## **Regulation amending the Regulation** 75,0 respecting the maximum number of taxi

owner's permits per taxi servicing area and certain conditions of operation

An Act respecting transportation services by taxi (R.S.Q., c. S-6.01)

**1.** The schedule of the Regulation respecting the maximum number of taxi owner's permits per taxi servicing area and certain conditions of operation is amended with the replacement of the number 10 by the number 5 in the Taxi Owner's Permits column for the Saint-Félicien servicing area (administrative number: 209102).

**2.** This Regulation comes into force 15 days after the date of its publication in the *Gazette officielle du Québec*.

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### **Draft Regulation**

Environment Quality Act (R.S.Q., c. Q-2)

An Act to affirm the collective nature of water resources and provide for increased water resource protection (R.S.Q., c. C-6.2)

Pesticides Act (R.S.Q., c. P-9.3)

Water Withdrawal and Protection Regulation and Regulation respecting the application of the Environment Quality Act, Regulation respecting waste water disposal systems for isolated dwellings, Regulation respecting the quality of drinking water, Regulation respecting contaminated soil storage and contaminated soil transfer stations and Pesticides Management Code — Amendment

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (R.S.Q., c. R-18.1) and section 124 of the Environment Quality Act (R.S.Q., c. Q-2), that the Water Withdrawal and Protection Regulation, appearing below, may be made by the Government on the expiry of 60 days following this publication.

The draft Regulation sets out the requirements for authorizations issued for water withdrawals under section 31.75 of the Environment Quality Act, in particular by specifying that certain water withdrawals require authorization even with a maximum flow rate below 75,000 litres per day, and that certain other withdrawals do not require authorization. In addition, it stipulates the contents of an application for authorization and an application for the renewal of authorization, and specifies a term for the authorization that differs from the term set out in section 31.81 of the Environment Quality Act for certain types of water withdrawals.

The draft Regulation also prescribes water quality protection standards, in particular by setting rules for the installation of certain water withdrawal facilities and underground facilities that may be in contact with groundwater. The draft Regulation specifies that some of the rules will be applied by municipalities, and that some withdrawals made using the facilities will require a permit from the municipality concerned when they do not require an authorization under section 31.75 of the Environment Quality Act.

The draft Regulation sets out special rules for water withdrawn for drinking water or food processing purposes. The rules require the persons responsible for the facilities used to withdraw the water to delimit zones around the withdrawal site to protect the water withdrawn. The size of the area delimited will depend on the categories of water withdrawal set out in the draft Regulation, and on the level of protection needed. Various activities liable to affect water quality, including agricultural activities, will be prohibited within the protection zones. The draft Regulation specifies that the persons responsible for larger water withdrawal sites will have to prepare and submit information on their protection zones and water vulnerability within those zones. It also requires those persons to take samples and record observations, and to record the information in a register that they must keep and make available to the Minister.

The draft Regulation includes administrative and penal provisions to ensure compliance, in addition to the administrative and penal provisions in the Environment Quality Act. It sets out transitional provisions, along with provisions to amend other regulations under the Environment Quality Act and the Pesticides Act, in particular following the replacement of the Groundwater Catchment Regulation.

Study of the matter has shown no specific negative impact on small and medium-sized businesses. The measures proposed will have most impact on enterprises that withdraw large quantities of water of 75,000 or more litres per day. The net cost of the measures for all private enterprises is practically zero, but is estimated at roughly \$25 million over 15 years for municipalities in Québec. In the agricultural sector, major gains in terms of the area of farmable land may be made. The fee for filing an application for authorization will be the same as the fee for making an application for groundwater catchment under section 31 of the Groundwater Catchment Regulation (R.R.Q., c. Q-2, r. 6). Lastly, the penal sanctions have been increased to harmonize them with the new sanctions set out in the Act to amend the Environment Quality Act in order to reinforce compliance (2011, c. 20).

Further information may be obtained by contacting

Normand Boulianne, Division Head Service de l'aménagement et des eaux souterraines Direction des politiques de l'eau Ministère du Développement durable, de l'Environnement et des Parcs Édifice Marie-Guyart 675, boulevard René-Lévesque Est, 8<sup>e</sup> étage Québec (Québec) G1R 5V7 Telephone: 418 521-3885, extension 4856 Fax: 418 643-0252 Email: normand.boulianne@mddep.gouv.qc.ca

Any person wishing to comment on the draft Regulation is requested to submit written comments within the 60-day period to the above address.

PIERRE ARCAND, Minister of Sustainable Development, Environment and Parks

# Water Withdrawal and Protection Regulation

Environment Quality Act

(R.S.Q., c. Q-2, s. 31, 1st par., subpars. *e* and *m*, s. 31.75, 2nd par., subpars 1 and 3, s. 31.81, 2nd par., s. 31.95, s. 46, pars. *r* and *s*, subpars. 1 to 2.1, 2.3 to 2.6, 3 and 4, s. 86 and s. 115.34)

An Act to affirm the collective nature of water resources and provide for increased water resource protection

(R.S.Q., c. C-6.2, ss. 33, 34 and 35)

### CHAPTER I

GENERAL

**1.** The object of this Regulation is to set the terms and conditions for the granting of authorizations to withdraw water, as provided for in section 31.75 of the Environment Quality Act (R.S.Q., c. Q-2), and to prescribe certain standards for water withdrawals, water withdrawal facilities and underground facilities that may affect the quality of water withdrawn in the vicinity. It ensures, in particular, the protection of water withdrawn for distribution as drinking water.

The Regulation applies to all water withdrawals referred to in section 31.74 of the Environment Quality Act and, unless otherwise indicated, applies to both surface water withdrawals and groundwater withdrawals.

The Regulation applies in a reserved area and an agricultural zone established under the Act respecting the preservation of agricultural land and agricultural activities (R.S.Q., c. P-41.1).

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

"person responsible" means the operator or owner;

"professional" means a professional within the meaning of section 1 of the Professional Code (R.S.Q., c. C-26), belonging to an order responsible for the exercise of a professional activity referred to in this Regulation; it also means any other person legally authorized to exercise that activity in Québec;

"watercourse" means a mass of water running along a bed in a regular or intermittent flow, except a common ditch, a ditch along a public or private road, or a drainage or irrigation ditch within the meaning of section 103 de la Municipal Powers Act (R.S.Q., c. C-47.1);

"wetland" means an environment dominated by hydrophytes or composed of hydric soils, such as ponds, marshes, swamps and peatlands;

"withdrawal site" means the place where water enters a facility installed to make water withdrawals.

The terms "lakeshore or riverbank" and "floodplain" have the meaning given in the Protection Policy for Lakeshores, Riverbanks, Littoral Zones and Floodplains (R.R.Q., c. Q-2, r. 35).

**3.** To determine whether a water withdrawal requires an authorization under section 31.75 of the Environment Quality Act, or to determine a category of water withdrawal, all the water withdrawals made at withdrawal sites connected to the same facility, establishment or waterworks system are deemed to constitute a single water withdrawal.

**4.** For the purposes of section 31.95 of the Environment Quality Act, the average quantity of water withdrawn or consumed is calculated over a period of 90 consecutive days that constitutes the period of maximum water withdrawal or consumption.

#### AUTHORIZATION FOR WATER WITHDRAWALS

#### DIVISION I WATER WITHDRAWALS REQUIRING AUTHORIZATION

**5.** A water withdrawal for purposes of human consumption requires authorization under section 31.75 of the Environment Quality Act, even if the maximum flow rate is less than 75,000 litres per day, if it is used to supply

(1) over 20 persons;

(2) a temporary industrial camp housing more than 80 persons at a time or set up to salvage timber following a natural disaster.

