Gouvernement du Québec

# **O.C. 696-2002,** 12 June 2002

Environment Quality Act (R.S.Q., c. Q-2; 2001, c. 59)

## **Groundwater Catchment**

Groundwater Catchment Regulation

WHEREAS, under paragraphs b, c, e, g, h.1, h.2, k and m of section 31, paragraphs a, b, d, p, q, r and s of section 46, section 86, paragraph a of section 87 and sections 109.1 and 124.1 of the Environment Quality Act (R.S.Q., c. Q-2; 2001, c. 59, s. 1), the Government may make regulations on the matters set forth therein;

WHEREAS, 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, a draft Regulation respecting groundwater catchment was published in the *Gazette officielle du Québec* on 13 June 2001 with a notice that it could be made by the Government upon the expiry of a 60-day period following that publication;

WHEREAS, after considering the comments received following the publication of the draft Regulation, it is expedient to make the Regulation with amendments;

WHEREAS, under section 18 of the Regulations Act, a regulation may come into force on the date of its publication in the *Gazette officielle du Québec* where the authority that has made it is of the opinion that the urgency of the situation requires it;

WHEREAS, under section 18 of that Act, the reason justifying such coming into force shall be published with the regulation;

WHEREAS the Government is of the opinion that the urgency due to the following circumstances justifies such a coming into force of the Groundwater Catchment Regulation attached to this Order in Council:

— the obligation under the Act to impose restrictions on pig farming (2002, c. 18) to make, no later than 15 June 2002, a regulation to replace the Regulation respecting the reduction of pollution from agricultural sources enacted by Order in Council 742-97 dated 4 June 1997;

— the necessity that the measures respecting water catchment protection found in the Regulation respecting the reduction of pollution from agricultural sources and now transferred to the Groundwater Catchement Regulation come into force on the same date as the Agricultural Operations Regulation made by Order in Council 695-2002 dated 12 June 2002 which replaces the Regulation respecting the reduction of pollution from agricultural sources;

IT IS ORDERED, therefore, upon the recommendation of the Minister of State for Municipal Affairs and Greater Montréal, the Environment and Water and Minister of the Environment:

THAT the Groundwater Catchment Regulation, attached to the Order in Council, be made.

JEAN ST-GELAIS, Clerk of the Conseil exécutif

# **Groundwater Catchment Regulation**

Environment Quality Act (R.S.Q., c. Q-2, s. 31, pars. *b*, *c*, *e*, *g*, *h*.1, *h*.2, *k* and *m*, s. 46, pars. *a*, *b*, *d*, *p*, *q*, *r* and *s*, ss. 86, 87, par. *a*, ss. 109.1 and 124.1; 2001, c. 59, s. 1)

## CHAPTER I OBJECT

**1**. The object of this Regulation is to

(1) promote the protection of groundwater intended for human consumption; and

(2) govern groundwater catchment in order to prevent the catchment of that water by an owner or operator from causing abusive nuisance to its neighbours, in particular by lowering the phreatic water level or by reducing the artesian pressure, to prevent the drawing of water in excessive amounts considering its availability, and to minimize the negative impacts from the catchment on watercourses and bodies of water, on the persons entitled to use them and on the ecosystems associated with those watercourses and bodies of water.

## CHAPTER II CATCHMENT WORKS

**2.** This Chapter applies to catchment works that are not subject to the authorization of the Minister in accordance with Chapters IV and V.

Catchment works referred to in this Chapter are exempt from the application of section 32 of the Environment Quality Act (R.S.Q., c. Q-2). **3.** Every catchment work installation is subject to the authorization of the local or regional municipality in the territory of which the work will be installed. The application must specify the location of the work and its capacity.

**4.** Installation works or modification of a catchment work must be carried out in such a way as to prevent groundwater from being contaminated.

Catchment work must be made of materials adequate to supply drinking water.

**5.** It is prohibited to install a catchment work less than

(1) 30 m from any non-watertight wastewater system. However, where the distance is not complied with, a tube well that complies with the standards provided for in subparagraphs 1 to 3 of the second paragraph of section 10 may be installed at a distance of at least 15 m from a non-watertight wastewater system; or

(2) 15 m from a watertight wastewater system.

