

Draft Regulations

Draft Regulation

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

Non-watertight secondary treatment system

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 Regulation to amend the Regulation respecting waste water disposal systems for isolated dwellings, appearing below, may be made by the Government on the expiry of 60 days following this publication.

The main purpose of the draft Regulation is to introduce into the regulation the technical adjustments required to permit the installation of non-watertight secondary treatment systems directly above a soil absorption system and to provide for the installation of a non-watertight advanced secondary treatment system directly above a polishing leaching field.

The draft Regulation sets location standards based on the watertightness of the treatment system and standards for the installation of a non-watertight secondary treatment system directly above a soil absorption field, a seepage bed, an above-ground sand-filter bed and a standard sand-filter bed.

The amendment entails no economic impact associated with the coming into force of the Regulation. Rather, the amendment will facilitate the use of non-watertight secondary treatment systems and consequently reduce installation costs.

Further information on the draft Regulation to amend the Regulation respecting waste water disposal systems for isolated dwellings may be obtained by contacting Didier Bicchi, Head, Service des eaux municipales, telephone: 418 521-3885, extension 4852; fax: 418 528-0990

or e-mail: didier.bicchi@mddep.gouv.qc.ca. Information may also be obtained by writing to Mr. Bicchi at the Ministère du Développement durable, de l'Environnement et des Parcs, édifice Marie-Guyart, Direction des politiques de l'eau, 675, boulevard René-Levesque Est, 8^e étage, boîte 42, Québec (Québec) G1R 5V7.

Any person wishing to comment on the draft Regulation may submit written comments to Didier Bicchi at the above address within the 60-day period.

LINE BEAUCHAMP,
*Minister of Sustainable Development,
Environment and Parks*

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., subpar. c, s. 46, pars. g, i and l and s. 87, par. c)

1. Section 16.3 of the Regulation respecting waste water disposal systems for isolated dwellings is replaced by the following:

“16.3. Watertightness and location: Every secondary treatment system must be located in accordance with section 7.1 if it is watertight or section 7.2 if it is not watertight.”.

2. The following is inserted before section 17:

“§1. General”.

3. Subparagraph c of the first paragraph of section 21 is amended by adding the following at the end: “and allow for the hydraulic barrier separating two consecutive absorption trenches to be at least 1.2 metres wide”.

* 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 540-2007 dated 27 June 2007 (2007, G.O. 2, 1581A). For previous amendments, refer to the *Tableau des modifications et Index sommaire*, Québec Official Publisher, 2007, updated to 1 September 2007.

4. The following is inserted after section 25:

“§2. *Provisions specific to soil absorption fields under a non-watertight secondary treatment system*

25.1. Construction standards: A gravity feed soil absorption field built under a non-watertight secondary treatment system must comply with subparagraphs *c* and *h.1* of the first paragraph of section 21 and with the following requirements:

(a) the secondary treatment system must be able to cover and uniformly distribute water over the entire seepage surface of the soil absorption field;

(b) the length of an absorption trench must not exceed the maximum length of the secondary treatment distribution system in accordance with the manufacturer’s manual;

(c) if the width of the treatment system units is greater or lesser than 60 centimetres without exceeding 1.2 metres, the total length of the absorption trenches required by section 22 must be rectified according to the width of the secondary treatment system so as to cover the same absorption area, considering that the length is valid for a trench 60 centimetres wide. If the absorption trenches are wider than the units of the secondary treatment system, a minimum 15-centimetre layer of gravel or crushed stone complying with subparagraph *f* of the first paragraph of section 21 must be spread over the entire absorption trench; and

(d) the bottom of the treatment system or the layer of crushed stone must be at least 60 centimetres above bedrock, impermeable or low permeability soil or underground water.

25.2. Covering: Despite section 24, the parts of a soil absorption field that are not situated directly under the non-watertight secondary treatment system must be covered with an anti-contaminant material and a layer of soil permeable to air as prescribed by subparagraph *g* of the first paragraph of section 21 and be stabilized with grass-type vegetation. The soil must be sloped to facilitate the drainage of run-off water.”.

5. The following is inserted before section 26:

“§1. *General*”.

6. The following is inserted after section 31:

“§2. *Provisions specific to seepage beds under a non-watertight secondary treatment system*

31.1. Construction standards: A gravity feed seepage bed built under a non-watertight secondary treatment system must comply with subparagraph *h.1* of the first paragraph of section 21 and with the following requirements:

(a) the secondary treatment system must be able to cover and uniformly distribute water over the entire absorption area required by section 28;

(b) the maximum length of the seepage bed must not exceed the maximum length of the secondary treatment distribution system in accordance with the manufacturer’s manual;

(c) if the base of the non-watertight secondary treatment system is less than the area referred to in the table in section 28, without the absorption area exceeding the base of the treatment system by more than 60 centimetres, a minimum 15-centimetre layer of gravel or crushed stone complying with subparagraph *f* of the first paragraph of section 21 must be spread over the entire seepage surface. If the seepage bed is built in sections, this requirement applies with the necessary modifications; and

(d) the bottom of the treatment system or the layer of crushed stone must be at least 60 centimetres above bedrock, impermeable or low permeability soil or underground water.

