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chapter Q-2, r. 35.2

Water Withdrawal and Protection Regulation

Environment Quality Act

(chapter Q-2, s. 31.81, 2nd par., s. 46, pars. 15 and 16, subpars. d, i, k and m and s. 95.1, 1st par., subpars. 7 and 14).

Act to affirm the collective nature of water resources and to promote better governance of water and associated environments

(chapter C-6.2, ss. 33, 34 and 35).

Act respecting certain measures enabling the enforcement of environmental and dam safety legislation (chapter M-11.6, ss. 30 and 45).



See Chapter III of the Regulation respecting the temporary implementation of the amendments made by chapter 7 of the Statutes of 2021 in connection with the management of flood risks (chapter Q-2, r. 32.2)

O.C. 696-2014; I.N. 2019-12-01; S.Q. 2022, c. 8, s. 1.

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CHAPTER I

APPLICATION

1. The object of this Regulation is to prescribe certain standards for water withdrawals, water withdrawal facilities and facilities or activities that may affect the quality of water withdrawn in the vicinity. It ensures, in particular, the protection of water withdrawn for human consumption or food processing purposes.

The Regulation applies to all water withdrawals referred to in section 31.74 of the Environment Quality Act, including water withdrawals in a reserved area and an agricultural zone established under the Act respecting the preservation of agricultural land and agricultural activities (chapter P-41.1).

O.C. 696-2014, s. 1; I.N. 2019-12-01; O.C. 871-2020, s. 1.

2. For the purposes of this Regulation, unless otherwise indicated by the context,

"animal waste" means animal waste within the meaning of the Agricultural Operations Regulation (chapter Q-2, r. 26); (déjections animales)

"ditch" means a common ditch, a ditch along a public or private road, or a drainage ditch referred to in subparagraph 4 of the first paragraph of section 103 of the Municipal Powers Act (chapter C-47.1); (fossé)

"food processing" means an activity governed by the Food Products Act (chapter P-29); (transformation alimentaire)

"parcel" means a parcel within the meaning of the Agricultural Operations Regulation; (parcelle)

"person responsible" means the operator or owner; (responsable)

"professional" means a professional within the meaning of section 1 of the Professional Code (chapter C-26) who belongs to an order responsible for the carrying on of a professional activity referred to in this Regulation; any other person authorized by a professional order to carry on an activity referred to in this Regulation is also deemed to be a professional for that sole activity; (professionnel)

"raising facility" means a raising facility within the meaning of the Agricultural Operations Regulation; (installation d'élevage)

"temporary industrial camp" means a temporary industrial camp within the meaning of the Regulation respecting the regulatory scheme applying to activities on the basis of their environmental impact (chapter Q-2, r. 17.1); (campement industriel temporaire)

"watercourse" means, with the exception of a ditch, a mass of water running along a bed in a regular or intermittent flow, including a bed established or modified by human intervention, the St. Lawrence River, the Gulf of St. Lawrence, and all seas surrounding Québec; (cours d'eau)

"withdrawal site" means the place where water enters a facility installed to make water withdrawals; (site de prélèvement)

"yard" means a yard within the meaning of the Agricultural Operations Regulation. (cour d'exercice)

The terms "boundary of the littoral zone", "littoral zone", "flood zone" and "lakeshore or riverbank" have the same meaning than the meaning given in the Protection Policy for Lakeshores, Riverbanks, Littoral Zones and Floodplains (chapter Q-2, r. 35).

O.C. 696-2014, s. 2; O.C. 871-2020, s. 2.

3. The average volume of water withdrawn per day is calculated over a period of 90 consecutive days that constitutes the period of maximum water withdrawal.

The number of users supplied by a water withdrawal is calculated in accordance with Schedule 0.1 of the Regulation respecting the quality of drinking water (chapter Q-2, r. 40) on the basis of the system, establishment or place to which it is principally or exclusively connected.

In making the calculations, all the water withdrawals made at withdrawal sites connected to the same establishment, facility or waterworks system are deemed to constitute a single water withdrawal. The same applies to establish the maximum daily flow rate of a withdrawal subject to authorization pursuant to subparagraph 2 of the first paragraph of section 22 of the Environment Quality Act (chapter Q-2).

O.C. 696-2014, s. 3; I.N. 2019-12-01.

4. (*Revoked*).

O.C. 696-2014, s. 4; O.C. 871-2020, s. 3.

CHAPTER II

(Revoked)

O.C. 696-2014, c. II; O.C. 871-2020, s. 3.

DIVISION I

(Revoked)

O.C. 871-2020, s. 3.

5. (*Revoked*).

O.C. 696-2014, s. 5; I.N. 2019-12-01; O.C. 871-2020, s. 3.

DIVISION II

(Revoked)

O.C. 871-2020, s. 3.

6. (*Revoked*).

O.C. 696-2014, s. 6; I.N. 2019-12-01; O.C. 871-2020, s. 3.

DIVISION III

(Revoked)

O.C. 871-2020, s. 3.

7. (*Revoked*).

O.C. 696-2014, s. 7; S.Q. 2016, c. 35, s. 267; I.N. 2019-12-01; O.C. 871-2020, s. 3.

8. (*Revoked*).

O.C. 696-2014, s. 8; I.N. 2019-12-01; O.C. 871-2020, s. 3.

DIVISION IV

(Revoked)

O.C. 871-2020, s. 3.

9. (Revoked).

O.C. 696-2014, s. 9; O.C. 871-2020, s. 3.

DIVISION V

(Revoked)

O.C. 871-2020, s. 3.

10. (*Revoked*).

O.C. 696-2014, s. 10; O.C. 871-2020, s. 3.

CHAPTER III

GROUNDWATER WITHDRAWAL FACILITIES

O.C. 696-2014, c. III; O.C. 871-2020, s. 4.

- 11. The object of this Chapter is to prescribe the standards applicable to facilities for the following groundwater withdrawals:
- (1) a water withdrawal for human consumption supplying a maximum of 20 persons or, in the case of a temporary or industrial camp, a maximum of 80 persons;
 - (2) a water withdrawal of less than 75,000 litres per day for any other purpose.

It does not apply to a facility that is the subject of an authorization pursuant to section 22 of the Environment Quality Act (chapter Q-2).

Neither does it apply to facilities at which water withdrawals are exempted pursuant to the Regulation respecting the regulatory scheme applying to activities on the basis of their environmental impact (chapter Q-2, r. 17.1).

O.C. 696-2014, s. 11; I.N. 2019-12-01; O.C. 871-2020, s. 5.

12. For the purposes of this Chapter, the construction of a water withdrawal facility includes its initial construction, its substantial modification and its replacement.

A substantial modification includes work to deepen, fracture or seal a well.

O.C. 696-2014, s. 12.

DIVISION I

GENERAL

- 13. The construction of any water withdrawal facility must meet the following conditions:
 - (1) the facility must be constructed with new materials;

(2) work relating to the construction of the facility must be performed in a way that minimizes lakeshore and riverbank erosion and the clearing of vegetation, limits work in littoral zones and the flow of sediment to lakes and watercourses, and prevents any water contamination and deterioration of the environment.

O.C. 696-2014, s. 13.

14. Every water withdrawal facility must remain accessible for inspection, maintenance, disinfection or equipment repair purposes, and for plugging or dismantling if required.

O.C. 696-2014, s. 14.

15. A groundwater withdrawal facility may not be installed in a high-velocity flood zone.

Where no other location may be chosen because of the configuration of the land, the prohibition provided for in the first paragraph does not apply to the following installations:

- (1) the installation of a facility further to the termination of a water supply from a water withdrawal facility located on a neighbouring immovable that is owned by someone other than the owner of the immovable on which the facility must be installed;
 - (2) the replacement of a facility for the same use.

O.C. 696-2014, s. 15; O.C. 871-2020, s. 7.

- **16.** A groundwater withdrawal facility constructed in a flood zone must meet the following conditions:
 - (1) the well must be sealed in accordance with section 19;
 - (2) the well must be constructed under the supervision of a professional.

O.C. 696-2014, s. 16.

- 17. The construction of a groundwater withdrawal facility must, in addition, meet the following conditions:
- (1) the facility must be located at a distance of 15 m or more from a watertight waste water treatment system;
- (2) the facility must be located 30 m or more from a non-watertight waste water treatment system or, if the well is sealed in accordance with section 19, 15 m or more from such a system;
- (3) the facility must be located 30 m or more from a composting area, a yard, a raising facility, a construction used to store animal waste, land, pasture land or land used as a cemetery;
- (4) the casing used for a drilled or excavated well must rise at least 30 cm above the ground level existing after earth-moving operations are completed;
 - (5) the casing joints must be watertight.

The distances provided for in subparagraphs 1, 2 and 3 of the first paragraph do not apply to the following constructions if the person responsible for the facility obtains a hydrogeological notice signed by a professional justifying:

- (1) the construction of a facility subsequent to the cessation of the supplying of water from a water withdrawal facility located on a neighbouring immovable having a different owner than the owner of the immovable on which the facility is to be constructed;
 - (2) the replacement of a facility for the same use.

Such a hydrogeological notice must contain

- (1) a demonstration that it is impossible to comply with the distances provided for in subparagraphs 1, 2 and 3 of the first paragraph because of the dimensions of the land or obstacles present on the land, such as the presence of a residence authorized by a municipality;
- (2) a justification of the choice of the location and the measures adopted for the design of the facility based on the local context, which may take into account in particular the nature of the geological materials and the presence of activities likely to alter the groundwater or the direction of water flow; and
 - (3) a diagram of the layout of the proposed water withdrawal facility.

The hydrogeological notice must demonstrate that the location selected and the layout of the facility minimize risks that could affect the quality of the groundwater withdrawn.

The hydrogeological notice must be sent by the professional to the person responsible for the facility and to the municipality concerned within 30 days following completion of the work. The information it contains is public. It must be kept by the person responsible for the facility for the duration of water withdrawal operations.

A professional must supervise the construction of the facility for which a hydrogeological notice has been produced.

O.C. 696-2014, s. 17; O.C. 871-2020, s. 8.