**6.** It is prohibited to install a catchment work in an area subject to flooding with a recurring period of between 0 to 20 years, unless it is to replace a catchment work existing on 15 June 2002. In such case, a tube well that complies with the standards provided for in subparagraphs 1 to 3 of the second paragraph of section 10 may be installed provided that the casing rises above the ground surface at a sufficient height to prevent possible immersion.

**7.** In an area subject to flooding with a recurring period of between 20 to 100 years, only a tube well that complies with the standards provided for in subparagraphs 1 to 3 of the second paragraph of section 10 may be installed provided that the casing rises above the ground surface at a sufficient height to prevent possible immersion.

**8.** It is prohibited to install a groundwater catchment work for human consumption purposes less than 30 m from a cultivated parcel. "Parcel" means a portion of land forming a single block and planted with the same crop and requiring the same fertilization, belonging to the same owner and constituting a lot or part of lot.

**9.** A person who installs a tube well must ensure that the casing is new, at least 5.3 m long, has an inside diameter wider than 8 cm, rises above the ground surface by not less than 30 cm and complies with one of the following standards :

— ASTM Standard A 53/A 53M - 99b, if made of steel;

— ASTM Standard A 409/A 409M – 95a, if made of stainless steel; or

— ASTM Standard F 480 – 00, if made of plastic.

The owner must ensure that the casing is at least 30 cm high above the ground at all times.

**10.** A person who installs a tube well in a rock formation must connect a drive shoe to the lower end of the casing.

In addition, if the rock formation lies less than 5 m from the ground surface,

(1) the well must be drilled in such a way so as to obtain, all along the depth required for sealing, a diameter at least 10 cm wider than the nominal diameter of the casing;

(2) the casing must be sunk to a depth of not less than 5 m from the ground surface ; and

(3) the annular space must be filled, in accordance with the rules, with a material that ensures a watertight and durable sealing such as a cement bentonite mix since drill cuttings are not acceptable.

The casing must be anchored in bedrock for at least 60 cm or until penetration ceases.

The connection between two casings must be water-tight.

**11.** A person who installs a shallow well must comply with the following standards :

(1) the materials used must be new;

(2) the space inside the well must be wider than 60 cm and the well must not be more than 9 m deep below the ground surface;

(3) the casing must be made of concrete pipes complying with Standard NQ 2622-126 or stonework or porous concrete or plastic;

(4) the connection joints must be watertight;

(5) the well must rise above the ground surface by not less than 30 cm; and

(6) the annular space must be filled in accordance with the rules by means of a material that ensures, over a space of at least 5 cm, a watertight and durable sealing such as a cement bentonite mix, to a depth of 1 m below the ground surface.

**12.** A person who installs a spring catchment work must comply with the standards that apply to a surface well. The work must be equipped with an overflow and the sealing of the annular space is not required.

If a horizontal well is used,

(1) it must be buried at least 1 m deep upstream from the natural point of groundwater resurgence so as to collect that water before it surfaces;

(2) it must be connected to a watertight reservoir;

(3) the reservoir must be equipped with an overflow; and

(4) the layout of the ground, above and no less than 3 m upstream from the well, must be carried out so as to prevent runoff or infiltration of surface water.

**13.** A person who installs a well point must ensure that the casing is new, has an inside diameter of not more than 8 cm, rises above the ground surface by not less than 30 cm and complies with one of the standards provided for in the first paragraph of section 9.

**14.** A person who makes underground connections to the casing of a catchment work must ensure that those connections are watertight.

**15.** A person who installs a catchment work must cover it safely so as to prevent contaminant infiltration.

The owner of the work shall ensure that the integrity of the well cover is constantly maintained.

**16.** The owner of a catchment work must ensure that the finishing grade, within a 1-m radius from a catchment work, is carried out so as to prevent the presence of stagnant water and infiltration of water into the ground and that the integrity of the finishing grade is constantly maintained.

