M.O., 2013

Order of Minister of Sustainable Development, Environment, Wildlife and Parks dated 11 December 2013

Environment Quality Act
(chapter Q-2)

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

THE MINISTER OF SUSTAINABLE DEVELOPMENT, ENVIRONMENT, WILDLIFE AND PARKS,

CONSIDERING section 2.2 of the Environment Quality Act (chapter Q-2), which provides that the Minister of Sustainable Development, Environment, Wildlife and Parks 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 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 4 September 2013, in accordance with sections 10 and 11 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 a draft 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, Environment, Wildlife and Parks on the expiry of 60 days following that publication;

CONSIDERING section 18 of the Regulations Act, which provides that a regulation may come into force between the date of its publication in the *Gazette officielle du Québec* and 15 days after that date 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 the Minister of Sustainable Development, Environment, Wildlife and Parks is of the opinion that the urgency due to the following circumstances justifies a coming into force on 1 January 2014:

—the amendments made by the draft Regulation, in particular regarding the methods for calculating greenhouse gas emissions, must apply as of 1 January 2014 so that the contaminant emissions for 2014 are declared according to the new requirements;

CONSIDERING that it is expedient to make the Regulation with amendments;

ORDERS AS FOLLOWS:

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

Québec, 11 December 2013

YVES-FRANÇOIS BLANCHET
Minister of Sustainable Development, Environment, Wildlife and Parks

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

(1) by replacing the second paragraph by the following:

"The operator must also identify the activities, processes or equipment that are the source of contaminant emissions, by specifying separately for each of them the emissions attributable to them, the quantity of fuel and raw materials used and the volume of production that have been used in calculating the quantities of contaminants.

Furthermore, the operator must provide the Minister with the methods of calculation or assessment referred to in the second paragraph of section 6 that were used as well as any information relevant to the calculations, including the factors and emission rates used, their source and, if they originate in published documents, the applicable reference.";

(2) by striking out everything that follows "identified separately" in the fourth paragraph.

2. The second paragraph of section 5 is replaced by the following:

"The operator must also identify the activities, processes or equipment that are the source of contaminant emissions, by specifying separately for each of them the emissions attributable to them, the quantity of fuel and raw materials used and the volume of production that have been used in calculating the quantities of contaminants reported to the Minister of the Environment of Canada.

Furthermore, the operator must provide the Minister with the methods of calculation or assessment referred to in the second paragraph of section 6 that were used as well as any information relevant to the calculations, including the factors and emission rates used, their origin and, if they originate in published documents, the applicable reference.".

3. Section 6.1 is amended by replacing "referred to in section 85.33 of the Act respecting the Régie de l'énergie (chapter R-6.01) is required, if the greenhouse gas emissions attributable to the combustion or use of the fuel distributed, calculated in accordance with protocol QC.30 in Schedule A.2" in the third paragraph by "referred to in part QC.30.1 of protocol QC.30 in Schedule A.2 and for which greenhouse gas emissions attributable to their use".

4. Section 6.2 is amended

(1) by inserting "of Schedule A.2" in subparagraphs 1 and 2 of the first paragraph after "QC.17 and QC.30";

(2) by replacing subparagraph 2.3 of the first paragraph by the following:

"(2.3) for establishments in the sectors referred to in Appendix A to the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1), the total quantity of the emitter's greenhouse gas emission in metric tons CO_2 equivalent, excluding emissions captured, stored, re-used or transferred out of the establishment, emissions referred to in the second paragraph of section 6.6 and emissions calculated in accordance with protocols QC.17 and QC.30 of Schedule A.2;";

(3) by inserting "and the emissions calculated in accordance with protocols QC.17 and QC.30 of Schedule A.2" after "section 6.6" in paragraph *b* of subparagraph 8 of the first paragraph;

(4) by inserting "of Schedule A.2" in subparagraph 1 of the second paragraph after "QC.1.7".

5. Section 6.3 is amended by adding the following at the end of the third paragraph: "However, as soon as an emitter's situation no longer corresponds to one of the cases referred to in the second paragraph, the emitter must change the calculation method for the protocols referred to in the first paragraph.".

6. Section 6.6 is amended

(1) by striking out "pulp and paper mill" in subparagraph 3.1 of the second paragraph;

(2) by replacing "specified in the fourth paragraph" in the seventh paragraph by "specified in the sixth paragraph".