- **18.** Unless a groundwater withdrawal facility is plugged in accordance with section 20, the facility must, at all times, be operated in compliance with the following conditions:
- (1) the facility must be equipped with a secure cover that is resistant to the weather, contaminants and vermin, and, if the facility is exposed to immersion risks, the infiltration of water;
- (2) the soil around the facility must be graded so as to prevent water pooling and water runoff towards the facility for a distance of 1 m around the facility;
 - (3) the facility must be visibly locatable;
- (4) if a hydrofracturing activity is carried out at the facility, water that meets the quality standards for drinking water prescribed by the Regulation respecting the quality of drinking water (chapter Q-2, r. 40) must be used.

This section also applies to an observation well.

O.C. 696-2014, s. 18.

- 19. When the sealing of a groundwater withdrawal facility is required under this Regulation, it must be performed in accordance with the following conditions:
- (1) the well must be drilled in such a way that, over a minimum depth of 5 m, it has a diameter at least 10 cm greater than the nominal diameter of the pipe casing;
 - (2) the permanent pipe casing, excluding the perforated casing, must descend to a minimum depth of 5 m;
- (3) the annular space around the pipe casing must be filled, in accordance with good practice, to a minimum depth of 5 m using a material that ensures a watertight, durable seal, such as a cement bentonite mix or pure bentonite;
 - (4) the excess pipe casing must be removed without damaging the seal;

(5) the sealing must be performed under the supervision of a professional.

All work carried out after the sealing must be performed in a way that minimizes the effect on the seal.

O.C. 696-2014, s. 19.

- **20.** Where a groundwater withdrawal facility is plugged, the plugging must meet the following conditions:
 - (1) a material not likely to degrade the quality of the groundwater must be used;
 - (2) the well casing must be exposed to a depth of at least 1 m below the surface of the ground;
 - (3) the well casing must be cut off at the bottom of the excavation;
 - (4) the portion of the casing open to the aquifer must be filled with clean sand;
 - (5) the remaining portion of the casing must be filled with pure bentonite or a cement bentonite mix;
 - (6) a concrete slab must be placed over the end of the casing;
 - (7) the excavation must be filled using the soil initially excavated.

This section also applies to an observation well.

O.C. 696-2014, s. 20.

21. The person who performed the construction work for a groundwater withdrawal facility or the professional who supervised the work must send to the Minister, within 30 days after the work is completed, a report containing the information listed in Schedule I certifying that the work complies with the standards set out in this Regulation.

A copy of the report must also be sent to the person responsible for the facility and the municipality concerned within the prescribed time limit.

The information recorded in the report is public information.

O.C. 696-2014, s. 21.

DIVISION II

SPECIFIC PROVISIONS FOR CERTAIN CATEGORIES OF FACILITIES

O.C. 696-2014, Div. II; O.C. 871-2020, s. 9.

22. A groundwater withdrawal facility used to supply water for human consumption must be designed with materials suitable for drinking water supply systems.

It must be cleaned and disinfected before being operated to eliminate any possibility of water contamination. The same applies to any accessory equipment installed more than 2 days after the cleaning and disinfection of the water withdrawal facility.

O.C. 696-2014, s. 22.

- **23.** A facility that is drilled must
- (1) include a pipe casing having a nominal thickness of 4.78 mm compliant with ASTM-53 Grade B or ASTM A-589 Grade B if it is made of steel or ASTM A-312 if it is made of stainless steel:

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(2) be assessed by the person who constructed it to verify if the daily quantity of water supplied may meet the water needs during the periods of the day where the need will be more important.

In the event that the facility assessed cannot meet the water needs mentioned in subparagraph 2 of the first paragraph, the person that constructed the facility must immediately inform the owner. The facility must then be plugged in accordance with section 20 or, if it is used for observation purposes, be operated in accordance with section 18.

O.C. 696-2014, s. 23; O.C. 871-2020, s. 10.

- **24.** A groundwater withdrawal facility consisting of a well drilled into rock must be constructed in accordance with the following conditions:
 - (1) the casing used must be anchored in bedrock for at least 0.6 m or until penetration ceases;
 - (2) a drive shoe or other device to prevent deformation of the lower end of the casing must be used;
- (3) where the drilled rock formation is located within a depth of 5 m, the facility must be sealed in accordance with section 19, without having to be supervised by a professional if, in the latter case, the facility is constructed in accordance with subparagraph 1, 2 and 3 of the first paragraph of section 17.

O.C. 696-2014, s. 24.

- **25.** A groundwater withdrawal facility designed to capture a natural resurgence of groundwater using a horizontal drain must meet the following conditions:
- (1) the drain must be buried at least 1 m deep upstream from the natural point of groundwater resurgence so as to collect the water before it surfaces;
 - (2) the drain must be connected to a watertight reservoir;
- (3) the reservoir must stand at least 30 cm above the surface of the ground and must be equipped with an overflow, directing water that is not withdrawn towards the natural outlet of the resurgence;
- (4) the ground above and for at least 3 m upstream from the drain must be graded so as to prevent runoff towards the drain or the infiltration of surface water;
- (5) the location of the drain, and in particular of its extremities, must be indicated by visual markers. $\overline{O.C.~696-2014}$, s. 25.
- **26.** A groundwater withdrawal facility using artesian pressure must include a flow control system
 - (1) to confine the flow within the casing;
 - (2) to control gushing in such a way that the water does not damage neighbouring properties.

O.C. 696-2014, s. 26.

DIVISION III

(Revoked)

O.C. 696-2014, Div. III; O.C. 871-2020, s. 11.

27. (*Revoked*).

O.C. 696-2014, s. 27; O.C. 871-2020, s. 11.

CHAPTER IV

GEOTHERMAL SYSTEMS

27.1. The object of this Chapter is to prescribe the standards applicable to geothermal systems.

It does not apply to a system that is authorized pursuant to section 22 of the Environment Quality Act (chapter Q-2). Neither does it apply to facilities for which water withdrawals are exempted pursuant to the Regulation respecting the regulatory scheme applying to activities on the basis of their environmental impact (chapter Q-2, r. 17.1).

O.C. 871-2020, s. 12.

- **28.** A geothermal system that withdraws water must be constructed in accordance with the following conditions:
 - (1) the system must be exclusively supplied by groundwater;
- (2) the system must return the water to the aquifer without allowing it to come into contact with any substance liable to affect its quality;
- (3) the water withdrawal facility and the discharge facility of such a system must comply with the standards applicable to a groundwater withdrawal facility set out in sections 12 to 26, adapted as required.

 O.C. 696-2014, s. 28.
- **29.** A ground-source geothermal system that does not withdraw water must be constructed in accordance with the following conditions:
 - (1) the system must not be located in a littoral zone or in a high-velocity flood zone;
- (2) the components situated below the soil's surface must be made of materials that are new at the time the facility is installed;
 - (3) the system cannot use ethylene glycol, potassium acetate and methanol for its operation;
- (4) the work to construct the system must be carried out in such a way that no water is contaminated and no environmental degradation occurs;
- (5) when the system is installed at a depth of over 5 m in the ground, the soil must be graded above the underground components and over a distance of 1 m around the system in a way that prevents water pooling and water runoff towards the components;
- (6) if the system is installed in a low-velocity flood zone must be designed to resist a 100-year flood and the work must be carried out below the soil's surface;
- (7) the watertightness of the components must be assessed before the system is operated. O.C. 696-2014, s. 29.
- **30.** The person who installed the ground-source geothermal system that does not withdraw water or the professional who supervised the work must send to the Minister, within 30 days after the work is completed, a report containing the information listed in Schedule I certifying that the work complies with the standards set out in this Regulation. The report must also contain
 - (1) a plan showing the location of the system, including the location of all underground components;
 - (2) the dimensions of the geothermal loops and the composition of the fluids used in the system;

(3) the results of the pressure tests conducted on the system.

A copy of the report must also be sent to the person responsible for the system and to the municipality concerned within the prescribed time limit.

The information recorded in the report is public information.

O.C. 696-2014, s. 30.

CHAPTER V

DRILLING SITE USED TO OPERATE AN UNDERGROUND RESERVOIR

O.C. 696-2014, c. V; S.Q. 2022, c. 10, s. 109.

DIVISION I

GENERAL

- **31.** For the purposes of this Chapter, unless otherwise indicated by the context,
 - (1) (subparagraph revoked);
 - (2) (subparagraph revoked);
- (3) "drilling site" means the zone grouping the drilling well or wells used to operate an underground reservoir and the land laid out in the immediate vicinity of the well or wells to receive the equipment and infrastructures necessary for the interventions performed on the well or wells, such as storage areas, soil mound and waste water storage or treatment basins;
 - (4) (subparagraph revoked).

The information recorded in a notice, a study, a program or a report required under this Chapter is public information. The same applies to the analysis results sent to the Minister under this Chapter. In all cases, a copy of the notices, studies, programs, reports or analysis results must be sent to the Minister of Energy and Natural Resources within the time limit prescribed for their transmission to the Minister.

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O.C. 696-2014, s. 31; S.Q. 2022, c. 10, s. 110.
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32. It is prohibited to construct a drilling site in a high-velocity flood zone or less than 500 m from a site where water is withdrawn for human consumption or food processing.

The distance of 500 m provided for in the first paragraph concerning the construction of a drilling site may be increased to the distance set in the hydrogeological study provided for in section 38 where the study shows that the distance of 500 m does not minimize risks of contamination of the sites where water is withdrawn for human consumption or food processing that are located on the territory covered by the study.

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O.C. 696-2014, s. 32; S.Q. 2022, c. 10, s. 111.
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DIVISION II

(Revoked)

O.C. 696-2014, Div. II; O.C. 871-2020, s. 13.

33. (*Revoked*).

O.C. 696-2014, s. 33; O.C. 871-2020, s. 13.

34. (*Revoked*).

O.C. 696-2014, s. 34; O.C. 871-2020, s. 13.

35. (*Revoked*).

O.C. 696-2014, s. 35; O.C. 871-2020, s. 13.

36. (*Revoked*).

O.C. 696-2014, s. 36; O.C. 871-2020, s. 13.