**17.** A person who installs or alters a catchment work must, on completion of the work, clean and disinfect the catchment work so as to eliminate any contamination.

The same requirement applies to a person who installs pumping equipment if the installation is made more than two days after the cleaning and disinfecting referred to in the first paragraph.

**18.** The owner of a catchment work must seal it off so as to protect the quality of groundwater

(1) where pumping equipment has not been installed three years after completion of the work;

(2) where pumping has been interrupted for at least three years;

(3) where a new work intended to replace it is installed; or

(4) where the catchment work is non-productive or does not meet the owner's needs.

The requirement set forth in the first paragraph shall be suspended if the owner of the work has filed with the municipality a notice by which the owner expresses his or her intention to use again the catchment work. The notice must be renewed every three years.

**19.** A person who drills a tube well must carry out a flow rate test for not less than 30 minutes, during which the flow rate and the water level before pumping and at the end of pumping must be measured. The test must verify if the flow rate meets the daily peak requirements of a residence, where applicable.

**20.** A person who drills or deepens a catchment work must, within 30 days after completion of the work, draw up a report, in accordance with the sample standard format provided by the Minister of the Environment, containing the information listed in Schedule I. The report must certify that the work complies with the standards provided for in this Regulation.

A copy of the report must be provided to the owner of a catchment work, the municipality and the Minister of the Environment.

**21.** The owner of a catchment work must have groundwater samples taken between the second and the thirtieth day following the beginning of use of the pumping equipment and have the samples analyzed by a laboratory accredited by the Minister under section 118.6 of the Environment Quality Act.

The following parameters must be analyzed:

- total coliform bacteria;
- Escherichia coli bacteria;
- enterococcus bacteria;
- arsenic;
- barium ;
- chlorides;
- fluorides;
- iron;
- manganese;
- nitrates and nitrites;
- sodium;
- sulfates; and

- total hardness based on the calcium and magnesium content.

The laboratory shall give to the owner and send to the Minister the results of the analyses of the water samples referred to in the first paragraph, within ten days after the samples intended to control bacteria are drawn, or, for samples intended to control other parameters, within 60 days of drawing the samples.

The owner of a catchment work referred to in the first paragraph must ensure that water intended for human consumption complies with section 3 of the Regulation respecting the quality of drinking water made by Order in Council 647-2001 dated 30 May 2001.

**22.** The owner of a catchment work in artesian condition must have it installed and maintain it so as to prevent any gushing.

This section does not apply to spring water catchments.

**23.** Groundwater may be used for heating or air conditioning purposes only where the water is returned to its original aquifer in accordance with Standard CSA-C445-M92.

# CHAPTER III PROTECTION AREAS

#### DIVISION I GENERAL

GENERAL

**24.** Owners of spring water, mineral water or groundwater catchment sites supplying more than 20 persons must take the measures necessary to maintain the quality of groundwater, in particular by delimiting an immediate protection area established within a radius not less than 30 m from the catchment work. That area may be smaller if a hydrogeological study signed by an engineer member of the Ordre des ingénieurs du

Québec or a geologist member of the Ordre des géologues du Québec shows the presence of a natural protection barrier, such as the presence of a layer of clay.

For the purposes of this Regulation, "spring water" and "mineral water" have the meaning given to them in the Regulation respecting bottled water (R.R.Q., 1981, c. Q-2, r.5).

A safety fence at least 1.8 m high must be installed at the boundaries of the immediate protection area of a catchment site the average flow rate of which is greater than 75 m<sup>3</sup> per day. A notice must be posted at the catchment site and indicate the presence of a groundwater source intended for human consumption.

Within the immediate protection area, activities, facilities or deposits of materials or objects likely to contaminate groundwater are prohibited, except equipment necessary to operate a catchment work when installed safely.

The finishing grade, within the immediate protection area, must be carried out so as to prevent the percolation of water.