For the purposes of this section, a "temporary industrial camp" means a group of facilities and appurtenances set up temporarily by an employer to house persons employed or supervised by that employer, for a period of not more than 6 months out of the 12 months after the camp is set up.

The number of persons supplied by a water withdrawal is calculated using the method established by Schedule 0.1 to the Regulation respecting the quality of drinking water (R.R.Q., c. Q-2, r. 40).

#### **DIVISION II**

# WATER WITHDRAWALS NOT REQUIRING AUTHORIZATION

**6.** The following water withdrawals do not require authorization under section 31.75 of the Environment Quality Act:

(1) water withdrawals that use a drain installed around a building's foundations;

(2) water withdrawals that use a drainage ditch or drain to lower the local water table, if the ditch or drain is not connected to an active pumping system, is not intended to dry a wetland, and is not designed to carry water to a place where it is or will be used. A ditch created for the operation of a quarry or sand pit within the meaning of the Regulation respecting pits and quarries (R.R.Q., c. Q-2, r. 7) is excluded;

(3) water withdrawals from a body of water the bed of which is hydraulically linked to the water table, provided the body of water is no more than 4 metres deep and is located more than 200 metres from a lake, watercourse, wetland or groundwater withdrawal site; (4) temporary and non-recurring water withdrawals as part of mining exploration activities, other than gas or petroleum prospection or extraction or withdrawals made for the purposes of dewatering or keeping dry mine shafts, access ramps to a mine or mine workings;

(5) non-recurring water withdrawals whose duration does not exceed 180 days, carried out as part of civil engineering work;

(6) non-recurring withdrawals whose duration does not exceed 30 days, carried out to analyze the performance of a withdrawal facility or to establish the properties of a geological aquifer.

#### DIVISION III APPLICATION FOR AUTHORIZATION

**7.** An application for a water withdrawal authorization under section 31.75 of the Environment Quality Act must be sent in writing to the Minister and include the following information and documents:

(1) the applicant's contact information;

(2) if the applicant is a municipality, legal person, partnership or association, a certified copy of the deed authorizing the application;

(3) the Québec business number assigned to the applicant after registration in the register of sole proprietorships, partnerships and legal persons;

(4) a description of the water withdrawal project and its characteristics, in particular concerning its operation and including the maximum volume of water that is expected to be withdrawn and discharged on a daily, weekly and monthly basis;

(5) with regard to the withdrawal site or sites:

(*a*) the location of each withdrawal site, including its geographical coordinates and the cadastral designation of the lots concerned;

(b) a map or an aerial or satellite photograph of each withdrawal site;

(c) in the case of a surface water withdrawal, the name of the lake or watercourse concerned;

(6) where applicable, the measuring equipment available to the applicant, and its location;

(7) a certificate from the clerk or secretary-treasurer of the local municipality or regional county municipality concerned stating that the project complies with the applicable municipal by-laws;

(8) proof that the applicant owns or is authorized to use the land required to install a water withdrawal facility;

(9) a study by a competent professional of the impact of the water withdrawal on water resources in the surrounding area, in terms of quantity and quality, on associated ecosystems, and on other users in the area concerned or, in the case of an application for an authorization for water withdrawal for the purposes of drinking water for an industrial camp, a study by a competent professional showing that the water withdrawal is appropriate for such use.

Subparagraph 7 of the first paragraph does not apply to a person who, under the Mining Act (R.S.Q., c. M-13.1), is authorized to do work involved in exploration, development, mining or production of mineral substances or underground reservoirs, except work involved in extracting sand, gravel or building stone on private land for which, under section 5 of the Mining Act, rights in or over such mineral substances have been surrendered to the owner of the soil.

All volumes of water must be expressed in litres for the purposes of this section.

The information provided pursuant to this section, except the information listed in subparagraphs 7 and 8 of the first paragraph, is public information.

#### **DIVISION IV**

# TERM OF AUTHORIZATIONS ISSUED FOR CERTAIN WITHDRAWALS

**8.** Despite the first paragraph of section 31.81 of the Environment Quality Act, the term of a water withdrawal authorization issued for the operation of a salmonid fish farm is 15 years when, for each ton of annual production, the fish farm expects an annual discharge of phosphorous effluence of 4.2 kilograms or less per ton of production and withdraws a volume of water of 10,000 litres or less per hour.

#### DIVISION V RENEWAL OF AUTHORIZATION

**9.** An application for the renewal of a water withdrawal authorization must be sent to the Minister in writing at least 6 months before the expiry of the term of the authorization, and must include the following information and documents: (1) an update of the information contained in the initial application;

(2) the measures implemented to document water withdrawal and its effects, if any;

(3) an opinion concerning the impacts identified and a new impact study by a competent professional if the opinion specifies that the impacts have changed since the issue of the initial authorization.

Information provided pursuant to this section is public information.

#### CHAPTER III

GENERAL PROTECTION STANDARDS

**10.** This Chapter applies to all water withdrawals referred to in section 31.74 of the Environment Quality Act.

It applies specifically to the installation of certain facilities to withdraw water and to certain underground facilities that may affect the quality of the water withdrawn in the vicinity.

**11.** A groundwater withdrawal facility or observation well must meet the following conditions:

(1) the facility or well must be equipped at all times with a secure, weather-proof cover that prevents the infiltration of water, contaminants and vermin;

(2) the soil around the withdrawal site must be graded so as to prevent water pooling and water run-off towards the facility for a distance of 1 metre around a drilled or driven well, and for a distance of 3 metres around an excavated well when an inner protection zone is not delimited for the facility;

(3) the facility or well must be visibly locatable at all times;

(4) all hydrofracturing activities at the facility or well must use water that meets the quality standards for drinking water.

The conditions no longer apply if the facility or well is sealed in accordance with good practice, in particular using materials that are not likely to degrade the quality of the groundwater.

**12.** The sealing of a groundwater withdrawal facility must meet the following conditions:

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(1) the well must be drilled in such a way that, over a minimum depth of 5 metres, it has a diameter at least 10 centimetres 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 metres;

(3) the annular space around the pipe casing must be filled, in accordance with good practice, to a minimum depth of 5 metres using a material that ensures a water-tight, durable seal, such as a cement bentonite mix or pure bentonite;

(4) the excess pipe casing must be removed without damaging the seal.

If, after the sealing of a groundwater withdrawal facility, work is carried out that affects the watertightness of the annular space, the seal must be restored by placing watertight, durable material from the bottom of the trench to the ground surface.

**13.** A ground-source geothermal system that does not withdraw water may be installed in a flood plain only if the flood plain has a flood recurrence interval of 100 years and the work is carried out below the soil's surface, or if the system is designed to resist a 100-year flood.

The system must be installed in a way that meets the following conditions:

(1) the components situated below the soil's surface must be made of materials that are new at the time of installation and only water/propylene glycol or water/ ethanol fluid mixtures may be used in those components;

(2) the system must be installed in accordance with CSA C448;

(3) the work to install the system must be carried out in such a way that no water is contaminated and no environmental degradation occurs;

(4) when the system is installed at a depth of over 5 metres in the ground, the soil must be graded over a distance of 1 metre over the components in a way that prevents water pooling and water run-off towards the components.

**14.** A person who installs a ground-source geothermal system that does not withdraw water must prepare the following documents and submit them to the owner of the system and the municipality concerned within 30 days of the date on which the system is commissioned:

(1) a plan showing the location of the system and the location of all underground components;

(2) a system design report including the parameters used for the calculation of the length of the geothermal loops and the composition of the fluids used in the system;

(3) a report on the pressure tests conducted to verify the watertightness of the underground components.

**15.** A person who installs a ground-source geothermal system that does not withdraw water must prepare a report containing the information listed in Schedule I and a certificate stating that the work complies with the standards set out in this Regulation.