DIVISION III

INITIAL CHARACTERIZATION STUDY

37. The person responsible for a drilling site must carry out an initial characterization study of the site.

The characterization study must cover, according to the most stringent areas, a territory having a minimum radius of 2 km outside the limits of the drilling site or a territory corresponding to the horizontal length of the well planned.

The characterization study includes, with respect to the territory involved,

- (1) a hydrogeological study signed by a professional;
- (2) an analysis of the water samples taken at the sites where water is withdrawn for human consumption or food processing purposes, such analysis is carried out using the parameters and substances in Schedule II;
- (3) an analysis of the water samples taken at the observation wells referred to in section 39 and carried out using the parameters and substances in Schedule II.

The water samples referred to in subparagraph 2 of the second paragraph are taken with the consent of the person responsible for the water withdrawal site concerned. If such consent cannot be obtained, the person responsible for the drilling site must include in the hydrogeological study, the list of the persons responsible for the water withdrawals who refused the sampling of the site.

O.C. 696-2014, s. 37.

- **38.** The hydrogeological study must, in particular, provide the following information with respect to the territory involved:
 - (1) its topography;
 - (2) its geological and structural context, including its stratigraphic profile;

- (3) its hydrogeological, hydrological and geochemical context, by specifying in particular the aquifers present and the hydrographical network;
- (4) the location and a description of the layout of the water withdrawals for human consumption or food processing purposes and the results of the analyses of the water samples taken at the sites of the withdrawals in accordance with subparagraph 2 of the third paragraph of section 37, if any;
- (5) the location and a description of the layout of the wells for the operation of an underground reservoir, if any;
- (6) the conditions of confinement and recharging of the aquifers and their vulnerability to the planned surface activities on the drilling site;
- (7) the dynamics of the water flow in particular with respect to the groundwater flow direction and their links with surface water;
- (8) an assessment of the impact of water contamination on water withdrawals for human consumption or food processing purposes and on aquatic ecosystems associated to a watercourse, in the event that
 - (a) a failure of the well causes a migration of fluids to the aquifer or aquifers or to the surface;
 - (b) an accidental spill occurs on the drilling site;
- (9) the demonstration that the location selected for the drilling site is the least likely to affect water withdrawn for human consumption or food processing purposes and, if applicable, the distance to comply with to minimize the risks of contamination of the water from such withdrawals if the distance is greater than the minimum distance prescribed under section 32;
- (10) the location of the observation wells constructed or to be constructed and the reasons justifying the choice of their location and their construction.

The analysis results provided for in subparagraph 4 of the first paragraph must be sent to each person responsible for the withdrawal sites concerned within 30 days of their receipt.

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O.C. 696-2014, s. 38; O.C. 871-2020, s. 14; S.Q. 2022, c. 10, s. 112.
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39. The person responsible for the drilling site must construct, at a distance of not more than 30 m from the drilling well, 3 observation wells for taking water samples. One of the wells must be located hydraulically upgradient from the drilling site while the other 2 must be located hydraulically downgradient.

The water samples taken must make it possible to assess the quality of the groundwater withdrawn or likely to be withdrawn, as well as groundwater that may affect aquatic ecosystems associated with a lake or watercourse.

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O.C. 696-2014, s. 39; I.N. 2014-09-01; O.C. 871-2020, s. 15.
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39.1. The person responsible for the drilling site must take water samples in each of the observation wells before the beginning of operations or, if the project has already begun, as soon as possible before the next phase of operations. The samples must be analyzed in terms of the parameters and substances referred to in Schedule II.

Water samples must also be taken in each of the observation wells for the purposes of monitoring groundwater quality, according to the requirements of Division V of this Chapter.

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O.C. 871-2020, s. 15.
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39.2. All the samples must be analyzed by laboratories accredited pursuant to section 118.6 of the Environment Quality Act (chapter Q-2) or, if no laboratory is accredited for the analysis of a given substance, by a laboratory that meets ISO/CEI 17025, General requirements for the competence of testing and calibration laboratories, which is published jointly by the International Organization for Standardization and the International Electrotechnical Commission.

The analysis results must be sent to the person responsible for the drilling site, and that person must keep them in accordance with the rules of section 49.

O.C. 871-2020, s. 15.

DIVISION IV

(Revoked)

O.C. 696-2014, Div. IV; S.Q. 2022, c. 10, s. 113.

40. (*Revoked*).

O.C. 696-2014, s. 40; S.Q. 2022, c. 10, s. 113.

41. (*Revoked*).

O.C. 696-2014, s. 41; S.Q. 2022, c. 10, s. 113.

42. (Revoked).

O.C. 696-2014, s. 42; S.Q. 2022, c. 10, s. 113.

43. (*Revoked*).

O.C. 696-2014, s. 43; S.Q. 2016, c. 35, s. 268; O.C. 871-2020, s. 16.

44. (Revoked).

O.C. 696-2014, s. 44; S.Q. 2022, c. 10, s. 113.

45. (*Revoked*).

O.C. 696-2014, s. 45; O.C. 871-2020, s. 17; S.Q. 2022, c. 10, s. 113.

46. (*Revoked*).

O.C. 696-2014, s. 46; S.Q. 2022, c. 10, s. 113.

DIVISION V

MONITORING OF GROUNDWATER

47. The person responsible for the drilling site must take water samples 3 times a year from the observation wells constructed in accordance with section 39. Samples must also be taken 90 days after every repair to a well.

The person must also take samples 3 times a year during any drilling site closure period and for 10 years after its permanent closure.

Every sampling campaign executed during a year must be spaced at an interval of at least 3 months from any other such campaign.

The samples that are taken must be analyzed in accordance with Schedule III by a laboratory referred to in section 39.2.

O.C. 696-2014, s. 47; O.C. 871-2020, s. 18.

48. The person responsible for a drilling site must obtain from a professional, not later than 15 days after receipt of the results of the analysis of the water samples in accordance with section 47, the professional's opinion on the quality of the groundwater of the drilling site to determine in particular whether it is contaminated or not or to assess the degradation of its quality.

In the preparation of the opinion, the professional takes into account the analysis results obtained following the initial characterization study of the drilling site and the results of the analysis of the water samples obtained during the withdrawal and previous withdrawals.

If the conclusion of the opinion is that the groundwater is contaminated, the person responsible must immediately send the opinion to the Minister. The person responsible must also send to the Minister within 30 days after receipt of the professional's opinion a statement certifying the measures that have been or will be taken to determine the cause of the problem and correct the situation.

O.C. 696-2014, s. 48.

DIVISION VI

REGISTER

- **49.** The person responsible for a drilling site must keep and update a register to record the following information:
 - (1) the hydrogeological study referred to in section 38;
 - (2) (subparagraph revoked);
 - (3) the results of the analysis of the samples collected in accordance with Schedules II and III;
 - (4) (subparagraph revoked);
 - (5) the opinion obtained from a professional under section 48;
 - (6) the opinions or declarations sent to the Minister under this Chapter.

The register must be retained for 10 years following the permanent closure of the site.

The information recorded in the register must be given to the Minister and to the Minister of Energy and Natural Resources on request.

O.C. 696-2014, s. 49; O.C. 871-2020, s. 19; S.Q. 2022, c. 10, s. 114.

CHAPTER VI

PROTECTION GIVEN TO THE WATER WITHDRAWN FOR HUMAN CONSUMPTION OR FOOD PROCESSING PURPOSES

DIVISION I

GENERAL

50. This Chapter applies only to water withdrawals made for human consumption or food processing purposes. It provides for the delimitation, where required, of inner, intermediate and outer protection zones for groundwater or surface water withdrawals in order, in particular, to assess the vulnerability of the water withdrawn and to supervise the performance of certain activities that may affect water quality.

O.C. 696-2014, s. 50.

- **51.** For the purposes of this Chapter, the following categories of water withdrawals are established:
- (1) category 1: water withdrawals carried out for a municipal waterworks system supplying over 500 persons and at least 1 residence;
 - (2) category 2: water withdrawals carried out to supply
 - (a) a municipal waterworks system supplying between 21 and 500 persons and at least 1 residence;
 - (b) any other waterworks system supplying 21 or more persons and at least 1 residence;
- (c) a system, independent from a waterworks system, supplying at least 21 or more persons at 1 or more educational institutions, 1 or more detention facilities, or 1 or more health and social services institutions within the meaning of the Regulation respecting the quality of drinking water (chapter Q-2, r. 40);
 - (3) category 3: water withdrawals carried out to supply
- (a) a system, independent from a waterworks system, supplying only 1 or more food processing establishments;
- (b) a system, independent from a waterworks system supplying only 1 or more enterprises, 1 or more tourist establishments or 1 or more seasonal tourist establishments within the meaning of the Regulation respecting the quality of drinking water;
 - (c) any other system supplying 20 persons or fewer.

O.C. 696-2014, s. 51.

52. The location of a withdrawal site and any delimitation of a protection zone determined by a professional in accordance with this Chapter is public information. The person responsible for water withdrawals must disclose them on request.

O.C. 696-2014, s. 52.

DIVISION II

GROUNDWATER

- § 1. Vulnerability of groundwater
- **53.** The intrinsic vulnerability of groundwater must be assessed by a professional for each category 1 water withdrawal protection zone delimited pursuant to this Division in accordance with the DRASTIC method of

the National Water Well Association, as established in Aller, L., Bennet, T., Lehr, J.H. et al. (1987), DRASTIC: A Standardized System for Evaluating Ground Water Pollution Potential Using Hydrogeologic Settings, report no. EPA 600/2 87-035, the results of which must be used to rate vulnerability using the following vulnerability ratings:

- (1) "Low": a rating equal to or less than 100 for the entire protection zone;
- (2) "Medium": a rating less than 180 for the entire protection zone, except if a "low" rating has been assigned;
 - (3) "High": a rating equal to or greater than 180 in any part of the protection zone.

The intrinsic vulnerability of groundwater within a category 2 or 3 water withdrawal protection zone is deemed to be high, unless a professional assesses it otherwise in accordance with the method referred to in the first paragraph.

O.C. 696-2014, s. 53.

