Draft Regulations

Draft Regulation

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

Waste water disposal systems for isolated dwellings — Amendments

Notice is hereby given, in accordance with sections 10 and 13 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 Regulation to amend the Regulation respecting waste water disposal systems for isolated dwellings, the text of which appears below, may be made on the expiry of 15 days following this publication.

The main purpose of the draft Regulation is to defer to 31 December 2005 the date provided for in the Regulation currently in force on which Division XV.1 dealing with peat-based biofiltration systems is to cease to have effect.

The draft Regulation assigns to the Minister, as a transitional measure until 31 December 2005, the certification of "standard" systems using new technologies so long as the systems are evaluated and their effluents meet the discharge standards specific to each system. The systems concerned are primary, secondary, advanced secondary and tertiary treatment systems.

The owner of a disposal system will be required to see to the maintenance of the system and to enter into an inspection and maintenance contract with the system manufacturer in which the minimum annual maintenance to be performed by the manufacturer, the manufacturer's representative or a qualified person designated by the manufacturer must be stipulated.

The draft Regulation sets out the minimum information and documents to be filed with an application for a system installation permit.

The owners of tertiary treatment systems with disinfection or phosphorous removal will be required to have the system effluent analyzed at least twice a year.

The draft Regulation provides that it will be possible in specific circumstances to construct a polishing leaching field in sections, and introduces a requirement for owners of tertiary treatment systems with disinfection or phosphorous removal to perform a minimum number of analyses of the system's effluent. Various clerical errors in the Regulation currently in force are also corrected.

The draft Regulation will have no financial impact on enterprises, including small and medium-sized businesses, other than the cost of the system analyses to be borne by owners of tertiary treatment systems with disinfection or phosphorous removal.

The publication period shorter than the 60 days provided for in section 124 of the Environment Quality Act is warranted by the necessity of deferring for one year the date on which Division XV.1 of the Regulation currently in force is to cease to have effect, and to provide for a transitional system to be set in place until implementation of the mechanism for certifying compliance with NQ Standard 3680-910.

Further information may be obtained by contacting Didier Bicchi, Head of the Service des eaux municipales, by telephone at (418) 521-3885, extension 4852, or by e-mail at didier.bicchi@menv.gouv.qc.ca. Mr. Bicchi may also be reached by mail at 675, boulevard René-Lévesque Est, 8e étage, Québec (Québec) G1R 5V7.

Any person wishing to comment on the draft Regulation may do so by submitting written comments before the expiry of the 15-day period to the Minister of the Environment, 675, boulevard René-Lévesque Est, 30e étage, Québec (Québec) G1R 5V7.

THOMAS J. MULCAIR,
Minister of the Environment

Regulation to amend the Regulation respecting waste water disposal systems for isolated dwellings*

Environment Quality Act
(R.S.Q., c. Q-2, s. 31, 1st par., subpars. *a*, *c*, *d*, *e*, *f*, *h*.1 and *m*, s. 46, pars. *g*, *i* and *p* and s. 87, par. *c*)

1. The Regulation respecting waste water disposal systems for isolated dwellings is amended in section 1

(1) by inserting the following after paragraph *j*:

* The Regulation respecting waste water disposal systems for isolated dwellings (R.R.Q., 1981, c. Q-2, r.8) was last amended by the regulation made by Order in Council 903-2002 dated 21 August 2002 (2002, *G.O.* 2, 4545). For previous amendments, refer to the *Tableau des modifications et Index sommaire*, Québec Official Publisher, 2004, updated to 1 September 2004.

"(*j*.1) "maintenance": routine recurring work or action required to keep a disposal system in such condition that it may be continuously utilized, at its original or designed capacity and efficiency;";

(2) by replacing "is deemed" in paragraph *u* by "is considered".

2. The following is inserted after section 3.1:

"**3.2. Equipment maintenance:** The owner or user of a waste water disposal system must see to its maintenance, which includes the requirement to replace any part of a system whose service life requires it be replaced.

