth paragraph of section 44.0.2 is certified within the meaning of section 44 or is under the supervision of such a person;

(36) to send to the Minister the attestation prescribed by the third paragraph of section 53 within the period and on the conditions provided for therein;

(37) to collect or to have collected the water samples referred to in the first paragraph of section 53.0.1 according to the frequencies and the conditions provided for or to send the samples to a laboratory referred to in that section;

(38) to hold the attestation referred to in section 53.2 in accordance with the conditions prescribed therein.

O.C. 682-2013, s. 5; O.C. 699-2014, s. 9.

44.10. A monetary administrative penalty of \$1,000 in the case of a natural person or \$5,000 in other cases may be imposed on any person who fails

(1) to notify, as soon as possible, the Minister and the public health director of the region concerned in the case provided for in section 17.1 or to inform them of the measures referred to in that section on the conditions provided for therein;

(2) to communicate to the persons referred to in the fourth paragraph of section 35 and in accordance with the means prescribed the results of the analysis provided for therein;

(3) to take immediately in the case provided for in the second paragraph of section 35.1 remedial measures or to inform the Minister during business hours;

(4) to notify as soon as possible, the Minister and the public health director of the region concerned in the case provided for in the first paragraph of section 36 or to inform them of the measures referred to in that section on the conditions provided for therein;

(5) to comply with the conditions provided for in the fifth paragraph of section 39 permitting to consider as again complying the water referred to;

(6) to immediately notify the Minister and the public health director of the region concerned in the case provided for in the first paragraph of section 39.1 or to inform them of the measures referred to in that section on the conditions provided for therein;

(7) to maintain the advisory provided for in the second paragraph of section 39.1 as long as prescribed by that section;

(8) to immediately implement, in the case provide for in section 44.5, the remedial measures referred to therein, to notify the Minister and the public health director of the region concerned or to inform them of the measures taken.

O.C. 682-2013, s. 5.

44.11. A monetary administrative penalty of \$1,500 in the case of a natural person or \$7,500 in other cases may be imposed on any person who

(1) uses to supply water intended for human consumption the tank of a vehicle used or having been used to transport substances unfit for human consumption, in contravention of the first paragraph of section 29;

(2) fails to immediately communicate the results of the analysis of the water referred to in section 35 to the persons prescribed by that section in accordance with the first, second, third, fifth or sixth paragraph of that section;

(3) fails to immediately notify the Minister in the case provided for in the first paragraph of section 35.1 or to inform the Minister of the actions referred to in that section on the conditions provided for therein;

(4) fails to immediately notify the users of a system that the water is considered unfit for consumption or to inform the public health director of the region concerned in accordance with the third paragraph of section 35.1.

O.C. 682-2013, s. 5; O.C. 699-2014, s. 10.

44.12. A monetary administrative penalty of \$2,000 in the case of a natural person or \$10,000 in other cases may be imposed on any person who fails

(1) to comply with the requirements provided for in section 1.2 relating to the water disinfection treatment;

(2) to ensure that the water intended for human consumption complies with the standards of quality of drinking water prescribed by section 3;

(3) to treat the water in accordance with section 5 before making it available to the user;

(4) to ensure that the rates of effectiveness of the filtration and disinfection treatment referred to in the first paragraph of section 5.1 correspond to those prescribed therein, as the case may be;

(5) to treat water made available to the user in the manner referred to in the first paragraph of section 6 by a disinfection treatment whose proven rate of elimination effectiveness is that provided for in that provision;

(6) to notify the persons referred to in the second paragraph of section 12.1 in the cases provided for therein or, as the case may be, to take the corrective measures to remedy the situation;

(7) to ensure that the water used to fill the tank and intended for human consumption complies with the standards prescribed by the first paragraph of section 27;

(8) to notify the users by the appropriate means, as the case may be, as prescribed by the second or third paragraph of section 36;

(9) to immediately notify the person in charge of another distribution system in the case and on the conditions provided for in section 37;

(10) to post a notice complying with the first paragraph of section 38 or to interrupt any water service in the case and on the conditions provided for in that section;

(11) to notify the users in the case referred to in the second paragraph of section 38;

(12) to install or to maintain in place or ensure to be installed or maintained in place the pictograms complying with the conditions of visibility or manufacture provided for in the first paragraph of section 44.2.

O.C. 682-2013, s. 5.

CHAPTER VI

PENAL SANCTIONS

O.C. 647-2001, c. VI; O.C. 682-2013, s. 6.

45. Every person who contravenes section 10.1, the second or third paragraph of section 30, the second paragraph of section 32, the third paragraph of section 33, section 44.0.1, the fifth paragraph of section 44.0.2, the section paragraph of section 44.3 or the third paragraph of section 53 or 53.3 commits an offence and is liable, in the case of a natural person, to a fine of \$1,000 to \$100,000 or, in other cases, to a fine of \$3,000 to \$600,000.

Every person who fails

(1) to be in possession of, to keep for at least 2 years or to make available to the Minister a copy of the contract referred to in section 9.1,

(2) to enter the results obtained pursuant to section 17 or 23 on the forms provided for therein,

(2.1) to keep a record containing the information prescribed by section 22.0.4,

(3) to send the analysis request forms with the samples referred to in the first paragraph of section 31,

(4) to enter the results obtained pursuant to the second paragraph of section 39 on the forms provided for therein,

(5) to comply with the conditions relating to the form of the pictograms referred to in the first paragraph of section 44.2,

(6) to keep a copy of the analysis request and report referred to in the first paragraph of section 44.4 or to make them available to the Minister during the period provided for in that section,

(7) to comply with the periods or frequencies provided for in the third paragraph of section 53 or the second paragraph of section 53.0.1 to send to the Minister the attestations or report referred to therein, as the case may be,

(8) to provide a copy of the report referred to in the second paragraph of section 53.3 to the user who so requests in accordance with that paragraph,

also commits an offence and is liable to the same fines.