The report must be sent to the Minister in electronic format using the link provided on the website of the department within 30 days after the work is completed. A copy of the report must also be sent to the owner of the system and to the municipality concerned within 30 days after the work is completed.

The information in the report is public information.

#### CHAPTER IV

PROTECTION STANDARDS APPLICABLE TO WATER WITHDRAWALS FOR DRINKING WATER DISTRIBUTION AND FOOD PROCESSING

**16.** This Chapter applies only to water withdrawals made for drinking water distribution or food processing purposes.

The standards set out in this Chapter are based on the following categories of water withdrawals:

(1) category 1: water withdrawals carried out by a municipality to supply over 500 persons for residential purposes;

(2) category 2: water withdrawals carried out by a municipality to supply between 21 and 500 persons for residential purposes, water withdrawals carried out by any person other than a municipality mainly to supply 21 or more persons for residential purposes, and water withdrawals carried out by a municipality or any other person to supply 21 or more persons for institutional purposes;

(3) category 3: water withdrawals carried out by a municipality or any other person to supply 20 or fewer persons and water withdrawals carried out by any other person for food processing purposes or solely to supply an enterprise or tourist establishment within the meaning of the Regulation respecting the quality of drinking water.

**17.** The vulnerability of the water in a protection zone delimited pursuant to this Chapter is assessed

(1) in the case of groundwater, in accordance with the DRASTIC method of the National Water Well Association which provides the following vulnerability ratings:

(*a*) "Low": a rating equal to or less than 100 for the entire protection zone;

(b) "Medium": a rating less than 180 for the entire protection zone, except if a "low" rating has been assigned;

(c) "High": a rating equal to or greater than 180 in any part of the protection zone.

(2) in the case of surface water, water vulnerability is assessed as high, medium or low based on the following 6 indicators, described in Schedule II:

(a) physical integrity of the withdrawal site;

(b) vulnerability to microorganisms;

(c) vulnerability to fertilizers;

(d) vulnerability to suspended solids;

(e) vulnerability to toxic substances;

(f) vulnerability to anthropic threats.

#### **DIVISION I**

INNER PROTECTION ZONES

**18.** An inner protection zone must be delimited for all category 1 and 2 water withdrawals, and for category 3 groundwater withdrawals.

**19.** In the case of groundwater withdrawals, the limits of the inner protection zone must be situated, depending on the category of water withdrawal, at the following distances:

(1) 30 metres from the withdrawal site in the case of a category 1 or category 2 water withdrawal;

(2) 3 metres from the withdrawal site in the case of a category 3 water withdrawal.

The limits of the inner protection zone for a category 1 or category 2 water withdrawal mentioned in subparagraph 1 of the first paragraph do not apply if a hydrogeological survey conducted by a competent professional sets limits and certifies that (1) the presence of a superficial geological formation with low permeability provides natural protection for the groundwater;

(2) the configuration of the land or a nearby infrastructure eliminates the risks that may affect groundwater quality; or

(3) human activities within a radius of 30 meters from the withdrawal site present no risk that may affect groundwater quality.

For category 1 and 2 water withdrawals, the location of the inner protection zone must be indicated by signs at all times to ensure its visibility.

Unless it has been assessed otherwise, the vulnerability of groundwater within the inner protection zone is deemed to be high.

**20.** In the case of surface water withdrawals, the limits of the inner protection zone must be situated at the following distances, depending on the location of the withdrawal site:

(1) 300 metres around the withdrawal site, if it is located in a lake;

(2) 500 metres upstream and 10 metres downstream from the withdrawal site, if it is located in a watercourse with a regular flow;

(3) 1 kilometre upstream and 20 metres downstream from the 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 kilometre upstream and downstream from the withdrawal site.

The distances include surface water, lakeshores and riverbanks, and portions of tributaries and their banks, excluding ditches.

The limits of the inner protection zone mentioned in the first paragraph do not apply if a hydrodynamic survey conducted by a competent professional sets limits and certifies that a contaminant spilled at the shoreline or on the surface cannot reach the withdrawal site.

**21.** All activities presenting a risk of water contamination are prohibited within the inner protection zone delimited for groundwater withdrawals, except activities relating to the operation, maintenance, rebuilding or replacement of the water withdrawal facility and its accessory equipment.

**22.** Animal grazing and the spreading of animal manure, farm compost, fertilizing waste substances and mineral fertilizers are prohibited in the inner protection zone delimited for surface water withdrawals.

All other activities within the protection zone 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.

If the activities involve the digging of new ditches or underground drains, 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.

**23.** The soil within the inner protection zone delimited for groundwater withdrawal must be graded so as to prevent water pooling and water run-off towards the withdrawal site. This condition does not apply if the facility installed for groundwater withdrawal is sealed in accordance with good practice, in particular using a material that is not likely to degrade groundwater quality.

#### DIVISION II INTERMEDIATE PROTECTION ZONES

**24.** An intermediate protection zone must be delimited for category 1, 2 and 3 groundwater withdrawals and for category 1 and 2 surface water withdrawals.

**25.** In the case of groundwater withdrawals, the limits of the intermediate protection zone must correspond to the distances measured by a competent professional as corresponding to the 200-day groundwater migration time, to ensure bacteriological protection, and to the 550-day groundwater migration time, to ensure virological protection for category 1, 2 and 3 groundwater withdrawals.

If the distances are not measured in accordance with the first paragraph, they must be located, depending on the category of water withdrawal, at

(1) 100 or 200 metres from the withdrawal site, to ensure, respectively, the bacteriological protection and virological protection of category 2 groundwater withdrawals;

(2) 30 metres from the withdrawal site, to ensure the bacteriological protection of category 3 water withdrawals or, if the well is sealed in accordance with section 12 under the direct supervision of a competent professional, 15 metres from the withdrawal site;

(3) 100 metres from the withdrawal site, to ensure the virological protection of category 3 water withdrawals.

The person responsible for a category 1 or 2 water withdrawal must send a written notice to the domicile of the owner of every property included in an intermediate protection zone informing the owner or occupant of the presence of a withdrawal site in the vicinity.

Unless it has been shown otherwise, the vulnerability of groundwater within the intermediate protection zone is deemed to be high.

**26.** In the case of surface water withdrawals, the limits of the intermediate protection zone must be situated at the following distances, depending on the location of the withdrawal site:

(1) 2 kilometres around the withdrawal site, if it is located in a lake;

(2) 10 kilometres upstream from the withdrawal site, if it is located in a watercourse with a regular flow;

(3) 15 kilometres upstream from the withdrawal site, if it is located in the St. Lawrence River and, in addition, in the parts of the St. Lawrence River where the current may reverse due to the tide, 5 kilometres downstream from the withdrawal site.

The distances include surface water, portions of tributaries and their banks, excluding ditches, and a 120-metre strip of land measured from the highwater mark of the lake or watercourse concerned.

**27.** The following activities are prohibited in the first 100 metres of an intermediate bacteriological protection zone delimited for a category 1, 2 or 3 groundwater withdrawal with a medium or high vulnerability rating:

(1) the installation of an animal waste storage facility;

(2) the installation of a discharge facility for a geothermal system supplied by groundwater;

(3) the installation and operation of a building for raising livestock, except canidae and felidae, and fish farms, zoos, parks and zoological gardens.

**28.** The following activities are prohibited in the intermediate bacteriological protection zone delimited for a category 1, 2 or 3 groundwater withdrawal with a medium or high vulnerability rating:

(1) the installation and operation of an animal exercise yard or composting area;

(2) the storage, directly on the ground, of animal waste, farm compost or fertilizing waste substances;

(3) animal grazing;

(4) the spreading of animal waste, farm compost or fertilizing waste substances.