**25.** Owners of spring water, mineral water or groundwater catchment sites intended to supply drinking water, the average operation flow rate of which is greater than 75 m<sup>3</sup> per day must have the following documents signed by an engineer member of the Ordre des ingénieurs du Québec or a geologist member of the Ordre des géologues du Québec :

(1) the plan showing the location of the supply area;

(2) the plan showing the location of the bacteriological protection area and the virological protection area which correspond to the portions of the supply area of the catchment site as defined by using a migration time of groundwater over 200 days (bacteriological protection) and over 550 days (virological protection);

(3) the assessment of the vulnerability of groundwater within the areas defined in paragraph 2 by applying the DRASTIC method;

(4) the inventory of the activities and works located within the areas defined in subparagraph 2 of the first paragraph that are likely to alter the microbiological quality of groundwater such as wastewater treatment systems, works or sites for the storing or spreading of animal waste or farm compost, yards or feedlots. For catchment sites operated for drinking water supply purposes the average flow rate of which is 75 m<sup>3</sup> per day and supplying more than 20 persons, the bacteriological protection area shall be set within a 100-m radius from the catchment site and the virological protection area shall be set within a 200-m radius. For the purposes of Division II of this Chapter, groundwater is considered vulnerable. Protection areas may be different if they are established in accordance with the provisions of subparagraph 2 of the first paragraph and the vulnerability of groundwater was assessed therein by applying the DRASTIC method.

The inventory referred to in subparagraph 4 of the first paragraph must be kept up to date and the information listed in subparagraphs 2, 3 and 4 of that paragraph must be available upon request from the Minister of the Environment.

Furthermore, a copy of the documents referred to in the first paragraph must be given to the local municipality on whose territory the catchment site is located.

# **DIVISION II** SPECIAL PROVISIONS FOR FARMING AREAS

**26.** The spreading of animal waste, farm compost, mineral fertilizer and fertilizing waste substances is prohibited less than 30 m from any groundwater catchment work intended for human consumption.

The spreading of animal waste, farm compost or fertilizing waste substances, except the fertilizing waste substances that comply with the CAN/BNQ 0413-200 standards, is prohibited within the bacteriological protection area of a groundwater catchment site where such water is considered vulnerable or where the DRASTIC vulnerability index is equal to or greater than 100 over any portion of that area.

The spreading of animal waste, farm compost or fertilizing waste substances, except the fertilizing waste substances that comply with the CAN/BNQ 0413-200 standards, on the periphery of the areas of prohibition prescribed in the previous paragraphs must be carried out so as to prevent infiltration into those areas.

**27.** A municipality may, by municipal by-law made under the Act respecting land use planning and development (R.S.Q., c. A-19.1), prohibit the spreading of animal waste, farm compost, mineral fertilizer and fertilizing waste substances in defined portions of the supply area of a catchment work supplying a drinking water distribution system if the concentration in nitrates of water from a groundwater catchment site exceeds 5 mg/L for two consecutive controls carried out within the scope

of the periodic control provided for in the Regulation respecting the quality of drinking water.

**28.** The owner of a catchment site must, if the periodic control provided for in the Regulation respecting the quality of drinking water shows a concentration in nitrates greater than 3 mg/L, notify farm operators who use parcels that intersect with the supply area of the catchment site or, for a catchment site the average flow rate of operation of which is lower than 75 m<sup>3</sup> per day, parcels that intersect with the bacteriological and virological protection areas.

**29.** The erection or layout of a raising facility or animal waste storage facility is prohibited

(1) less than 30 m from any groundwater catchment work intended for human consumption;

(2) in the bacteriological protection area of a groundwater catchment site, where the water is considered vulnerable or where the DRASTIC vulnerability index is equal to or greater than 100 over any portion of that area.

For the layout of a winter enclosure for beef cattle, the distance provided for in subparagraph 1 of the first paragraph shall be extended to 75 m.

This section does not apply to the raising of canidae and felidae as well as fish breeding, zoos, parks and zoological gardens.

**30.** Storage directly on the ground of animal waste, farm compost or fertilizing waste substances in a crop field is prohibited

(1) less than 300 m from any groundwater catchment work intended for human consumption; and

(2) in a bacteriological protection area of a groundwater catchment site where the DRASTIC vulnerability index is equal to or greater than 100 over any portion of that area.