O.C. 647-2001, s. 45; O.C. 467-2005, s. 42; O.C. 70-2012, s. 62; O.C. 682-2013, s. 7; O.C. 699-2014, s. 11.

46. Every person who contravenes the second paragraph of section 28, the first paragraph of section 33, section 36.1 or the second paragraph of section 44.2 commits an offence and is liable, in the case of a natural person, to a fine of \$2,000 to \$100,000 or, in other cases, to a fine of \$6,000 to \$600,000.

Every person who fails

(1) to make available to the Minister for a period of 10 years, from the date it is signed by a professional, the notice referred to in the second paragraph of section 6,

(2) to obtain a written access right in the cases and on the conditions provided for in section 9.1,

(3) to make available to the Minister, for a minimum period of 5 years, a copy of the plan and the document of explanation referred to in section 21.0.1 and including the information provided for in that section,

(4) to enter each day in a record the information prescribed by the fourth paragraph of section 22 or the second paragraph of section 22.0.2, to sign or keep it for a minimum period of 5 years or to make it available to the Minister,

(4.1) to keep or to make available to the Minister the record provided for in section 22.0.4 for a minimum period of 15 years,

(5) to immediately send to the Minister and the public health director the declaration provided for in the fourth paragraph of section 36,

(5.1) to send to the person in charge of the water withdrawal facility the analysis result provided for in the first paragraph of section 36.0.1 within the periods and on the conditions for sending provided for therein,

(6) to make available to the Minister for at least 5 years the attestation referred to in section 53.2,

(7) to complete or to keep the report referred to in the second paragraph of section 53.3 or to make it available to the Minister for a minimum period of 5 years,

also commits an offence and is liable to the same fines.

O.C. 647-2001, s. 46; O.C. 467-2005, s. 43; O.C. 70-2012, s. 63; O.C. 682-2013, s. 7; O.C. 699-2014, s. 12.

47. Every person who

(1) contravenes section 41 or 44.1 or the first paragraph of section 44.3,

(2) fails to send for analysis the samples referred to in the first paragraph of section 44.4 to a laboratory accredited by the Minister in accordance with that section,

(3) fails to send to the Minister the reports prescribed by the second paragraph of section 53.0.1 containing the information provided for therein,

commits an offence and is liable, in the case of a natural person, to a fine of \$2,500 to \$250,000 or, in other cases, to a fine of \$7,500 to \$1,500,000.

O.C. 647-2001, s. 47; O.C. 70-2012, s. 64; O.C. 682-2013, s. 7.

47.1. Any offence against sections 11, 12, 12.1, 14 to 15, 17 to 19, 21, the second paragraph of section 21.0.1, the first or third paragraph of section 30, the third, fourth or fifth paragraph of section 39, section 40 or the first paragraph of section 44.3 renders the offender liable

- (1) to a fine of \$2,000, to \$25,000, in the case of a natural person;
- (2) to a fine of \$5,000 to \$60,000, in the case of a legal person.

O.C. 467-2005, s. 44; O.C. 70-2012, s. 65; O.C. 699-2014, s. 13.

48. Every person who contravenes section 8, 9, 11 or 12, the third paragraph of section 12.1, section 13 or 14, the first paragraph of section 14.1, section 15, 18, 19 or 21, the second paragraph of section 21.1, the first, second or third paragraph of section 22, section 22.0.1, 22.0.2 or 26, the second paragraph of section 27, the first paragraph of section 32, the second or third paragraph of section 30, the first paragraph of section 32, the first, third or fourth paragraph of section 39, section 40, 42 or 44, the first, second, third or fourth paragraph of section 44.0.2 or the first paragraph of section 53.0.1 commits an offence and is liable, in the case of a natural person, to a fine of \$4,000 to \$250,000 or, in other cases, to a fine of \$12,000 to \$1,500,000.

Every person who fails

(1) to ensure, by a prepared notice signed by a professional, that the equipment in place meets the requirements provided for in the second paragraph of section 6,

(2) to comply with the conditions provided for in section 9.2 relating to the products used for the treatment of water intended for human consumption,

(3) to provide to the person in charge of the supplying distribution system the contact information prescribed by the second paragraph of section 12.1;

(4) to measure the pH of the water for the samples referred to in section 17,

(5) to ensure that the sampling points where samples are collected enable to obtain data representative of the quality of water for the whole network in accordance with section 21.0.1,

(6) to measure daily the flow rate, volume, temperature and pH of the water in accordance with the fourth paragraph of section 22,

(7) to equip a facility referred to in the fifth paragraph of section 22 with software that allows for continuous calculation and an alarm complying with that paragraph,

(7.1) to install a device to continuously measure the turbidity of water provided for in the second paragraph of section 22.0.2,

(8) to measure the quantity of free residual disinfectant or, as the case may be, the free and total residual disinfectant in the samples referred to in section 23,

(9) to ensure, in the case of a tank truck, that the water transfer operations are performed under such sanitary conditions that the water quality is not affected in accordance with the first paragraph of section 27,

(10) to send for analysis the samples referred to in the first paragraph of section 31 to a laboratory accredited by the Minister in accordance with that section,

(11) to give users the notices prescribed by the fourth paragraph of section 36 according to the frequency and the conditions provided for therein,

(12) to measure the quantity of free and total residual disinfectant in the samples referred to in the second paragraph of section 39,

(13) to send to the Minister the attestation prescribed by the third paragraph of section 53 within the period and on the conditions provided for therein,

(14) to hold the attestation referred to in section 53.2 in accordance with the conditions provided for therein,

also commits an offence and is liable to the same fines.

O.C. 647-2001, s. 48; O.C. 467-2005, s. 45; O.C. 682-2013, s. 7; O.C. 699-2014, s. 14.