- § 2. *Inner protection zone*
- **54.** An inner protection zone is delimited for all groundwater withdrawals. The limits of the zone are set at the following distances:
- (1) 30 m from a category 1 or 2 water withdrawal site, unless a professional determines them after certifying, in a hydrogeological study, that
- (a) the presence of a superficial geological formation with low permeability provides natural protection for the groundwater;
- (b) the configuration of the land or a nearby infrastructure ensures the protection of the quality of the groundwater with respect to incidents or activities that may occur in the zone concerned; or
- (c) human activities within a radius of 30 m from the withdrawal present no significant risk that may affect groundwater quality;
 - (2) 3 m from a category 3 water withdrawal site.

O.C. 696-2014, s. 54.

55. The location of the inner protection zone for category 1 or 2 groundwater withdrawal facility must be indicated on the site in a way that is visible at all times from all access points, in particular by way of signs.

O.C. 696-2014, s. 55.

56. All activities presenting a risk of water contamination are prohibited in the inner protection zone of a groundwater withdrawal, except activities relating to the operation, maintenance, rebuilding or replacement of the water withdrawal facility and its accessory equipment.

O.C. 696-2014, s. 56.

- § 3. *Intermediate protection zone*
- **57.** An intermediate protection zone is delimited for all groundwater withdrawals. The limits of the zone are set as follows:

- (1) for category 1 water withdrawals, the limits must be determined by a professional who verifies, using data collected from a minimum of 3 wells that are constructed within the aquifer used for water withdrawals and that may be used to observe groundwater,
 - (a) the 200-day groundwater migration period, to ensure bacteriological protection;
 - (b) the 550-day groundwater migration period, to ensure virological protection;
- (2) for category 2 water withdrawals, the limits are set at the following distances, except if they have been determined in accordance with subparagraph 1:
 - (a) 100 m from the withdrawal site to ensure bacteriological protection;
 - (b) 200 m from the withdrawal site, to ensure virological protection;
- (3) for category 3 water withdrawals, the limits are set at the following distances, except if they have been determined in accordance with subparagraph 1:
 - (a) 30 m from the withdrawal site, to ensure bacteriological protection;
 - (b) 100 m from the withdrawal site, to ensure virological protection;

The person responsible for the category 1 or 2 water withdrawal must send a written notice to the domicile of each property included in the intermediate protection zone informing the owners or occupants of the presence of the withdrawal site in their neighbourhood.

O.C. 696-2014, s. 57.

58. The spreading and storage, directly on the ground, of sludge from municipal waste water treatment works or from any other works for the collection or treatment of sanitary waste water are prohibited within the intermediate virological protection zone of groundwater withdrawals with a water vulnerability rating of medium or high, except if the spreading is carried out for domestic landscaping purposes or if the spreading uses sludge certified to comply with CAN/BNQ 0413-200, CAN/BNQ 0413-400 or BNQ 419-090.

The first paragraph also applies to any substance containing more than 0.1%, dry weight basis, of sludge from sanitary waste water.

O.C. 696-2014, s. 58.

- **59.** The construction of a yard and storage, directly on the ground, of animal waste, nitrogenous fertilizers, farm compost or any fertilizing waste substance not certified to comply with CAN/BNQ 0413-200, CAN/BNQ 0413-400 or BNQ 419-090 are prohibited
- (1) in the intermediate bacteriological protection zone for groundwater withdrawals with a water vulnerability rating of medium or high;
- (2) in the virological protection zone for groundwater withdrawals if the nitrate + nitrite (expressed as N) concentration of the water withdrawn, sampled in accordance with the Regulation respecting the quality of drinking water (chapter Q-2, r. 40), is above 5 mg/l on 2 or more occasions over a 2-year period;
- (3) within the first 100 m of the intermediate virological protection zone from category 3 groundwater withdrawals on a neighbouring property when the vulnerability rating is medium or high.

O.C. 696-2014, s. 59.

60. The construction of a composting area is prohibited

- (1) less than 100 m from the bacteriological protection zone for a category 1 or 2 groundwater withdrawal with a vulnerability rating of medium or high;
- (2) in the bacteriological protection zone of a category 3 groundwater withdrawal with a vulnerability rating of medium or high;
- (3) within the first 100 m of the intermediate virological protection zone from category 3 groundwater withdrawals on a neighbouring property when the vulnerability rating is medium or high.

O.C. 696-2014, s. 60.

- **61.** The construction of a facility to store animal waste or a building for raising livestock is prohibited
- (1) less than 100 m from the bacteriological protection zone for a category 1 or 2 groundwater withdrawal with a vulnerability rating of medium or high;
- (2) in the intermediate bacteriological protection zone of a category 3 groundwater withdrawal with a vulnerability rating of medium or high.

This section does not apply to fish farms.

O.C. 696-2014, s. 61.

62. In all cases in which the construction of a composting area, animal waste storage facility or building for raising livestock is not prohibited in the intermediate bacteriological protection zone for groundwater withdrawals, the facility must be designed to ensure watertightness and must be constructed under the supervision of a professional.

In addition, the watertightness of a composting area or animal waste storage facility constructed in such a zone must be assessed by a professional every 10 years.

A professional having carried out an assessment referred to in the second paragraph must send to the person responsible for groundwater withdrawals and to the Minister a watertightness certificate or a recommendation concerning the corrective measures required to make the facility watertight after a watertightness deficiency is noted.

The corrective measures required to make a facility watertight must be completed no later than 1 year following receipt of the professional's recommendation. They must be carried out under the supervision of a professional who must forward a watertightness certificate to the person responsible for withdrawals and to the Minister as soon as possible.

A copy of the watertightness certificate must be sent as soon as possible to the regional county municipalities whose territory intersects with the intermediate protection zones concerned.

O.C. 696-2014, s. 62.

- **63.** Grazing and the spreading of animal waste, farm compost and fertilizing waste substances not certified compliant with CAN/BNQ 0413-200, CAN/BNQ 0413-400 or BNQ 419-090 are prohibited
- (1) in the intermediate bacteriological protection zone for groundwater withdrawals with a water vulnerability rating of high;
- (2) in the virological protection zone for groundwater withdrawals when the nitrate + nitrite (expressed as N) concentration of the water sampled in accordance with the Regulation respecting the quality of drinking water (chapter Q-2, r. 40) is above 10 mg/l on 2 or more occasions over a 2-year period;

(3) less than 100 m from a category 1 groundwater withdrawal site with a water vulnerability rating of medium.

The spreading of nitrogenous fertilizers is also prohibited in the virological protection zone for groundwater withdrawals in the case provided for in subparagraph 2 of the first paragraph.

The spreading of animal waste, farm compost, nitrogenous fertilizers or fertilizing waste substance, if it is for domestic landscaping purposes, is not under the prohibition provided for in this section.

O.C. 696-2014, s. 63.

- **64.** Grazing and the spreading of animal waste, farm compost or fertilizing waste substances must be carried out in accordance with the recommendations of a professional
- (1) in the intermediate bacteriological protection zone for groundwater withdrawals with a vulnerability rating of medium;
- (2) in the intermediate virological protection zone for groundwater withdrawals when the nitrate + nitrite (expressed as N) concentration of the water sampled in accordance with the Regulation respecting the quality of drinking water (chapter Q-2, r. 40) is above 5 mg/l on 2 or more occasions over a 2-year period.

The spreading of nitrogenous fertilizers must also be carried out in accordance with the recommendation of a professional in the intermediate virological protection zone for groundwater withdrawals in the case provided for in subparagraph 2 of the first paragraph.

The recommendation must set out the measures to be taken to minimize the impact on the water withdrawn, especially concerning the addition of nitrogen and pathogenic agents. It must be based on

- (1) a historical review of the last 5 years of cultivation, spreading activities and grazing activities in the intermediate protection zone;
 - (2) the hydrogeological context and the texture, depth and state of compaction of the soil.

The recommendation must be submitted with the agro-environmental fertilization plan prepared in accordance with the Agricultural Operations Regulation (chapter Q-2, r. 26) when the place where the livestock raising or spreading occurs is subject to that Regulation. It must be retained for 5 years and provided to the Minister on request.

O.C. 696-2014, s. 64.

- § 4. Outer protection zone
- **65.** An outer protection zone is delimited for category 1 or 2 groundwater withdrawals. The limits of the zone are set as follows:
- (1) for category 1 water withdrawals, the limits must be determined by a professional who verifies, using data collected from a minimum of 3 wells that are constructed within the aquifer used for water withdrawals and that may be used to observe groundwater, the area of land where circulating groundwater may eventually be captured for water withdrawal;
- (2) for category 2 groundwater withdrawals, using a radius of 2 km upstream from the withdrawal site, except if the limits have been determined under paragraph 1.

O.C. 696-2014, s. 65.

66. In addition to the prohibition provided for in section 32, the construction of a drilling site to operate an underground reservoir is prohibited in the outer protection zone for category 1 or 2 groundwater withdrawals.

O.C. 696-2014, s. 66; S.Q. 2022, c. 10, s. 115.

- § 5. *Notice and report sent to the Minister*
- 67. Where the person responsible for a groundwater withdrawal is notified that at least 2 water samples contained more then 5 mg/l of nitrates + nitrites (expressed as N) over a 2-year period, in accordance with section 36.01 of the Regulation respecting the quality of drinking water (chapter Q-2, r. 40), the person must send to the Minister, within 30 days of receipt of such notice, the list of properties included in part or all of the intermediate protection zone of the water withdrawal or withdrawals at the source of the concentration measured.

O.C. 696-2014, s. 67.

- **68.** The person responsible for a category 1 groundwater withdrawal must send to the Minister, every 5 years, a report containing the following information and updates, if any:
 - (1) the location of the withdrawal site and a description of its construction;
- (2) the location plan of the inner, intermediate and outer protection zones, which must make it possible to identify their limits on site;
 - (3) the water vulnerability rating assessed in accordance with section 53 for each protection zone;
- (4) with respect to the outer protection zone, human activities, land use of the territory and potential events likely to affect the quality and quantity of the water used for the withdrawal;
- (5) an assessment of the threats the human activities and potential events recorded pursuant to subparagraph 4 represent;
- (6) an identification of the causes that may explain what affects or has affected the quality and quantity of the groundwater used for the withdrawal, on the basis of the interpretation of available data, in particular, the data obtained in the monitoring of the quality of raw and supplied water required under the Regulation respecting the quality of drinking water (chapter Q-2, r. 40).