# CHAPTER IV

GROUNDWATER CATCHMENT SUBJECT TO THE MINISTER'S AUTHORIZATION

**31.** The following are subject to the authorization of the Minister:

(1) groundwater catchment projects having a capacity less than 75  $m^3$  per day intended to supply more than 20 persons;

(2) groundwater catchment projects intended to be distributed or sold as spring water or mineral water or to be an ingredient used in the manufacture, conservation or treatment announced as spring water or mineral water on a product within the meaning of the Food Products Act (R.S.Q., c. P-29) or on the package, container or label of such a product; and

(3) groundwater catchment projects having a capacity of 75 m<sup>3</sup> or more per day or that will bring the capacity to more than 75 m<sup>3</sup> per day.

Catchment works referred to in this section are exempt from the application of section 32 of the Environment Quality Act.

**32.** Any application for authorization to carry out a project referred to in section 31 must be made in writing and contain the following information and documents:

(1) for a natural person, the person's name, address and telephone number;

(2) for a legal person, partnership or association, its name, the address of its head office, the position of the signatory of the application and a certified true copy of the deed authorizing the application and its signatory;

(3) the registration number assigned to an applicant registered in the register of sole propriertorships, partnerships and legal persons;

(4) for a municipality, a certified true copy of the deed authorizing the application and its signatory;

(5) the cadastral description of lots on which the project will be carried out;

(6) the intended use of the water drawn;

(7) the total flow rate of groundwater intended to be drawn each month in a year;

(8) titles of ownership and the uses of lots located within a 30-m radius from the site where any groundwater catchment work intended for human consumption will be installed;

(9) an attestation issued by the Minister of Natural Resources related to the mining rights likely to be granted therein; and

(10) for a groundwater catchment work located on lands in the domain of the State, a letter from the Minister of Natural Resources indicating the Minister's intention to agree to a lease with an applicant with respect to the installation of infrastructures related to groundwater catchment activities.

**33.** Applications related to the groundwater catchment projects intended for supplying drinking water referred to in subparagraphs 1 and 3 of the first paragraph of section 31 must include a hydrogeological study establishing the impact of the project on the environment, other users and public health.

**34.** Applications related to the groundwater catchment projects referred to in subparagraph 2 of the first paragraph of section 31 must include a hydrogeological study establishing the impact of the project on the environment, other users and its food safety.

**35.** Applications related to the groundwater catchment projects having a capacity of  $75 \text{ m}^3$  or more per day but of less than 300 m<sup>3</sup>, the water of which is not intended for human consumption, must include a hydrogeological study establishing the impact of the project on the users established within a 1-km radius.

**36.** Applications related to the groundwater catchment projects having a capacity of more than 300 m<sup>3</sup> per day the water of which is not intended for human consumption must include a hydrogeological study establishing the impact of the project on the environment and other users.

**37.** Studies and reports provided for in sections 33 to 36 must be signed by an engineer member of the Ordre des ingénieurs du Québec or a geologist member of the Ordre des géologues du Québec and the plans and specifications of the catchment facilities must be signed by an engineer member of the Ordre des ingénieurs du Québec.

**38.** The valid term of authorizations issued for catchment projects referred to in subparagraph 2 or subparagraph 3 of the first paragraph of section 31 but, in the case of subparagraph 3, that are not intended for supplying drinking water, is ten years.

In the six months preceding the expiry of the valid term of an authorization, the holder must file an application of renewal with the Minister. The application must include a notice signed by an engineer member of the Ordre des ingénieurs du Québec or a geologist member of the Ordre des géologues du Québec, certifying that the impact of groundwater catchment on the environment, on other users or, for groundwater catchments for spring water or mineral water purposes, on food safety remains unchanged. If the notice shows that there is a change of impact, the application for renewal must include a hydrogeological study specifying the nature and cause of the changes. **39.** The following are rights for the issue or modification of authorizations for the projects listed in section 31:

(1) \$1 500 for groundwater catchment projects having a capacity less than 75 m<sup>3</sup> per day intended to supply more than 20 persons;

(2) \$3 500 for groundwater catchment projects intended to be distributed or sold as spring water or mineral water or to be an ingredient used in the fabrication, conservation or treatment announced as spring water or mineral water on a product within the meaning of the Food Products Act or on the package, container or label of such a product;

(3) \$1 500 for groundwater catchment projects having a capacity of 75 m<sup>3</sup> and not more than 300 m<sup>3</sup> per day or that will bring the capacity to more than 75 m<sup>3</sup> per day without exceeding 300 m<sup>3</sup>; and

(4) \$4 000 for groundwater catchment projects having a capacity of more than 300 m<sup>3</sup> per day.