49. Every person who

(1) contravenes section 17.1, the fourth paragraph of section 35, the second paragraph of section 35.1, the first paragraph of section 36, the fifth paragraph of section 39 or section 39.1 or 44.5,

(2) pursuant to this Regulation, makes a declaration, communicates information or files a document that is false or misleading,

commits an offence and is liable, in the case of a natural person, to a fine of \$5,000 to \$500,000 or, despite article 231 of the Code of Penal Procedure (chapter C-25.1), to a maximum term of imprisonment of 18 months, or to both the fine and imprisonment, or, in other cases, to a fine of \$15,000 to \$3,000,000.

O.C. 647-2001, s. 49; O.C. 682-2013, s. 7.

49.1. Every person who contravenes the first paragraph of section 29, the first, second, third, fifth or sixth paragraph of section 35 or the first or third paragraph of section 35.1 commits an offence and is liable, in the case of a natural person, to a fine of \$8,000 to \$500,000 or, despite article 231 of the Code of Penal Procedure (chapter C-25.1), to a maximum term of imprisonment of 18 months, or to both the fine and imprisonment, or, in other cases, to a fine of \$24,000 to \$3,000,000.

O.C. 682-2013, s. 7; O.C. 699-2014, s. 15.

49.2. Every person who

(1) contravenes section 1, 2, 3, 5 or 5.1, the first paragraph of section 6, the second or third paragraph of section 36, section 37 or 38,

(2) fails to notify the persons referred to in the second paragraph of section 12.1 in the cases provided for therein or, as the case may be, to take the corrective measures to remedy the situation,

(3) fails to ensure that the water used to fill the tank and intended for human consumption complies with the standards prescribed by the first paragraph of section 27,

(4) fails to install or maintain in place or to ensure to be installed or maintained in place pictograms complying with the conditions of visibility or manufacture provided for in the first paragraph of section 44.2,

commits an offence and is liable, in the case of a natural person, to a fine of \$10,000 to \$1,000,000 or, despite article 231 of the Code of Penal Procedure (chapter C-25.1), to a maximum term of imprisonment of 3 years, or to both the fine and imprisonment, or, in other cases, to a fine of \$30,000 to \$6,000,000.

O.C. 682-2013, s. 7.

49.3. Every person who contravenes any other requirement imposed by this Regulation also commits an offence and is liable, where no other penalty is provided for by this Chapter or the Environment Quality Act (chapter Q-2), to a fine of \$1,000 to \$100,000 in the case of a natural person or, in other cases, to a fine of \$3,000 to \$600,000.

O.C. 682-2013, s. 7.

CHAPTER VII

MISCELLANEOUS AND FINAL

50. This Regulation applies in particular to the immovables in a reserved area or an agricultural zone established under the Act respecting the preservation of agricultural land and agricultural activities (chapter P-41.1).

O.C. 647-2001, s. 50.

51. (*Omitted*).

O.C. 647-2001, s. 51.

52. (Amendment integrated into chapters F-4.1, r. 1.001.1, P-29, r. 1, P-30, r. 14.1 and Q-2, r. 7).

O.C. 647-2001, s. 52.

53. The distribution systems supplying water that consists in whole or in part of surface water that undergoes no treatment by flocculation, slow filtration or membrane filtration on 28 June 2001, and not meeting the requirements of section 5 on 25 June 2008, are exempt from the application of that section until the date on which the attestation referred to in the third paragraph is received by the Minister.

However, the persons in charge of the systems referred to in the first paragraph must, not later than 28 June 2010 for the facilities of municipalities and not later than 28 June 2012 for other facilities, be authorized under section 32 of the Environment Quality Act (chapter Q-2) to carry out the work required to have the systems meet the requirements of section 5.

In addition, the persons in charge of the systems referred to in the first paragraph must send to the Minister, not later than 60 days after the end of the work, an attestation from a professional to the effect that the work carried out enables the systems to meet the requirements of section 5.

O.C. 647-2001, s. 53; O.C. 301-2002, s. 2; O.C. 467-2005, s. 46; O.C. 633-2008, s. 1; O.C. 70-2012, s. 66.

53.0.1. The persons in charge of the distribution systems referred to in section 53, to the extent that they serve 20 persons or more for the non-exclusive use of enterprises, must, as of 28 June 2008 and until the date

on which the attestation referred to in the third paragraph of that section is received by the Minister, collect or cause to be collected, on a weekly basis for the facilities of municipalities and monthly for other facilities, at least 1 sample of raw water at each surface water catchment site and send those samples for counting of *Escherichia coli* bacteria to a laboratory accredited under section 118.6 of the Environment Quality Act (chapter Q-2) or a laboratory referred to in the second paragraph of section 31.

In addition, the persons in charge must, not later than 28 January, 28 April, 28 July and 28 October of each year, send to the Minister a report containing, for every preceding quarter, the results of the testing referred to in the first paragraph, the elimination percentages of the viruses and parasites referred to in section 5, calculated by a professional using the data entered in the record required under section 22, as well as the events and microbiological sources of pollution likely to have reduced the quality of the raw water.

The first quarterly report referred to in the second paragraph must be sent not later than 28 January 2009.

O.C. 633-2008, s. 1; O.C. 70-2012, s. 67.

53.1. (*Revoked*).

O.C. 467-2005, s. 47; O.C. 70-2012, s. 68.

53.2. The person in charge of a water treatment facility serving more than 5,000 persons and at least 1 residence must hold, not later than 8 March 2017, and thereafter every 5 years, an attestation from a professional, to the effect that the treatment facilities meet the requirements of sections 5, 5.1, 6, 8, 9, 9.1 and 22 of this Regulation. The attestation must be made available to the Minister for at least 5 years.

O.C. 70-2012, s. 69.

53.3. The person in charge of a distribution system or a tank truck serving more than 20 persons and at least 1 residence must, not later than 31 March of each year, have completed a report on the quality of water intended for human consumption supplied from 1 January to 31 December of the preceding year. The report must indicate the minimum number of samples that must be collected under this Regulation, the number of samples collected for each parameter and the number of samples analyzed by an accredited laboratory during that period. The report must indicate, for each exceedance observed over the standards, the parameter in question, the place in question, the maximum authorized concentration, the concentration measured and, where applicable, the measures taken by the person in charge to remedy the situation.