7. Section 6.7 is replaced by the following:

"**6.7.** An emitter referred to in section 6.6 who communicates a notice of correction for the emitter's emissions report in accordance with section 6.5 must include a verification report where any of the following relative importance thresholds is reached:

(1) where errors or omissions, calculated using the equation below, represent 5% or more of the total emissions of the establishment or correspond to emissions equal to or greater than 25,000 metric tons CO_2 equivalent:

$$PE = \left(\frac{SEO}{TER} \times 100 \right)$$

Where:

PE = Percentage of error;

SEO = Sum of CO_2 equivalent greenhouse gas emissions erroneously calculated or omitted, in metric tons;

TER = Total greenhouse gas emissions initially reported and referred to in subparagraph 2.3 of the first paragraph of section 6.2, in metric tons CO_2 equivalent;

(2) where errors or omissions in the total annual quantity of benchmark units declared in accordance with subparagraph *a* of subparagraph 8 of the first paragraph of section 6.2, calculated using the equation below, represent 0.1% or more:

$$PE = \left(\frac{BUEO}{BUD} \times 100 \right)$$

Where:

PE = Percentage of error;

BUEO = Quantity of benchmark units erroneously calculated or omitted, on the basis of the benchmark unit used;

BUD = Quantity of benchmark units initially declared, on the basis of the benchmark unit used.

Where the errors or omissions calculated in accordance with subparagraphs 1 and 2 of the first paragraph are less than the relative importance threshold provided for by those subparagraphs, the emitter must provide an attestation to that effect.".

8. Section 6.8 is amended

(1) by replacing "the enterprise, facility or establishment" in subparagraph 2 of the first paragraph by "each establishment";

(2) by adding the following subparagraph after subparagraph 2 of the first paragraph:

"(3) be performed by using the relative importance thresholds provided for in subparagraphs 1 and 2 of the first paragraph of section 6.7.".

9. Section 6.9 is amended

(1) by replacing "and emissions reported using protocols QC.17 and QC.30" in paragraph 7 by ", emissions referred to in the second paragraph of section 6.6 and emissions reported using protocols QC.17 and QC.30 of Schedule A.2";

(2) by striking out ", referred to in Table B of Part I of Schedule C to the Regulation respecting a cap-a-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1)," in paragraph 7.1;

(3) by replacing paragraph 7.2 by the following:

"(7.2) for each benchmark unit, the total quantity of greenhouse gas emissions for each type of emissions, excluding emission referred to in the second paragraph of section 6.6, namely:

(*a*) annual CO_2 emissions attributable to fixed processes, in metric tons;

(*b*) annual emissions of greenhouse gas attributable to combustion, in metric tons CO_2 equivalent;

(*c*) other annual greenhouse gas emissions, in metric tons CO_2 equivalent;

(7.3) the total quantity of greenhouse gas emissions attributable to the use of fuel distributed for consumption in Québec, in metric tons CO_2 equivalent, calculated in accordance with subparagraph 1 of the first paragraph of part QC.30.2 of protocol QC.30 in Schedule A.2;";

(4) by replacing "and an attestation that the emissions report is exact and reliable" in paragraph 8 by ", in particular regarding accuracy and reliability, of the emissions report".

10. Section 7.1 is amended by replacing "used to measure the parameters required to calculate greenhouse gas emissions or" in the second paragraph by "of an emitter referred to in section 6.6 used to measure the parameters required to calculate greenhouse gas emissions subject to the verification or the calculation of".

11. Schedule A is amended

(1) in the table of Part I:

(*a*) by striking out "7782-41-4" in column "CAS" of the contaminant causing toxic pollution identified as "total fluorides";

(*b*) by replacing "218-01-09" by "218-01-9" in column "CAS" of the contaminant causing toxic pollution identified as "Chrysene";

(*c*) by replacing "207-08-09" by "207-08-9" in column "CAS" of the contaminant causing toxic pollution identified as "Benzo (k) fluoranthene";

(2) in the table of Part II, by replacing "7446-09-05" in column "CAS" of the contaminant causing acid rain and smog identified as "sulphur dioxide (SO_2)" by "7446-09-5".

