

Regulations and other Acts

M.O., 2016

Order of the Minister of Sustainable Development, the Environment and the Fight Against Climate Change dated 21 December 2016

Environment Quality Act
(chapter Q-2)

Regulation to amend the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere

THE MINISTER OF SUSTAINABLE DEVELOPMENT,
THE ENVIRONMENT AND THE FIGHT AGAINST CLIMATE
CHANGE

CONSIDERING section 2.2 of the Environment Quality Act (chapter Q-2), which provides that the Minister of Sustainable Development, the Environment and the Fight Against Climate Change may make regulations determining what information a person or a municipality is required to provide regarding an enterprise, a facility or an establishment that the person or municipality operates;

CONSIDERING section 46.2 of the Act, which also provides that the Minister may determine by regulation the emitters that are required to report greenhouse gas emissions and the related information and documents to be provided to the Minister;

CONSIDERING the publication in Part 2 of the *Gazette officielle du Québec* of 26 October 2016, in accordance with sections 10, 12 and 13 of the Regulations Act (chapter R-18.1) and the fifth paragraph of section 2.2 and the second paragraph of section 46.2 of the Environment Quality Act, of the Regulation to amend the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere with a notice that it could be made by the Minister of Sustainable Development, the Environment and the Fight Against Climate Change on the expiry of 45 days following that publication;

CONSIDERING section 18 of the Regulations Act, which provides that a regulation may come into force on the date of its publication in the *Gazette officielle du Québec* or between that date and the date applicable under section 17 of that Act where the authority that is making it is of the opinion that the urgency of the situation requires it and the reason justifying such coming into force must be published with the regulation;

CONSIDERING that, in the opinion of the Minister of Sustainable Development, the Environment and the Fight Against Climate Change, the urgency due to the following circumstances justifies a coming into force on 1 January 2017:

— The persons or municipalities governed by the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere (chapter Q-2, r. 15) must take into account, as of 1 January 2017, the amendments made by the draft Regulation since the information is necessary in particular for the application of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1);

CONSIDERING that it is expedient to make the Regulation without amendment;

ORDERS AS FOLLOWS:

The Regulation to amend the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere, attached hereto, is hereby made.

Québec, 21 December 2016

DAVID HEURTEL,
*Minister of Sustainable Development,
the Environment and the
Fight Against Climate Change*

Regulation to amend the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere

Environment Quality Act
(chapter Q-2, ss. 2.2, 46.2, 115.27 and 115.34)

1. The Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere (chapter Q-2, r. 15) is amended in section 4 by striking out the last paragraph.

2. The following is inserted after section 5:

“5.0.1. When a facility or an installation changes operator during a year, the operator ceasing to operate must so inform the Minister as soon as possible.

For the purposes of sections 4 and 5, the emissions report for the current year must, in that case, be submitted by the new operator. The previous operator must provide the new operator with all the data required for the report for the period of the year for which the facility or establishment was under his or her responsibility.”.

2. Section 6.1 is replaced by the following:

“6.1. Every person or municipality operating an establishment that, during a calendar year, emits into the atmosphere greenhouse gases mentioned in Schedule A.1 in a quantity equal to or greater than 10,000 metric tons CO₂ equivalent must report those emissions to the Minister in accordance with this Division as long as its emissions are not below the reporting threshold for 4 consecutive years, even if the establishment ceases its activities.

Every person or municipality operating an enterprise that purchases electricity produced outside Québec for its own consumption or for sale in Québec must also report the emissions attributable to the production of that electricity, under the first paragraph. For such an emitter, and for an emitter that exports, transports or distributes electricity, that transports or distributes natural gas, that carries on gas or oil exploration or production, or that transports or distributes petroleum by pipeline, the reporting threshold provided for in the first paragraph applies to the enterprise as a whole.

Every person or municipality operating an enterprise that distributes each year more than 200 litres of fuels referred to in part QC.30.1 of protocol QC.30 in Schedule A.2 is to report to the Minister all greenhouse gas emissions attributable to their combustion or use as long as the quantity of fuels distributed is not below the reporting threshold for 4 consecutive years, even if the enterprise ceases its activities.

