

Where:

BA_{final} = Total quantity of halocarbons contained in foam extracted and sent for destruction, in metric tonnes;

i = Type of halocarbon;

n = Number of types of halocarbons;

$BA_{\text{final}, i}$ = Total quantity of halocarbons of type i extracted and sent for destruction, determine in accordance with Appendix D, in metric tonnes.

104892

Draft Regulation

Environment Quality Act
(chapter Q-2)

An Act mainly to ensure effective governance of the fight against climate change and to promote electrification (2020, chapter 19)

Landfill methane reclamation and destruction projects eligible for the issuance of offset credits

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the Regulation respecting landfill methane reclamation and destruction projects eligible for the issuance of offset credits, appearing below, may be made by the Minister of the Environment and the Fight Against Climate Change on the expiry of 45 days from the date of publication.

The contents of many of the provisions in the draft Regulation constitute an improved version of the provisions of Appendix D of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1).

The draft Regulation sets out, in a manner consistent with the amendments introduced by the draft Regulation to amend the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances, the conditions on which a project to reclaim or destroy methane from a landfill site will be eligible for the issuance of offset credits. It also contains the general conditions that apply to such a project.

The draft Regulation introduces a system of project notices to inform the Minister that the promoter of an eligible project intends to file a request for the issuance of offset credits. This mechanism replaces project registration, which the draft Regulation to amend the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances repeals for landfill methane reclamation or destruction projects.

The draft Regulation also defines the methods to be used to quantify the greenhouse gas emission reductions attributable to an eligible project, as well as the contents of the project report that the promoter must produce for each reporting period for emission reductions. It sets the conditions that apply to the verification of project reports, in particular concerning the accreditation of the verification organization and the independence of the organization, the verifier and the other members of the verification team from the promoter.

The draft Regulation sets the conditions applicable to the use, maintenance, verification and calibration of the measurement instruments used to quantify the greenhouse gas emission reductions attributable to an eligible project and to the use and maintenance of the reclamation or destruction devices used by the promoter.

Lastly, the draft Regulation includes monetary administrative penalties for failures to comply with the Regulation and penal sanctions for offences, along with transitional provisions to place under the new rules the projects that were registered under the old rules in the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances.

The draft Regulation has a limited impact on enterprises since it essentially simplifies the future regulatory amendments for landfill methane reclamation and destruction projects that are eligible for the issuance of offset credits.

Further information on the draft Regulation may be obtained by contacting Pierre Bouchard, Coordinator, Direction du marché du carbone, Direction générale de la réglementation carbone et des données d'émission, Ministère de l'Environnement et de la Lutte contre les changements climatiques, Édifice Marie-Guyart, 675, boulevard René-Lévesque Est, boîte 30, Québec (Québec) G1R 5V7; email: pierre.bouchard@environnement.gouv.qc.ca.

Any person wishing to comment on the draft Regulation is requested to submit written comments within the 45-day period to Kim Ricard, Associate Director for Market Operations, Direction du marché du carbone, Direction générale de la réglementation carbone et des données d'émission, Ministère de l'Environnement et de la Lutte contre les changements climatiques, Édifice Marie-Guyart, 675, boulevard René-Lévesque Est, boîte 31, Québec (Québec) G1R 5V7; email: kim.ricard@environnement.gouv.qc.ca.

BENOIT CHARETTE,
*Minister of the Environment
and the Fight Against Climate Change*

Regulation respecting landfill methane reclamation and destruction projects eligible for the issuance of offset credits

Environment Quality Act

(chapter Q-2, ss. 46.1, 46.5, 46.8.2, 115.27 and 115.34).

An Act mainly to ensure effective governance of the fight against climate change and to promote electrification
(2020, chapter 19, s. 21).

CHAPTER I

OBJECT, SCOPE AND INTERPRETATION

1. The object of this Regulation is to

(1) determine the landfill methane reclamation and destruction projects that are eligible for the issuance of offset credits pursuant to section 46.8.2 of the Environment Quality Act (chapter Q-2);

(2) determine the conditions and methods applicable to such projects;

(3) determine the information and documents that a person or municipality responsible for carrying out an eligible project or a project whose eligibility for credits must be determined must keep or provide to the Minister.

2. In this Regulation, unless otherwise indicated by context,

(1) “methane reclamation device” means any device or operation referred to in Appendix A that allows methane to be reclaimed;

(2) “methane destruction device” means any device or operation referred to in Appendix A that allows methane to be destroyed;

(3) “officer” means the president, chief executive officer, chief operating officer, chief financial officer or secretary of a legal person or a person holding a similar position, or any person designated as an officer by a resolution of the board of directors;

(4) “greenhouse gas” or “GHG” means a gas referred to in the second paragraph of section 46.1 of the Environment Quality Act or in the second paragraph of section 70.1 of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1), namely carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆), nitrogen trifluoride (NF₃), chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs);

(5) “landfill gas” means a gas resulting from the decomposition of residual materials disposed of in a landfill site;

(6) “landfill site” means a place where residual materials are permanently disposed of above or below ground;

(7) “professional” means a professional within the meaning of section 1 of the Professional Code (chapter C-26); any other person authorized by a professional order to carry on an activity carried on by a professional belonging to that order is also deemed to be a professional;

(8) “promoter” means a person or municipality responsible for carrying out a project eligible for the issuance of offset credits;

(9) “cap-and-trade system for emission allowances” means a cap-and-trade system for greenhouse gas emission allowances established pursuant to the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1).

CHAPTER II

ELIGIBILITY

DIVISION I

ELIGIBILITY CONDITIONS

3. A project to reclaim or destroy methane from a landfill site is eligible for the issuance of offset credits pursuant to section 46.8.2 of the Environment Quality Act, for the eligibility period provided for in Division II of this Chapter, if it meets the following conditions:

(1) the project is carried out by a promoter registered for the cap-and-trade system for emission allowances in accordance with the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances, that is domiciled in Québec in the case of a natural person or has an establishment in Québec in other cases;

(2) the GHG emission reductions attributable to the project are achieved as an initiative of the promoter, without the promoter being required to do so, on the date of filing of the project notice or renewal notice provided for in Chapter IV, under a law or regulation, an authorization, an order made pursuant to a law or regulation or a court decision;

(3) the methane is reclaimed or destroyed using a reclamation device or destruction device referred to in Appendix A in accordance with the conditions set out in that Appendix.

4. For the purposes of section 3, a landfill site must meet the following conditions:

(1) it is located in Québec;

(2) on the date on which the project notice or renewal notice referred to in Chapter IV is filed, and for the whole of the project's eligibility period, it receives less than 50,000 metric tonnes of residual materials annually and has a capacity of less than 1.5 million cubic metres;

(3) in the case of a landfill site that is closed on the date on which the project notice or renewal notice referred to in Chapter IV is filed and that began operations or was enlarged in or after 2006, the site has received less than 50,000 tonnes of residual materials annually and has a maximum capacity of less than 1.5 million cubic metres.

Subparagraphs 2 and 3 of the first paragraph do not apply to a landfill site for residual materials from a pulp and paper mill, a sawmill or an oriented strandboard manufacturing plant.

DIVISION II

ELIGIBILITY PERIOD

5. For the purposes of this Regulation, "eligibility period" means the period during which a project remains eligible for the issuance of offset credits, subject to compliance with the eligibility conditions in force when the project notice provided for in either section 11 or the second paragraph of section 13, or the renewal notice provided for in section 14, is filed.