12. Schedule A.2 is amended

(1) in protocol QC.1:

(*a*) by adding the following paragraph after paragraph 4 of QC.1.3.3:

"(5) in the case of a mixture of fuels, the emitter may use equations 1-4 to 1-6, using the average carbon content of the mixture of fuels measured by the emitter in accordance with QC.1.5, but the emitter must declare annual emissions of CO_2 per type of fuel in accordance with QC.1.2.";

(*b*) by inserting ", except for fuels containing less than 5% of biomass by weight or waste-derived fuels making up less than 30% by weight of the fuels combusted during the year" after "the emitter must" in the part preceding subparagraph *a* of paragraph 2 of QC.1.3.5;

(*c*) by replacing, in subparagraph *b* of paragraph 2 of QC.1.3.5, "if the fuels contain over 5% of biomass by weight or if waste-derived fuels make up over 30% by weight of the fuels combusted during the year, calculate the emissions" by "determine the biomass portion of the fuels";

(*d*) by inserting "or 1-1.1" in paragraph 3 of QC.1.3.5 after "equation 1-1";

(*e*) by inserting the following after paragraph 4 of QC.1.5.1:

"(4.1) monthly, in accordance with subparagraphs *a* to *c* of paragraph 4, or at each delivery in the case of coal;";

(*f*) by replacing paragraph 5 of QC.1.5.1 by the following:

"(5) at each delivery in the case of any fuel that is not referred to in paragraphs 1 to 4.1;

(6) monthly, in accordance with subparagraphs *a* to *c* of paragraph 4, in the case of a mixture of fuels.";

(*g*) by adding the following at the end of QC.1.5.1:

"Despite subparagraphs 4, 4.1, 5 and 6 of the first paragraph, in the case of solid fuels or mixtures of fuels used in an electric arc furnace or a clinker kiln, the emitter may do the fuel sampling or use the sampling results of the supplier provided that the sampling is composed of at least 3 representative samples per year.";

(*h*) by adding the following after paragraph *c* of subparagraph 1 of the first paragraph of QC.1.5.2:

"(*d*) in the case of an emitter that uses equation 1-3 or 1-5 to calculated CO_2 emissions, by using equation 1-8;";

(*i*) by replacing "kilograms" in the third dash of the definitions of factors "CC_a" and "CC_i" of equation 1-18 in the first paragraph of QC.1.5.5 by "metric tons";

(*j*) by adding the following subparagraph after subparagraph 3 of the second paragraph of QC.1.5.5:

"(4) in the case of a mixture of fuels, in accordance with an analysis method published by a body referred to in QC.1.5.";

(*k*) in the "Liquid fuels" part of Table 1-1 of QC.1.7:

(i) by striking out "Refinery Use" in the line "Petroleum Coke – Refinery Use";

(ii) by striking out the line "Petroleum Coke – Upgrader Use";

(*l*) in the "Gaseous fuels" part of Table 1-1 of QC.1.7:

(i) by striking out "Refineries" in the line "Still Gas – Refineries";

(ii) by striking out the line "Still Gas – Upgraders";

(*m*) in the part "Liquid fuels and biofuels" of Table 1-3 of QC.1.7:

(i) by striking out "Refinery Use" in the line "Petroleum Coke – Refinery Use";

(ii) by striking out the line "Petroleum Coke – Upgrader Use";

(*n*) by replacing "85.0" in the line "Tires" in the "Biomass and other solid fuels" part of Table 1-3 of QC.1.7 by "80.8";

(*o*) in the part "Gaseous fuels and biofuels" of Table 1-3 of QC.1.7:

(i) by striking out "Refineries" in the line "Still Gas – Refineries";

(ii) by striking out the line "Still Gas – Upgraders";

(2) in protocol QC.3:

(*a*) by replacing the equation 3-5 of paragraph 3 of QC.3.3.3 by the following:

"**Equation 3-5**

$$CO_{2P} = \sum_{i=1}^{12} \left(GAC - BAC - \left(H_P \times PC \times GAC\right) - RT\right)_i \times 3.664$$

Where:

CO_{2P} = Annual CO_2 emissions attributable to the coking of pitch or another binding agent, in metric tons;

i = Month;

GAC = Quantity of green anodes or cathodes put into furnace during month *i*, in metric tons;

BAC = Quantity of baked anodes or cathodes removed from furnace for month *i*, in metric tons;

H_p = Hydrogen content in pitch or other binding agent for month *i* or the International Aluminium Institute factor used, in kilograms of hydrogen per kilogram of pitch or other binding agent;

PC = Pitch or other binding agent content of green anodes or cathodes for month *i*, in kilograms of pitch or other binding agent per kilogram of green anodes or cathodes;

RT = Recovered tar for month *i*, in metric tons;