The report must be signed by a professional, a representative of the watershed organization or a representative of the organization mandated to coordinate the regional advisory panel concerned, duly mandated by the person responsible for water withdrawal.

The information recorded in the report is public information, except the information provided for in subparagraphs 4, 5 and 6 of the first paragraph. The information is published on the website of the person responsible for the withdrawal if possible.

A copy of the report is sent, as soon as possible, to the regional county municipalities whose territories intersect with the protection zones of the withdrawal and the municipalities whose territory intersects with the outer protection zone of the withdrawal. The information referred to in subparagraphs 1 to 3 of the first paragraph must also be sent, as soon as possible, to the watershed organizations whose territories intersect with the protection zones of the withdrawal.

O.C. 696-2014, s. 68; O.C. 871-2020, s. 20.

DIVISION III

SURFACE WATER

- § 1. *Vulnerability of surface water*
- **69.** The vulnerability of surface water used for category 1 water withdrawals must be rated as high, medium or low by the person responsible for withdrawals, for each of the following indicators, defined in Schedule IV:
 - (1) physical integrity of the withdrawal site;
 - (2) vulnerability to microorganisms;
 - (3) vulnerability to fertilizers;
 - (4) vulnerability to turbidity;
 - (5) vulnerability to inorganic substances;
 - (6) vulnerability to organic substances.

O.C. 696-2014, s. 69.

- § 2. Inner protection zone
- **70.** An inner protection zone is delimited for category 1 or 2 surface water withdrawals. The limits of the zone are set at the following distances:
 - (1) 300 m around a category 1 or 2 withdrawal site, if it is located in a lake;
- (2) 1 km upstream and 100 m downstream from a category 1 or 2 withdrawal site if it is situated in the St. Lawrence River or, in the parts of the St. Lawrence River where the current may reverse due to the tide, 1 km upstream and downstream from the withdrawal site;
- (3) 500 m upstream and 50 m downstream from a category 1 or 2 withdrawal site if it is situated in any other watercourse.

The distances include any surface water, portions of tributaries and a 10 m strip of land measured from the boundary of the littoral zone.

The person responsible for the water withdrawal must send a written notice to the domicile of each property included in the inner protection zone informing their owners or occupants of the presence of the withdrawal site in their neighbourhood.

O.C. 696-2014, s. 70.

- **71.** The following activities are prohibited in the inner protection zone for categories 1 and 2 surface water withdrawals:
 - (1) grazing;
- (2) the spreading and storage, directly on the ground, of animal waste, farm compost, nitrogenous fertilizers or fertilizing waste substances;

- (3) the spreading and storage, directly on the ground, of sludge from municipal waste water treatment works or from any other works for the collection of treatment of sanitary waste water and of any substance containing more than 0.1%, dry weight basis, of sludge from sanitary waste water;
- (4) the construction of a new discharge in a watercourse, except a watercourse over 30 m wide at low water if a professional certifies that the discharge will not affect the water withdrawal site.

All other activities within the inner protection zone for category 1 or 2 surface water withdrawals, except activities relating to the operation of a hydroelectric power station, must meet the following conditions:

- (1) the activity must be organized to minimize the risk of soil erosion, in particular by re-establishing and maintaining natural plant cover and the natural state of the lakeshore or riverbank;
- (2) if the activity involves a ditch or underground drain, they must not connect directly to the receiving lake or watercourse, unless they include infrastructures to limit the flow of sediments to the lake or watercourse concerned and, in the case of a ditch, the top of the bank must have plant cover over a minimum width of 1 m.

O.C. 696-2014, s. 71.

§ 3. — Intermediate protection zone

O.C. 696-2014, Sd. 2; I.N. 2014-09-01.

- **72.** An intermediate protection zone is delimited for category 1 or 2 surface water withdrawals. The limits of the zone are set at the following distances:
 - (1) 3 km around a category 1 or 2 withdrawal site, if it is located in a lake;
- (2) 15 km upstream and 100 m downstream from a category 1 or 2 withdrawal site if it is situated in the St. Lawrence River or, if it is located in the parts of the St. Lawrence River where the current may reverse due to the tide, 15 km upstream and downstream from the withdrawal site;
- (3) 10 km upstream and 50 m downstream from a category 1 or 2 withdrawal site located in any other watercourse.

The distances include surface water, portions of tributaries and a 120 m strip of land measured from the boundary of the littoral zone.

O.C. 696-2014, s. 72.

73. In addition to the prohibition provided for in section 32, the construction of the drilling site to operate an underground reservoir is prohibited in the intermediate protection zone for category 1 or 2 surface water withdrawals.

O.C. 696-2014, s. 73; S.Q. 2022, c. 10, s. 116.

§ 4. — *Outer protection zone*

O.C. 696-2014, Sd. 3; I.N. 2014-09-01.

74. An outer protection zone is delimited for category 1 water withdrawals. The limits of the zone correspond to the territory of the catchment area of the withdrawal site and include, if any, the limits of the intermediate protection zone for the withdrawal site located upstream.

O.C. 696-2014, s. 74.

§ 5. — Report sent to the Minister

O.C. 696-2014, Sd. 4; I.N. 2014-09-01.

- 75. The person responsible for category 1 surface water withdrawals must send to the Minister a report containing the following information and updates, if any:
 - (1) location of the withdrawal site and a description of its layout;
- (2) a plan showing the location of the inner, intermediate and outer protection zones, which must make it possible to determine their limits on site;
- (3) the water vulnerability ratings assessed in accordance with section 69 for each indicator provided for in Schedule IV;
- (4) with respect to the inner and intermediate protection zones, human activities, land use and potential events likely to affect the quality and quantity of the water used for the withdrawal;
- (5) with respect to the part of the outer protection zone that does not intersect with the inner and intermediate protection zones, human activities, land use and potential events likely to affect significantly the quality and quantity of the water used for the withdrawal;
- (6) an assessment of the threats the human activities and potential events recorded pursuant to subparagraphs 4 and 5 represent;
- (7) an identification of the causes that may explain, for each indicator provided for in Schedule V, the average or high levels of vulnerability of the surface water assessed.

The report must be signed by a professional, a representative of the watershed organization or a representative of the organization mandated to coordinate the regional advisory panel concerned, duly mandated by the person responsible for water withdrawal. The first report must be sent to the Minister 6 years after water withdrawal operations begin. The subsequent reports must then be sent every 5 years.

To determine if a human activity, land use or potential event is likely to affect significantly the quality and quantity of the water used for a withdrawal, its nature and importance, its location and the discharge of contaminants that may result must be taken into consideration.

The information recorded in the report is public information, except the information referred to in the subparagraphs 4, 5, 6 and 7 of the first paragraph. It must be published on the website of the person responsible for the withdrawal, if possible.

A copy of the report must be sent, as soon as possible, to the regional county municipalities whose territories intersect with the withdrawal protection zone and to municipalities whose territories intersect with an intermediate withdrawal protection zone. The information referred to in subparagraphs 1 to 3 of the first paragraph are also sent, as soon as possible, to the watershed organizations whose territories intersect with the withdrawal protection zones.

O.C. 696-2014, s. 75; O.C. 871-2020, s. 21.

CHAPTER VII

SPECIAL PROVISIONS APPLICABLE TO VILLE DE MERCIER AND OTHER CLOSE TERRITORIES

- **76.** This Chapter applies to the territories of the following municipalities
 - (1) Ville de Mercier;

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- (2) Paroisse de Saint-Isidore;
- (3) Sainte-Martine;
- (4) Saint-Urbain-Premier.

O.C. 696-2014, s. 76.

77. The drilling, excavating or operating of a groundwater withdrawal facility, except if such activities are authorized for environmental rehabilitation purposes in accordance with the Environment Quality Act (chapter Q-2), is prohibited within the perimeter described in Schedule V.

O.C. 696-2014, s. 77; I.N. 2014-09-01.

78. In the territory of a municipality to which this Chapter applies, a tube well located outside the perimeter described in Schedule V that withdraws groundwater from the bedrock must be drilled so as to cut through at least 10 m of bedrock.

O.C. 696-2014, s. 78; I.N. 2014-09-01.

79. In order to monitor the presence of vinyl chloride, the person responsible for a category 1 groundwater withdrawal facility used to supply water for human consumption or for food production or processing must, if the outer protection zone delimited pursuant to section 65 partly intersects with the area defined in Schedule V, withdraw, twice per year, groundwater samples.

The groundwater samples must be analyzed by a laboratory accredited pursuant to section 118.6 of the Environment Quality Act (chapter Q-2).

If the analysis reveals the presence of vinyl chloride, the person responsible for the facility must immediately inform the Minister. The person responsible must also send to the Minister, within 30 days after receipt of the analysis certificate provided by the accredited laboratory, a statement certifying that the measures the person has taken or intends to take to determine the cause of the problem and correct the situation.

The person responsible for the facility must record the following information in a register:

- (1) the place where the samples were taken;
- (2) the sampling method;
- (3) all analysis results.

The register must be retained for 5 years. The information recorded in the register is provided to the Minister on request.

O.C. 696-2014, s. 79.

80. The provisions of section 79 apply to every category 2 groundwater withdrawal facility used to supply water for human consumption or for food production or processing if the intermediate bacteriological protection zone delimited pursuant to section 57 partly intersects with the area defined in Schedule V.

O.C. 696-2014, s. 80.

CHAPTER VIII

ADMINISTRATIVE PROVISIONS AND SANCTIONS

DIVISION I

MONETARY ADMINISTRATIVE PENALTIES

- **81.** A monetary administrative penalty of \$250 for a natural person and \$1,000 in other cases may be imposed on any person who, in violation of this Regulation,
- (1) refuses or neglects to send a notice or report or fails to comply with the conditions or applicable deadline, if no other monetary administrative penalty is prescribed;
- (2) fails to retain, for the required time limit, any documents that the person is required to prepare or obtain;
 - (3) fails to keep the register provided for in section 49 or fails to retain it for the prescribed time limit;
- (4) fails to disclose the location of a water withdrawal site and the delimitation of a protection zone in accordance with section 52;
- (5) fails to indicate at the site the location of an inner protection zone in accordance with section 55 or removes or damages a sign installed at the site, or allows such a sign to deteriorate;
- (6) fails to submit the recommendation of a professional with an agro-environmental fertilization plan in accordance with the fourth paragraph of section 64.