6. The eligibility period has a term of 10 consecutive years and begins on the project start date.

For the purposes of this Regulation, a project eligible for the issuance of offset credits is deemed to begin on the date on which the first GHG emission reductions attributable to the project occur.

The eligibility period may be renewed for the same term by filing the renewal notice provided for in section 14. The renewed eligibility period begins on the day following the end of the preceding period.

CHAPTER III

GENERAL CONDITIONS APPLICABLE TO AN ELIGIBLE PROJECT

7. A project eligible for the issuance of offset credits must be carried out in accordance with all the requirements applicable to the project based on its type and the place where it is carried out.

8. The promoter must inform the Minister within 30 days if any of the following events occurs:

(1) the promoter terminates the project permanently before the end of the eligibility period referred to in section 6;

(2) the promoter intends to transfer responsibility for carrying out the project to another person or another municipality.

The promoter must, for the purposes of the first paragraph, file a notice containing the following documents and information:

(1) in the case of a project termination referred to in subparagraph 1 of the first paragraph,

(a) the date of the project termination;

(b) the reason for the project termination;

(c) an estimate of the offset credits that will be requested by the promoter in accordance with the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances;

(d) a declaration by the promoter or the promoter's representative that all the information provided is complete and accurate;

(2) in the case of a transfer referred to in subparagraph 2 of the first paragraph,

(a) the scheduled date of the transfer;

(b) the name of the transferee and all the information needed to identify the transferee, including the number of the general account opened by the Minister for the transferee pursuant to section 14 of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances after the transferee registers for the cap-and-trade system for emission allowances;

(c) an estimate of the offset credits that will be requested, for the reporting period during which the transfer is planned, by the promoter and by the transferee in accordance with the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances;

(d) a declaration by the promoter and the transferee, or their representatives that all the information provided is complete and accurate.

9. The promoter must use the forms or templates available on the website of the Ministère de l'Environnement et de la Lutte contre les changements climatiques to submit any information or document required pursuant to this Regulation.

10. The promoter must keep a copy of any information or document that must be submitted pursuant to this Regulation for the duration of the project and for a minimum period of 7 years after the project's end date.

The promoter must also keep any other information or document needed to quantify the GHG emission reductions attributable to the promoter's project pursuant to Chapter V of this Regulation for the duration of the project and for a minimum period of 7 years after the project's end date.

The documents and information referred to in this section must also be provided to the Minister on request.

CHAPTER IV

PROJECT NOTICE AND RENEWAL NOTICE

11. The promoter must, not later than the date of filing of the first issuance request for offset credits under the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances, file a project notice with the Minister containing the following documents and information:

- (1) the information needed to identify the promoter and the promoter's representative, if any;
- (2) the number of the general account opened by the Minister for the promoter pursuant to section 14 of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances following the promoter's registration for the cap-and-trade system for emission allowances;
- (3) a summary description of the project and information about its location;
- (4) an estimate of the expected annual and total GHG emission reductions attributable to the project, in metric tonnes CO₂ equivalent;
- (5) the duration of the project and the start date for the project, when known, or in other cases an estimate of the duration and start date;
- (6) when the promoter has retained or intends to retain the services of a professional or another person to prepare or carry out the project,
 - (a) the information needed to identify that professional or person;
 - (b) a summary of the tasks that have been or will be entrusted to that professional or person;
 - (c) if applicable, a declaration by the professional or person that the information and documents provided are complete and accurate;
- (7) the information needed to identify the owner of the landfill site where the project is carried out and the owner's representative, if any, if the promoter is not the owner of the site;

(8) the information needed to identify any person or municipality involved in reclaiming the landfill gas, in particular by purchasing the gas, and a description of the role played in reclamation by that person or municipality;

(9) a declaration by the promoter or the promoter's representative that the documents and information provided are accurate.

12. On receiving a project notice, the Minister gives it a project code and communicates the code to the promoter.

13. The project described in a notice filed in accordance with section 11 must start within 2 years following the filing.

After that time, a promoter that has not yet started the project must file a new project notice containing the information and documents referred to in section 11.

14. The promoter must, between the sixth and the first month preceding the end of the eligibility period for the project, ask the Minister to renew the eligibility period by filing a renewal notice containing, in addition to what is required by section 11, the following information:

(1) the project code given to the project by the Minister pursuant to section 12;

(2) a description of any change planned to the project for the new eligibility period.

CHAPTER V

QUANTIFICATION OF GHG EMISSION REDUCTIONS ATTRIBUTABLE TO AN ELIGIBLE PROJECT

15. The object of the provisions of this Chapter is to

(1) identify the GHG sources, sinks and reservoirs forming the project boundaries and determine the GHG emission reductions attributable to the project for quantification purposes;

(2) define the period during which the GHG emission reductions attributable to the project are quantified and specify the calculation methods used for quantification;

(3) establish the conditions for project surveillance, including the conditions for collecting and recording the data needed to quantify the GHG emission reductions attributable to the project, for using, maintaining and calibrating the instruments used for data collection, and for using and maintaining the reclamation devices and destruction devices used for the project.

DIVISION I**PROJECT BOUNDARIES AND GHG EMISSION REDUCTIONS ATTRIBUTABLE TO THE PROJECT**

16. Only the GHG sources, sinks and reservoirs identified in the area of Figure 1 that lies within the dotted line and described in Table 1 of Appendix B may be used by the promoter to quantify the GHG emission reductions attributable to the promoter's project. The GHG sources, sinks and reservoirs identified in this way form the project boundaries.

17. GHG emission reductions may only be deemed to be attributable to an eligible project for quantification purposes pursuant to this Chapter if no offset credits have previously been issued for those emissions pursuant to the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances and if no credits have been issued under another voluntary or regulatory program for GHG emission reductions.

DIVISION II**REPORTING PERIOD AND CALCULATION METHODS FOR QUANTIFICATION***§ 1. – Reporting period*

18. For the purposes of this Regulation, “reporting period” means a continuous period of time, within an eligibility period, during which the GHG emission reductions attributable to a project eligible for the issuance of offset credits are quantified in accordance with this Chapter for the issuance of offset credits.

The reporting periods of a project eligible for the issuance of offset credits cover 12 months and succeed each other in an uninterrupted fashion during the eligibility period for the project.

Despite the second paragraph, the first reporting period covers a minimum period of one month and a maximum period of 18 months.

§ 2. – Calculation methods

19. To quantify the GHG emission reductions attributable to a project during the reporting period, the promoter uses Equation 1:

Equation 1

$$ER = BE - FFE$$

Where:

ER = GHG emission reductions attributable to the project, in metric tonnes CO₂ equivalent;

BE = GHG emissions under the baseline scenario, calculated using Equation 2, in metric tonnes CO₂ equivalent;

FFE = GHG emissions attributable to fossil fuel consumption during the project, calculated using Equation 9, in metric tonnes CO₂ equivalent.

20. To quantify the GHG emission reductions attributable to a project, the promoter must calculate the GHG emissions under the baseline scenario using Equations 2 to 8:

Equation 2

$$BE = CH_{4R-D} \times GWP_{CH_4} \times (1 - OX)$$

Where:

BE = GHG emissions under the baseline scenario, in metric tonnes CO₂ equivalent;

CH_{4R-D} = Total quantity of CH₄ reclaimed or destroyed by all landfill gas reclamation or destruction devices, calculated using Equation 4, in metric tonnes of CH₄;

GWP_{CH₄} = Global warming potential of CH₄, taken from Schedule A.1 to the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere (chapter Q-2, r. 15);

OX = Factor for the oxidation of CH₄ by soil bacteria, using the value established for each of the cases provided for in subparagraphs 1, 2 and 3 below.