However, the activity specified in subparagraph 2 of the first paragraph is prohibited over a distance of 75 metres in the case of a category 3 groundwater withdrawal if the site of the groundwater withdrawal to be protected is located on a neighbouring property.

Similarly, the activities specified in subparagraphs 3 and 4 of the first paragraph are prohibited over the first 100 metres of an intermediate bacteriological protection zone when their water vulnerability rating is medium.

**29.** The spreading and storage, directly on the ground, of sludge from municipal wastewater treatment works or from any other works for the collection or treatment of sanitary waste water, and of any substance containing such sludge, is prohibited within the virological protection zone for a category 1, 2 or 3 groundwater withdrawal site with a medium or high vulnerability rating.

**30.** The spreading of various substances, as specified in subparagraph 4 of the first paragraph of section 28 and in section 29, is not prohibited if

(1) the spreading is carried out for domestic landscaping purposes;

(2) the spreading uses fertilizing waste substances or sludge certified to comply with CAN/BNQ 0413-200, CAN/BNQ 0413-400 or BNQ 419-090.

**31.** When an activity involving grazing animals or the spreading of animal waste, farm compost or fertilizing waste substances is permitted within the intermediate bacteriological protection zone delimited for a groundwater withdrawal with a medium water vulnerability rating, the activity can only be carried out after obtaining a recommendation from a competent professional containing

(1) a historical review of the last 5 years of spreading activities and animal grazing activities in the intermediate protection zone;

(2) a detailed description of the texture, depth and state of compaction of the soil; and

(3) the measures to be implemented to minimize the impact of the quality of the water withdrawn, in particular concerning the addition of nitrate/nitrite-N and pathogenic agents.

The recommendation must be submitted with the agroenvironmental fertilization plan prepared in accordance with the Agricultural Operations Regulation (R.R.Q., c. Q-2, r. 26) when the place where the livestock raising or spreading location is subject to that regulation.

#### **DIVISION III**

#### OUTER PROTECTION ZONES

**32.** An outer protection zone must be delimited for all category 1 water withdrawals, unless it is a surface water withdrawal carried out in the St. Lawrence River, in the des-Milles-îles, des Prairies or des Outaouais rivers, or in lac des Deux Montagnes, excluding their tributaries.

**33.** In the case of a groundwater withdrawal, the limits of the outer protection zone are the distances measured for a 5-year groundwater migration time.

**34.** In the case of a surface water withdrawal, the limits of the outer protection zone are those of the drainage basin, excluding the portions situated upstream from lakes that feed into the watercourse concerned and its tributaries.

**35.** The following activities are prohibited in the outer protection zone delimited for groundwater withdrawals if the nitrate/nitrite-N concentration of the water withdrawn, sampled in accordance with the Regulation respecting the quality of drinking water, is above 5 mg/L:

(1) the construction and operation of an animal exercise yard or composting area;

(2) the storage, directly on the ground, of animal waste, farm compost or any fertilizing substance;

(3) the storage, directly on the ground, of sludge from municipal wastewater treatment works or from any other works for the collection or treatment of sanitary waste water, and of any substance containing such sludge.

In addition, the following activities can only take place on the recommendation of a competent professional in accordance with the requirements provided for in section 31:

(1) animal grazing;

(2) the spreading of nitrogenous fertilizer materials.

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**36.** The activities mentioned in the second paragraph of section 35 are prohibited in the outer protection zone delimited for groundwater withdrawal if the nitrate/ nitrite-N concentration in the water withdrawn, sampled in accordance with the Regulation respecting the quality of drinking water, is above 10 mg/L.

#### **DIVISION IV**

INFORMATION ON PROTECTION ZONES AND WATER WITHDRAWALS

**37.** The person responsible for a category 1 water withdrawal must prepare and maintain up to date a map of the drainage basin for the withdrawal site. The map must be approved by a competent professional and show

(1) the location of the inner, intermediate and outer protection zones;

(2) the delimitation and location of the drainage basin of the groundwater withdrawal site, if applicable;

(3) the water vulnerability ratings in the inner, intermediate and outer protection zones, assessed using the methods described in section 17.

The person responsible for the withdrawal must also have access to a risk assessment for water contamination within the outer protection zone. The risk assessment for contamination must take into account existing human activities on the date of the assessment and the activities permitted under the land use and development plan applicable pursuant to the Act respecting land use planning and development (R.S.Q., c. A-19.1).

The person responsible must, in addition, draw up an inventory of the properties situated in the outer protection zone if the nitrate/nitrite-N concentration of the water withdrawn, sampled in accordance with the Regulation respecting the quality of drinking water, is above 5 mg/L.

The documents must be retained and provided to the Minister on request. The map of the drainage basin for the withdrawal site must, however, be made pubic within 30 days of being prepared, and a copy of the map must be forwarded to the regional county municipality or municipalities whose territory is included in the drainage basin, within 120 days of being prepared.

**38.** A municipality that makes a category 1 or category 2 water withdrawal must draw up an inventory of the sanitary facilities of isolated dwellings within the meaning of the Regulation respecting waste water disposal systems for isolated dwellings (R.R.Q., c. Q-2, r. 22) situated in the inner protection zone delimited for the withdrawal concerned and, if applicable, in the inter-

mediate bacteriological and virological protection zone delimited for the withdrawal, in the case of an underground withdrawal. The inventory must indicate the location of each sanitary facility and its characteristics.

The municipality must, in addition, instruct a competent professional to prepare a study of the environment and of the sanitary facilities of isolated dwellings including, in particular, an overview of the protection zone concerned, a description of the characteristics of the area covered and the activities that take place in that area, the planned land use and the natural features of the land, in order to establish the impact of the sanitary facilities on the groundwater in the surrounding area.

Lastly, the municipality must prepare an intervention plan in order to implement measures to reduce the impact that sanitary facilities of isolated dwellings in the protection zone delimited for a water withdrawal referred to in the first paragraph may have on water quality.

The documents must be kept and provided to the Minister on request.

**39.** The person responsible for a category 1 surface water withdrawal must sample the raw water withdrawn once every month from May to October, with a minimum interval of 2 weeks between each sample. The samples must be withdrawn for phosphorous analysis by a laboratory accredited under section 118.6 of the Environment Quality Act.

If the water is withdrawn from a watercourse, the water withdrawal facility must be equipped with a device for the continuous measurement of raw water turbidity. The person responsible must take a reading from the device every 4 hours.

The person responsible must, in addition, create a historical record of natural events, algae proliferation, increases in ammoniacal nitrogen and accidents of human origin that may have affected the functioning of the withdrawal site or facility. The historical record must, in particular, include information on the location, duration, date and impact of each situation observed.

The person responsible must keep a register to record all the measurements and samples taken and the observations that the person is required to make. The register must be kept and provided to the Minister on request.

#### DIVISION V OTHER PROTECTION

**40.** A facility for category 1 groundwater withdrawals must be situated inside a building constructed so that no person other than a member of the maintenance staff can enter.

**41.** A facility for category 1, 2 or 3 groundwater withdrawals must be cleaned and disinfected before being operated to eliminate any possibility of water contamination. The same applies for any accessory equipment installed more than 2 days after the cleaning and disinfection of the water withdrawal facility.

**42.** The spreading of animal waste, farm compost, fertilizing waste substances, mineral fertilizers, sludge from municipal wastewater treatment works or from any other works for the collection or treatment of sanitary waste water, and of any substance containing such sludge, around the perimeter of a protection zone must be carried out so as to prevent any run-off of such substances towards the protection zone.

#### **CHAPTER V**

#### STANDARDS APPLICABLE TO WATER WITHDRAWALS NOT REQUIRING AUTHORIZATION FROM THE MINISTER

**43.** This Chapter applies to water withdrawals that do not require authorization under section 31.75 of the Environment Quality Act, except temporary and non-recurring water withdrawals and other water withdrawals to which section 6 applies.