O.C. 696-2014, s. 81.

82. A monetary administrative penalty of \$350 for a natural person and \$1,500 in other cases may be imposed on any person who refuses or neglects to send the reports referred to in section 68 or 75 or to provide all the information that must be included in the reports, or fails to comply with the conditions or applicable deadlines.

O.C. 696-2014, s. 82.

- **83.** A monetary administrative penalty of \$500 for a natural person and \$2,500 in other cases may be imposed on any person who
 - (1) fails to take a sample or measurement in accordance with this Regulation;
 - (2) fails to conduct an analysis, test, monitoring or check in accordance with this Regulation;
 - (3) fails to make a water withdrawal facility accessible in accordance with section 14.

O.C. 696-2014, s. 83; I.N. 2014-09-01.

- **84.** A monetary administrative penalty of \$750 for a natural person and \$3,500 in other cases may be imposed on any person who
- (1) fails to construct a facility in accordance with a standard provided for in paragraph 1 of section 13, section 16 or 17, the first paragraph of section 22, sections 23 to 28 or subparagraph 2 or 3 or subparagraphs 5 to 7 of section 29;
- (2) fails to seal a water withdrawal facility in accordance with section 19 or fails to minimize damage to the seal during subsequent work;

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- (3) fails to plug the groundwater withdrawal facility in accordance with section 20;
- (4) fails to construct groundwater observation wells in accordance with section 39;
- (5) (paragraph revoked).

O.C. 696-2014, s. 84; I.N. 2014-09-01; O.C. 871-2020, s. 22; S.Q. 2022, c. 10, s. 117.

- **85.** A monetary administrative penalty of \$1,000 for a natural person and \$5,000 in other cases may be imposed on any person who
- (1) fails to comply with the conditions for performing an activity in accordance with section 18, the second paragraph of section 22, section 62, the first, second or third paragraph of section 64 or the second paragraph of section 71;
 - (2) fails to carry out an initial characterization study in accordance with section 37;
 - (3) fails to notify the Minister in accordance with the third paragraph of section 48;
 - (4) fails to assess water vulnerability ratings in accordance with section 53 or 69;
- (5) fails to delimit the protection zones in accordance with section 54, 57 or 65 where the delimitation is determined by a professional.

O.C. 696-2014, s. 85; O.C. 871-2020, s. 23; S.Q. 2022, c. 10, s. 118.

- **86.** A monetary administrative penalty of \$1,500 for a natural person and \$7,500 in other cases may be imposed on any person who
- (1) performs an activity prohibited by sections 15, 32, 56, 58 to 61, 63 or 66, the first paragraph of section 71 or section 73;
- (2) constructs a water withdrawal facility or a ground-source geothermal system in contravention of paragraph 2 of section 13 or subparagraph 1 or 4 of section 29;
 - (3) (paragraph revoked);
 - (4) (paragraph revoked).

O.C. 696-2014, s. 86; I.N. 2014-09-01; S.Q. 2022, c. 10, s. 119.

- **87.** A monetary administrative penalty of \$2,000 for a natural person and \$10,000 in other cases may be imposed on any person who
 - (1) drills, digs or operates a water withdrawal facility in violation of section 77 or 78;
- (2) fails to carry out preventive monitoring, to have monitoring samples analyzed by a laboratory accredited pursuant to section 118.6 of the Environment Quality Act (chapter Q-2) or to notify the Minister of the analysis results for the samples and the measures planned to correct the situation in accordance with section 79.

O.C. 696-2014, s. 87.

DIVISION II

PENAL SANCTIONS

88. Every person who

- (1) refuses or neglects to send a notice or report or to provide any information or document required under this Regulation, or fails to comply with the conditions and applicable time limit,
 - (2) fails to retain, for the prescribed time limit, the documents the person is required to prepare or obtain,
- (3) fails to keep the register provided for in section 49 or fails to retain the register for the prescribed time limit,
 - (4) fails to disclose the presence and delimitation of a protection zone in accordance with section 52,
- (5) fails to indicate at the site the location of an inner protection zone in accordance with section 55 or removes or damages a sign installed at the site, or allows such a sign to deteriorate,
- (6) fails to submit the recommendation of a professional with an agro-environmental fertilization plan in accordance with the fourth paragraph of section 64,
- (7) fails to comply with an obligation imposed by this Regulation that is not otherwise sanctioned under this Division or under Chapter VII of Title I of the Environment Quality Act (chapter Q-2),

commits an offence and is liable to a fine of \$1,000 to \$100,000 in the case of a natural person or \$3,000 to \$600,000 in other cases.

O.C. 696-2014, s. 88; I.N. 2019-12-01.

89. Every person who refuses or neglects to send the reports referred to in section 68 or 75 or to provide all the information that must be included in the reports, or fails to comply with the conditions or applicable deadlines, commits an offence and is liable to a fine of \$2,000 to \$100,000 in the case of a natural person or \$6,000 to \$600,000 in other cases.

O.C. 696-2014, s. 89; I.N. 2014-09-01.

90. Every person who

- (1) fails to take a sample or measurement in accordance with this Regulation,
- (2) fails to conduct an analysis, test, monitoring or check in accordance with this Regulation,
- (3) fails to make a water withdrawal facility accessible in accordance with section 14,

commits an offence and is liable to a fine of \$2,500 to \$250,000 in the case of a natural person or \$7,500 to \$1,500,00 in other cases.

O.C. 696-2014, s. 90.

91. Every person who

- (1) fails to construct a facility in accordance with a standard provided for in paragraph 1 of section 13, section 16 or 17, the first paragraph of section 22, sections 23 to 28 or subparagraph 2 or 3 or subparagraphs 5 to 7 of section 29,
- (2) fails to seal a water withdrawal facility in accordance with section 19 or fails to minimize damage to the seal during subsequent work,
 - (3) fails to plug the groundwater withdrawal facility in accordance with section 20,
 - (4) fails to construct groundwater observation wells in accordance with section 39,
 - (5) (paragraph revoked),

commits an offence and is liable to a fine of \$4,000 to \$250,000 in the case of a natural person or \$12,000 to \$1,500,000 in other cases.

O.C. 696-2014, s. 91; I.N. 2014-09-01; O.C. 871-2020, s. 24; S.Q. 2022, c. 10, s. 120.

92. Every person who

- (1) provides false or misleading information,
- (2) fails to comply with the conditions for the performance of an activity in accordance with section 18, the second paragraph of section 22, section 62, the first, second or third paragraph of section 64 or the second paragraph of section 71,
 - (3) fails to carry out an initial characterization study in accordance with section 37,
 - (4) fails to notify the Minister in accordance with section 48,
 - (5) fails to assess water vulnerability ratings in accordance with section 53 or 69,
- (6) fails to delimit the protection zones in accordance with section 54, 57 or 65 where the delimitation is determined by a professional,

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. 696-2014, s. 92; O.C. 871-2020, s. 25; S.Q. 2022, c. 10, s. 121.

93. Every person who

- (1) performs an activity prohibited by sections 15, 32, 56, 58 to 61, 63 or 66, the first paragraph of section 71 or section 73,
- (2) constructs a water withdrawal facility or a ground-source geothermal system in contravention of paragraph 2 of section 13 or subparagraph 1 or 4 of section 29,
 - (3) (paragraph revoked),
 - (4) (paragraph revoked),

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. 696-2014, s. 93; I.N. 2014-09-01; S.Q. 2022, c. 10, s. 122.

94. Every person who

- (1) drills, digs or operates a water withdrawal facility in contravention of section 77 or 78,
- (2) fails to carry out preventive monitoring, to have monitoring samples analyzed by a laboratory accredited pursuant to section 118.6 of the Environment Quality Act (chapter Q-2) or to notify the Minister of the analysis results for the samples and the measures planned to correct the situation in accordance with section 79,

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. 696-2014, s. 94; I.N. 2014-09-01.

CHAPTER IX

TRANSITIONAL AND FINAL

95. The distance provided for in subparagraph 2 of the first paragraph of section 17 does not apply to the substantial modification of a groundwater withdrawal facility constructed between 15 June 2003 and 2 March 2015 if its annular space has been sealed in accordance with section 10 of the Groundwater Catchment Regulation (chapter Q-2, r. 6). The applicable distance is then 15 m or more from a non-watertight waste water treatment system.

O.C. 696-2014, s. 95; O.C. 871-2020, s. 26.

- **95.1.** Every person who fails to comply with the requirements of section 95
- (1) may have a monetary administrative penalty imposed in the amount of \$750 for a natural person and \$3,500 in other cases;
- (2) commits an offence and is liable to a fine of \$4,000 to \$250,000 in the case of a natural person and \$12,000 to \$1,500,000 in other cases.

O.C. 871-2020, s. 26.

96. Despite section 54 of this Regulation, the limits of the inner protection zone of a category 1 or 2 groundwater withdrawal site used since the coming into force of the Groundwater Catchment Regulation (chapter Q-2, r. 6), namely 15 June 2002, may be set less than 30 m from the withdrawal site given obstacles present, such as the size of the land, a road or a dwelling.

O.C. 696-2014, s. 96.

97. The person responsible for an animal waste storage facility or a composting area located in the bacteriological protection zone for groundwater withdrawals made for human consumption or food processing purposes on the date of coming into force of this section (2014-08-14), must have the facility, yard or area assessed by a professional not later than 4 years after the date of coming into force of this section (2018-08-14).

The professional who has carried out an assessment referred to in the first paragraph must send to the person responsible for the groundwater withdrawal facility and to the Minister a watertightness certificate or a recommendation concerning the corrective measures required to make the facility watertight after a watertightness deficiency is noted or, if no corrective measure is possible, the choice of a new location outside the protection zone where operations can continue. In the latter case, the plans and specifications for the new facility, yard or area must be submitted with the recommendation.