The factor for the oxidation of CH₄ by soil bacteria is established as follows:

(1) for closed landfill sites with a geomembrane covering the entire area of the landfill in accordance with the requirements of the Regulation respecting the landfilling and incineration of residual materials (chapter Q-2, r. 19), the promoter must use a CH₄ oxidation rate of zero (0%);

(2) for operating landfills, where part of the landfill is filled and covered by a geomembrane meeting the requirements of the Regulation respecting the landfilling and incineration of residual materials, the promoter must use a CH₄ oxidation rate of zero (0%) for the zone covered by a geomembrane and a CH₄ oxidation rate of 10% for the zone not covered by a geomembrane, and must pro-rate the CH₄ oxidation factor based on the zones which are covered and uncovered by a geomembrane using Equation 3;

(3) for all other landfill sites, the promoter must use a CH₄ oxidation factor of 10%.

Equation 3

$$OX = \frac{(0\% \times A_{CZ}) + (10\% \times A_{NCZ})}{S_{CZ} + A_{NCZ}}$$

Where:

OX = Factor for the oxidation of CH₄ by soil bacteria for the case provided for in subparagraph 2;

A_{CZ} = Area, in m², of the landfill site zone that is filled and covered by a geomembrane;

A_{NCZ} = Area, in m², of the landfill site zone that is operating and not covered by a geomembrane under final cover at the start of the reporting period.

Equation 4

$$CH_{4R-D} = \sum_{i=1}^n (CH_{4R-D,i}) \times (0.668 \times 0.001)$$

Where:

CH_{4R-D} = Total quantity of CH₄ reclaimed or destroyed by all landfill gas reclamation or destruction devices, in metric tonnes of CH₄;

n = Number of reclamation or destruction devices;

i = Reclamation device or destruction device;

CH_{4R-D,i} = Quantity of CH₄ reclaimed or destroyed by reclamation or destruction device *i*, calculated using Equation 5, in cubic metres of CH₄ at standard conditions;

0.668 = Density of CH₄, in kilograms per cubic metre at standard conditions;

0.001 = Conversion factor, kilograms to metric tonnes.

Equation 5

$$CH_{4R-D,i} = Q_i \times DE_i$$

Where:

CH_{4R-D,i} = Quantity of CH₄ reclaimed or destroyed by reclamation or destruction device *i*, in cubic metres of CH₄ at standard conditions;

Q_i = Quantity of CH₄ sent to reclamation or destruction device *i*, calculated using Equation 6, in cubic metres of CH₄ at standard conditions;

DE_i = Efficiency of reclamation or destruction device i , determined in accordance with Appendix A or using Equation 7 for destruction by biological oxidation;

i = Reclamation or destruction device.

Equation 6

$$Q_i = \sum_{t=1}^n (VLG_{i,t} \times C_{CH_4,t})$$

Where:

Q_i = Total quantity of CH_4 sent to reclamation or destruction device i , in cubic metres of CH_4 at standard conditions;

n = Number of time intervals;

t = Time interval shown in the table of monitoring parameters in Appendix D for which CH_4 flow and content measurements from the landfill gas are aggregated;

$VLG_{i,t}$ = Corrected volume of landfill gas sent to reclamation or destruction device i during time interval t , measured using a flow meter in cubic metres at standard conditions or calculated in accordance with section 21;

$C_{CH_4,t}$ = Average concentration of CH_4 in the landfill gas during time interval t , measured using a continuous CH_4 analyzer, in cubic metres of CH_4 per cubic metre of landfill gas.

Equation 7

$$DE_i = \frac{(CO_{CH_4} - CO_{dest-CH_4})}{CO_{CH_4}}$$

Where:

DE_i = Efficiency of biological oxidation destruction device i , in cubic metres of CH_4 per cubic metre of landfill gas;

CO_{CH_4} = Average CH_4 concentration of the gas entering the biological oxidation destruction device, measured using a continuous CH_4 analyzer, in cubic metres of CH_4 per cubic metre of landfill gas;

$CO_{dest-CH_4}$ = Average CH_4 concentration of the gas at the outlet of the biological oxidation destruction device, measured using a continuous CH_4 analyzer, in cubic metres of CH_4 per cubic metre of landfill gas.

21. When the flow meter used for quantification purposes does not correct for the temperature and pressure of the landfill gas at standard conditions, the promoter must measure the landfill gas pressure and temperature separately and correct the flow values using Equation 8. The promoter must then use the corrected flow values for quantification purposes.

Equation 8

$$VLG_{i,t} = VLG_{uncorrected} \times \frac{293.15}{T} \times \frac{P}{101.325}$$

Where:

$VLG_{i,t}$ = Corrected volume of landfill gas sent to reclamation or destruction device i during time interval t , in cubic metres at standard conditions;

i = Reclamation or destruction device;

t = Time interval shown in the table of monitoring parameters in Appendix D for which CH_4 flow and content measurements from the landfill gas are aggregated;

$VLG_{uncorrected}$ = Uncorrected volume of the landfill gas captured for the given time interval, measured using a flow meter, in cubic metres;

T = Measured temperature of the landfill gas for the given time interval, in Kelvin ($^{\circ}C + 273.15$);

P = Measured pressure of the landfill gas for the given time interval, in kilopascals.

22. To quantify the GHG emission reductions attributable to a project, the promoter must calculate the quantity of GHG emissions attributable to fossil fuel consumption during the project using Equation 9:

Equation 9

$$FFE = \sum_{f=1}^n \left[FF_f \times \left[(EF_{CO_2,f} \times 10^{-3}) + (EF_{CH_4,f} \times GWP_{CH_4} \times 10^{-6}) + (EF_{N_2O,f} \times GWP_{N_2O} \times 10^{-6}) \right] \right]$$

Where:

FFE = Total GHG emissions attributable to fossil fuel consumption, in metric tonnes CO_2 equivalent;

n = Number of types of fossil fuel;

f = Type of fossil fuel;

FF_f = Total quantity of fossil fuel f consumed, expressed

— in kilograms, in the case of fuels whose quantity is expressed as a mass;

— in cubic metres at standard conditions, in the case of fuels whose quantity is expressed as a volume of gas;

— in litres, in the case of fuels whose quantity is expressed as a volume of liquid;

$EF_{CO_2,f}$ = CO₂ emission factor for fossil fuel *f* specified in Tables 1-3 to 1-8 of QC.1.7 in Schedule A.2 to the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere (chapter Q-2, r. 15), expressed

— in kilograms of CO₂ per kilogram, in the case of fuels whose quantity is expressed as a mass;

— in kilograms of CO₂ per cubic metre at standard conditions, in the case of fuels whose quantity is expressed as a volume of gas;

— in kilograms of CO₂ per litre, in the case of fuels whose quantity is expressed as a volume of liquid;

10^{-3} = Conversion factor, kilograms to metric tonnes;

$EF_{CH_4,f}$ = CH₄ emission factor for fossil fuel *f* specified in Tables 1-3 to 1-8 of QC.1.7 in Schedule A.2 to the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere, expressed

— in grams of CH₄ per kilogram, in the case of fuels whose quantity is expressed as a mass;

— in grams of CH₄ per cubic metre at standard conditions, in the case of fuels whose quantity is expressed as a volume of gas;

— in grams of CH₄ per litre, in the case of fuels whose quantity is expressed as a volume of liquid;

GWP_{CH_4} = Global warming potential of CH₄ taken from Schedule A.1 to the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere;

10^{-6} = Conversion factor, grams to metric tonnes;

$EF_{N_2O,f}$ = N₂O emission factor for fossil fuel *f* specified in Tables 1-3 to 1-8 of QC.1.7 in Schedule A.2 to the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere, expressed

— in grams of N₂O per kilogram, in the case of fuels whose quantity is expressed as a mass;

— in grams of N₂O per cubic metre at standard conditions, in the case of fuels whose quantity is expressed as a volume of gas;

— in grams of N₂O per litre, in the case of fuels whose quantity is expressed as a volume of liquid;

GWP_{N₂O} = Global warming potential of N₂O taken from Schedule A.1 to the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere.