The renewal of authorizations referred to in section 38 is subject to payment of rights representing 10% of the rights provided for in the first paragraph. If there are changes of operating conditions, the rights to be paid are the same as those provided for in the first paragraph.

#### CHAPTER V PARTICULAR AREAS

**DIVISION I** ÎLES-DE-LA-MADELEINE

**40.** Any groundwater operation project in the territory of Îles-de-la-Madeleine is subject to the authorization of the Minister.

For projects not referred to in section 31, the application for authorization must be made in writing and contain the information and include the documents referred to in section 32.

## DIVISION II REGION OF VILLE MERCIER

**41.** This Division applies to the territories of the municipalities of Ville de Mercier, Saint-Isidore, Sainte-Martine and Saint-Urbain-Premier.

**42.** It is prohibited to drill, dig or operate a catchment work in the perimeter described in Schedule II, except for environmental renewal purposes.

**43.** Any tube well installed in the territory of a municipality referred to in this Division but outside the perimeter described in Schedule II and intended to collect groundwater that flows in the bedrock must be drilled so as to cut through it over a minimum depth of 10 m.

**44.** The owner of a groundwater catchment project intended for human consumption or for the production or processing of food the supply area of which is likely to cut in part through the territory described in Schedule II must have a groundwater quality monitoring program for certain organic compounds, in particular vinyl chloride. The content of the monitoring program (sites where groundwater is drawn and frequency, physicochemical parameters, detection limit, method of drawing samples) is related to the technical characteristics of the project (catchment site and volume of water drawn).

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

The presence of one of the organic compounds that is part of the monitoring program must be sent to the Minister no later than 30 days after the owner has received the results of the analyses of the water samples referred to in the first paragraph.

The operation of a catchment site may be continued provided that the presence of any organic compound part of the monitoring program is not found.

The results of the monitoring program must be kept and be made available upon request from the Minister.

#### CHAPTER VI DRILLING

**45.** Any person who drills for the purposes of exploring for groundwater must, on completion of the work, seal off the bore holes which have been drilled and which will not be used for the purposes of collection or monitoring groundwater.

**46.** Any person who installs an observation well must cover it safely so as to prevent contaminant infiltration.

The owner of the work shall ensure that the integrity of the well cover is constantly maintained.

**47.** Every application for a drilling permit must be made on the form provided by the Minister by the holder of a well drilling contractor's licence issued by the Régie du bâtiment du Québec.

**48.** Every application for renewal of a permit must be made no later than 1 March each year on the form provided by the Minister.

**49.** Every application for a permit or for renewal of a permit must include a postal money order or a certified cheque for \$75 made out to the Minister of Finance.

# **CHAPTER VII**

PENAL

**50.** Any person who contravenes any of the provisions of sections 4 to 23, 40, 42, 43, 45, 46, the first paragraph of section 53, the first paragraph of section 54 and sections 58 or 59 commits an offence and is liable to a fine of

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

(2) \$1 000 to \$20 000, in the case of a legal person.

**51.** Any owner of a catchment work or catchment site who contravenes any of the provisions of sections 24 to 26, 28 to 30 and 43 commits an offence and is liable to a fine of

(1)  $2000 \text{ to } 15\,000$ , in the case of a natural person; or

(2) \$5 000 to \$100 000, in the case of a legal person.