For the purposes of this Division, an enterprise operated by an emitter referred to in the second and third paragraphs is considered to be an establishment.

When an establishment referred to in the first paragraph has more than one facility, the data for each facility must be identified separately.

When an enterprise, a facility or an establishment changes operator during a year, the operator ceasing to operate the enterprise, facility or establishment must so inform the Minister as soon as possible. The emissions report for the current year must be made by the new operator. The previous operator must provide the new operator with all the data required for the report for the period of the year for which the enterprise, facility or establishment was under his or her responsibility.

When an emitter referred to in the first paragraph permanently closes an establishment or an emitter referred to in the second or third paragraph dissolves an enterprise and they are still subject to the mandatory reporting of their greenhouse gas emissions under this section, they must, within 6 months of the permanent closing of the establishment or the dissolution of the enterprise, send to the Minister an emissions report for the period during which the establishment or enterprise was operating but was not covered by such a report. If such an establishment or enterprise is referred to respectively in the first or second paragraph of section 2 of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1), the emissions report must be sent with the verification report referred to in section 6.6.”.

4. Section 6.3 is amended by replacing subparagraph 1 of the second paragraph by the following:

“(1) to calculate the greenhouse gas emissions of one or more sources of emissions when the emissions attributable to them represent, cumulatively, not more than 3% of the emissions from the establishment in CO₂ equivalent, up to a maximum of 20,000 metric tons CO₂ equivalent where the emissions from the establishment are, in the case of an emitter not referred to in section 6.6, the greenhouse gas emissions referred to in subparagraph 1 of the first paragraph of section 6.2, and in the case of an emitter referred to in section 6.6, the greenhouse gas emissions referred to in subparagraph 2.3 of the first paragraph of section 6.2.”.

5. Section 6.6 is amended

(1) by striking out subparagraphs 4 to 7 of the second paragraph;

(2) by striking out “emissions” before “threshold” in the fourth paragraph;

(3) by striking out the fifth paragraph;

(4) by replacing the sixth paragraph by the following:

“Despite the first paragraph, the verification report on the emissions report may have been made by a verification organization in the process of being accredited so long as the organization receives its accreditation not later than 1 September of the year in which the emitter’s verification report is sent.”.

6. Section 6.9 is amended by adding the following paragraph at the end:

“(10) a written confirmation from the verifier that the calibration of the equipment used to measure the parameters required to calculate the greenhouse gas emissions subject to the verification or the quantity of reference units, according to the requirements provided for in the second paragraph of section 7.1, has been verified.”.

7. Schedule A.2 is amended

- (1) in protocol QC.7, by replacing QC.7.5.3 by the following:

“QC.7.5.3. Consumption of materials and by-products

The emitter must determine the quantity of solid, liquid and gaseous materials and the quantity of by-products used or coming from all the processes referred to in QC.7.1 using the same equipment used for inventory purposes, such as weigh hoppers or belt weigh feeders.”;

- (2) in protocol QC.17, by replacing table 17-1 in QC-17.4 by the following:

“Table 17-1. Default greenhouse gas emission factors for Canadian provinces and certain North American markets, in metric tons CO₂ equivalent per megawatt-hour

(QC.17.3.1 (3), QC.17.3.2 (1) and (2))

Canadian provinces and North American markets	Default emission factor (metric tons GHG/MWh)
Newfoundland and Labrador	0.030
Nova Scotia	0.694
New Brunswick	0.292
Québec	0.002
Ontario	0.041
Manitoba	0.003
Vermont	0.002
New England Independent System Operator (NE-ISO), including all or part of the following states: - Connecticut - Massachusetts - Maine - Rhode Island - Vermont - New Hampshire	0.266
New York Independent System Operator (NY-ISO)	0.242