§ 3. – *Missing data*

23. Where the data needed to quantify the GHG emission reductions attributable to an eligible project are missing, the promoter uses the data replacement methods set out in Appendix C if

(1) the data concern the CH₄ concentration or flow rate parameters for landfill gas, or data on gas flow rates that are discrete, non-chronic and due to unforeseen circumstances;

(2) the proper functioning of the reclamation or destruction device can be shown by thermocouple readings for a flare, or by the monitoring device for a reclamation or destruction device for any other reclamation or destruction device;

(3) the data concern either landfill gas flow data, or landfill gas CH₄ concentration, but not both;

(4) the data concern landfill gas flow rates, a continuous analyzer is used to measure the CH₄ concentration and it is shown that the CH₄ concentration was consistent with normal operations for the time when the data are missing;

(5) the data concern the measurement of CH₄ concentration and it is shown that the landfill gas flow rate was consistent with normal operations for the time when the data are missing.

DIVISION III

CONDITIONS APPLICABLE TO PROJECT SURVEILLANCE

24. The promoter is responsible for project surveillance, which includes all tasks relating to the collecting and recording of the data needed to quantify the GHG emission reductions attributable to the project, all tasks relating to the use, maintenance, verification and calibration of the measurement instruments used for data collection, and all tasks relating to the use and maintenance of reclamation and destruction devices.

The promoter measures and monitors the surveillance parameters in accordance with the table in Appendix D.

§ 1. – *Installation and use of measurement instruments and other equipment*

25. Every measurement instrument or other equipment used for quantification purposes pursuant to this Chapter must be installed and used in accordance with the manufacturer's instructions, be maintained in good working order and work reliably during operating hours.

In addition, the flow meter and the CH₄ analyzer for the landfill gas must meet the following conditions:

- (1) they must not be separated by a component that eliminates moisture;
- (2) they must be installed in a way that allows them to measure the gas flow and CH₄ concentration in the landfill gas sent to the reclamation or destruction device before any additional fuel is added.

26. The flow meter and CH₄ analyzer used by the promoter to quantify the GHG emission reductions attributable to the project must measure

- (1) the flow of landfill gas before it is sent to the reclamation or destruction device, continuously and recorded every 15 minutes or totalized and recorded at least daily, adjusted for temperature and pressure;
- (2) the CH₄ concentration of the landfill gas sent to each reclamation or destruction device, continuously, recorded every 15 minutes and totalized as a daily average.

When temperature and pressure must be measured to correct flow values at standard conditions, the parameters must be measured continuously.

§ 2. – *Maintenance, verification and calibration of measurement instruments*

27. All landfill gas flow meters and CH₄ analyzers used for quantification purposes pursuant to this Chapter must be maintained, cleaned and inspected as specified in the project's surveillance plan and at the minimum maintenance, cleaning and inspection frequency specified by the manufacturer.

In addition, not more than three months before the end date of the reporting period quantified, the promoter must

- (1) have the accuracy of every flow meter used verified by a qualified person. The person must, for that purpose, use a Type L Pitot tube or a reference flow meter with a valid calibration certificate issued by the manufacturer or by a third party certified for that purpose, and compare the values obtained using those instruments with the values measured by the flow meter used for the project;

(2) for every CH₄ analyzer used, either

(a) have the accuracy of the CH₄ analyzer verified by a qualified person. The person must, for that purpose, use a reference device with a valid calibration certificate issued by the manufacturer or by a third party certified for that purpose, and compare the values obtained using those instruments with the values measured by the CH₄ analyzer used for the project; or

(b) have the CH₄ analyzer calibrated by the manufacturer or by a third party certified for that purpose by the manufacturer.

The promoter must also have the CH₄ analyzer calibrated at the frequency specified by the manufacturer or, if that frequency is greater than 5 years, every 5 years.

The verification of the accuracy of flow meters and CH₄ analyzers performed in accordance with the second paragraph must determine if the relative error in the reading of volumetric flow or CH₄ concentration is within a +/-5% range from the reference value calculated using the following equation:

$$\text{Relative error (\%)} = \frac{M_{\text{project inst}} - M_{\text{reference inst}}}{M_{\text{project inst}}} \times 100$$

Where:

Relative error = Percentage difference between the measurements of the volumetric flow or CH₄ concentration of landfill gas by project instruments compared to the reference instruments;

$M_{\text{project inst}}$ = Measurement made by measurement instruments for the project, being the volumetric flow of landfill gas measured by the flow meter for the project or the CH₄ concentration in the landfill gas by the CH₄ analyzer for the project;

$M_{\text{reference inst}}$ = Measurement made by reference instruments, being the volumetric flow of landfill gas measured by the reference flow meter or Type L Pitot tube, or the measurement of the CH₄ concentration in the landfill gas by the reference CH₄ analyzer.

28. When the verification of the accuracy of the measurement instruments in accordance with section 27 shows that the volumetric flows of landfill gas as measured by the flow meters or the CH₄ concentration measured by the reference CH₄ analyzers have a relative error outside the +/-5% range, the promoter must take the necessary corrective action, such as cleaning or adjusting the sensor on the instruments, as specified by the manufacturer. The promoter must then verify the accuracy of the instruments again.

When the corrective actions taken by the promoter do not, following a new verification, ensure that the instruments can maintain a relative error within the +/-5% range, the promoter must have the instruments calibrated by the manufacturer or by a third party certified by the manufacturer. The calibration must be performed not more than 2 months after the end date of the quantified reporting period.

29. Data collected by a measurement instrument between the time of the last verification of the accuracy of the instrument with a relative error within the +/-5% range and the time when a calibration is performed pursuant to the second paragraph of section 28 must be used or corrected to quantify the GHG emission reductions attributable to the project as follows:

(1) when the relative error calculated using the equation referred to in the fourth paragraph of section 27 is negative, the promoter must use the measured values without correction;

(2) when the relative error calculated using the equation referred to in the fourth paragraph of section 27 is positive, the promoter must correct the measurement of the volumetric flow of the landfill gas by the project flow meters or the measurements of CH₄ concentrations de CH₄ by the project analyzers by multiplying the flow or concentration measurement by the relative error obtained using that equation.

§ 3. – Use, maintenance and monitoring of reclamation or destruction devices

30. Every landfill gas reclamation or destruction device must be used in accordance with the manufacturer's instructions, be maintained in good working order and work reliably during operating hours.

31. The operating status of landfill gas reclamation or destruction devices must be monitored and recorded at least hourly, as follows:

(1) for flares, by reading the thermocouple;

(2) for other reclamation or destruction devices referred to in Appendix A, using a monitoring device to verify the operating status of the reclamation or destruction device.

Where landfill gas is injected into a natural gas distribution network, or compressed or liquefied before being injected into a natural gas distribution network, the monitoring device used must be placed at the injection station of the natural gas distribution network.