The report must be kept for a minimum period of 5 years by the person in charge of the distribution system or tank truck and a copy must be made available to the Minister upon request. The person in charge must also provide copies to the water users, upon request.

If the distribution system or tank truck is under the responsibility of a municipality, a copy of the report must also be posted in the office of the municipality. If the municipality has a newsletter or a website, it must also post in its newsletter or online on its website a notice stating that the municipality has drawn up the report on the quality of drinking water provided for in this section, specifying the place where users may obtain it.

O.C. 70-2012, s. 69.

54. The Minister must, not later than 8 March 2020, and thereafter every 5 years, report to the Government on the implementation of this Regulation, in particular on the advisability of amending the standards of quality of drinking water after considering the scientific and technical knowledge current at the time.

That report shall be made available to the public not less than 15 days after it has been sent to the Government.

O.C. 647-2001, s. 54; O.C. 70-2012, s. 70.

55. (*Omitted*).

O.C. 647-2001, s. 55; O.C. 301-2002, s. 3; O.C. 586-2004, s. 1; O.C. 467-2005, s. 48.

SCHEDULE 0.1

(s. 1)

METHOD TO DETERMINE THE NUMBER OF USERS SUPPLIED

System supplying residences: the maximum number of persons supplied by the operator or 2.5 persons multiplied by the number of residences supplied.

Establishment offering camping sites: the number of camping sites of the establishment multiplied by 2.5 persons, to which is added the maximum number of regular employees of the establishment present on the same work shift.

Establishment offering sleeping accommodations: the number of persons supplied is determined by the number of beds (in single-bed equivalents) in the establishment, increased by the number of regular non-resident employees on the same work shift.

Establishment offering restaurant services: the number of persons supplied is determined by the number of seated places in the establishment increased by the number of regular employees of the establishment on the same work shift. In the case of an establishment for which the Régie des alcools, des courses et des jeux has issued a permit, the number of places is the number indicated on the permit, increased by the number of regular employees on the same work shift. In the case of a canteen, convenience store or restaurant not having seating accommodation for users but providing glasses of water or access to toilets, refer to the calculation under Public place.

Educational institution: the number of persons supplied is determined by the accommodation capacity of the institution, increased by the number of regular employees of the institution working on the premises.

Health and social services institution or correctional facility: the number of persons supplied is determined by the accommodation capacity of the institution or facility, increased by the number of regular employees of the institution or facility on the same work shift.

Public place: if there is a book or register of the number of persons who visited the place in the previous year, the number of persons supplied is determined by the average daily number of visitors during the open period, increased by the maximum number of regular employees on the same work shift. The number of persons supplied may also be determined, if applicable, by the number of seated places for persons waiting for the service offered by the place, increased by the number of regular employees on the same work shift. In the absence of data, the number of persons supplied is 500.

Place not accessible to the public: the number of regular employees on the same work shift indicated on the declaration made by the person in charge if the employer puts water intended for human consumption at the disposal of employees through piping.

O.C. 467-2005, s. 49.

SCHEDULE 1

(s. 3)

STANDARDS OF QUALITY OF DRINKING WATER

1. Microbiological parameters

(a) water collected for microbiological analysis purposes must be free from pathogenic microorganisms and indicator microorganisms of fecal contamination, such as *Escherichia coli* bacteria, enterococci bacteria and F-specific coliphage viruses;

(b) water must not contain more than 10 total coliforms per 100 mL of water collected where a technique is used to count them;

(c) where, pursuant to section 11 of this Regulation, 21 water samples or more are collected over a period of 30 consecutive days, at least 90% of the samples must be free from total coliform bacteria;

(d) where, pursuant to section 11 of this Regulation, less than 21 water samples are collected over a period of 30 consecutive days, only one of the samples may contain total coliform bacteria;

(e) water must not contain more than 200 atypical colonies per membrane where the membrane filtration technique is used to count total coliform bacteria;

(f) water must not contain bacteria in such quantity that they may not be identified or counted where the membrane filtration technique is used to count total coliform bacteria and *Escherichia coli* bacteria in 100 mL of water collected.

2. Parameters respecting inorganic substances

Water must not contain inorganic substances in a concentration greater than those indicated in the following table:

Inorganic substances	Maximum concentration (mg/L)
Antimony	0.006
Arsenic (As)	0.010
Barium (Ba)	1.0
Boron (B)	5.0
Bromates	0.010
Cadmium (Cd)	0.005

Chloramines ⁽¹⁾	3
Chlorates	0.8
Chlorites	0.8
Chromium (Cr)	0.050
Copper (Cu)	1.0
Cyanides (CN)	0.20
Fluorides (F)	1.50
Lead (Pb)	0.010
Mercury (Hg)	0.001
Nitrates + nitrites (expressed as N)	10.0
Nitrites (expressed as N)	1.0
Selenium (Se)	0.010
Uranium (U)	0.020

3. Parameters respecting organic substances

Water must not contain organic substances in a concentration greater than those indicated in the following table:

Pesticides	Maximum concentration (µg/L)
Aldicarb and its metabolites	7

Aldrin and dieldrin	0.7
Atrazine and its metabolites	3.5
Azinphos-methyl	17
Bendiocarb	27
Bromoxynil	3.5
Carbaryl	70
Carbofuran	70
(4-chloro-2-methylphenoxy) acetic acid also referred to as MCPA	30
Chlorpyrifos	70
Cyanazine	9
Diazinon	14
Diazinon	14
Diazinon Dicamba	14 85
Diazinon Dicamba Diclofop-methyl 2,4-dichlorophenoxyacetic acid	14 85 7
Diazinon Dicamba Diclofop-methyl 2,4-dichlorophenoxyacetic acid also referred to as 2,4-D	14 85 7 70
Diazinon Dicamba Diclofop-methyl 2,4-dichlorophenoxyacetic acid also referred to as 2,4-D Dimethoate	14 85 7 70 14