3.3. The owner of a treatment system referred to in section 11.1, 16.1, 87.7 or 87.13 must, for the inspection and maintenance of the system, have a binding contract with the system manufacturer in which it is stipulated that minimum annual maintenance is to be performed on the system by the manufacturer, the manufacturer's representative or a qualified person designated by the manufacturer.

A copy of the contract must be deposited with the local municipality in which the isolated dwelling or the other building served by the treatment system is situated.".

3. The following is inserted after section 4:

"**4.1. Content of the permit application:** For the purposes of section 4, every application for a permit to install a waste water discharge, collection or disposal system for an isolated dwelling must include

(1) the name and address of the person referred to in section 4;

(2) the cadastral designation of the lot on which the project is to be carried out;

(3) the number of bedrooms in the isolated dwelling or, in the case of another building, the total daily flow;

(4) a characterization study of the site and natural land conducted by a qualified professional, containing the following elements:

(a) the topography of the site;

(b) the disposal site grade;

(c) the soil permeability at the disposal site, specifying the methodology used to determine soil permeability;

(d) the level of bedrock, underground water or any layer of impermeable soil or low permeability soil below the surface of the disposal site;

(e) mention of any element that may influence the siting or construction of a disposal system; and

(5) a site plan to scale showing

(a) the elements identified in the "Reference point" column of sections 7.1 and 7.2 on the lot on which a waste water discharge, collection or disposal system is proposed and on the contiguous lots;

(b) the siting proposed for the parts of the waste water discharge, collection or disposal system;

(c) the installation depth of the soil absorption system, the standard sand-filter bed, the absorption field or the polishing leaching field in relation to the level of bedrock, underground water or any layer of impermeable soil or low permeability soil below the surface of the disposal site; and

(d) the installation depth of each component in the disposal system.

In the case of a project providing for other discharge into the environment, the information and plan must describe the receiving area and,

(1) in the case of a watercourse, specify the water flow and the effluent dilution rate in the watercourse in low-water periods, the hydrographic network to which the watercourse belongs, the location of the discharge site and effluent sampling site; or

(2) in the case of discharge into a ditch, the plan must show where the waste water is discharged into the ditch, the location of wells and springs used for the supply of water that are situated less than 30 metres from the ditch, the location of any other discharge sites in the same ditch and the drainage system to which the ditch is connected.

Despite the first paragraph, every application for a permit required under section 4 must, in the case of a building other than an isolated dwelling, be signed by the applicant and by an engineer who is a member of the Ordre des ingénieurs du Québec, and be filed with certification by the engineer that the project complies with the provisions of this Regulation and that the disposal system is capable of disposing of the waste water having regard to the specific characteristics of the waste water.".

4. Section 21 is amended by replacing "three" by "six" in subparagraph *g*.3 of the first paragraph.

5. Section 36 is amended by striking out "and at the most 120 centimetres" in paragraph *b*.

6. Section 60 is amended by replacing "with the exception of the minimum total capacity, which must be 2.3 cubic metres" by "except that its minimum total capacity must be 2.3 cubic metres and its siting must comply with the minimum standards set out in section 63, with the necessary modifications".

7. Section 72 is replaced by the following:

"**72. Compost management:** The provisions of section 6 apply to compost from a compost toilet.".

8. Section 87.16 is amended by adding the following paragraph:

"In addition, in the case of an ultraviolet disinfection system, it is prohibited to not connect, to disconnect, or to not replace a lamp forming part of the system.".