32. If the thermocouple referred to in subparagraph 1 of the first paragraph of section 31 records a reading below 260°C, no GHG emissions reduction may be credited for quantification purposes pursuant to this Chapter for the period during which the temperature remains below 260°C.

If a monitoring device for any other reclamation or destruction device, or the reclamation or destruction device itself, is not in good working order, no GHG emission reductions may be credited for quantification purposes pursuant to this Chapter for the period during which the device is not in good working order.

33. In the case of a project to reclaim landfill gas, the quantity of landfill gas emitted into the atmosphere between the measurement of the landfill gas by the promoter at the landfill site and the reclamation device, in particular because of an emergency shutdown, must be measured, and this quantity of landfill gas must be excluded from the quantification of GHG emission reductions attributable to the project.

If gas from other sources is mixed with the landfill gas between the measurement of the landfill gas by the promoter at the landfill site and the reclamation device, the quantity of gas emitted into the atmosphere, in particular because of an emergency shutdown, must be measured, and this quantity must be excluded from the quantification of GHG emission reductions attributable to the project in proportion to the quantity of gas from each gas source. If the quantification of the gases from various sources is not possible, the total quantity of landfill gas emitted into the atmosphere must be excluded.

34. When the landfill gas is reclaimed by a person or municipality other than the promoter, the promoter must ensure that the conditions of this Division are complied with.

§ 4. – *Surveillance plan*

35. To ensure surveillance of the project, the promoter must establish a project surveillance plan, which must

- (1) specify the methods used to collect and record the data required for all the parameters in Appendix D, and specify the frequency of data acquisition;
- (2) specify
 - (a) the maintenance, cleaning and inspection frequency specified by the manufacturer;
 - (b) the frequency of the maintenance, cleaning and inspection of the equipment used for the project;
 - (c) the frequency of the verification of measurement instrument accuracy and calibration, in accordance with subdivision 2 of this Division;
 - (d) the methods used to replace missing data, if applicable, in accordance with subdivision 3 of Division II of this Chapter;

(3) include the role of the person responsible for each monitoring activity, as well as the quality assurance and quality control measures taken to ensure that data acquisition and the verification of measurement instrument accuracy and calibration are carried out consistently, precisely and in accordance with this Chapter; and

(4) include a template for the maintenance logs for project components.

CHAPTER VI

PROJECT REPORT

DIVISION I

GENERAL CONDITIONS

36. The promoter must produce a project report for each reporting period referred to in section 18 not later than 4 months following the end of the reporting period concerned, with the content specified in Division II of this Chapter.

A promoter whose project ends during a period covering a reporting period is not bound by the requirement in the first paragraph for that reporting period. The promoter must notify the Minister of the situation within 30 days following the end of the reporting period.

37. Every project report verified in accordance with Chapter VII in which the verifier has noted errors, omissions or inaccuracies must be corrected by the promoter before any issuance request for offset credits is made under the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances.

38. The promoter must, on request, provide the Minister with the project reports produced.

DIVISION II

CONTENTS OF THE PROJECT REPORT

39. The project report produced for the first reporting period must contain the following information and documents:

(1) the information needed to identify the promoter and the promoter's representative, if any;

(2) where the promoter has retained the services of a professional or of another person to prepare or carry out the project,

(a) the information needed to identify the professional or person;

(b) a summary of the tasks entrusted to the professional or person;

- (c) where applicable, a declaration by the professional or person that the information and documents produced are complete and accurate;
- (3) the project code given to the project by the Minister after receiving the project notice referred to in Chapter IV;
- (4) a detailed description of the project;
- (5) information about the location of the project;
- (6) the information needed to identify the owner of the project site and the owner's representative, if any, if the promoter is not the owner;
- (7) a demonstration that the project meets the conditions set out in Division I of Chapter II, including a copy of any relevant document;
- (8) a description of the GHG sources, sinks and reservoirs for the project, with a definition of the project boundaries;
- (9) when an analysis of the environmental impacts of the project has been performed, a summary of the analysis and its conclusions;
- (10) a copy of any authorization needed to carry out the project;
- (11) information about financial assistance received for the project under any other program for GHG emission reductions;
- (12) the project surveillance plan referred to in subdivision 4 of Division III of Chapter V;
- (13) a detailed plan showing the layout of the various project components, in particular the measurement instruments and equipment connected with the GHG sources, sinks and reservoirs defining the project boundaries;
- (14) information on the flow meters, CH₄ analyzers and landfill gas destruction devices used for the project, including their type, model number, serial number and most recent calibration certificate;
- (15) in the case of a project for a closed landfill site where the entire landfill zone is covered by a geomembrane, a demonstration that the geomembrane and its installation meet the requirements of the Regulation respecting the landfilling and incineration of residual materials;
- (16) a description of any problem occurring during the operation of the project that may affect the quantity of GHG emission reductions attributable to the project;
- (17) the start and end dates for the reporting period covered by the project report;

- (18) the GHG emission reductions attributable to the project for the reporting period, quantified annually in accordance with Chapter V, in metric tonnes CO₂ equivalent, along with the calculation methods and all the information and documents used to make the quantification, including a copy of the raw measurement data used for quantification purposes;
- (19) in the case of a project for an operating landfill site, a demonstration that the site received less than 50,000 tonnes of residual materials annually during the reporting period covered by the project report, in accordance with subparagraph 2 of the first paragraph of section 4, including a copy of the operating log for the landfill site project kept by the operator pursuant to the Regulation respecting the landfilling and incineration of residual materials;
- (20) in the case of a project for an operating landfill site, part of which is filled and covered by a geomembrane,
- (a) a demonstration that the geomembrane meets the requirements of the Regulation respecting the landfilling and incineration of residual materials;
- (b) the method used to determine the covered zone and the uncovered zone, in accordance with Equation 3 in subdivision 2 of Division II of Chapter V of this Regulation;
- (21) periods of missing data, the nature of the missing data and the methods used to replace them in accordance with section 23;
- (22) a demonstration that the thermocouple or monitoring device has successfully monitored and confirmed the proper operation of the reclamation or destruction device;
- (23) a copy of the maintenance and monitoring log for all measurement instruments, devices and other project equipment;
- (24) a copy of the verification reports showing the accuracy of all measurement instruments and the calibration certificates referred to in subdivision 2 of Division III of Chapter V;
- (25) where a flow meter has been calibrated, a demonstration that the calibration was performed in variable flow conditions matching the conditions of the landfill site;
- (26) where a CH₄ analyzer has been calibrated, a demonstration that the calibration was performed in temperature and pressure conditions matching the conditions of the landfill site;

(27) where the promoter is not the owner of the project site, a declaration signed by the owner attesting that the owner has authorized the carrying out of the project by the promoter and undertakes, with respect to the GHG emission reductions covered by the project report, not to make a request for offset credits under the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances or a request for credits under another voluntary or regulatory program for GHG emission reductions;

(28) a declaration signed by the promoter or the promoter's representative that no offset credits for the GHG emission reductions covered by the project report have been issued pursuant to the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances and that no credits have been or will be issued under another voluntary or regulatory program for GHG emissions reduction;

(29) a declaration signed by the promoter or the promoter's representative that the project is carried out in accordance with this Regulation and that the documents and information provided are complete and accurate.