More specifically, it applies to the installation of facilities to make the water withdrawals concerned, which includes the siting of and any change to the facility.

This Chapter also applies to the construction of a discharge facility for a geothermal system supplied by groundwater.

**44.** A water withdrawal to which this Division applies requires the issue of a permit by the municipality having authority over the land where the withdrawal site is located, in particular to authorize the installation of the water withdrawal facility.

The conditions governing the issue of the permit are determined by the municipality concerned.

#### **DIVISION I**

# STANDARDS APPLICABLE TO ALL TYPES OF WATER WITHDRAWAL FACILITY

**45.** A water withdrawal facility may not be installed in a flood plain having a flood recurrence interval of 20 years unless it replaces an existing facility. In the latter case, the facility must be installed in accordance with the following conditions if it is a facility for groundwater withdrawals:

(1) the well must be sealed in accordance with section 12;

(2) the well casing must extend far enough from the ground surface to avoid immersion;

(3) the well must be installed under the direct supervision of a competent professional.

For the construction of a facility for surface water withdrawals, the facility must be installed to ensure that the components of the facility are below ground level.

**46.** The installation of a water withdrawal facility in a flood plain having a flood recurrence interval of 100 years must meet the conditions set out in section 45.

**47.** The installation of a water withdrawal facility must meet the following conditions:

(1) new materials must be used in the design of the facility;

(2) the work to lay out the facility must be completed in a way that prevents any water contamination or environmental degradation.

The facility must remain accessible at all times for inspection, maintenance, disinfection or equipment repair purposes, and for plugging or dismantling if required.

#### **DIVISION II**

SPECIAL STANDARDS FOR GROUNDWATER WITHDRAWAL FACILITIES

**48.** In addition to the general standards applicable to all water withdrawal facilities, a groundwater withdrawal facility must be installed in accordance with the following conditions:

(1) the facility must be installed at a distance of 15 metres or more from a watertight waste water treatment system;

(2) the facility must be installed 30 metres or more from a non-watertight waste water treatment system or, if the well is sealed in accordance with section 12 under the direct supervision of a competent professional, 15 metres or more from such a system;

(3) no facility can be installed if agricultural activities such as those referred to in sections 27 and 28 are carried on or a cemetery is operated within the perimeter fixed for the intermediate bacteriological protection zone delimited for category 3 water withdrawals; (4) materials suitable for drinking water supply systems must be used in designing the facility;

(5) the casing used for a drilled well must have a minimum thickness of 0.188 inches and comply with ASTM A-53 Grade B, with ASTM A-589 Grade B if the casing is steel, or with ASTM A-409 if the casing is stainless steel;

(6) the casing used for a drilled, excavated or driven well must rise at least 30 cm above the ground level existing before the work begins;

(7) the casing joints must be watertight.

The distances mentioned in subparagraphs 1, 2 and 3 of the first paragraph do not apply if a hydrogeological survey conducted by a competent professional has set distances and certified that the water treatment system cannot contaminate the groundwater withdrawal facility because of the local hydrogeological conditions, especially connected with the nature of the geological materials present and the direction of flow of the groundwater. In such a case, the plans and specifications for the facility must be approved by an engineer and the work must be carried out under the direct supervision of a professional competent in the field.

**49.** The casing for a groundwater withdrawal facility consisting of a well drilled into rock must have a drive shoe connected to its lower end. The casing must be anchored in bedrock for at least 0.6 metres or until penetration ceases.

**50.** The installation of a withdrawal facility 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 metre deep upstream from the natural point of groundwater resurgence so as to collect that water before it surfaces;

(2) the drain must be connected to a watertight reservoir;

(3) the reservoir must stand at least 30 centimetres above ground level 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 metres 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.

**51.** A groundwater withdrawal facility using artesian pressure must include a flow control system to

(1) confine the flow within the casing;

(2) control gushing in such a way that the water cannot return inside the casing and is protected from freezing.

**52.** A water withdrawal facility used for a geothermal system must be installed to meet the following conditions:

(1) the layout must comply with CSA C448;

(2) the facility must be supplied by groundwater;

(3) the layout must allow the water to be returned to the source aquifer without coming into contact with any substance liable to affect its quality.

#### DIVISION III REPORT

**53.** A person who has installed a groundwater withdrawal facility must prepare a report containing the information listed in Schedule I, a certificate stating that the work complies with the standards set out in this Regulation, and the results of a flow test lasting at least 30 minutes, if the facility has been drilled, to verify whether the flow is able to meet peak demand.

The report must be sent to the Minister electronically using the link provided for that purpose on the website of the department within 30 days of the end of the work. A copy of the report must also be sent to the owner of the facility and to the municipality concerned within 30 days of the end of the work.

The information in the report is public information.

#### CHAPTER VI

SPECIAL PROVISIONS APPLICABLE TO WATER WITHDRAWALS IN THE AREA OF VILLE DE MERCIER

**54.** The provisions of this Division apply to the territories of the municipalities of Ville de Mercier, Saint-Isidore, Sainte-Martine and Saint-Urbain-Premier.

**55.** The drilling, excavating or operating of a water withdrawal facility is prohibited, except for environmental rehabilitation purposes, within the perimeter described in Schedule III.

**56.** In the territory of a municipality to which this Division applies, a tube well located outside the perimeter described in Schedule III that withdraws groundwater from the bedrock must be drilled so as to cut through at least 10 metres of bedrock.

57. The owner of a groundwater withdrawal facility used to supply water for human consumption or for food production or processing must, if the perimeter of the outer protection zone for category 1 groundwater withdrawals or of the intermediate bacteriological protection zone for category 2 groundwater withdrawals falls within the territory described in Schedule III, apply a preventive monitoring program for groundwater quality to analyze the concentration of vinyl chloride. The monitoring program must take into account the technical characteristics of the project, such as the site of the withdrawal and the volume of water withdrawn. The program must include the sites for the withdrawal of groundwater samples, the frequency of the sampling, the physical and chemical parameters, the detection limit and the sampling method.

The groundwater samples must be analyzed by a laboratory accredited under section 118.6 of the Environment Quality Act.

The presence of vinyl chloride must be reported to the Minister not later than 30 days after the owner receives the analysis results of the water samples mentioned in the first paragraph. The remedial measures planned to correct the situation must also be sent to the Minister within the same period.

The results of the monitoring program must be kept and provided to the Minister on request.

#### **CHAPTER VII**

ADMINISTRATIVE AND PENAL PROVISIONS

#### **DIVSION I**

MONETARY ADMINISTRATIVE PENALTIES

**58.** A monetary administrative penalty of \$250 for a natural person and \$1,000 for a legal person may be imposed on the owner or operator of a withdrawal site who, in violation of this Regulation,

(1) refuses or neglects to send a notice or to provide any information, survey, assessment, plan or report or fails to comply with the applicable deadline, if no other monetary administrative penalty is prescribed;

(2) fails to keep any documents that the owner or operator is required to prepare, or fails to keep and update a register; (3) fails to install signs or who removes, damages or allows to be damaged a sign that the owner or operator is required to install.

**59.** A monetary administrative penalty of \$500 for a natural person and \$2,500 for a legal person may be imposed on the owner or operator of a withdrawal site who fails

(1) to comply with a condition imposed by this Regulation;

(2) to prepare or have prepared a plan of the drainage basin for a withdrawal site, a risk assessment for water contamination within an outer protection zone, or an inventory of the properties situated in an outer protection zone in accordance with the first, second and third paragraphs of section 37;

(3) to prepare an inventory of the sanitary facilities of isolated dwellings, a study of the environment and of the sanitary facilities of isolated dwellings and an intervention plan in accordance with the first, second and third paragraphs of section 38;

(4) to withdraw samples, install a measurement device or create a historical record in accordance with the first, second and third paragraphs of section 39;

(5) to comply with the time limits set in sections 81 to 83 for the actions described in sections 37 to 39.