3.664 = Ratio of molecular weights, CO_2 to carbon.";

(*b*) by adding the following after paragraph 5 of QC.3.6:

"(6) in the case of the quantity of calcinated coke, the emitter may directly measure that quantity or determine it by multiplying the recovery factor by the quantity of green coke consumed, in accordance with equation 3-10-1:

Equation 3-10.1

$$CCP_M = RF \times CGC$$

Where:

CCP_M = Calcinated coke produced and measured during the measurement campaign, in metric tons;

RF = Recovery factor determined yearly during a measurement campaign, in metric tons of calcinated coke per metric ton of green coke;

CGC = Consumption of green coke measured during the measurement campaign, in metric tons.";

(3) by striking out subparagraph 7 of the first paragraph of QC.4.2;

(4) in protocol QC.7:

(*a*) by striking out "argon-" in subparagraph *a* of subparagraph 6 of the first paragraph of QC.7.2;

(*b*) by inserting "that is the quantity of steel, in the form of ingot, being brought to the forging operation, excluding from the initial weight of the ingot the weight of the part of the cut steel when the head of the ingot is cut prior to forging," after "produced," in subparagraph 13 of the first paragraph of QC.7.2;

(*c*) by striking out "argon-" in the definition of factor "$CO_{2,\ ADD}$" in equation 7-1 of paragraph 1, in the part preceding equation 7-6 of paragraph 6 and by striking out "argon" in the definitions of factors "$CO_{2,\ ADD}$" and "Steel" in equation 7-6 of paragraph 6 of QC.7.3.2;

(*d*) by inserting "or 7-9-01" in the part of paragraph 9 of QC.7.3.2 that precedes the equation 7-9 and after "equation 7-9";

(*e*) in the equation 7-9 of paragraph 9 of QC.7.3.2:

(i) by inserting "Annual" before "Consumption" in the definition of the factor "GBP";

(ii) by inserting "Annual" before "Quantity" in the definition of the factor "FP";

(*f*) by inserting the following after equation 7-9 of paragraph 9 of QC.7.3.2:

"**Equation 7-9.01**

$$CO_{2,IP} = \left[\sum_{j}^{n} \left(AD_j \times C_{ADj} \right) + \left(IRC \times C_{IRC} \right) - \left(FP \times C_{FP} \right) - \left(R \times C_R \right) \right] \times 3.664$$

Where:

$CO_{2,IP}$ = Annual CO_2 emissions attributable to the indurating of iron ore pellets, in metric tons;

n = Number of additives;

j = Type of additive, such as limestone, dolomite or bentonite;

AD_j = Annual consumption of additive *j*, in metric tons;

C_{ADj} = Annual average carbon content of the additive *j*, in metric tons of carbon per metric ton of additive;

IRC = Annual consumption of iron ore, in metric tons;

C_{IRC} = Annual average carbon content of the iron ore, in metric tons of carbon per metric ton of iron ore;

FP = Annual quantity of fired pellets produced by the indurating process, in metric tons;

C_{FP} = Average annual carbon content of fired pellets, in metric tons of carbon per metric ton of fired pellets;

R = Annual quantity of air pollution control residue, in metric tons;

C_R = Average annual carbon content of air pollution control residue collected or a default value of 0, in metric tons of carbon per metric ton of residue;

3.664 = Ratio of molecular weights, CO_2 to carbon;";

(*g*) by replacing the equation 7-9.1 of paragraph 10 of QC.7.3.2 by the following:

"**Equation 7-9.1**

$$CO_{2,LF} = \left[\begin{array}{l} \left(MS_{SUP} \times C_{MS\,\sup}\right) + \sum_{j=1}^{m} \left(AD_j \times C_{AD,j}\right) + \left(EL \times C_{EL}\right) \\ - \left(MS_{prod} \times C_{MSprod}\right) - \left(SL \times C_{SL}\right) - \left(R \times C_R\right) - \left(Rp \times C_{Rp}\right) \end{array} \right] \times 3.664$$

Where:

$CO_{2,LF}$ = Annual CO_2 emissions attributable to using a ladle furnace, in metric tons;

MS_{SUP} = Annual quantity of molten steel supplied to the ladle furnace, in metric tons;

C_{MSsup} = Average annual carbon content of molten steel supplied to the ladle furnace, in metric tons of carbon per metric ton of molten steel;

m = Number of additives;

j = Additive;

