# **Draft Regulation**

Environment Quality Act (chapter Q-2)

### Landfilling and incineration of residual materials Clean Air

#### —Amendment

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the draft Regulation to amend the Regulation respecting the landfilling and incineration of residual materials and the draft Regulation to amend the Clean Air Regulation, appearing below, may be made by the Government on the expiry of 60 days following this publication.

The draft Regulation to amend the Regulation respecting the landfilling and incineration of residual materials makes amendments that are consequential to the draft Regulation respecting the regulatory scheme applying to activities on the basis of their environmental impact, which was published in the *Gazette officielle du Québec* on the same date. It eliminates, in particular, the provisions on the information and documents that must be provided to request a ministerial authorization pursuant to section 22 of the Environment Quality Act (chapter Q-2), as well as the provisions on the activities exempted from the requirement to obtain such authorization. Those provisions will now be contained in the Regulation respecting the regulatory scheme applying to activities on the basis of their environmental impact.

The draft Regulation to amend the Regulation respecting the landfilling and incineration of residual materials makes amendments to the operation conditions of certain residual materials disposal facilities. It provides, in particular, the possibility to store contaminated soils or other residual materials intended to be used as cover material on a platform that meets certain containment requirements and to use soils that contain contaminants in a concentration equal to or lower than the limit values set out in Schedule I to the Land Protection and Rehabilitation Regulation (chapter Q-2, r. 37) in the upper layer of the final cover. The draft Regulation replaces the requirement to obtain a specific authorization for the use of residual materials as an alternative cover material in a landfill by monitoring requirements in order to ensure the compliance of the materials used. It amends certain rules regarding the operations log and the operator's annual report and, in certain cases, makes it possible to verify the eligibility of certain soils before receiving them. The draft Regulation also revises certain conditions that apply to the closure of certain disposal facilities in order to specify the obligations that are incumbent on the operators of such facilities.

The draft Regulation broadens and specifies the scope of the provisions regarding residual materials incineration facilities and eliminates the rules relating to the gas emissions of those facilities provided for in the Regulation. As a consequence, the scope of the Clean Air Regulation (chapter Q-2, r. 4.1) is amended to make the emissions standards that are set out for incinerators applicable to the residual materials incineration facilities referred to in the Regulation respecting the landfilling and incineration of residual materials. The Clean Air Regulation is also amended by the replacement of Schedule H concerning air dispersion models in order to update that information.

The draft Regulation to amend the Regulation respecting the landfilling and incineration of residual materials also amends certain provisions concerning residual materials transfer stations, in particular, to allow persons other than municipalities to operate low capacity transfer stations.

The draft Regulation updates the provisions concerning the financial guarantees required from operators of residual materials disposal facilities, in coherence with the rules to that effect in other regulations under the responsibility of the Minister of the Environment and the Fight Against Climate Change.

The draft Regulation also makes adjustments to monetary administrative penalties and penal sanctions to take into account the amendments made to the remainder of the Regulation.

The draft Regulation provides a new requirement for all custodians of land formerly used as a residual materials disposal site and to which a cover requirement was applicable when it closed in order to ensure that the residual materials remain covered with soil at all times. The draft Regulation also provides various other technical amendments deemed necessary to clarify the text and facilitate its application.

Lastly, the draft Regulation makes adjustments to the rules regulating the management of animal carcasses in coherence with the amendments proposed in the draft Regulation to amend the Regulation respecting biomedical waste, which was published in the *Gazette officielle du Québec* on the same date, and the draft Regulation respecting the regulatory scheme applying to activities on the basis of their environmental impact.

A study of the regulatory impact of the draft Regulation to amend the Regulation respecting the landfilling and incineration of residual materials shows that the proposed amendments will have no major impact on the operators of residual materials disposal facilities. The impact would mainly affect the operators of landfills by making them responsible for the cover materials they use.

Further information on the draft regulations may be obtained by contacting Nicolas Juneau, Director, Direction des matières résiduelles, Ministère de l'Environnement et de la Lutte contre les changements climatiques, Édifice Marie-Guyart, 675, boulevard René-Lévesque Est, 9° étage, boîte 71, Québec (Québec) G1R 5V7; email: nicolas.juneau@environnement.gouv.qc.ca.

Any person wishing to comment on the draft regulations is requested to submit written comments within the 60-day period to Nicolas Juneau at the above-mentioned contact information.