The professional's recommendation must be implemented not later than 2 years following its receipt. The work linked to the recommendation must be carried out under the supervision of a professional who must send, to the person responsible for the withdrawals and to the Minister when the work is completed, a watertightness certificate for the facility, yard or area concerned as soon as possible.

O.C. 696-2014, s. 97.

- **98.** Every person who fails to have the watertightness of a facility assessed in accordance with the first paragraph of section 97 or who fails to comply with the requirements of that section, if a watertightness deficiency is noted,
- (1) may have a monetary administrative penalty imposed in the amount of \$750 for a natural person and \$3,500 in other cases:
- (2) is guilty of an offence and is liable to a fine of \$4,000 to \$250,000 in the case of a natural person and \$12,000 to \$1,500,000 in other cases.

O.C. 696-2014, s. 98.

- **99.** The reports required under in sections 68 and 75 of this Regulation must be sent to the Minister not later than
- (1) 6 years after the date of coming into force of sections 68 and 75 of this Regulation (2015-04-01), in the case where the water withdrawals concerned are already in operation on that date;
- (2) 6 years after the beginning of the withdrawal operations, in the case where the water withdrawals concerned are authorized on the date of coming into force of sections 68 and 75 of this Regulation (2015-04-01), but are not yet in operation at that date; to that end, the person responsible for the water withdrawals concerned must inform the Minister of the beginning date of the withdrawal operations not later than 30 days after that date.

Until then, the person responsible for the groundwater withdrawals referred to in section 68 of this Regulation, where the withdrawal is in operation on 14 August 2014, must make public the information required under subparagraphs 1 to 3 of the first paragraph of section 25 of the Groundwater Catchment Regulation (chapter Q-2, r. 6), including by a publication on the website of the person responsible where such a publication is possible.

O.C. 696-2014, s. 99.

- **100.** Every person who refuses or neglects to send the reports or information provided for in section 99 or does not comply with the prescribed time limit for filing them
- (1) may be imposed an administrative monetary penalty of \$350 in the case of a natural person or \$1,500 in other cases;
- (2) commits an offence and is liable to a fine of \$2,000 to \$100,000 in the case of a natural person or \$6,000 to \$600,000 in other cases.

O.C. 696-2014, s. 100.

101. (*Revoked*).

O.C. 696-2014, s. 101; O.C. 871-2020, s. 27.

102. (*Revoked*).

O.C. 696-2014, s. 102; O.C. 871-2020, s. 27.

103. (*Revoked*).

O.C. 696-2014, s. 103; O.C. 871-2020, s. 27.

104. The terms "groundwater catchment facility", "groundwater catchment works" and "water supply intake", as used in an Act, regulation or other document, must be read as referring to a groundwater withdrawal facility.

O.C. 696-2014, s. 104.

105. Municipalities are responsible for the application of the provisions of Chapters III and IV, and of sections 78 and 79 of this Regulation to the extent that those sections concern water withdrawals or geothermal systems situated in a territory under the authority of the municipality concerned.

To accomplish their responsibilities under the first paragraph, Division I of Chapter VIII of this Regulation does not apply.

O.C. 696-2014, s. 105.

106. The standards of this Regulation concerning the protection of water withdrawals for human consumption or food processing purposes are evaluated 3 years after the coming into force of this Regulation (2014-08-14) and every 5 years after that on the basis of the evolution of the applicable scientific and technical knowledge in that respect.

O.C. 696-2014, s. 106.

107. This Regulation replaces the Groundwater Catchment Regulation (chapter Q-2, r. 6). However, the provisions of Chapter II and Schedule I to that Regulation remain applicable until 2 March 2015.

O.C. 696-2014, s. 107.

108. (Omitted).

O.C. 696-2014, s. 108.

SCHEDULE I

(ss. 21, 28 and 30)

CONTENT OF REPORT

- (1) For the purposes of this Schedule, "facility" means a water withdrawal facility, the discharge facility of a geothermal system that withdraws water, and a ground-source geothermal system.
- (2) The information required to draw up the drilling report consists of
- (1) the name of the owner of the place where the facility is installed;
- (2) the location of the place where the facility is installed (number, street, municipality, postal code, cadastral designation, latitude and longitude expressed in decimal degrees using the NAD 83 coordinate system and measured using a GPS device or other instrument of equivalent precision);
- (3) the units of measurement used in the report (all information in the report must be expressed using the same units of measurement);
- (4) the intended use of the facility installed;
- (5) the number of the permit issued by the municipality concerned;
- (6) the number of the licence issued by the Régie du bâtiment du Québec;
- (7) the construction method used (drilling, excavation, driving);
- (8) whether the work concerned was intended to deepen an existing well;
- (9) the date of construction;
- (10) the diameter or diameters drilled, and the depth of each diameter drilled;
- (11) the presence of gas or saltwater during construction;
- (12) in the case of a sealed well, the height of the seal and the materials used for the seal;
- (13) the length, diameter and type of casing installed, and the length of the casing above ground level;
- (14) the length, diameter, opening and type of perforated casing installed, if any;
- (15) the length, diameter and type of additional or support tubing installed, if any;
- (16) the type and thickness of the layers drilled;
- (17) the following information on the flow tests conducted, if any:
- (a) the date of the flow test;
- (b) the water level at the end of the work;
- (c) the duration of the flow test:
- (d) the flow rate of the facility;

ENVIRONMENT QUALITY — WATER WITHDRAWAL AND PROTECTION

(e) the pumping method.

O.C. 696-2014, Sch. I.

SCHEDULE II

(s. 37)

INITIAL CHARACTERIZATION STUDY

- (1) The following physico-chemical parameters must be measured on-site during sampling:
- (1) specific electric conductivity;
- (2) pH;
- (3) oxydo-reduction potential;
- (4) temperature;
- (5) turbidity, where a water sample is taken from a surface water withdrawal site.
- (2) The samples collected must be analyzed for the following substances and parameters:
- (1) organic compounds:
- (a) total BTEX (benzene, toluene, ethylbenzene, xylene);
- (b) total organic carbon (C);
- (c) ethane (C_2H_6) ;
- (d) polycyclic aromatic hydrocarbons (PAHs);
- (e) petroleum hydrocarbons (C₁₀-C₅₀);
- (f) dissolved and, if applicable, stable isotopic signature

(f) dissolved and, if applicable, stable isotopic signature ($\delta^{13}C$) of methane, if any;

(g) propane (C_3H_8) .
(2) dissolved inorganic compounds:
(a) aluminum (Al);
(b) antimony (Sb);
(c) silver (Ar);
(d) arsenic (As);
(e) barium (Ba);
(f) beryllium (Be);
(g) bismuth (Bi);
(h) boron (B);
(i) bromium (Br);
(j) cadmium (Cd);
(k) calcium (Ca);
(1) chlorides;
(m) chrome (Cr);
(n) cobalt (Co);
(o) copper (Cu);
(p) tin (Sn);
(q) iron (Fe);
(r) fluorides (F);
(s) lithium (Li);
(t) magnesium (Mg);
(u) manganese (Mn);
(v) molybdenum (Mo);
(w) nickel (Ni);
(x) nitrites + nitrates;
(y) lead (Pb);
(z) potassium (K);
(aa) radium (Ra) 226;

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(bb) selenium (Se);
(cc) silicon (Si);
(dd) sodium (Na);
(ee) strontium (Sr);
(ff) sulphates;
(gg) sulphides;
(hh) thallium (Tl)
(ii) total thorium (Th);
(jj) titanium (Ti);
(kk) uranium (U);
(ll) vanadium (V);
(mm) zinc (Zn);
(3) the following parameters:
(a) alkalinity;
(b) total dissolved and suspended solids.
(3) (Revoked).
(4) (Revoked).
O.C. 696-2014, Sch. II; O.C. 871-2020, s. 28.
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SCHEDULE III

(s. 47)

GROUNDWATER MONITORING

- (1) (Revoked).
- (2) The samples collected during groundwater monitoring must be analyzed for the following substances:
- (1) total BTEX (benzene, toluene, ethylbenzene, Xylene);
- (2) chlorides;
- (3) petroleum hydrocarbons (C₁₀-C₅₀);
- (4) dissolved methane;
- (5) dissolved solids.
- (3) The following physico-chemical parameters must be measured on-site during the sampling:
- (1) specific electric conductivity;
- (2) pH;
- (3) oxydo-reduction potential;
- (4) temperature.
- (4) (Revoked).
- (5) (*Revoked*).

O.C. 696-2014, Sch. III; O.C. 871-2020, s. 29.

SCHEDULE IV

(ss. 69 and 75)

VULNERABILITY OF SURFACE WATER

Physical vulnerability of withdrawal site

- (1) The physical vulnerability of the withdrawal site must be assessed using the most restrictive of the following methods:
- (1) a historical review of all the natural or anthropic events recorded pursuant to section 22.0.4 of the Regulation respecting the quality of drinking water (chapter Q-2, r. 40), over a consecutive 5-year period, that may have affected the condition of the withdrawal site, allowing water vulnerability to be rated as follows:
- (a) high if more than 1 distinct event is recorded;
- (b) medium if a single distinct event is recorded;
- (c) low if no events are recorded;
- (2) a high rating assessment by a professional who certifies in writing that the location of the withdrawal site is a cause for concern because of the hydro-dynamic characteristics of the body of water, of water extraction, development or harnessing projects upstream, of a forecast increase in water demand, or of the anticipated effects of climate change.