**52.** The fines prescribed in sections 50 and 51 shall be doubled in the case of a subsequent offence.

# CHAPTER VIII

TRANSITIONAL AND FINAL

**53.** Notwithstanding section 5, a tube well installed in accordance with subparagraphs 1 to 3 of the second paragraph of section 10 may be installed on a lot if, on 15 June 2002, there is on that lot a main construction authorized by the municipality and the dimensions of the lot do not comply with the distances applicable to a catchment work referred to in section 5.

If, during the flow rate test provided for in section 19, water in sufficient quantity cannot be drawn from a tube well to meet domestic needs, a surface well or a well point may be installed instead of a tube well.

**54.** Notwithstanding section 8, a tube well installed in accordance with subparagraphs 1 to 3 of the second paragraph of section 10 may be installed on a lot if, on 15 June 2003, there is on that lot, a main construction authorized by the municipality and the dimensions of the lot do not comply with the distances applicable to a catchment work referred to in section 8.

If, during the flow rate test provided for in section 19, water in sufficient quantity cannot be drawn from a tube well to meet domestic needs, a surface well or a well point may be installed instead of a tube well.

**55.** Notwithstanding section 24, the immediate protection area of a catchment site existing on 15 June 2002 may be established at less than 30 m, considering the obstacles found, such as the dimension of the lot, a road or a dwelling.

**56.** For the purposes of section 26 and until 15 June 2006, the bacteriological protection area considered vulnerable of a groundwater catchment site supplying more than 20 persons shall correspond to the area defined by a 100-m radius around the catchment site.

Until 15 June 2006, the bacteriological protection area determined in accordance with section 25 may be applied in the place and stead of the area defined by a 100-m radius around the catchment site if the municipality responsible for the application of that provision makes, under the Act respecting land use planning and development, a by-law that contains in full the provisions of section 26.

**57.** For the purposes of sections 29 and 30 and until 15 June 2006, the bacteriological protection area considered vulnerable of a groundwater catchment site supplying more than 20 persons, the average daily flow rate of which is less than 75 m<sup>3</sup>, shall correspond to the area defined by a 100-m radius around the catchment site. However, a 300-m radius must be applied if the average daily flow rate is greater than 75 m<sup>3</sup> or if groundwater is collected for spring water or mineral water purposes.

Until 15 June 2006, the bacteriological protection area determined in accordance with section 25 may be applied in the place and stead of the area defined by a 300-m radius around the catchment site if the municipality responsible for the application of that provision makes, under the Act respecting land use planning and development, a by-law that contains in full the provisions of sections 29 and 30.

**58.** The owner of a groundwater catchment site located in the territory of a municipality referred to in section 40 must send to the Minister, no later than 15 June 2003, a notice indicating the location of any catchment work, the use of the water collected, an estimate of the average volume of water collected daily and of the daily peak volume, and the number of days per year when water is collected. The owner must then notify the Minister of the Environment of any change to the information contained in the notice.

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**59.** The owner of a catchment site that can provide a volume of at least 75  $\text{m}^3$  of groundwater per day must send to the Minister, no later than 15 June 2003, a notice indicating the location of any catchment work, the use of that water, the volume of water drawn daily and the number of days per year when water is drawn. The owner must also notify the Minister of any change that may cause the notice to be inaccurate or incomplete.

**60.** The Regulation respecting waste water disposal systems for isolated dwellings  $^{\circ}$  is amended by substituting the following lines for the first line of the table of subparagraph *d* of the first paragraph of section 7.2, starting with the words "Well or source":

Other well or source used 30 as water supply	Tube well that is 5 m deep or more and installed in accordance with the prescriptions of subparagraphs 1 to 3 of the second paragraph of section 10 of the Groundwater Catchment Regulation (O.C. 696-2002) dated 12 June 2002	15	
	Other well or source used as water supply	30	

**61.** This Regulation replaces the Regulation respecting underground waters (R.R.Q., 1981, c. M-13, r.3) and the Regulation respecting the protection of ground water in the region of the Town of Mercier made by Order in Council 1525-82 dated 23 June 1982.

**62.** This Regulation applies in particular to a reserved area or an agricultural zone established pursuant to the Act respecting the preservation of agricultural land and agricultural activities (R.S.Q., c. P-41.1).