40. Where landfill gas is reclaimed, the project report produced for the first reporting period must also include

(1) the information needed to identify any person or municipality involved in reclaiming the landfill gas, in particular the person or municipality that purchases the gas, along with a description of the role played in the reclamation by the person or municipality;

(2) a detailed plan showing the layout of all the project components associated with landfill gas reclamation, including the location of all measurement instruments and equipment connected with the GHG sources, sinks and reservoirs defining the project boundaries, if applicable as far as the station where the landfill gas is injected into the natural gas distribution network;

(3) a copy of the contract for the sale of the landfill gas and, where applicable, of any gas that was processed, compressed or liquefied before being reclaimed;

(4) evidence of the sale of the landfill gas and of the sale of the gas injected, if applicable, including the actual quantities sold during the reporting period;

(5) a declaration by any person or municipality involved in reclaiming the landfill gas, in particular the person or municipality that purchases the gas, in which the person or municipality undertakes, with respect to the GHG emission reductions covered by the project report, not to make a request for offset credits under the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances or a request for credits under another voluntary or regulatory program for GHG emission reductions.

41. Every subsequent project report must include the following information and documents:

(1) the information and documents listed in paragraphs 1 to 3 and 16 to 29 of section 39;

(2) a detailed description of any change made to the project since the end of the preceding reporting period or to the information contained in the project report produced for that period and, where applicable, a demonstration that the project still meets the requirements of Division I of Chapter II and of the project surveillance plan if that plan has been amended.

42. Where landfill gas is reclaimed, every subsequent project report subsequent must also include the information and documents listed in paragraphs 4 and 5 of section 40.

CHAPTER VII

VERIFICATION

DIVISION I

GENERAL CONDITIONS

43. The promoter must entrust every verification of a project report to a verification organization accredited under ISO 14065 by a member of the International Accreditation Forum in Canada or the United States and according to an ISO 17011 program, with respect to the sector of activity for the project.

Despite the first paragraph, the verification of a project report may be entrusted to a verification organization that is not yet accredited, provided it is accredited in accordance with the first paragraph in the year following the verification of the project report.

44. The promoter may entrust the verification of a project report to a verification organization in accordance with section 43 if the organization, the verifier designated by that organization and the other members of the verification team

(1) have not acted for the promoter, in the 3 preceding years, as a consultant for the purpose of developing the project or calculating the GHG emission reductions attributable to the project;

(2) have not verified project reports covering more than six consecutive reporting periods for the project being verified.

In addition, when the promoter wishes to have the project report verified by a verification organization other than the organization that verified the report for the preceding reporting period, the verification organization to which the verification is entrusted, the verifier designated by that organization to carry out the verification and the other members of the verification team, must not have verified a project report covering the three preceding project periods for that project.

45. In addition to the requirements of the standards ISO 14064-3 and ISO 14065 concerning conflicts of interest, the promoter must ensure that none of the following situations exists between the promoter, its officers, the verification organization and the members of the verification team referred to in section 44:

(1) a member of the verification team or a close relative of that member has personal ties with the promoter or one of its officers;

(2) during the 3 years preceding the year of the verification, one of the members of the verification team was employed by the promoter;

(3) during the 3 years preceding the year of the verification, one of the members of the verification team provided the promoter with one of the following services:

(a) the design, development, commissioning or maintenance of a data inventory or data management system for GHG emissions from the establishment or facility of the promoter or, where applicable, for data on electricity or fuel transactions;

(b) the development of GHG emission factors, or the design and development of other data used for quantification purposes for any GHG emission reductions;

(c) a consultation concerning GHG emission reductions or GHG withdrawals from the atmosphere, in particular the design of an energy efficiency or renewable energy project and the assessment of assets relating to greenhouse gas sources, sinks and reservoirs;

(d) the preparation of manuals, guides or procedures connected with the reporting of the promoter's GHG emissions under the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere;

(e) consultation in connection with a GHG allowances market, including

i. brokerage, with or without registration, while acting as a promoter or subscriber on behalf of the promoter;

ii. advice concerning the suitability of a GHG emissions transaction;

iii. the holding, purchase, sale, negotiation or withdrawal of emission allowances referred to in the second paragraph of section 46.6 of the Environment Quality Act;

(f) a consultation in the field of health and safety and environmental management, including a consultation leading to ISO 14001 certification;

(g) actuarial consulting, bookkeeping or other consulting services relating to accounting documents or financial statements;

- (h) a service connected with the management systems of data related to a project of the promoter that is eligible for the issuance of offset credits;
 - (i) an internal audit of GHG emissions;
 - (j) a service provided in connection with litigation or an inquiry into GHG emissions;
 - (k) a consultation for a GHG emissions reduction project carried out in accordance with this Regulation or the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances;
- (4) the independent verification examiner has previously provided the promoter with a verification service or other services referred to in subparagraph 3 for the reporting periods covered by the verification.

The existence of one of the situations described in the first paragraph or in section 44 is considered to be a conflict of interest that invalidates the verification.

For the purposes of this section, a close relative of a member of the verification team is that person's spouse, child, spouse's child, mother or father, mother's or father's spouse, child's spouse or spouse's child's spouse.

DIVISION II

CONDUCT OF THE VERIFICATION

46. The verification of a project report must be conducted in accordance with ISO 14064-3 and also in accordance with the terms and conditions of this Division, and in compliance with the provisions of the Professional Code.

47. For the purposes of a verification the promoter and, where applicable, the owner of the site, must provide the verifier with any information or document needed for the conduct of the verification and give access to the site where the project is carried out.

The verification of a project report must include a project site visit by the verifier, except if such a visit was carried out for the purposes of a verification conducted during the two preceding reporting periods within the same eligibility period.

The site visit must allow the verifier, in particular, to observe the proper conduct and operation of the project and any change made to the project since the preceding verification. During the site visit, the verifier must be accompanied by the promoter.

In cases where the landfill gas is reclaimed by a person or municipality other than the promoter, the promoter must ensure that the verifier has access to all the equipment, facilities and documentation needed to conduct the verification of the project in accordance with this Division.

48. The verifier must conduct the verification in a way that supports a conclusion, with reasonable assurance, that the project report meets the conditions set out in this Regulation and that the GHG emission reductions attributable to the project are quantified and recorded in the project report with no significant errors, omissions or inaccuracies.

For the purposes of this Regulation, “significant errors, omissions or inaccuracies” means any errors, omissions or inaccuracies in the GHG emission reductions quantified and recorded in the project report for a reporting period that, individually or as an aggregate, result in an over-estimate or under-estimate of GHG emission reductions greater than 5%.

49. A verifier who, during a verification, observes an error, omission or inaccuracy in the quantification of the GHG emission reductions attributable to the project, or a failure to comply with a condition of this Regulation, must inform the promoter.

50. A verifier who, following the verification of a project report, concludes that the report meets the conditions of this Regulation and contains no significant errors, omissions or inaccuracies, must give the promoter a notice of positive verification attesting, with reasonable assurance, that the quantification of the GHG emission reductions attributable to the project is free of any significant error, omission or inaccuracy and that the project report meets the conditions of this Regulation.

A verifier who, following the verification of a project report, observes a failure to comply with a condition for the quantification of GHG emission reductions that cannot be corrected by the promoter must assess its impact on the GHG emission reductions recorded in the project report and determine if it leads to significant errors, omissions or inaccuracies. If a failure to comply with a condition for the quantification of GHG emission reductions cannot be corrected by the promoter but does not lead to significant errors, omissions or inaccuracies, and if the verifier concludes that the other conditions of the Regulation have been complied with and that there are no significant errors, omissions or inaccuracies, the verifier gives the promoter a notice of positive verification.