AD_j = Annual consumption of the additive *j* that contributes 0.5% or more of the total carbon in the process, in metric tons;

C_{ADj} = Annual average carbon content of the additive *j* that contributes 0.5% or more of the total carbon in the process, in metric tons of carbon per metric ton of additive *j*;

EL = Annual consumption of carbon electrodes, in metric tons;

C_{EL} = Annual average carbon content of carbon electrodes, in metric tons of carbon per metric ton of carbon electrodes;

MS_{prod} = Annual production of molten steel produced in a ladle furnace, in metric tons;

C_{MSprod} = Average annual carbon content of molten steel, in metric tons of carbon per metric ton of molten steel;

SL = Annual production of slag, in metric tons;

C_{SL} = Average annual carbon content of slag or a default value of 0, in metric tons of carbon per metric ton of slag;

R = Annual quantity of air pollution control residue collected, in metric tons;

C_R = Average annual carbon content of air pollution control residue collected or a default value of 0, in metric tons of carbon per metric ton of residue;

Rp = Annual quantity of other residue produced, in metric tons;

C_{Rp} = Average annual carbon content of other residue produced or a default value of 0, in metric tons of carbon per metric ton of residue;

3.664 = Ratio of molecular weights, CO_2 to carbon.";

(*h*) by replacing "in QC.7.4.1 and QC.7.4.2" in QC.7.4 by "in QC.7.4.1 to QC.7.4.3";

(*i*) by replacing "production of steel" in subparagraph *b* of subparagraph 1 of the second paragraph of QC.7.6 by "the quantity of steel processed or produced";

(5) in protocol QC.9:

(*a*) by striking out "dioxyde de" in subparagraph 5 of the first paragraph of QC.9.2 in the French text;

(*b*) by striking out "dioxyde de" in the heading of QC.9.3.4 and in the part preceding equation 9.9 of QC.9.3.4 in the French text;

(*c*) in equation 9-9 of QC.9.3.4:

(i) by striking out "dioxyde de" in the definition of factor "CO_2" in the French text;

(ii) by replacing the definition of "FR" by the following:

"FR = Annual volumetric flow of acid gas emitted to the sulphur recovery units, in cubic metres at standard conditions;";

(iii) by replacing the definition of factor "MF" by the following:

"MF = Molecular fraction of CO_2 in the acid gas emitted to sulphur recovery units, obtained by sampling at source and analyzing annually, in a percentage expressed as a decimal, or as a factor of 20% or 0.20;";

(*d*) by inserting "when equation 9-1 is used," before "measure" in subparagraph *d* of subparagraph 1 of the first paragraph of QC.9.4.1;

(*e*) by striking out "dioxyde de" in the heading of QC.9.4.4 and in the first paragraph of QC.9.4.4 in the French text;

(*f*) by replacing "hydrogen sulphide" in the second paragraph of QC.9.4.4 by "acid gas emitted to sulphur recovery units";

(6) by inserting "at 10% humidity" after "air-dried" in subparagraph 10 of the first paragraph of QC.10.2;

(7) in protocol QC.12:

(*a*) by inserting "calculated and reported in accordance with QC.9" in subparagraphs 4 and 4.1 of the first paragraph of QC.12.2 after "regeneration";

(*b*) by inserting "calculated and reported in accordance with QC.9" in subparagraph 5 of the first paragraph of QC.12.2 after "devices";

(*c*) by inserting "calculated and reported in accordance with QC.9" in subparagraph 6 of the first paragraph of QC.12.2" after "vents";

(*d*) by inserting "calculated and reported in accordance with QC.9" in subparagraph 7 of the first paragraph of QC.12.2 after "components";

(*e*) by inserting "calculated and reported in accordance with QC.9" in subparagraph 8 of the first paragraph of QC.12.2 after "tanks";

(*f*) by inserting the following after subparagraph 11 of the first paragraph of QC.12.2:

"(11.1) the annual production of each petrochemical product, namely:

(*a*) in dry metric tons when the quantity is expressed in weight;

(*b*) in thousands of cubic metres at standard conditions when the quantity is expressed as a volume of gas;

(*c*) in kilolitres when the quantity is expressed as a volume of liquid;

(*d*) in dry metric tons in the case of biomass fuels when the quantity is expressed in weight;";

(*g*) by replacing subparagraph 12 of the first paragraph of QC.12.2 by the following:

"(12) the average annual carbon content of the materials consumed or of the products, in kilograms of carbon per kilogram of materials consumed or products;";