**63.** Local municipalities are responsible for the application of sections 2 to 20, 22, 23, 42, 43, 53, 54 and the second paragraphs of sections 56 and 57.

**64.** The Minister of the Environment must, no later than 15 June 2008, and every five years thereafter, file a report with the Government on the application of this Regulation.

The report shall be made public no later than fifteen days after it has been filed with the Government.

**65.** This Regulation comes into force on 15 June 2002 except

(1) the provisions of Chapter II which come into force on 15 June 2003;

(2) the provisions of Chapter IV which come into force on 15 June 2003 except for their application to the territories referred to in section 41 for which they come into force on 15 June 2002; and

(3) section 25 which comes into force on 15 June 2006.

## SCHEDULE I

(s. 20)

## DRILLING REPORT

The following information must be entered in the drilling report:

(1) name of the owner of the site on which the catchment work is installed;

(2) address of the site on which the catchment work is installed (number, street, municipality, postal code);

(3) cadastral description of the lot on which the catchment work is installed;

(4) location of the catchment work:

— No. of topographical map at a scale of 1:50 000;

- latitude - longitude coordinates or UTM coordinates: X and Y;

- UTM zone; and

projected display used: NAD 27 or NAD 83;

(5) sketch indicating location and distance from

— soil absorption system;

- road;
- dwelling; and
- building;

(6) units of measure used to complete the report;

<sup>\*</sup> The Regulation respecting waste water disposal systems for isolated dwellings (R.R.Q., 1981, c. Q-, r.8) was last amended by the Regulation made by Order in Council 217-2000 dated 18 October 2000 (2000, G.O. 2, 5243). For previous amendments, refer to the *Tableau des modifications et Index sommaire*, Éditeur officiel du Québec, 2002, updated to 1 March 2002.

(7) intended use of the water drawn;

(8) maximum daily volume forecasted;

(9) number of water drilling permit (WDP);number of licence issued by the Régie du bâtiment duQuébec;

date of installation of catchment work;

(10) drilling method:

- rotary;
- cable tool;
- diamond;
- excavation;
- earth auger; and
- driven wells;

(11) description of drilling;

- drilled depth; and

— drilled diameter;

(12) casing length and diameter; length rising above the ground; and type of well liner;

(13) length, diameter, opening and type of strainer, where applicable;

(14) length, diameter and type of exterior liner or cribbing, if any;

(15) nature and thickness of the geological formations encountered; and

(16) flow rate test:

— date of the test;

— water level before pumping (static level) and at the end of pumping (dynamic level);

— duration of pumping;

- flow rate of the catchment work; and

- pumping method.

#### SCHEDULE II

(s. 41 to 43)

## CONTAMINATED PERIMETER

CANADA PROVINCE OF QUÉBEC DISTRICT OF BEAUHARNOIS

## **Technical Description**

Namely, the whole territory part of Municipalité de Sainte-Martine, MRC de Beauharnois-Salaberry and Ville de Mercier, MRC de Rousillon and bounded to 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 rightof-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".

This technical description was prepared at the request of Michel Ouellet, engineer and team head for groundwater of the Service de l'expertise technique en eau at the Direction des politiques du secteur municipal of the Ministère de l'Environnement, based on a summary plan and description provided for the purpose of Schedule II to the future Groundwater Catchment Regulation.

The various data, either on the cadastral or municipal plan, come from cadastral maps at a scale of 1: 20 000 drawn by the Ministère des Ressources naturelles. As for the designation of the stream, the datum comes from Marie Simard, technical officer, Génie civil et urbanisme of Ville de Mercier who referred me to an extract of a plan called "Aire d'application du contrôle intérimaire". This technical description was prepared by the undersigned in Québec City on 11 June 2001 under the number 2214 of my minutes. The report may be used only for the purposes of the person requesting it and the plan attached is an integral part of it. Any other use will require the signed agreement of the undersigned.

Québec 11 June 2002

ANDRÉ GAGNÉ, Land Surveyor

Minute : 2214 Plan : 10342-001 File : 4116-03-04-93-034



Annexe II au Règlement sur le captage des eaux souterraines