DIVISION III

VERIFICATION REPORT

51. The verification of a project report must be recorded in a verification report. A verification report may record the verification of several project reports.

The verification report must include the following information and documents:

(1) the information needed to identify the verification organization and the verifier designated to conduct the verification, the other members of the verification team and the independent examiner;

- (2) the information needed to identify the accrediting organization that accredited the verification organization for the verification, the sector of activity covered by the accreditation of the verification organization, and the period of validity of the accreditation;
- (3) information about the project, the project report or reports covered by the verification, and the quantity of GHG emission reductions attributable to the project for each reporting period concerned;
- (4) the verification plan and a description of the activities completed by the verifier to verify the project report or reports, along with all exchanges of information between the verifier and the promoter for the purposes of the verification;
- (5) the period during which the verification was conducted, and the date of any project site visit;
- (6) a list of any errors, omissions or inaccuracies observed in the quantification of the GHG emission reductions attributable to the project, and of any conditions of this Regulation that have not been met, including the following information concerning the error, omission, inaccuracy or condition:
 - (a) its description;
 - (b) the date on which the promoter was informed of it;
 - (c) where applicable, a description of any action taken by the promoter to correct it, and the date of that action;
 - (d) in the case of a failure to comply with a condition governing the quantification of the GHG emission reductions attributable to the project that cannot be corrected by the promoter, an assessment of the impact of each failure on the quantification of GHG emission reductions and a notice from the verifier concerning any significant errors, omissions or inaccuracies within the meaning of the second paragraph of section 48 that may result from that failure;
- (7) if applicable, the version and date of each project report revised following the verification;
- (8) where the verifier observes errors, omissions or inaccuracies in the quantification of GHG emission reductions attributable to the project made by the promoter, the annual and total quantity of GHG emission reductions which, according to the verifier, are actually attributable to the project, expressed in metric tonnes CO₂ equivalent;
- (9) the verification notice given to the promoter pursuant to section 50, along with the justification for the notice;

- (10) a declaration by the verification organization and verifier that the verification was conducted in accordance with this Regulation and ISO 14064-3;
- (11) a declaration concerning conflicts of interest, including
 - (a) the information needed to identify the verification organization, the members of the verification team and the independent examiner, and the sectors of activity covered by the accreditation of the verification organization;
 - (b) a copy of the organization chart for the verification organization;
 - (c) a declaration signed by a representative of the verification organization that the conditions of sections 44 and 45 of this Regulation have been met and that the risk of conflict of interest is acceptable.

CHAPTER VIII

ADMINISTRATIVE AND PENAL

DIVISION I

MONETARY ADMINISTRATIVE PENALTIES

52. A monetary administrative penalty of \$500 in the case of a natural person or \$2,500 in other cases may be imposed on any person who

- (1) in contravention of this Regulation, refuses or fails to file any notice, information, report or other document, or fails to produce it within the required time;
- (2) contravenes the first and second paragraphs of section 10, the first paragraph of section 43 or the first paragraph of section 47;
- (3) contravenes any other requirement of this Regulation, if no other monetary administrative penalty is otherwise specified for that contravention by this Chapter or by the Environment Quality Act.

53. A monetary administrative penalty of \$1,000 in the case of a natural person or \$5,000 in other cases may be imposed on any person who contravenes the first paragraph of section 25, section 30 or section 44.

DIVISION II

PENAL SANCTIONS

54. Every person who

- (1) refuses or fails to file any notice, information, report or other document, or fails to produce it within the required time;
- (2) contravenes the first and second paragraphs of section 10, the first paragraph of section 43 or the first paragraph of section 47;

(3) contravenes any other requirement of this Regulation, if no other penal sanction is otherwise specified for that contravention by this Chapter or by the Environment Quality Act;

commits an offence and is liable, in the case of a natural person, to a fine of \$3,000 to \$100,000 and, in other cases, to a fine of \$3,000 to \$600,000.

55. Every person who contravenes the first paragraph of section 25, section 30 or section 44 commits an offence and is liable, in the case of a natural person, to a fine of \$6,000 to \$250,000 and, in other cases, to a fine of \$25,000 to \$1,500,000.

56. Every person who, for the purposes of this Regulation, communicates to the Minister information that is false or misleading commits an offence and is liable, in the case of a natural person, to a fine of \$5,000 to \$500,000 or, despite article 231 of the Code of Penal Procedure (chapter C-25.1), to a maximum term of imprisonment of 18 months, and, in other cases, to a fine of \$15,000 to \$3,000,000.

CHAPTER IX

TRANSITIONAL AND FINAL

DIVISION I

TRANSITIONAL

57. Projects to reduce GHG emissions by the destruction or treatment of methane captured at a landfill site, referred to in Appendix D of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances and registered in accordance with Chapter IV of Title III of that Regulation as it read on (*insert the date preceding the date of coming into force of this Regulation*), are deemed to be projects eligible for the issuance of offset credits for which a project notice has been filed with the Minister in accordance with section 11 of this Regulation, and the provisions of this Regulation, adapted as required, apply to such projects.

58. Despite section 57, for the application of subparagraph 2 of the first paragraph of section 3 of this Regulation to such projects, the “date of filing of the project notice or renewal notice provided for in Chapter IV” means the date on which it is registered or renewed pursuant, as the case may be, to section 70.2 or 70.5 of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances as it read on (*insert the date preceding the date of coming into force of this Regulation*) until the end of the eligibility period during which this Regulation comes into force.

59. Despite section 57, for the application of subdivision 2 of Division III of Chapter V of this Regulation, the conditions for the maintenance, verification and calibration of the measurement instruments used by a promoter whose project is deemed to be a project eligible for the issuance of offset credits under that section are the conditions set out in section 7.3 of Part I of Protocol 2 in Appendix D of the Regulation respecting a cap-and-trade system for greenhouse gas emission

allowances as it read on (*insert the date preceding the date of coming into force of this Regulation*) until the end of the reporting period during which this Regulation comes into force.

60. Despite the provisions of the Regulation to amend the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (*reference to the G.O.*), for the purposes of protocols 1, 4 and 5 of Appendix D of the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances (chapter Q-2, r. 46.1), the provisions of sections 70.1, 70.2, 70.3, 70.4, 70.5, 70.7, 70.8, 70.10, 70.11, 70.12, 70.13, 70.14 insofar as it provides for the contents of a project report, 70.15, 70.15.1, 70.16, 70.17, 70.18, 70.19, 70.22, 71, 72, 74, 75 and 75.2 of that Regulation, as they read on (*insert the date preceding the date of coming into force of this Regulation*), continue to apply to the projects covered by those protocols until the latter are replaced.