(*h*) by replacing "feedstock consumed or materials produced" in subparagraph 13 of the first paragraph of QC.12.2 by "gas consumed or of the products";

(8) in protocol QC.14:

(*a*) by inserting "or product" in subparagraphs 3 and 4 of the first paragraph of QC.14.2 after "each material";

(*b*) by adding "or product" at the end of subparagraph 4 of the first paragraph of QC.14.2;

(*c*) by replacing equation 14-1 in QC.14.3.2 by the following:

"**Equation 14-1**

$$CO_2 = \left[\sum_{i}^{n} \left(M_i \times C_i \right) - \sum_{j=1}^{m} \left(P_j \times C_j \right) \right] \times 3.664$$

Where:

CO_2 = Emissions of CO_2 attributable to the use in the furnace of materials containing carbon, in metric tons;

n = Number of types of material;

i = Type of material;

M_i = Annual quantity of each material *i* used that contributes 0.5% or more of the total carbon in the process, in metric tons;

C_i = Average annual carbon content of each material *i* used, in metric tons of carbon per metric ton of material;

m = Number of types of product;

j = Type of product;

P_j = Annual quantity of each product *j* that contributes 0.5% or more of the total carbon in the process, in metric tons;

C_j = Average annual carbon content of each product *j* used, in metric tons of carbon per metric ton of product;

3.664 = Ratio of molecular weights, CO_2 to carbon.";

(*d*) by inserting "or product" in the part of paragraph 1 of QC.14.4 preceding subparagraph *a* after "material" wherever that word appears;

(*e*) by replacing "and ores" in subparagraph *d* of paragraph 1 of QC.14.4 by ", ores or other materials or products";

(*f*) by inserting "or product" in paragraph 2 of QC.14.4 after "material" wherever that word appears;

(*g*) by replacing "lead production" in paragraph *b* of subparagraph 1 of the second paragraph of QC. 14.5 by "the production of lead or other products";

(9) in protocol QC.15:

(*a*) by inserting "or product" in subparagraphs 3 and 4 of the first paragraph of QC.15.2 after "material";

(*b*) by replacing equation 15-1 in QC.15.3.2 by the following:

"**Equation 15-1**

$$CO_2 = \left[\sum_{i}^{n} \left(M_i \times C_i \right) - \sum_{j=1}^{m} \left(P_j \times C_j \right) \right] \times 3.664$$

Where:

CO_2 = Annual CO_2 emissions attributable to the use in the furnace of materials containing carbon, in metric tons;

n = Number of types of material;

i = Type of material;

M_i = Annual quantity of each material *i* used that contributes 0.5% or more of the total carbon in the process, in metric tons;

C_i = Average monthly carbon content of material *i* used in metric tons of carbon per metric ton of material;

m = Number of types of product;

j = Type of product;

P_j = Annual quantity of each product *j* that contributes 0.5% more of the total carbon in the process, in metric tons;

C_j = Average annual carbon content of each product *j* used, in metric tons of carbon per metric ton of product;

3.664 = Ratio of molecular weights, CO_2 to carbon.";

(*c*) by inserting "or product" in the part of paragraph 1 of QC.15.4 preceding subparagraph *a* after "material";

(*d*) by replacing "and ores" in subparagraph *d* of paragraph 1 of QC.15.4 by ", ores or other materials or products";

(*e*) by inserting "or product" in paragraph 2 of QC.15.4 after "material";

(10) by inserting "QC.1.3.1 or" in paragraphs 5 and 6 of QC.16.3.2 before "QC.1.3.2";

(11) by replacing Table 17.1 of 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 CO_2 equivalent per megawatt-hour)**
Newfoundland and Labrador	0.020
Nova Scotia	0.717
New Brunswick	0.444
Québec	0.002
Ontario	0.098
Manitoba	0.003
Vermont	0.001
New England Independent System Operator (NE-ISO), including all or part of the following states: - Connecticut - Massachusetts - Maine - Rhode Island - Vermont - New Hampshire	0.333
New York Independant System Operator (NY-ISO)	0.304
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	0.660

Midwest Independent Transmission System Operator (MISO-RTO), including all or part of the following states: - North Dakota - South Dakota - Minnesota - Iowa - Missouri - Wisconsin - Illinois - Manitoba - Michigan - Nebraska - Indiana - Ohio - Montana - Kentucky	0.727