<p>Pennsylvania Jersey Maryland Interconnection Regional Transmission Organization (PJM- RTO), including all or part of the following states:</p> <ul style="list-style-type: none"> - North Carolina - Delaware - Indiana - Illinois - Kentucky - Maryland - Michigan - New Jersey - Ohio - Pennsylvania - Tennessee - Virginia - West Virginia - District of Columbia 	0.592
<p>Midwest Independent Transmission System Operator (MISO-RTO), including all or part of the following states:</p> <ul style="list-style-type: none"> - Arkansas - North Dakota - South Dakota - Minnesota - Iowa - Missouri - Wisconsin - Illinois - Michigan - Nebraska - Indiana - Montana - Kentucky - Texas - Louisiana - Mississippi 	0.638

Southwest Power Pool (SPP), including all or part of the following states: - Kansas - Oklahoma - Nebraska - New Mexico - Texas - Louisiana - Missouri - Mississippi - Arkansas	0.614
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(3) in protocol QC.29,

(a) in QC.29.2,

- i. by striking out “fugitive emissions or” in subparagraph vi of subparagraph a of subparagraph 3 of the first paragraph;
- ii. by replacing subparagraph j of subparagraph 3 of the first paragraph by the following:
 - “(j) annual CO₂ and CH₄ emissions from other sources of venting emissions from the pipeline system, calculated in accordance with QC.29.3.10;”;
- iii. by inserting “QC.29.3.7 or” after “calculated in accordance with” in subparagraphs b, c and i of subparagraph 7 of the first paragraph;
- iv. by replacing subparagraphs d and e of subparagraph 7 of the first paragraph by the following:
 - “(d) annual CO₂ and CH₄ fugitive emissions from the transmission and distribution system, calculated in accordance with QC.29.3.7 or QC.29.3.8;
 - (e) annual CO₂ and CH₄ fugitive emissions from a service pipe, calculated in accordance with QC.29.3.7 or QC.29.3.8;”;
- v. by replacing subparagraph g of subparagraph 7 of the first paragraph by the following:

- “(g) venting emissions from other sources of emissions, calculated in accordance with QC.29.3.11.”;
- (b) by replacing the definition of factor “ p_i ” in equations 29-3 and 29-4 of QC.29.3.1, equation 29-5 of QC.29.3.2 and equation 29-6 of QC.29.3.3 by the following:
- “ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions.”;
- (c) in QC.29.3.4,
- i. by replacing the definition of factor “ p_{CO_2} ” in equation 29-7 by the following:
- “ p_{CO_2} = Density of CO₂ that is 1.830 kg per cubic metre at standard conditions.”;
- ii. by replacing the definition of factor “ p_{CH_4} ” in equation 29-8 by the following:
- “ p_{CH_4} = Density of CH₄ that is 0.668 kg per cubic metre at standard conditions.”;
- (d) by replacing the definition of factor “ p_i ” in equation 29-10 of QC.29.3.5, equation 29-11 of QC.29.3.6 and equation 29-12 of QC.29.3.7 by the following:
- “ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions.”;
- (e) in QC.29.3.8,
- i. by replacing subparagraph *d* of subparagraph 1 of the second paragraph by the following:
- “(d) fugitive emissions from the transmission and distribution system and service pipe.”;
- ii. by replacing the definition of factor “ p_i ” in equation 29-14 by the following:
- “ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions.”;
- iii. by adding the following at the end:

“To calculate fugitive emissions from the pipeline system and service pipe, equations 29-14 and 29-15 may be amended as provided in the most recent version of Methodology Manual: Estimation of Air Emissions from the Canadian Natural Gas Transmission, Storage and Distribution System, published by Clearstone Engineering Ltd.”;

- (f) in QC.29.3.9, by replacing the definition of factor “ p_{ref} ” in equations 29-16 and 29-18 by the following:

“ p_{ref} = Density of CH₄ that is 0.668 kg per cubic meter at standard conditions;”;

- (g) by replacing the definition of factor “ p_i ” in equation 29-19 of QC.29.3.10 by the following:

“ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions;”;

- (h) in QC.29.3.11,

- i. by striking out “fugitive” in the heading;
- ii. by striking out “fugitive” in the first paragraph;

- (i) in the second paragraph of QC.29.4, by striking out “Beginning on 1 January 2015,”;

- (j) in QC.29.4.8, by replacing the definition of factor “ p_i ” in equation 29-20 by the following:

“ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions;”;