DIVISION II

FINAL

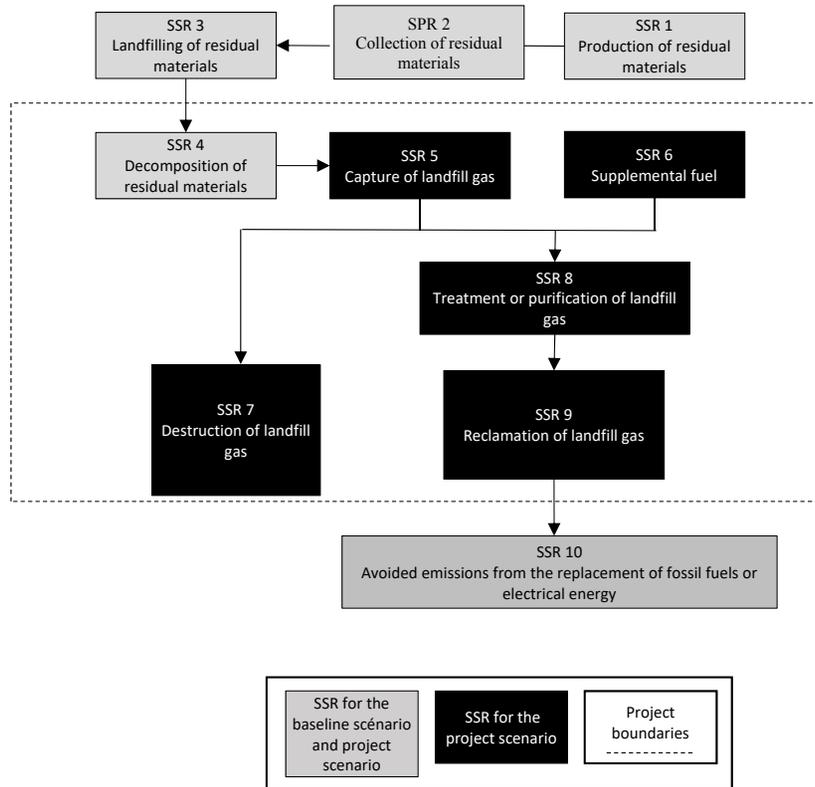
61. This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*.

Appendix A – Reclamation and destruction devices, conditions of use and efficiency

Destruction device	Condition of use	Efficiency
Open flare		0.96
Enclosed flare		0.995
Biological oxidation	The concentration of methane to be destroyed in the landfill gas must be equal to or below 20%	To be calculated using Equation 8
Reclamation device		Efficiency
Internal combustion engine		0.936
Boiler		0.98
Microturbine or large gas turbine		0.995
Station for injection into a natural gas distribution network		0.98
Compression or liquefaction station for injection into a natural gas distribution network		0.95

Appendix B – Project boundaries

Figure 1: Illustration of project boundaries



Explanatory note: The baseline scenario shows the GHG sources, sinks and reservoirs (SSRs) that are present in the absence of any project eligible for the issuance of offset credits. The project scenario shows the SSRs that are present when a project is implemented. Not all of these SSRs necessarily form part of the project eligible for the issuance of offset credits; only the SSRs within the project boundaries must be considered.

Table 1 – Description of GHG sources, sinks and reservoirs (SSRs)

# SSR	Description	GHG targeted	Applicability: Baseline scenario (B) and/or Project scenario (P)	Included in or Excluded from project boundaries
1	GHG emissions resulting from the production of residual materials	NA	B, P	Excluded
2	GHG emissions resulting from the collection of residual materials	CO ₂	B, P	Excluded
		CH ₄		Excluded
		N ₂ O		Excluded
3	GHG emissions resulting from the landfilling of residual materials	CO ₂	B, P	Excluded
		CH ₄		Excluded
		N ₂ O		Excluded
4	GHG emissions resulting from the decomposition of residual materials in the landfill site	CO ₂	B, P	Excluded
		CH ₄		Included
5	GHG emissions resulting from the operation of the landfill gas capture system	CO ₂	P	Included
		CH ₄		Excluded
		N ₂ O		Excluded
6	GHG emissions resulting from the use of supplemental fuel	CO ₂	P	Included
		CH ₄		Included
		N ₂ O		Included
7	Destruction of landfill gas using a destruction device, calculated using the efficiency determined in Appendix A	CO ₂	P	Excluded
		CH ₄		Included
		N ₂ O		Excluded
8	GHG emissions resulting from the use of supplemental energy sources to treat or purify landfill gas before it is reclaimed, if any	CO ₂	P	Included
		CH ₄		Excluded
		N ₂ O		Excluded

9	Reclamation of landfill gas using a reclamation device, calculated using the efficiency determined in Appendix A	CO ₂	P	Excluded
		CH ₄		Included
		N ₂ O		Excluded
10	Avoided GHG emissions from use of project-generated landfill gas to replace fossil fuel	CO ₂	P	Excluded
		CH ₄		Excluded
		N ₂ O		Excluded

Appendix C – Replacement methods for missing data

Missing data period	Replacement method
Less than 6 hours	Use the average of the 4 hours immediately prior to and after the missing data period
6 to less than 24 hours	Use the 90% upper or lower confidence limit of the 24 hours prior to and after the missing data period, whichever results in greater conservativeness
1 to 7 days	Use the 95% upper or lower confidence limit of the 72 hours prior to and after the missing data period, whichever results in greater conservativeness
More than 7 days	<p>No data may be replaced and no reduction may be credited, except if the landfill gas from the project is injected into a natural gas distribution network, when the missing data may be replaced for a period of more than 7 days but not more than 2 months using the following equation. This method allows the replacement of both the missing flow data and the missing methane concentration data.</p> $Q_i = \frac{E_{NG}}{HHV_{CH_4}}$ <p>Q_i = Total quantity of CH₄ sent to reclamation device i during the reporting period, in cubic metres of CH₄ at standard conditions; E_{NG} = Quantity of combustible energy injected into the natural gas distribution network, in GJ HHV = High heat value of CH₄, or 0.03982 GJ / m³</p>

APPENDIX D – Surveillance parameters

Parameter	Description of parameter	Unit of measurement	Method	Frequency of measurement	Equation applicable
A _{CZ}	Area of the landfill site zone that is filled and covered by a geomembrane	Square metre	Measured	At the start of each reporting period	3
A _{NCZ}	Area of the landfill site zone that is operating and not covered by a geomembrane under final cover	Square metre	Measured	At the start of each reporting period	3
V _{LG_{i,t}}	Corrected volume of landfill gas sent to reclamation or destruction device <i>i</i> , during time interval <i>t</i>	Cubic metre at standard conditions	Measured	Continuous and recorded at least every 15 minutes and totaled as an average at least daily	6
C _{CH_{4,t}}	Average concentration of CH ₄ in landfill gas during time interval <i>t</i>	Cubic metre of CH ₄ at standard conditions per cubic metre of landfill gas at standard conditions	Measured	Continuous and recorded at least every 15 minutes and totaled as an average at least daily	6
CO _{CH₄}	CH ₄ concentration of gas entering the biological oxidation destruction device	In cubic metres of CH ₄ per cubic metre of landfill gas	Measured	Continuous	7
CO _{dest-CH₄}	CH ₄ concentration of gas leaving the biological oxidation destruction device	In cubic metres of CH ₄ per cubic metre of landfill gas	Measured	Continuous	7
V _{LG_{uncorrected}}	Uncorrected volume of landfill gas captured for the given time interval	Cubic metre	Measured	Only where flow data are not adjusted at standard conditions	8
T	Temperature of landfill gas	°C	Measured	Continuous	8

P	Pressure of landfill gas	KPa	Measured	Continuous	8
CF _r	Total fossil fuels f consumed	Kilogram (solid) Cubic metre at standard conditions (gas) Litres (liquid)	Calculated using purchasing register for fossil fuels	At each reporting period	9
N/A	Annual tonnage of residual materials	Metric tonnes	Calculated using operating logs	Annual	N/A
N/A	Operating status of reclamation or destruction devices	Degree Celsius or other, in accordance with this Division	Measured for each reclamation or destruction device	Hourly	N/A
N/A	Operating status of thermocouple or monitoring device for a reclamation or destruction device		Measured	Hourly for a thermocouple and indeterminate for other monitoring devices	N/A

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