(12) by striking out paragraph 3 of QC.27.5;

(13) in protocol QC.28:

(*a*) by adding the following at the end of the first paragraph of QC.28.2:

"(13) the number of times the methods for estimating missing data provided for in QC.28.5 were used.";

(*b*) by replacing "qu'ils fonctionnement" in the French text of paragraph 1 of QC.28.4.4 by "qu'ils fonctionnent";

(14) by replacing the heading of protocol QC.29 by the following:

"**QC.29. PROCESSES AND EQUIPMENT USED TO TRANSPORT AND DISTRIBUTE NATURAL GAS**";

(15) in protocol QC.30:

(*a*) by replacing subparagraphs 1 and 2 of the second paragraph of QC.30.1 by the following:

"(1) any form of trade or sale by a person or municipality, for consumption in Québec, of fuels that are refined, manufactured, mixed, prepared or distilled in Québec by that person or municipality;

(2) the acquisition outside Québec, for consumption, trade or sale in Québec, of fuels, other than natural gas distributed by a natural gas distributor within the meaning of section 2 of the Act respecting the Régie de l'énergie (chapter R-6.01), contained in one or more containers totalling over 200 litres, except the fuel contained in the fuel tank installed as standard equipment to supply a vehicle's engine;

(3) the distribution of natural gas for consumption in Québec by a natural gas distributor within the meaning of section 2 of the Act respecting the Régie de l'énergie.";

(*b*) by replacing QC.30.2 by the following:

"QC.30.2. Greenhouse gas reporting requirements

The greenhouse gas emissions report referred to in section 6.2 must include the following information:

(1) the annual emissions attributable to the use of fuel distributed for consumption in Québec, in metric tons CO_2 equivalent, excluding fuels other than automotive gasolines or diesel for transport purposes, used by an emitter for its establishments referred to in the first paragraph of section 2 of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1) and that is required to cover its greenhouse gas emissions under section 19 of that Regulation;

(2) for each type of fuel, the total annual quantity of fuel distributed for consumption in Québec, including firstly and excluding secondly the total annual quantities of fuels used by an emitter referred to in subparagraph 1, and fuels acquired outside Québec by the emitter for the emitter's own consumption;

(3) the name and contact information of the establishments of each emitter referred to in the first paragraph of section 2 of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances and required to cover its greenhouse gas emissions under section 19 of that Regulation to which the emitter has distributed fuel during the year, along with the total annual quantity distributed to each of those establishments;

(4) the number of times the methods for estimating missing data provided for in QC.30.5 were used.

For the purposes of subparagraph 2 of the first paragraph, the quantities must be expressed in thousands of cubic metres at standard conditions where the fuel quantity is expressed as a volume of gas and in kilolitres at standard conditions where the fuel quantity is expressed as a volume of liquid.";

(*c*) by inserting "distributed" before "fuel" in the definition of the factor "Q_i" of equation 30-1 provided for in QC.30.3;

(*d*) by replacing equation 30-2 provided for in QC.30.3 by the following:

"**Equation 30-2**

$$Q_i = Q_i^T - Q_i^G$$

Where:

Q_i = Total annual quantity of fuel *i* distributed,

- in thousands of cubic metres at standard conditions, in the case of fuels the quantity of which is expressed in gas volume;

- in kilolitres at standard conditions, in the case of fuels the quantity of which is expressed in liquid volume;

Q_i^T = Total annual quantity of fuel *i* distributed for consumption in Québec or acquired outside Québec by the emitter for the emitter's own consumption, measured in accordance with QC.30.4, that is,

- in thousand of cubic metres at standard conditions, in the case of fuels the quantity of which is expressed in gas volume;

- in kilolitres at standard conditions, in the case of fuels the quantity of which is expressed in liquid volume;

Q_i^G = Total annual quantity of fuel *i*, other than automotive gasolines or diesel for transport purposes, distributed to an emitter for the emitter's establishments referred to in the first paragraph of section 2 of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances that is required to cover greenhouse gas emissions pursuant to section 19 of that Regulation, measured in accordance with QC.30.4, that is,

- in thousands of cubic metres at standard conditions, in the case of fuels the quantity of which is expressed in gas volume;

- in kilolitres at standard conditions, in the case of fuels the quantity of which is expressed in liquid volume.";

(*e*) by adding the following paragraph at the end of QC.30.4:

"The emitter who operates an enterprise that distributes fuels must measure the quantity of fuel,