31.2. Other standards: Sections 7.2, 25 and 25.2 apply, with the necessary modifications, to a seepage bed built under a secondary treatment system.”.

7. The following is inserted before section 36:

“§1. *General*”.

8. Section 37 is amended by replacing “*f, g and h*” in the last paragraph by “and *f* to *i*”.

9. The following is inserted after section 39.1:

“§2. *Provisions specific to above-ground sand-filter beds under a non-watertight secondary treatment system*

39.2. A gravity feed above-ground sand-filter bed built under a non-watertight secondary treatment system

must comply with subparagraph *h.1* of the first paragraph of section 21, subparagraphs *f*, *g* and *h* of the first paragraph of section 37 and with the following requirements:

(*a*) the bottom of the non-watertight secondary treatment system or the layer of crushed stone must be at least 60 centimetres above bedrock, impermeable soil or low permeability soil;

(*b*) despite subparagraph *a* of the first paragraph of section 37, the 30-centimetre sand layer is not required if the effluent of the non-watertight secondary treatment system is uniformly distributed over the entire seepage surface of the disposal site. The distribution is calculated using the maximum hydraulic loading rate established pursuant to paragraph *f* of this section according to the permeability of the disposal site;

(*c*) despite subparagraph *d* of the first paragraph of section 37 and in the case of a non-watertight secondary treatment system installed above an above-ground sand-filter bed, the maximum width of the non-watertight secondary treatment system or of a section of such a system must be determined using a maximum linear hydraulic loading rate, pursuant to the following table, according to the permeability of the disposal site:

Permeability of the disposal site	Maximum linear hydraulic loading rate (litre/linear metre)
High permeability soil	150
Permeable soil	90
Low permeability soil	60

(*d*) for the purposes of section 38, the areas referred to apply to the minimum area that a non-watertight secondary treatment system installed on the surface of the disposal site of the above-ground sand-filter bed must cover;

(*e*) if the area of the base of the non-watertight secondary treatment system is less than the area in the table in section 38, without the absorption area exceeding the base of the treatment system by more than 60 centimetres, a minimum 15-centimetre layer of gravel or crushed stone complying with subparagraph *f* of the first paragraph of section 21 must be spread over the entire seepage area. If the above-ground sand filter is built in sections, this requirement applies with the necessary modifications; and

(*f*) despite the second paragraph of section 39.1 and in the case of a non-watertight secondary treatment system installed above an above-ground sand-filter bed, the minimum distance between the sections of the non-watertight secondary treatment system must be determined on the basis of the quantity of effluent carried towards that section of the treatment system and the maximum hydraulic loading rate at the natural land level pursuant to the following table according to the permeability of the disposal site:

Permeability of the disposal site	Maximum hydraulic loading rate (litre/ metre ² /day)
High permeability soil	36
Permeable soil	24
Low permeability soil	12

39.3. Location and backfill: Sections 7.2 and 25.2 apply, with the necessary modifications, to an above-ground sand-filter bed, except for the location standards respecting embankments, trees and shrubs.

The distances referred to in section 7.2 are measured from the edge of the earth backfill surrounding the sand-filter bed.”.

10. The following is inserted before section 40:

“§1. *General*”.

11. The second paragraph of section 41 is amended

(1) by striking out “*d, e,*”;

(2) by replacing “and with subparagraphs *a* and *c* of the first paragraph of section 27” by “; with subparagraphs *a* and *c* of the first paragraph of section 27 and with subparagraph *b* of the first paragraph of section 37”.

12. The following is inserted after section 46.1:

“§2. *Provisions specific to standard sand-filter beds under a non-watertight secondary treatment system*

46.2. Standard sand-filter beds built under a non-watertight secondary treatment system: A gravity feed standard sand-filter bed built under a non-watertight secondary treatment system must comply with subparagraphs *f*, *h* and *h.1* of the first paragraph of section 21, section 25.2, subparagraph *a* of the first paragraph of section 27, paragraphs *a*, *b* and *c* of section 31.1 with the reference to section 28 in the latter section replaced by a reference to section 44, subparagraph *b* of the first paragraph

of section 37, with the necessary modifications, and subparagraphs *a, f, g, h, j* and *k* of the first paragraph of section 41.”

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

8540