Glyphosate	210
Malathion	140
Methoxychlor	700
Metolachlor	35
Metribuzin	60
Paraquat (in dichlorides)	7
Parathion	35
Phorate	1.4
Picloram	140
Simazine	9
Terbufos	0.5
Trifluralin	35

Other organic substances	Maximum concentration (µg/L)
Benzene	0.5
Benzo(a)pyrene	0.01
Carbon tetrachloride	5
1,2-dichlorobenzene	150
1,4-dichlorobenzene	5
1,2-dichloroethane	5

d, cid) ⁽³⁾ 60
Maximum average entration calculated over 4 quarters (µg/L)
2
5
5
70
25
42
280
60
1.5
700
50
10

4. Parameters respecting radioactive substances

Water must not contain radioactive substances in a concentration greater than those indicated in the following table:

Radioactive substances	Maximum concentration (Bq/L)
Cesium-137	10
Iodine-131	6
Lead-210	0.2
Radium-226	0.5
Strontium-90	5
Tritium	7,000

5. Parameters respecting turbidity

The turbidity of water must be less than or equal to 5 NTU (nephelometric turbidity units).

5.1. Treatment facilities covered by the third paragraph of section 22

Column 1	Column 2	Column 3
Process	Limit value over a period of 30 days (NTU)	Limit Value (NTU)
oagulated, filtrated and isinfected water	0.3 in 95% of measurements ⁽⁴⁾⁽⁵⁾	1.0(5)
Slow filtration or with Hiatomaceous earth	1.0 in 95% of measurements ⁽⁴⁾	3.0

Membrane filtration	0.1 in 95% of measurements ⁽⁴⁾	0.2
Other filtration, or exclusion of filtration under section 5	Average of 1.0 ⁽⁶⁾	5.0

5.2. Treatment facilities covered by paragraph 3 of section 22.1

Column 1	Column 2	Column 3
Process	Limit value over a period of 30 days (NTU)	Limit Value (NTU)
Coagulated, filtrated and disinfected water	0.3 in 95% of measurements ⁽⁵⁾	1.0(5)
Slow filtration or with diatomaceous earth	1.0 in 95% of measurements	3.0
Membrane filtration	0.2 in 95% of measurements	0.3
Other filtration, or exclusion of filtration under section 5	Average of 1.0 ⁽⁶⁾	5.0

⁽¹⁾ For the purposes of this Schedule, chloramine concentration is the difference between the measurements of total residual chlorine and free residual chlorine.

⁽²⁾ The concentrations of microcystin-LA, microcystin-RR, microcystin-YR and microcystin-YM must be converted using the equivalence factors below and then be added to the microcystin-LR concentrations:

Variant microcystins

Equivalence factor

Microcystine-LA	1.0
Microcystine-RR	0.1
Microcystine-YR	1.0
Microcystine-YM	1.0

⁽³⁾ For the purpose of calculating the concentration of total trihalomethanes and haloacetic acids, the person in charge must identify the maximum concentration obtained during the quarter and calculate the average of the maximum values obtained for 4 consecutive quarters.

⁽⁴⁾ That limit value may be exceeded in 5% of measurements, but without exceeding 12 consecutive hours; the result may at no time exceed the limit value provided for in Column 3 of the table.

⁽⁵⁾ That limit value may be increased to 0.5 NTU in 95% of measurements if the percentage of elimination of pathogenic micro-organisms provided for in section 5 or 5.1 is fully ensured by the disinfection treatment downstream of the filtration; the result must at no time exceed the value of 5.0 NTU.

⁽⁶⁾ That average is calculated by means of data collected at each filter.

O.C. 647-2001, Sch. 1; O.C. 467-2005, s. 50; O.C. 70-2012, s. 71.

SCHEDULE 2

(s.19)

ORGANIC SUBSTANCES

Pesticides Atrazine and its metabolites Carbaryl Carbofuran Chlorpyrifos Diazinon Dicamba 2,4-dichlorophenoxyacetic acid (2,4-D) Diquat Diuron Glyphosate Metolachlor

Metribuzin

Paraquat (in dichlorides)
Picloram
Simazine
Trifluralin
Other organic substances
Benzene
Benzo(a)pyrene
Carbon tetrachloride
1,1-dichloroethylene
1,2-dichlorobenzene
1,4-dichlorobenzene
1,2-dichloroethane
Dichloromethane
2,4-dichlorophenol

Monochlorobenzene
Pentachlorophenol
Tetrachloroethylene
2,3,4,6-tetrachlorophenol
2,4,6-trichlorophenol
Trichloroethylene
Vinyl chloride

O.C. 647-2001, sch. 2; O.C. 70-2012, s. 72.

SCHEDULE 3

(s. 10.1)

INFORMATION PROVIDED IN THE DECLARATION BY THE PERSON IN CHARGE OF A DISTRIBUTION SYSTEM

- Identification of distribution system:
- Type of establishment or institution according to user base:
- Name of owner of distribution system:
- Address:
- Telephone:
- Name of operator if different from owner:
- Address:
- Telephone:
- Operation start date and end date:
- Chlorinated water: yes / no
- Ozonated water: yes / no
- Chloraminated water: yes / no
- Water treated with chlorine dioxide: yes/no
- Water disinfected with a virus elimination effectiveness equal to or greater than 99.99%: yes/no
- Oxidized water: yes/no; if yes, type of oxidizer used
- Record kept pursuant to section 22 or 22.1: yes/no
- Surface water in whole or in part: yes / no
- Supplied by another distribution system subject to testing requirements: yes / no
- Total number of persons supplied:
- Signature of person in charge of the distribution system
- Date of the declaration

O.C. 467-2005, s. 51; O.C. 70-2012, s. 73.

