Draft Regulations

Draft Regulation

Environment Quality Act
(chapter Q-2)

Mandatory reporting of certain emissions of contaminants into the atmosphere
— Amendment

Notice is hereby given, in accordance with sections 10, 12 and 13 of the Regulations Act (chapter R-18.1) and sections 2.2 and 46.2 of the Environment Quality Act (chapter Q-2), that the Regulation to amend the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere, appearing below, may be made by the Minister of Sustainable Development, the Environment and the Fight Against Climate Change on the expiry of 45 days following this publication.

The draft Regulation provides in particular that when the operator of a facility, an establishment or an enterprise submitted to the declaration requirement within the meaning of the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere ceases to operate, that operator must so inform the Minister as soon as possible.

The draft Regulation also provides for the addition of the transportation of petroleum by pipeline as an activity covered by the Regulation and for which the reporting threshold applies to the enterprise.

In addition, the draft Regulation specifies that the mandatory reporting of emissions of certain greenhouse gases ceases where the reporting threshold is not reached during four consecutive years, whether or not activities cease.

The draft Regulation specifies, in the case of an emitter referred to in section 6.6, the framework for using methods of calculation or assessment referred to in the second paragraph of section 6 for the calculation of greenhouse gas emissions of one or more sources of emissions.

The draft Regulation introduces the requirement to include, in the report on the verification of an emissions report, a written confirmation from the verifier that the calibration of the equipment used to measure the parameters required to calculate greenhouse gas emissions or the quantity of reference units has been verified.

Lastly, the draft Regulation provides for various technical adjustments, corrections to the methods of calculation of greenhouse gas emissions, certain improvements to protocols and an updating of certain tables, in particular with respect to default greenhouse gas emission factors related to electricity for Canadian provinces and for certain North American markets.

In accordance with sections 12 and 13 of the Regulations Act, the draft Regulation may be made on the expiry of a period shorter than the 45-day period required by sections 2.2 and 46.2 of the Environment Quality Act, owing to the urgency of the following circumstances:

— the amendments made by the draft regulation, in particular concerning methods for the calculation of greenhouse gas emissions, must be applicable from 1 January 2013 to ensure that the emissions of contaminants for the year 2013 are reported in compliance with the new requirements.

Study of the matter has shown that no consideration cost is associated with the amendments proposed by the draft Regulation.

Further information may be obtained by contacting Vicky Leblond, Direction générale de la réglementation carbone et des données d'émission, Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques; telephone: 418 521-3813, extension 4386; email: vicky.leblond@mddelcc.gouv.qc.ca; fax: 418 646-0001.

Any person wishing to comment on the draft Regulation is requested to submit written comments within the 45-day period to France Delisle, Acting General Director, Direction générale de la réglementation carbone et des données d'émission, Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques, édifice Marie-Guyart, 675, boulevard René-Lévesque Est, 5e étage, boîte 30, Québec (Québec) G1R 5V7; email: france.delisle@mddelcc.gouv.qc.ca

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 CO_2 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 CO_2 equivalent, up to a maximum of 20,000 metric tons CO_2 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 CO_2 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

Pennsylvania Jersey Maryland Interconnection Regional Transmission Organization (PJM-RTO), including all or part of the following states: - North Carolina - Delaware - Indiana - Illinois - Kentucky - Maryland - Michigan - New Jersey - Ohio - Pennsylvania - Tennessee - Virginia - West Virginia - District of Columbia	0.592
Midwest Independent Transmission System Operator (MISO-RTO), including all or part of the following states: - 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

”.

(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 CO_2 and CH_4 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 CO_2 and CH_4 fugitive emissions from the transmission and distribution system, calculated in accordance with QC.29.3.7 or QC.29.3.8;

(*e*) annual CO_2 and CH_4 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 CO_2 and 0.668 kg per cubic metre for CH_4 at standard conditions;";

(*c*) in QC.29.3.4,

i. by replacing the definition of factor "p_{CO2}" in equation 29-7 by the following:

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

ii. by replacing the definition of factor "p_{CH4}" in equation 29-8 by the following:

"p_{CH4} = Density of CH_4 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 CO_2 and 0.668 kg per cubic metre for CH_4 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 CO_2 and 0.668 kg per cubic metre for CH_4 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 CH_4 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 CO_2 and 0.668 kg per cubic metre for CH_4 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 CO_2 and 0.668 kg per cubic metre for CH_4 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 Natural gas (tonnes/hour)	Components in detection survey Natural gas (tonnes/hour)
Connector	8.227 x 10-8	6.875 x 10-6
Block valve	5.607 x 10-7	1.410 x 10-5
Control valve	1.949 x 10-5	7.881 x 10-5
Pressure relief valve	3.944 x 10-6	3.524 x 10-5
Orifice meter	3.011 x 10-6	8.091 x 10-6
Other flow meter	7.777 x 10-9	2.064 x 10-7
Regulator	6.549 x 10-7	2.849 x 10-5
Open ended line	6.077 x 10-5	1.216 x 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 x 10-2
Below grade meter and regulator, inlet pressure between 100 and 300 psig		5.663 x 10-3
Below grade meter and regulator, inlet pressure below 100 psig		2.832 x 10-3
Fugitive emission factors for each type of transmission pipeline		
Pipeline type		Natural gas m^3/hour
Unprotected steel		2.427 x 10-1
Protected steel		6.829 x 10-3
Plastic		7.969 x 10-3
Fugitive emission factors for each type of service pipe		
Pipeline type		Natural gas m^3/hour/service pipe
Unprotected steel		5.953 x 10-3
Protected steel		6.270 x 10-4
Plastic		4.036 x 10-5
Copper		8.829 x 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 CO_2 and 0.668 kg per cubic metre for CH_4 at standard conditions;";

(*b*) in QC.33.3.3, by replacing the definition of factor "p_{CO2}" in equations 33-6 and 33-7 by the following:

"p_{CO2} = Density of CO_2 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 CO_2 and 0.668 kg per cubic metre for CH_4 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 CH_4 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 CO_2 and 0.668 kg per cubic metre for CH_4 at standard conditions;";

(*f*) in QC.33.3.13,

i. by replacing the definition of factor "p_{CO2}" in equation 33-24 by the following:

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

ii. by replacing the definition of factor "p_{CH4}" in equation 33-25 by the following:

"p_{CH4} = 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.

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