**60.** A monetary administrative penalty of \$500 for a natural person and \$2,500 for a legal person may be imposed on any person or municipality that carries out an activity without complying with the conditions of this Regulation.

**61.** A monetary administrative penalty of \$1,000 for a natural person and \$5,000 for a legal person may be imposed on any person or municipality that carries out an activity prohibited by this Regulation.

**62.** A monetary administrative penalty of \$2,000 for a natural person and \$10,000 for a legal person may be imposed on any person or municipality that

(1) drills, excavates or operates a water withdrawal facility in violation of section 55;

(2) fails to apply a preventive monitoring program pursuant to section 57, have the resulting samples analyzed by a laboratory accredited under section 118.6 of the Environment Quality Act, or notify the Minister of the analysis results for the samples and the remedial measures planned.

#### **DIVISION II**

PENAL SANCTIONS

**63.** The owner or operator of a withdrawal site who fails to install signs to indicate the location of a protection zone in accordance with the third paragraph of section 19, who fails to forward a notice to the domicile of the owner of each of the properties within the protection zone in accordance with the third paragraph of section 25, who fails to keep the documents the owner or operator is required to prepare in accordance with the fourth paragraph of section 37 or 38, or who fails to keep a register in accordance with the fourth paragraph of section 39 is guilty of an offence and liable to a fine of

(1) \$1,000 to \$100,000, in the case of a natural person;

(2) \$3,000 to \$600,000, in the case of a legal person.

**64.** A person who fails to send a plan or a report in accordance with sections 14, 15 and 53 is guilty of an offence and liable to a fine of

(1) \$1,000 to \$100,000, in the case of a natural person;

(2) \$3,000 to \$600,000, in the case of a legal person.

**65.** The owner or operator of a withdrawal site who fails to comply with a condition of sections 11, 12, 23, 40, 41, 45 to 52 and 56, who fails to prepare a document in accordance with the first, second and third paragraphs of sections 37 and 38 and the third paragraph of section 39, or who fails to withdraw a sample or install a device to measure raw water turbidity in accordance with the first and second paragraphs of section 39 is guilty of an offence and liable to a fine of

(1) \$2,500 to \$250,000, in the case of a natural person;

(2) \$7,500 to \$1,500,000, in the case of a legal person.

**66.** The owner or operator of a ground-source geothermal system who fails to comply with a condition in the second paragraph of section 13 is guilty of an offence and liable to a fine of

- (1) \$2,500 to \$250,000, in the case of a natural person;
- (2) \$7,500 to \$1,500,000, in the case of a legal person.

**67.** Any activity carried out in violation of the conditions in the second and third paragraphs of section 22, section 31, the second paragraph of section 35 and section 42 constitutes an offence and renders the offender liable to a fine of

(1) \$2,500 to \$250,000, in the case of a natural person;

(2) \$7,500 to \$1,500,000, in the case of a legal person.

**68.** Any activity carried out in violation of a prohibition set out in the first paragraph of sections 13, 22, 35 and 45, and in sections 21, 27 to 29, 36 and 44 constitutes an offence and renders the offender liable to a fine of

(1) \$5,000 to \$500,000, in the case of a natural person;

(2) \$15,000 to \$3,000,000, in the case of a legal person.

**69.** Any activity carried out in violation of a prohibition set out in section 55, and any failure to apply a preventive monitoring program in accordance with section 57, constitutes an offence and renders the offender liable to a fine of

(1) \$7,000 to \$1,000,000, in the case of a natural person;

(2) \$21,000 to \$6,000,000, in the case of a legal person.

#### CHAPTER VIII AMENDING PROVISIONS

#### **Pesticides Management Code**

**70.** Section 15 of the Pesticides Management Code (R.R.Q., c. P-9.3, r. 1) is amended by replacing subparagraphs 2 and 3 of the first paragraph by the following:

"(2) less than 100 m from a category 1 or category 2 water withdrawal site within the meaning of subparagraphs 1 and 2 of the second paragraph of section 16 of the Water Withdrawal and Protection Regulation (*insert the reference to this Regulation in the Revised Regulations of Québec*) or from a water withdrawal site for the production of mineral water or spring water within the meaning of the Regulation respecting bottled water (R.R.Q., c. P-29, r. 2);

(3) less than 30 m from a category 3 water withdrawal site within the meaning of subparagraph 3 of the second paragraph of section 16 of the Water Withdrawal and Protection Regulation or from any other groundwater withdrawal site.".

**71.** Section 35 is amended by replacing subparagraphs 2 and 3 of the first paragraph by the following:

"(2) less than 100 m from a category 1 or category 2 water withdrawal site within the meaning of subparagraphs 1 and 2 of the second paragraph of section 16 of the Water Withdrawal and Protection Regulation (*insert the reference to this Regulation in the Revised Regulations of Québec*) or from a water withdrawal site for the production of mineral water or spring water within the meaning of the Regulation respecting bottled water (R.R.Q., c. P-29, r. 2);

(3) less than 30 m from a category 3 water withdrawal site within the meaning of subparagraph 3 of the second paragraph of section 16 of the Water Withdrawal and Protection Regulation or from any other groundwater withdrawal site.".

**72.** Section 50 is replaced by the following:

"50. It is prohibited to apply pesticides

(1) less than 100 m from a category 1 or category 2 water withdrawal site within the meaning of subparagraphs 1 and 2 of the second paragraph of section 16 of the Water Withdrawal and Protection Regulation (*insert the reference to this Regulation in the Revised Regulations of Québec*) or from a water withdrawal site for the production of mineral water or spring water within the meaning of the Regulation respecting bottled water (R.R.Q., c. P-29, r. 2);

(2) less than 30 m from a category 3 water withdrawal site within the meaning of subparagraph 3 of the second paragraph of section 16 of the Water Withdrawal and Protection Regulation;

(3) less than 3 m from any other groundwater with-drawal site.

The prohibition set out in subparagraphs 2 and 3 of the first paragraph does not apply to

(1) pesticide application for extermination during work described in permit Subclasses C5 or D5, if it is carried out more than 3 m from the water withdrawal site;

(2) pesticide application for ornamental horticulture during work described in permit Subclasses C4 or D4, other than an application on golf courses, more than 3 m from a water withdrawal site; or

(3) pesticide application on a railway ballast, if it is carried out with a windbreak.".

**73.** Section 76 is replaced by the following:

"76. It is prohibited to apply pesticides

(1) less than 100 m from a category 1 or category 2 water withdrawal site within the meaning of subparagraphs 1 and 2 of the second paragraph of section 16 of the Water Withdrawal and Protection Regulation (*insert the reference to this Regulation in the Revised Regulations of Québec*) or from a water withdrawal site for the production of mineral water or spring water within the meaning of the Regulation respecting bottled water (R.R.Q., c. P-29, r. 2);

(2) less than 30 m from a category 3 water withdrawal site within the meaning of subparagraph 3 of the second paragraph of section 16 of the Water Withdrawal and Protection Regulation;

(3) less than 3 m from any other groundwater with-drawal site.

The prohibition set out in subparagraphs 2 and 3 of the first paragraph does not apply to pesticide application close to a water withdrawal site supplying a building that is a dwelling in a forest area used from time to time.".

#### **Regulation respecting the application of the Environment Quality Act**

**74.** Section 2.1 of the Regulation respecting the application of the Environment Quality Act (R.R.Q., c. Q-2, r. 3) is revoked.