SCHEDULE 4

(s. 30)

STANDARDS OF COLLECTION AND PRESERVATION OF WATER SAMPLES

TITLE I

STANDARDS OF COLLECTION OF SAMPLES

CHAPTER I

STANDARDS APPLICABLE TO THE COLLECTION OF WATER SAMPLES OTHER THAN RAW WATER

DIVISION I

GENERAL STANDARDS APPLICABLE TO ALL COLLECTIONS OF SAMPLES OF WATER INTENDED FOR HUMAN CONSUMPTION

(1) Every sample collector who, for the purposes of this Regulation, collects samples of water intended for human consumption must

(1) wash and dry their hands before collecting any sample;

(2) subject to sections 2 to 7 of this Schedule, collect the sample in a place representative of the quality of the water of the distribution system located at the centre of the distribution facility;

(3) collect the sample from a tap that is accessible to users or from a tap intended for sampling;

(4) collect the sample from a tap located inside a building or in a location protected from wind and bad weather;

(5) collect the sample from a tap that is not connected to an individual treatment appliance or system, except if that appliance is installed in each building in accordance with section 9.1 of this Regulation, in which case the sample must be collected from a tap downstream of the treatment;

(6) use only sampling containers provided by a laboratory accredited by the Minister, except in the case of a measurement of residual chlorine or pH performed on the premises;

(7) collect the sample from the cold water tap by ensuring that the hot water tap is kept closed during sampling;

(8) let the tap run on moderate pressure for at least 5 minutes before collecting a sample; where the tap used has a valve that controls both cold and hot water, first let the hot water run for at least 2 minutes before letting the cold water run;

(9) carefully and tightly seal containers after sampling.

In addition, no sample collector may

- (1) use outside taps that are used to connect watering hoses;
- (2) use mixing valves that provide controlled water temperature;

(3) let water overflow the container used for sampling;

(4) rinse containers provided by a laboratory before sampling;

(5) use metal sampling devices if the sampling is intended for metal analyses.

DIVISION II

SPECIAL STANDARDS APPLICABLE TO THE COLLECTION OF WATER SAMPLES INTENDED FOR A MICROBIOLOGICAL ANALYSIS

(2) Every sample collector who, for the purposes of this Regulation, collects water samples intended for a microbiological analysis must

(1) remove any accessory of the spout used for sampling, such as a vent, screen or rose head. If it cannot be removed, the sampling must be done from another tap that does not have such an accessory or whose accessory has been removed;

(2) clean the outside and inside of the spout using a single-use piece of paper or absorbent textile with commercial bleach;

(3) collect, after letting the tap run in the manner provided for in subparagraph 8 of the first paragraph of section 1 of this Schedule, samples in sterile containers, provided by a laboratory accredited by the Minister, leaving an empty space of at least 2.5 cm between the surface of the liquid and the lid;

(4) make sure not to contaminate the container's neck or lid during handling and minimize exposure of the container to open air during sampling.

DIVISION III

SPECIAL STANDARDS APPLICABLE TO THE COLLECTION OF WATER SAMPLES INTENDED FOR THE ANALYSIS OF LEAD AND COPPER

(3) The water samples provided for in section 14.1, to control lead and copper, must be collected in accordance with the following standards:

(1) the samples must be collected from the tap of a single-family dwelling or a residential building with less than 8 dwellings where piping or the service entrance is manufactured in lead or likely to be in lead;

(2) where all the buildings or dwellings referred to in paragraph 1 were sampled in the last 5 years or where no such building or dwelling may be located, the samples must then be collected from the tap of residential buildings whose piping has lead solders or is likely to contain such metal;

(3) where the distribution system serves educational institutions or health and social services institutions providing services to children 6 years of age or under, those institutions must be included in the sampling sites referred to in paragraphs 1 and 2. The samplings must be collected in accordance with the following:

— at least one of the samples provided for in section 14.1 must be collected in such an institution;

— no additional samples may be collected if such institutions have more than 10% of the samples provided for in section 14.1;

— despite the preceding requirements, each institution must not be sampled more than once every 5 years.

(4) The samples collected pursuant to section 14.1 must be collected at various civic addresses from year to year if their number so allows. A single sample must be collected per residence or institution.

The following precautions must be taken during sampling:

— if a tap has a vent, screen or rose head, it should not be removed;

— if possible, the samples must be collected from the cold water tap in the kitchen or the cold water tap most frequently used to supply drinking water.

DIVISION IV

SPECIAL STANDARDS APPLICABLE TO THE COLLECTION OF WATER SAMPLES INTENDED FOR THE ANALYSIS OF ORGANIC SUBSTANCES

(5) Every sample collector who, for the purposes of this Regulation, collects water samples intended for the analysis of organic substances must

(1) collect samples in containers provided by a laboratory accredited by the Minister by filling them to the brim;

(2) store samples away from light;

(3) except for haloacetic acids, perform the sampling in a site at the end of the distribution system.

In addition, no sample collector may

(1) smoke while collecting or transporting samples;

(2) use an insect repellent product;

(3) perform samplings immediately after handling fuel;

(4) collect water samples in a bathroom that may contain chemical deodorants whose composition is identical to an organic compound that is being measured.

(6) When collecting samples intended for the analysis of a parameter provided for in the "Other organic substances" division of the table relating to the preservation standards of organic substances, the sample collector must remove the lid from the control container, commonly called "field blank", which accompanies the container used for collecting samples. The control container and the sampling container must remain open for an equal time.

During that time, the sterile water content of the control container must not be changed or altered. Once their lid is back into place, the sampling container and the control are sent together to the analytical laboratory.