(1) except in the case of natural gas referred to in paragraph 2, at the primary fuel distribution points or at the points of receipt of the fuels acquired outside Québec;

(2) at the points of delivery of natural gas distributed by a natural gas distributor within the meaning of section 2 of the Act respecting the Régie de l'énergie (chapter R-6.0.1).";

(*f*) in Table 30-1 of QC.30.6:

(i) by inserting the following lines after the line "Heavy oils (4, 5 and 6)":

"

Propane	1.544
Liquefied natural gas	1.890

";

(ii) by striking out the line "Propane" before the line "Natural gas";

(iii) by inserting the following line after the line "Natural gas":

"

Compressed natural gas	1.907

";

(16) in protocol QC.31:

(*a*) by replacing "carbonaceous material" in subparagraph 4 of the first paragraph of QC.31.2 by "coke";

(*b*) by inserting the following after subparagraph 6 of the first paragraph of QC.31.2:

"(6.1) the annual quantity of limestone used, in metric tons;

(6.2) the average annual carbon content of the limestone used, in metric tons of carbon per metric ton of limestone;";

(*c*) by replacing "5 to 7" in the second paragraph of QC.31.2 by "4, 6 and 6.2";

(*d*) by replacing "subparagraph 3" in subparagraph 1 of the third paragraph of QC.31.2 by "subparagraph 2";

(*e*) by replacing "subparagraph 2" in subparagraph 2 of the third paragraph of QC.31.2 by "subparagraph 1";

(*f*) by inserting the following after paragraph 5 of QC.31.4:

"(5.1) calculate the annual quantity of limestone used by weighing the limestone using the same plant instruments used for inventory purposes, such as mass balances, weight hoppers or belt weight feeders;";

(17) in protocol QC.32:

(*a*) by inserting "cast at the reduction furnaces" after "titanium dioxide (TiO_2)" in subparagraph *e* of subparagraph 4 of the first paragraph of QC.32.2;

(*b*) by replacing "ilmenite" in paragraph *b* of subparagraph 5 of the first paragraph of QC.32.2 by "molten cast iron";

(*c*) by inserting "or a default value of 0" after "air pollution control residue collected" in the definition of factor CC_R in equation 32-1 of QC.32.3.2;

(*d*) by adding "molten" before "cast" in the heading of QC.32.3.3;

(*e*) by replacing "QC.32.2.3" in the part preceding paragraph 1 of QC.32.4.1 by "QC.32.3.3";

(18) in the first paragraph of QC.33.2:

(*a*) by adding ", in thousands of cubic metres" at the end of paragraph *d* of subparagraph 6 of the first paragraph;

(*b*) by replacing "conventionnelles" in the French text of paragraph *h* of subparagraph 6 of the first paragraph by "conventionnels";

(*c*) by replacing paragraphs i and ii of paragraph *p* of subparagraph 6 of the first paragraph by the following:

"(i) the components of each emission source;

(ii) the emission factors determined in accordance with QC.33.4.16 and QC.33.4.17;

(iii) the total number of leaks detected during annual leak detection surveys;";

(*d*) by replacing paragraph *q* of subparagraph 6 of the first paragraph by the following:

"(*q*) the annual quantity of oil produced, in kilolitres;";

(*e*) by adding ", in thousands of cubic metres" at the end of paragraph *r* of subparagraph 6 of the first paragraph;

(19) in protocol QC.34:

(*a*) by replacing "iron and steel powder" in subparagraph 11 of the first paragraph of QC.34.2 by "iron powder and steel powder at bagging, after additives,";

(*b*) by replacing the definitions of the factors "SP_p" and "C_{SPp}" of equation 34-4 in QC.34.3.5 by the following:

"SP_p = Annual quantity of steel powder output from the annealing furnaces, in metric tons;

C_{SPp} = Annual average carbon content of the steel powder output from the annealing furnaces, in metric tons of carbon per metric ton of steel powder;";

(*c*) by replacing "iron and steel powder" in the part preceding paragraph 1 of QC.34.4 by "iron powder and steel powder";

(*d*) by replacing "or the quantity of by-products" in subparagraph *b* of subparagraph 1 of the second paragraph of QC.34.5 by ", the quantity of by-products, the quantity of residue or the quantity of other materials".

13. For the 2013 emissions report, an emitter may use the calculation methods as amended by this Regulation.

14. This Regulation comes into force on 1 January 2014.

3170