Water vulnerability to microorganisms

- (2) Water vulnerability to microorganisms is assessed using one of the following methods:
- (1) a compilation, over a consecutive 5-year period, of the results of an analysis of raw water samples withdrawn in accordance with the Regulation respecting the quality of drinking water for *Escherichia coli* bacteria, including the samples taken pursuant to section 22.0.1. The compilation is used to rate water vulnerability as follows:
- (a) high if the analysis results show a median value above 150 UFC/100 ml or if the value of the 95th percentile is above 1500 UFC/100 ml;
- (b) medium if vulnerability is neither low nor high;
- (c) low if the analysis results show a median value below 15 UFC/100 ml and if the value of the 95th percentile is below 150 UFC/100 ml;
- (2) when the method in paragraph 1 cannot be used, water vulnerability is rated as follows:
- (a) high, if the inner protection zone for the withdrawals is wholly situated in an urban area, or if at least one overflow from a combined or semi-separated sewer system likely to discharge raw or partially untreated sewage following a storm, continuous rain or a snow melt is located in the inner or intermediate protection zone;
- (b) medium if vulnerability is neither low nor high;
- (c) low, if the withdrawal site is situated downstream from an agglomeration served by a combined or semi-separated sewer system, a livestock raising operation, a food processing industry or another establishment likely to discharge pathogenic microorganisms or microorganisms indicating a contamination of fecal origin into the watercourse.

Water vulnerability to fertilizers

- (3) Water vulnerability to fertilizers is assessed using the most restrictive of the following methods:
- (1) a compilation, over a consecutive 5-year period, of the results of an analysis of raw water samples withdrawn in accordance with section 22.0.1 of the Regulation respecting the quality of drinking water for total phosphorous. The compilation is used to rate water vulnerability as follows:
- (a) in a lake:
- i. high if the average result is equal to or greater than 20 μ g/l P;
- ii. medium if the average result is between 10 μ g/l P and 20 μ g/l P;
- iii. low if the average result is equal to or les than 10 µg/l P;
- (b) in any other watercourse:
- i. high if the average result is equal to or greater than 50 µg/l P;
- ii. medium if the average result is between 30 μ g/l P and 50 μ g/l P;
- iii. low if the average result is equal to or less than 30 μ g/l P;
- (2) a historical review of all events recorded pursuant to section 22.0.4 of the Regulation respecting the quality of drinking water in a watercourse over a consecutive 5-year period involving cyanobacteria, algae or aquatic plant proliferations or increases in ammoniacal nitrogen, allowing water vulnerability to be rated as follows:
- (a) high if 5 or more events are recorded;
- (b) medium if 2 to 4 events are recorded;
- (c) low if 1 or no events are recorded;
- (3) when the methods in paragraphs 1 and 2 cannot be used, water vulnerability must be assessed by a professional based on the potential impact of anthropic activities recorded in the outer protection zone for the water withdrawals in terms of the introduction of fertilizers that may affect the water withdrawn.

Water vulnerability to turbidity

- (4) Vulnerability to turbidity must be assessed using one of the following methods:
- (1) a compilation, over a consecutive 5-year period, of the results of an analysis of raw water samples withdrawn in accordance with section 22.0.2 of the Regulation respecting the quality of drinking water for turbidity. The compilation is used to rate water vulnerability as follows:
- (a) high if the value of the 99th percentile is equal to or greater than 100 NTU (nephelometric turbidity unit);
- (b) low in other cases;
- (2) when the method in paragraph 1 cannot be used, water vulnerability must be assessed by a professional based on the potential impact of the natural characteristics of the outer protection zone for the water withdrawals and human acitivites carried out on water turbidity.

Water vulnerability to inorganic substances

(5) Vulnerability to inorganic substances must be assessed using one of the following methods:

- (1) a compilation, over a consecutive 5-year period, of the results of an analysis of water supply samples withdrawn in accordance with section 14 of the Regulation respecting the quality of drinking water for inorganic substances associated with the source. The compilation is used to rate water vulnerability as follows:
- (a) high if, for at least one substance, 2 of the values analyzed are equal to or greater than 50% of the applicable standard;
- (b) medium if
- i. for at least one substance, 2 of the values analyzed are between 20% and 50% of the applicable standard;
- ii. for at least one substance, 1 of the values analyzed is between 20% and 50% of the applicable standard and 1 other value is equal to or greater than 50% of the applicable standard;
- (c) low in other cases;
- (2) when the method in paragraph 1 cannot be used, the total of all the areas used for industrial, commercial or agricultural activities in the strips of land 120 m wide in the intermediate protection zone delimited for water withdrawals is used to rate water vulnerability as follows:
- (a) high, if the total is equal to or greater than 50% of the total area of the strips of land 120 m wide in the intermediate protection zone;
- (b) medium, if the total area is between 20% and 50% of the total area of the strips of land 120 m wide in the intermediate protection zone;
- (c) low, if the total area is equal to or less than 20% of the total area of the strips of land 120 m wide in the intermediate protection zone.

Water vulnerability to organic substances

- (6) Vulnerability to organic substances must be assessed using one of the following methods:
- (1) a compilation, over a consecutive 5-year period, of the results of an analysis of water supply samples withdrawn in accordance with section 19 of the Regulation respecting the quality of drinking water for inorganic substances associated with the source. The compilation is used to rate water vulnerability as follows:
- (a) high if, for at least one substance, 2 of the values analyzed are equal to or greater than 50% of the applicable standard;
- (b) medium if
- i. for at least one substance, 2 of the values analyzed are between 20% and 50% of the applicable standard;
- ii. for at least one substance, 1 of the values analyzed is between 20% and 50% of the applicable standard and 1 other value is equal to or greater than 50% of the applicable standard;
- (c) low in other cases;
- (2) when the method in paragraph 1 cannot be used, the total of all the areas used for industrial, commercial or agricultural activities in the strips of land 120 m wide in the intermediate protection zone delimited for water withdrawals is used to rate water vulnerability as follows:
- (a) high, if the total is equal to or greater than 50% of the total area of the strips of land 120 m wide in the intermediate protection zone;

- (b) medium, if the total area is between 20% and 50% of the total area of the strips of land 120 m wide in the intermediate protection zone;
- (c) low, if the total area is equal to or less than 20% of the total area of the strips of land 120 m wide in the intermediate protection zone.

O.C. 696-2014, Sch. IV; I.N. 2015-11-01.

SCHEDULE V

(ss. 77, 78, 79 and 80)

DELIMITATION OF A PERIMETER IN VILLE DE MERCIER AND IN OTHER CLOSE TERRITORIES

CONTAMINATED PERIMETER

CANADA

PROVINCE OF QUÉBEC

DISTRICT OF BEAUHARNOIS

Technical description

Namely, the whole territory forming part of Municipalité de Sainte-Martine, MRC de Beauharnois-Salaberry and Ville de Mercier, MRC de Rousillon and bounded by the limits of the following perimeter:

Starting from point "A" located at the meeting point of the southeast right-of-way of Boulevard Sainte-Marguerite and of the northeastern limit of lot 249 of the cadastre of Paroisse de Sainte-Philomène, thence, in a southeasterly direction following the northeastern limit of lot 249 to point "B" located at the limit of the cadastre of the parishes of Sainte-Philomène and Saint-Isidore, southeastern limit of Ville de Mercier; thence, in a southwesterly direction following the limit of the cadastre of the parishes of Sainte-Philomène and Saint-Isidore to point "C" located at the meeting point of that last limit and of the northeastern limit of the first concession of the cadastre of Paroisse de Saint-Urbain-Premier; thence, in a northerly direction following the northeastern limit of that first concession to point "D" located at the northern apex of lot 1 of the cadastre of Paroisse de Saint-Urbain-Premier; thence, in a southwesterly direction following the limit of the cadastre of the parishes of Sainte-Martine and Saint-Urbain-Premier to point "E" located at the meeting point of that last limit and of the southwestern limit of lot 289 of the cadastre of Paroisse de Sainte-Martine; thence, in a northwesterly direction following and along the extension of the southwestern limit of lot 289 to point "F" located along the northwest right-of-way of rang Saint-Joseph; thence, in a northeasterly direction following the northwest right-of-way of rang Saint-Joseph to point "G" located at the meeting point of that last right-ofway and of the southwestern limit of lot 183 of the cadastre of Paroisse de Sainte-Martine; thence, in a westerly direction following the southwestern limit of lot 183 to point "H" located along the southeast right-of way of Boule-vard Saint-Jean-Baptiste; thence, in a northeasterly direction following the southeast right-ofway of Boulevard Saint-Jean-Baptiste to point "I" located at the meeting point of that last right-of-way and of the northeastern limit of lot 129 of the cadastre of Paroisse de Sainte-Philomène; thence, in a southeasterly direction following and along the extension of the northeastern limit of lot 129 to point "J" located at the meeting point of that last limit and of the stream called "Branche 10 de la Rivière de l'Esturgeon", located for the one part at the southeastern limit of lot 129; thence, in a northeasterly direction following the meanders of the southeast bank of that stream to point "K" located at the meeting point of that last bank or its extension and of the northeastern limit of lot 144 of the cadastre of Paroisse de Sainte-Philomène; thence, in a southeasterly direction following and along the extension of the northeastern limit of lot 144 to point "L" located along the southeast right-of-way of Boulevard Sainte-Marguerite; thence, in a southwesterly direction following that right-of-way to the starting point "A".

The whole as shown on the attached map that is an integral part of the technical description.

Québec, 11 June 2002

ANDRÉ GAGNÉ,

Land Surveyor

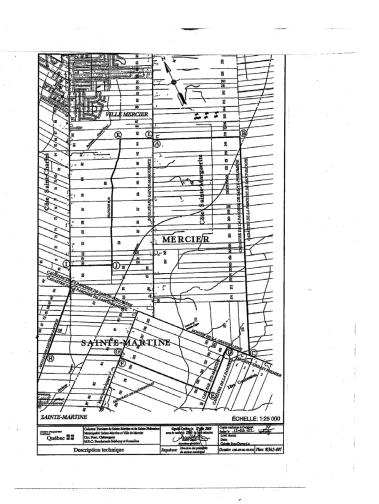
Minute: 2214

Map: 10342-001

File: 4116-03-04-93-034

SCHEDULE V

WATER WITHDRAWAL AND PROTECTION REGULATION



O.C. 696-2014, Sch. V.

UPDATES

O.C. 696-2014, 2014 G.O. 2, 1589

S.Q. 2017, c. 14, s. 51

S.Q. 2016, c. 35, ss. 267 and 268

O.C. 871-2020, 2020 G.O. 2, 2343A

O.C. 1596-2021, 2022 G.O. 2, 6

S.Q. 2022, c. 10, ss. 109 to 122