**75.** Section 3 is amended by striking out "drainage or" in subparagraph e of paragraph 2.

#### **Regulation respecting waste water disposal systems for isolated dwellings**

**76.** Section 7.2 of the Regulation respecting waste water disposal systems for isolated dwellings (R.R.Q., c. Q-2, r. 22) is amended by replacing "and installed in accordance with subparagraphs 1 to 3 of the second paragraph of section 10 of the Groundwater Catchment Regulation (c. Q-2, r. 6)" in the first column and first row of the table in subparagraph d of the first paragraph by "and sealed under the direct supervision of a competent professional in the field in accordance with the conditions set out in section 12 of the Water Withdrawal and Protection Regulation (*insert the reference to this Regulation in the Revised Regulations of Québec*)".

**77.** Section 63 is amended by adding the following paragraph:

"The distances provided for in subparagraph d of the first paragraph of section 7.2 of this Regulation also apply to the absorption field for a non-watertight waste water treatment system, unless a survey conducted by a competent professional in the field sets distances and certifies that the absorption field cannot contaminate existing wells because of the local hydrogeological conditions, especially connected with the nature of the geological materials present and the direction of flow of the groundwater. The survey must be appended to the permit application submitted to the municipality concerned.".

# Regulation respecting the quality of drinking water

**78.** Section 35 of the Regulation respecting the quality of drinking water (R.R.Q., c. Q-2, r. 40) is amended by inserting "or more than 5 mg/L nitrate/nitrite-N" after "trihalomethanes" in the second and third paragraphs.

**79.** Section 36 is amended by inserting the following paragraph after the first paragraph:

"If the water contains more than 5 mg/L nitrate/nitrite-N, the person responsible for a distribution system supplying clients other than a tourist establishment must, on being informed thereof, notify the Minister of Sustainable Development, Environment and Parks in writing within 30 days and forward a list of the properties within the outer protection zone for the water withdrawal site delimited pursuant to sections 32 to 34 of the Water Withdrawal and Protection Regulation (*insert the reference to this Regulation in the Revised Regulations of Québec*). If the water withdrawn comes from several withdrawal sites, the person must, in addition, notify the Minister of the measures taken to identify the site or sites at the origin of the concentration observed.".

# Regulation respecting contaminated soil storage and contaminated soil transfer stations

**80.** Section 39 of the Regulation respecting contaminated soil storage and contaminated soil transfer stations (R.R.Q., c. Q-2, r. 46) is amended

(1) by replacing "collection facility" in the first paragraph by "withdrawal facility";

(2) by replacing "supply area of a spring water, mineral water or groundwater catchment" in the second paragraph by "outer protection zone of a spring water, mineral water

or groundwater withdrawal", and by replacing "Groundwater Catchment Regulation (c. Q-2, r. 6)" by "Water Withdrawal and Protection Regulation (*insert the reference to this Regulation in the Revised Regulations of Québec*)".

#### CHAPTER IX

TRANSITIONAL AND FINAL

**81.** Where the concentration of nitrate/nitrite-N of water withdrawn for the purposes of drinking water is greater than 10 mg/L at any time during the 5-year period starting on (*insert the date of coming into force of this Regulation*), the activities referred to in section 36 of this Regulation are not prohibited. However, they must be carried out after obtaining a recommendation from a competent professional in accordance with the requirements provided for in section 31 of this Regulation.

**82.** The map of the drainage basin for a withdrawal site and the risk assessment for water contamination provided for in section 37 of this Regulation must be prepared by the person responsible for an existing water withdrawal facility not later than five years after (*insert here the date of coming into force of this Regulation*).

**83.** The inventory of the sanitary facilities of isolated dwellings, the study of the environment and of the sanitary facilities of isolated dwellings and the intervention plan provided for in section 38 of this Regulation must be prepared by the municipality responsible for an existing water withdrawal facility not later than 5 years after (*insert here the date of coming into force of this Regulation*).

**84.** The measurement device referred to in the second paragraph of section 39 of this Regulation must be installed by the person responsible for a category 1 surface water withdrawal facility not later than 1 year after (*insert the date of coming into force of this Regulation*).

**85.** Applications for a water withdrawal authorization already being examined on (*insert the date of coming into force of this Regulation*) pursuant to section 22, 31.5 or 32 of the Environment Quality Act (R.S.Q., c. Q-2) or, in the case of groundwater, pursuant to the provisions of Chapter IV of the Groundwater Catchment Regulation (R.R.Q., c. Q-2, r. 6) are governed by the provisions of this Regulation.

**86.** Despite section 31.81 of the Environment Quality Act, the term of the first authorization issued for water withdrawals carried out for the purpose of selling or distributing spring water or mineral water or for the purpose of making, preserving or processing products within the meaning of the Food Products Act (R.S.Q., c. P-29) is 11 years.

The first paragraph does not apply to water withdrawals referred to in section 34 of the Environment Quality Act.

**87.** The following authorizations, relating to water withdrawals referred to in sections 33 and 34 of the Act to affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection (R.S.Q., c. C-6.2), are valid for the following terms:

(1) after a term of 10 years beginning on (*insert the date of coming into force of this Regulation*), until the date of renewal of a depollution attestation referred to in section 31.10 of the Environment Quality Act, when the withdrawer also holds a depollution attestation;

(2) 11 years after (*insert the date of coming into force of this Regulation*) when the withdrawer carries out water withdrawals with an average daily flow equal to or greater than 5,000,000 litres;

(3) 12 years after (*insert the date of coming into force of this Regulation*) when the withdrawer carries out water withdrawals with an average daily flow equal to or greater than 1,500,000 litres but less than 5,000,000 litres;

(4) 13 years after (*insert the date of coming into force of this Regulation*) when the withdrawer carries out water withdrawals with an average daily flow equal to or greater than 600,000 litres but less than 1,500,000 litres;

(5) 14 years after (*insert the date of coming into force of this Regulation*) when the withdrawer carries out water withdrawals with an average daily flow equal to or greater than 200,000 litres but less than 600,000 litres;

(6) 15 years after (*insert the date of coming into force of this Regulation*) when the withdrawer carries out water withdrawals with an average daily flow less than 200,000 litres;

(7) 15 years after (*insert the date of coming into force of this Regulation*) when the withdrawer operates a salmonid fish farm and, for each ton of annual production, withdraws a volume of water equal to or less than 20,000 litres per hour and is authorized, by certificate, to produce an annual discharge of phosphorous effluence equal to or less than 4.2 kilograms per ton of production.

The applications for authorization or for the renewal of authorization referred to in this section must be submitted 6 months prior to the expiry of their term. Water withdrawals may continue after the term for such time as a renewal or new authorization has not been issued.

**88.** Unless otherwise indicated by the context, a reference in an Act, regulation, order, order in council, decree, policy, program, contract or other document to the Groundwater Catchment Regulation or to one of its provisions is deemed to be a reference to this Regulation or to the corresponding provisions of this Regulation.

**89.** The terms "groundwater catchment facility" or "groundwater catchment works", as used in an order, policy, program, contract or other document must be read as referring to a groundwater withdrawal facility.

**90.** All proceedings commenced under the Ground-water Catchment Regulation are continued under this Regulation.

**91.** Municipalities are responsible for the application of the provisions of Chapter V, except section 53, and of sections 11 to 14, 55 and 56 of this Regulation to the extent that those sections concern withdrawals under an authorization from the municipality concerned.

**92.** This Regulation replaces the Groundwater Catchment Regulation. However, the provisions of Chapter II of that Regulation continue to apply to groundwater withdrawal facilities existing on (*insert the date of coming into force of this Regulation*) until replaced or amended.