- (k) in QC.29.6,

- i. by adding “**or for any component using non-odorized natural gas**” at the end of the heading of Table 29-1;
- ii. by replacing Table 29-5 by the following:

“Table 29-5. Emission factors for natural gas leaks by component during natural gas distribution or for any component using odorized natural gas

(QC.29.4.7 (1), QC.29.4.8 (2))

Leak emission factors by component type following detection survey		
Component type	Components not in detection survey	Components in detection survey
	Natural gas (tonnes/hour)	Natural gas (tonnes/hour)
Connector	8.227×10^{-8}	6.875×10^{-6}
Block valve	5.607×10^{-7}	1.410×10^{-5}
Control valve	1.949×10^{-5}	7.881×10^{-5}
Pressure relief valve	3.944×10^{-6}	3.524×10^{-5}
Orifice meter	3.011×10^{-6}	8.091×10^{-6}
Other flow meter	7.777×10^{-9}	2.064×10^{-7}
Regulator	6.549×10^{-7}	2.849×10^{-5}
Open ended line	6.077×10^{-5}	1.216×10^{-4}
Fugitive emission factors for component group		
Component type	Natural gas m ³ /hour	
Below grade meter and regulator, inlet pressure greater than 300 psig	3.681×10^{-2}	
Below grade meter and regulator, inlet pressure between 100 and 300 psig	5.663×10^{-3}	
Below grade meter and regulator, inlet pressure below 100 psig	2.832×10^{-3}	
Fugitive emission factors for each type of transmission pipeline		
Pipeline type	Natural gas m ³ /hour	
Unprotected steel	2.427×10^{-1}	
Protected steel	6.829×10^{-3}	
Plastic	7.969×10^{-3}	
Fugitive emission factors for each type of service pipe		
Pipeline type	Natural gas m ³ /hour/service pipe	
Unprotected steel	5.953×10^{-3}	
Protected steel	6.270×10^{-4}	
Plastic	4.036×10^{-5}	
Copper	8.829×10^{-4}	

(4) in protocol QC.33,

- (a) by replacing the definition of factor “ p_i ” in equations 33-3 and 33-4 of QC.33.3.1 and equation 33-5 of QC.33.3.2 by the following:

“ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions;”;

- (b) in QC.33.3.3, by replacing the definition of factor “ p_{CO_2} ” in equations 33-6 and 33-7 by the following:

“ p_{CO_2} = Density of CO₂ that is 1.830 kg per cubic metre at standard conditions;”;

- (c) by replacing the definition of factor “ p_i ” in equation 33-8 of QC.33.3.4, equations 33-9 and 33-10 of QC.33.3.5 and equations 33-11 and 33-12 of QC.33.3.7 by the following:

“ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions;”;

- (d) in QC.33.3.8, by replacing the definition of factor “ p_{ref} ” in equations 33-16 and 33-18 by the following:

“ p_{ref} = Density of CH₄ that is 0.668 kg per cubic meter at standard conditions;”;

- (e) by replacing the definition of factor “ p_i ” in equation 33-19 of QC.33.3.9, equations 33-21 and 33-22 of QC.33.3.11 and equation 33-23 of QC.33.3.12 by the following:

“ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO₂ and 0.668 kg per cubic metre for CH₄ at standard conditions;”;

- (f) in QC.33.3.13,
- i. by replacing the definition of factor “ p_{CO_2} ” in equation 33-24 by the following:
“ p_{CO_2} = Density of CO_2 that is 1.830 kg per cubic metre at standard conditions;”;
 - ii. by replacing the definition of factor “ p_{CH_4} ” in equation 33-25 by the following:
“ p_{CH_4} = Density of CH_4 that is 0.668 kg per cubic metre at standard conditions;”;
- (g) by replacing the definition of factor “ p_i ” in equations 33-27 and 33-28 of QC.33.3.14, equations 33-29 and 33-30 of QC.33.3.15 and equation 33-31 of QC.33.3.16 by the following:
“ p_i = Density of greenhouse gas i that is 1.830 kg per cubic metre for CO_2 and 0.668 kg per cubic metre for CH_4 at standard conditions;”.

8. This Regulation comes into force on 1 January 2017.