DIVISION V

STANDARDS APPLICABLE TO THE COLLECTION OF WATER SAMPLES FROM A TANK TRUCK

(7) Where water samples from a tank truck are collected in a site located at the 55th parallel or further south, the samples must be collected at the outlet of the tank. Where the samples are collected in a site located north of the 55th parallel, the samples must be collected at the outlet of the tank where the tank truck is supplied with water.

DIVISION VI

STANDARD APPLICABLE TO THE COLLECTION OF WATER SAMPLES INTENDED TO CHECK THE RETURN TO COMPLIANCE FOLLOWING AN EXCEEDANCE OF STANDARDS

(8) Where water samples are collected for the purpose of checking the return of the water to compliance with a microbiological standard, no sample may be collected before at least 48 hours have elapsed after raw water has been disinfected or the distribution facility has been superchlorinated.

DIVISION VII

STANDARDS APPLICABLE TO ANALYSES OF PH AND RESIDUAL CHLORINE PERFORMED BY THE SAMPLE COLLECTOR ON THE TREATED SAMPLING SITE

(9) Every sample collector who, for the purposes of this Regulation, collects water samples to measure the pH or residual chlorine rate must

(1) prepare sampling containers so as to be free of any contaminant;

(2) perform the required measurement on the actual premises of the sampling and immediately before or after the sampling intended to be analyzed by a laboratory accredited by the Minister;

(3) perform the required measurement using an appliance offering an appropriate precision level, in accordance with section 32 of this Regulation.

In addition, no sample collector may use, for the purposes of these measurements, containers intended for sampling for microbiological analysis purposes likely to contain sodium thiosulfate.

CHAPTER II

STANDARDS APPLICABLE TO ALL RAW WATER SAMPLES

DIVISION I

GENERAL STANDARDS

(10) Every sample collector who, for the purposes of the provisions concerning the quality of raw water, collects raw water samples must

(1) use a tap located inside a building or in a location protected from wind and bad weather;

(2) use only sampling containers provided by a laboratory accredited by the Minister;

(3) carefully and tightly seal containers after sampling.

In addition, no sample collector may

(1) rinse containers provided by a laboratory before sampling;

(2) let water overflow the container used for sampling.

DIVISION II

SPECIAL STANDARDS APPLICABLE TO RAW WATER SAMPLES FROM A GROUNDWATER CATCHMENT

(11) Where raw water originates from groundwater, the sample collector must

- (1) collect the sample from the raw water tap closest to the well-head;
- (2) prior to sampling, let the water run long enough to empty the tap run;

(3) collect the sample when the well pump is operating;

(4) in the case of a sample required following an exceedance of microbiological standard in the distribution facility, collect the sample prior to any clean-up or disinfection procedure of the well.

TITLE II

STANDARDS OF SAMPLE PRESERVATION METHODS

(12) Every person who collects water samples within the scope of this Regulation must ensure that the water samples are preserved for analysis purposes. For that purpose, the person must

(1) carefully pack containers used for sampling to avoid accidental breakage or leakage;

(2) use a cooler adequately insulated with appropriate cooling agents to ship samples.

Except where samples intended for the analysis of a parameter for which a provision of one of the following tables provides a preservation period at a temperature of -20 °C, the sample collector may not at any time freeze samples or use cooling means likely to cause the freezing of samples during shipping.

In addition, the sample collector must, according to the parameter provided for in the following tables, ensure that the samples are treated using a preservative and according to the concentration indicated for that parameter. The samples thus treated must be kept in a container of the type indicated in the tables. The sample collector must also ensure that the period between the sampling and its analysis does not exceed the period referred to in the tables for those parameters.

Preservation standards of microbiological parameters

Parameter	Preservative (1)	Type of container (2)	Maximum preservation period
- Fecal coliform and Escherichia coli			
		PS	
- Total coliform	TS	or	48 hours
		VS	
- Enterococci			
- F-specific coliphage viruses			

Preservation standards of inorganic substances

Parameter	Preservative	Type of container	Maximum preservation period
	(1)	(2)	

Antimony	AN	P or V	180 days
Arsenic	AN	P or V	180 days
Barium	AN	P or V	180 days
Boron	AN	Р	180 days
Bromates	EDA	Ρ	28 days
Cadmium	AN	P or V	180 days
Chlorates	EDA	Ρ	28 days
Chlorites	EDA	РО	14 days
Chromium	AN	P or V	180 days
Copper	AN	P or V	180 days
Cyanides	NaOH	P or V	14 days
Fluorides	Ν	Ρ	28 days
Free residual		5 <i></i>	15
chlorine	N	P or V	15 minutes
Lead	AN	P or V	180 days
lercury	AC or AN	P or V	28 days
Phosphorus	AS	Ρ	28 days
Nitrates and nitrite (expressed as N)	es AS	P or V	28 days

рН	Ν	P or V	15 minutes	
Selenium	AN	P or V	180 days	
Temperature	N	P or V	15 minutes	
Total residual chlorine	Ν	P or V	15 minutes	
Turbidity	N	P or V	48 hours	
Uranium	AN	P or V	180 days	

Preservation standards of organic substances

Parameter	Preservative	Type of	Maximum
		container	preservation period
	(1)	(2)	
PESTICIDES			
Aldicarb and its			
metabolites	TS	Р	7 days
Aldrin and dieldrin	Ν	PY	7 days
Atrazine and its			
metabolites	Ν	PY	7 days
Azinphos-methyl	N	РҮ	7 days
Bendiocarb	N	PY	7 days
Bromoxynil	AS	VT	21 days

Carbaryl	Ν	PY	7 days	
Carbofuran	Ν	PY	7 days	
(4-chloro-2-methylphe acetic acid, also re				
to as MCPA	AS	VT	21 days	
Chlorpyriphos	Ν	PY	7 days	
Cyanazine	Ν	PY	7 days	
Diazinon	Ν	PY	7 days	
Dicamba	AS	VT	21 days	
2,4-dichlorophenoxyac acid, also referred				
2,4-D	AS	VT	21 days	
Diclofop-methyl	AS	VT	21 days	
Dimethoate	Ν	PY	7 days	
Dinoseb	AS	VT	21 days	
Diquat	Ν	P	7 days (3)	
Diuron	N	PY	7 days	
Glyphosate	TS	P	14 days (3)	
			-	
Malathion	N	PY	7 days	
Metholachlor	N	PY	7 days	
Methoxychlor	Ν	РҮ	7 days	