9. The following is inserted after section 87.25:

"**87.25.1. Construction in sections:** A polishing leaching field consisting of a seepage bed installed under a standard sand-filter bed, peat moss biofiltration system, advanced secondary treatment system or tertiary treatment system may be constructed in sections if the following criteria is met:

(1) the total area of the sections complies with the minimum absorption area in relation to the number of bedrooms in the dwelling and the permeability of the disposal site determined in section 87.25;

(2) the effluents are distributed in proportion to the areas of the sections constituting the polishing leaching field;

(3) where the sections are contiguous, their absorption areas are situated at the same level;

(4) where the sections are not at the same level, a hydraulic barrier at least 1.2 m wide composed of undisturbed natural ground separates the sections and is of a minimum height equivalent to the base of the disposal system;

(5) every collection and distribution component that carries part of the effluent towards a section of a polishing leaching field is designed and installed in such manner as to comply with the standards referred to in section 87.24 and to ensure uniform distribution within the section;

(6) the distribution of water in the part of the polishing leaching field constructed as a seepage bed is uniform and not altered by the effluent collection system;

(7) the equipment forming part of the collection component is installed under the treatment systems in such manner that the effluent complies with the applicable discharge standards; and

(8) the collection component and the delivery and distribution pipes in the various sections of the polishing leaching field are designed to prevent clogging or obstruction.".

10. The following is inserted after section 87.30:

"**87.30.1. Effluent analyses:** The owner of a tertiary treatment system with disinfection, phosphorous removal or disinfection and phosphorous removal must, at least once per six-month period, have a sample of the system effluent analyzed to determine the quantity, if any, of fecal coliforms or total phosphorous.".

11. Section 93 is replaced by the following:

"**93. Cessation of effect:** Division XV, comprising sections 76 to 87, and every reference to that Division or to an aerated installation, cease to have effect on 31 December 2004.

Division XV.1, comprising sections 87.1 to 87.6, and every reference to that Division or to a peat moss biofiltration system, cease to have effect on 31 December 2005.

This section does not operate to invalidate the authorizations concerning aerated installations or peat moss biofiltration systems issued before those dates.".

12. The following is inserted after section 94:

"**95. Provisional provisions:** Until 31 December 2005, despite the requirement in sections 11.1, 16.2, 87.8 and 87.14 to comply with NQ Standard 3680-910, a waste water disposal system using standard technology for a hydraulic capacity equal to or greater than the total daily flow from an isolated dwelling or other building served by the disposal system may be installed, subject to the conditions set out in this section.

For the purposes of this section, a disposal system's technology is standard if the technology was the subject of an evaluation report made to the Minister of the Environment by an engineer who is a member of the Ordre des ingénieurs du Québec, and the system's effluent complies with the effluent discharge limits according to the type of disposal system concerned and related system supply conditions.

The evaluation report must contain

(1) a description of the technology;

(2) the technical specifications and design criteria of each of its components;

(3) the specifications concerning the stages of preliminary treatment;

(4) the expected performance;

(5) the limits of the technology;

(6) a detailed analysis of the justifications (results of monitoring, former use or documentation, as the case may be);

(7) the manufacturer's recommendations on the operation, inspection and maintenance of the technology; and

(8) the engineer's signature.

The engineer's report must

(1) be based on tests carried out by an independent body over one year on at least one installation in conditions equivalent to those in which the technology is to be used, and comprising 16 affluent and effluent samples and measurement of the flow over that year; the samples must be taken monthly, 6 of which must be taken over 2 periods of 3 consecutive days, one in January, February or March and the other in July, August or September; or

(2) in the case of technology intended for isolated dwellings only and not for other buildings, be based on tests carried out by an independent body over one year on 4 installations, each test comprising 8 affluent and effluent samples and measurement of the flow over that year; the samples must be taken as follows: one sample per day for 3 consecutive days in January, February or March, one sample in April, May or June, one sample per day for 3 consecutive days in July, August or September and one sample in October, November or December.

If a disposal system's technology is standard, the Minister shall publish, on a medium based on information technology and, where the Minister considers it advisable, by any other means, a technical evaluation record specifying the features of the technology, the extent of its application, its design criteria, the maintenance rules for the disposal system, the level of development and the actual performance obtained. Publication of the record exempts the system installation from the provisions of section 32 of the Environment Quality Act.

The standards set out in this Regulation relating to the watertightness, siting, installation, use, maintenance and sampling in respect of a disposal system referred to in a section listed in the first paragraph apply, with the necessary modifications, to a standard disposal system.".

13. This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*.

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