**93.** This Regulation comes into force on (*insert the date of coming into force of section 31.75 of the Environment Quality Act, introduced by section 19 of chapter 21 of the Statutes of 2009).* 

#### SCHEDULE I

(ss. 15 and 53)

Information required in the report:

(1) the name of the owner of the place where the water withdrawal facility is installed;

(2) the location of the place where the water withdrawal 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) whether or not the water withdrawn is to be used as drinking water;

(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 installation method used (drilling, excavation, driving);

(8) whether the work concerned was intended to deepen an existing well;

(9) the date of installation of the water withdrawal facility;

(10) the diameter or diameters drilled, and the depth of each diameter drilled;

(11) in the case of a sealed well, the height of the seal and the materials used for the seal;

(12) the length, diameter and type of casing installed, and the length of the casing above ground level;

(13) the length, diameter, opening and type of perforated casing installed, if any;

(14) the length, diameter and type of additonal or support tubing installed, if any;

(15) the type and thickness of the layers drilled;

(16) the following information on the flow tests conducted, if any:

— the date of the flow test;

— the water level at the end of the work;

— the duration of the flow test;

— the flow rate of the water withdrawal facility;

— the pumping method.

#### SCHEDULE II

(s. 17)

(a) Physical integrity of the withdrawal site

The physical integrity of the withdrawal site is assessed through a historical review of all the natural events that may have affected the condition of the withdrawal site, such as an obstruction caused by frazil ice, coarse materials, zebra mussel multiplication or sand silting, a crushed pipe caused by ice pressure or the collapse of a retaining wall, a broken pipe caused by high water, a lack of water caused by a retaining dam failure or severely restricted flow, and any other natural event that may have affected the water intake.

Water vulnerability is

(1) high if 1 or more events is recorded over a 5-year period;

(2) medium if only 1 event is recorded over a 10-year period;

(3) low if 1 or no events are recorded over consecutive period exceeding 10 years.

Water vulnerability may be assessed differently by a competent 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.

Final water vulnerability, based on the physical integrity of the withdrawal site, is the most restrictive rating obtained using one of the methods.

(b) Vulnerability to microorganisms

Vulnerability to microorganisms is assessed using the following methods:

#### Method 1

For withdrawal sites covered by an analysis of *Escherichia coli* bacteria over a consecutive 5-year period, sampled in accordance with the Regulation respecting the quality of drinking water (R.R.Q., c. Q-2, r. 40), water vulnerability is

(1) high if the analysis results show a median value above 150 UFC/100 ml or if the value of the 95th percentile is above 1,500 UFC/100 ml; (2) medium if vulnerability is neither low nor high;

(3) 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.

#### Method 2

For withdrawal sites not covered by an analysis of *Escherichia coli* bacteria over a consecutive 5-year period, water vulnerability is

(1) high, if a combined sewer overflows more than once in the intermediate protection zone delimited for water withdrawal following a storm, continuous rain or a snow melt, if a combined sewer overflows at least once in the inner protection zone delimited for the type of water withdrawals concerned, or if the lakeshore or riverbank inner protection zone delimited for the type of water withdrawals concerned is wholly situated in an urban area;

(2) medium, if vulnerability is neither low nor high;

(3) low, if the withdrawal site is situated in a lake or in a watercourse that is not downstream from an agglomeration served by a combined or semi-separated sewer system.

(c) Vulnerability to fertilizers

Vulnerability to fertilizers is assessed using the following methods:

#### Method 1

Method based on phosphorous analysis results over a consecutive 5-year period, sampled in accordance with this Regulation.

In a lake, water vulnerability is

(1) high if the average result is equal to or greater than  $20 \ \mu g/l P$ ;

(2) medium if the average result is between 10  $\mu$ g/l P and 20  $\mu$ g/l P;

(3) low if the average result is equal to or les than  $10 \ \mu g/l P$ .

In a watercourse, water vulnerability is

(1) high if the average result is equal to or greater than 60  $\mu$ g/l P;

(2) medium if the average result is between 30  $\mu$ g/l P and 60  $\mu$ g/l P;

(3) low if the average result is equal to or less than  $30 \ \mu g/l P$ .

#### Method 2

Method based on observations made in a lake or watercourse over a consecutive 5-year period of events involving algae proliferations or increases in ammoniacal nitrogen that affected the settling, filtering or disinfecting of treated water, caused taste or odour problems in the water distributed, or caused at least 1 measurement of microcystin-LR in the water distributed to be 20% over the standard prescribed in the Regulation respecting the quality of drinking water.

Water vulnerability is

(1) high if 5 or more events are recorded;

(2) medium if 2 to 4 events are recorded;

(3) low if 1 or no events are recorded.

Final water vulnerability to fertilizers is the most restrictive rating obtained using one of the methods.

(d) Vulnerability to suspended solids

Vulnerability to suspended solids is assessed using measurements of the change in raw water turbidity taken using a measuring device in accordance with this Regulation.

The results of the measurements must be analyzed over a consecutive 5-year period.

Water vulnerability is

(1) high if the value of the 95th percentile is equal to or greater than 200 NTU (nephelometric turbidity unit);

(2) medium if the value of the 95th percentile is between 100 NTU and 200 NTU;

(3) low if the value of the 95th percentile is equal to or less than 100 NTU.

(e) Vulnerability to toxic substances

Vulnerability to toxic substances is assessed using samples withdrawn pursuant to the Regulation respecting the quality of drinking water over a 5-year period to analyze for the organic substances listed in Schedule II of this Regulation, or based on activities around the perimeter of the withdrawal site.

For distribution systems supplying more than 5,000 persons, water vulnerability is

(1) high if 1 of the values analyzed is equal to or greater than 50% of the applicable standard;

(2) medium if 1 of the values analyzed is between 20% and 50% of the applicable standard;

(3) low if 1 of the values analyzed is equal to or less than 20% of the applicable standard.

For distribution systems supplying 5,000 or fewer persons,

(1) high, if the total area used for industrial, commercial or agricultural activities in a strip 120 metres wide around the intermediate protection zone delimited for water withdrawals is equal to or greater than 50% of the protected zone;

(2) medium, if the total area is between 20% and 50% of the area of the intermediate protection zone;

(3) low, if the total area is equal to or less than 20% of the area of the intermediate protection zone.

(f) Vulnerability to accidents

Vulnerability to accidents is assessed on the basis of all the accidents of human origin that have occurred around the perimeter of the withdrawal site, such as a spill from a tank truck (equal to at least the volume of a semi-trailer) containing hydrocarbons, corrosive substances, other liquid chemicals, liquid manure or highly biodegradable soluble substances, the failure of a reservoir, oil pipeline or retention pond for similar substances, or the leaching of water from a storage or fill site, waste water or liquid manure pumping station, or treatment plant for liquid manure, municipal waste water or industrial waste water.

Water vulnerability is

(1) high, if 1 or more events is recorded over a 5-year period;

(2) medium, if only 1 event is recorded over a 10-year period;

(3) low, if 1 or no events are recorded over a consecutive period exceeding 10 years.

Vulnerability to accidents may also be assessed by a competent professional who certifies in writing that the location of the withdrawal site constitutes a cause for concern because of the proximity of a major transportations route, an industrial zone, a major industrial activity such as a transhipment site, a military base, or any major extraction, development or harnessing project upstream. The professional may also certify that the withdrawal site is sufficiently remote or at a sufficient depth from the activity and assess a low vulnerability.

Final vulnerability to accidents is the vulnerability assessed by the competent professional, if applicable.

#### SCHEDULE III

(ss. 55, 56 and 57)

#### CONTAMINATED PERIMETER

CANADA

PROVINCE OF QUEBEC

#### 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-of-way 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 Boulevard Saint-Jean-Baptiste; thence, in a northeasterly direction following the southeast right-of-way 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 III

SCHEDULE III WATER WITHDRAWAL AND PROTECTION REGULATION