Metribuzin	Ν	РҮ	7 days	
Paraquat (in dichlorides)	N	Р	7 days (3)	
Parathion	Ν	PY	7 days	
Phorate	N	PY	7 days	
Picloram	AS	VT	21 days	
Simazine	Ν	PY	7 days	
Terbufos	Ν	PY	7 days	
Trifluralin	Ν	PY	7 days	
OTHER ORGANIC SUBSTANCES				
Benzene	TSS	VI	7 days	
Benzo (a) pyrene	AS	VAT	7 days	
Carbon tetrachloride	TSS	VI	7 days	
1,2-dichlorobenzene	TSS	VI	7 days	
1,4-dichlorobenzene	TSS	VI	7 days	
1,2-dichloroethane	TSS	VI	7 days	
1,1-dichloroethylene	TSS	VI	7 days	
Dichloromethane	TSS	VI	7 days	
2,4-dichlorophenol	AS	VB	14 days	

Microcystins (expressed				
as microcystin-LR toxic equivalents)	TS-1	VT	7 days	
	10 1	V 1	, days	
Monochlorobenzene	TSS	VI	7 days	
Nitrilotriacetic acid (NTA)	N	P	7 days	
	IN	Ľ	/ days	
Pentachlorophenol	AS	VB	14 days	
Tetrachloroethylene	TSS	VI	7 days	
*			*	
2,3,4,6-tetrachlorophenol	AS	VB	14 days	
Trichloroethylene	TSS	VI	7 days	
2,4,6-trichlorophenol	AS	VB	14 days	
Vinyl chloride	TSS	VI	7 days	
OTHER				
Total trihalomethanes				
(chloroform, bromodichloromethane,				
chlorodibromomethane and bromoform)	TSS	VI	7 days	
Haloacetic acids				
(monochloroacetic acid, dichloroacetic acid, trichloroacetic acid,				
monobromoacetic acid and dibromoacetic acid)	CA	VAT	14 days	
		VAL	IT UAYS	
RADIOACTIVE SUBSTANCES				
Cesium - 137	AC or AN	P or V	180 days	

Iodine - 131	Ν	P or V	180 days	
Lead - 210	AC or AN	P or V	180 days	
Radium - 226	AC or AN	P or V	180 days	
Strontium - 90	AC or AN	P or V	180 days	
Tritium	Ν	P or V	180 days	
Gross alpha activity	AC or AN	P or V	180 days	
Gross beta activity	AC or AN	P or V	180 days	

(1) The letters written in respect of preservatives prescribed in the tables of Part II correspond to the following preservatives, including the methodology of each of them.

PRESERV	ATIVE
AC	Must contain HC1 in sufficient concentration to acidify sample to pH <2 $$
AN	Must contain ${\rm HNO}_3$ in sufficient concentration to acidify sample to pH $<\!2$
AS	Must contain $\rm H_2SO_4$ in sufficient concentration to acidify sample to pH <2
CA	Must contain 1 mL of ammonium chloride per 100 mg/L of sample
EDA	Must contain 1 mL of ethylene diamine, to 45 mg/L, per litre of sample collected
N	No preservative required

NaOH	Must contain NaOH in sufficient concentration to overbase sample to pH >12 $$		
TS	Final concentration of 100 mg/L of sodium thiosulfate		
TS-1	Final concentration of 10 mg/L of sodium thiosulfate		
TSS	Final concentration of 1,000 mg/L of sodium thiosulfate		

(2) The letters written in respect of types of containers prescribed in the tables of Part II correspond to the following types of containers:

TYPE OF CONTAINER

Ρ	Containers and cap coatings, if applicable, are made of the following plastics: high or low density polyethylene, polypropylene, polystyrene, polyvinyl chloride or Teflon
PO	Opaque plastic container
PS	Sterile non-toxic plastic container for bacteria
РҮ	Clear or amber Pyrex glass bottle with lid with Teflon or aluminum foil inner surface
V	Clear or amber glass bottle
5 4 D	
VAT	Clear or amber glass bottle covered with aluminum foil, with lid with Teflon or Teflon sheet or aluminum foil inner surface
VB	Clear or amber glass bottle with lid with Teflon inner surface
VI	Clear or amber glass bottle with cap with septum liner, filled to capacity
170	Storilo glass bottle

VS Sterile glass bottle

VT

Clear or amber glass bottle with lid with Teflon or Teflon sheet inner surface

(3) Samples may be kept for a maximum period of 28 days, provided they are kept at all times at a temperature of -20 °C.

O.C. 70-2012, s. 74; O.C. 682-2013, s. 8; O.C. 699-2014, s. 16.

TRANSITIONAL

2014

(O.C. 699-2014)SECTION 17. Despite section 22.0.2, as introduced by section 2 of this Regulation, the person in charge of a municipal distribution system serving more than 500 persons and at least 1 residence with water that originates in whole or in part from surface water has 6 months from the coming into force of this Regulation (2014-08-14) to comply with the obligations in that section.

UPDATES O.C. 647-2001, 2001 G.O. 2, 2641 O.C. 301-2002, 2002 G.O. 2, 1669 O.C. 586-2004, 2004 G.O. 2, 2023 O.C. 467-2005, 2005 G.O. 2, 1431 O.C. 633-2008, 2008 G.O. 2, 2550 O.C. 70-2012, 2012 G.O. 2, 467 O.C. 682-2013, 2013 G.O. 2, 1808 S.Q. 2013, c. 28, s. 205 O.C. 699-2014, 2014 G.O. 2, 1621