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

# Regulation to amend the Regulation respecting the landfilling and incineration of residual materials

Environment Quality Act (chapter Q-2, ss. 64.1, 70, 95.1, 115.27 and 115.34)

- **1.** Section 3 of the Regulation respecting the landfilling and incineration of residual materials (chapter Q-2, r. 19) is replaced by the following:
- "3. The purpose of this Regulation is to ensure the protection of the environment against pollution caused by the disposal of residual materials. For that purpose, it prescribes in particular which residual materials may be accepted at the facilities referred to in section 2, the conditions subject to which the facilities are to be sited and operated, and the conditions that apply to their closure and post-closure management."
- **2.** Section 4 of the Regulation is amended by replacing paragraph 2 by the following:
- "(2) hazardous materials within the meaning of section 1 of the Environment Quality Act (chapter Q-2), as well as any product resulting from the treatment of such materials by a stabilization, fixation or solidification process;".
- **3.** Section 6 of the Regulation is amended
  - (1) by replacing the first paragraph by the following:

"With the exception of the other landfills authorized by this Regulation or any other regulation, the engineered landfills governed by Division 2 are the only landfills in which residual materials to which Division VII of Chapter IV of Title I of the Environment Quality Act (chapter Q-2) applies may be landfilled, except the following:

- (1) batches of branches, stumps or shrubs less than 60 m<sup>3</sup>;
- (2) soil excavated from land that has not been contaminated by human activity; and
- (3) plant species the transportation of which is likely to result in the propagation of invasive exotic species.";
  - (2) by adding the following paragraph at the end:

"Despite the provisions of the first paragraph, animal carcasses to which the provisions of section 5 do not otherwise apply, as well as their ash, may be disposed of in an animal cemetery authorized by the Minister under section 22 of the Environment Quality Act.".

- **4.** Section 12 of the Regulation is amended by replacing "tariffs" by "prices" and "certificate of authorization" by "authorization" in the first paragraph.
- **5.** Section 18 of the Regulation is amended by inserting "the stockpiling platform for contaminated soil or other residual materials intended to be used as cover material," after "if present," in the first paragraph.
- **6.** Section 24 of the Regulation is amended by deleting "rock" and inserting "within the meaning of the Regulation respecting sand pits and quarries (chapter Q-2, r. 7.1)" after "quarry" in the part preceding paragraph 1.
- **7.** The Regulation is amended by adding the following after section 24:
- **"24.1.** A stockpiling platform for contaminated soil or other residual materials intended to be used as cover material must be composed of one of the following materials:
- (1) a homogenous natural soil layer with a constant hydraulic conductivity of  $1 \times 10^{-6}$  cm/s or less to a minimum depth of 3 m, the hydraulic conductivity to be established *in situ*;
- (2) a layer of clayey materials with a constant hydraulic conductivity of 1 x  $10^{-7}$  cm/s or less to a minimum depth of 1 m;
  - (3) a geomembrane at least 1.5 mm thick;
  - (4) a bentonite geocomposite;
- (5) a layer of bituminous concrete over a bituminous membrane, or a layer of cement concrete, the operator being required, in either case, to verify the platform or have it verified at least once a year to detect fractures or fissures that might form and to repair any defects detected;

(6) any other liner system composed of materials at least as effective as one of the above-mentioned systems.

The platform must have a liquid collection system.".

**8.** Section 28 of the Regulation is amended by adding the following paragraph at the end:

"Any liner system installed as of (indicate here the date of the coming into force of this Regulation) must be adequately protected from natural or man-made damage that might affect its effectiveness.".

- **9.** Section 32 of the Regulation is amended by replacing "accepted" by "received" in the second paragraph.
- **10.** Section 39 of the Regulation is amended in the first paragraph
- (1) by inserting "whether they are to be landfilled or used to cover the residual materials received in the disposal areas," after "landfill," in the part preceding subparagraph 1;
- (2) by replacing "land rehabilitation work," by "rehabilitation work on land, on a contaminated soil stockpiling site or on a contaminated soil processing site," in subparagraph 2;
- (3) by inserting "municipality that is the" between "the" and "source" in subparagraph 3;
- (4) by adding "and broken down according to their source" after "weight" in subparagraph 4.
- **11.** Section 40 of the Regulation is revoked.
- **12.** Section 40.1 of the Regulation is amended by adding "Despite the foregoing, where the soil is from a contaminated soil stockpiling site or contaminated soil treatment site authorized pursuant to the Environment Quality Act (chapter Q-2), the operator may have an independent expert take the samples referred to this section from the stockpiling or treatment site. The samples must be separate from any other samples required to be taken pursuant to the Regulation respecting contaminated soil storage and contaminated soil transfer stations (chapter Q-2, r. 46)." at the end of the first paragraph.
- **13.** The Regulation is amended by inserting the following after section 40.1:
- **"40.2.** The soil referred to in subparagraph 2 of the first paragraph of section 39 may not be mixed with other residual materials at any place other than an engineered landfill in order to be used as cover material.".

- **14.** Section 42 of the Regulation is amended
  - (1) by replacing the fourth paragraph by the following:

"The operator must take or cause to be taken, for each batch of 2,000 tons or less of the same material used for the purpose of covering residual materials and each time that a material of a different type is used, a sample of that material for it to be measured and analyzed in order to ensure compliance with the requirements of the first paragraph. If two or more materials of different types are mixed together to be used for such purposes, they must be mixed evenly and the result of the mixing must comply with the requirements of the first paragraph. The results of the measurements and analyses must appear in the log referred to in section 39.";

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

"Contaminated soil or other residual materials intended to be used as cover material may be stockpiled at an engineered landfill only in areas that meet the containment requirements set out in this Regulation and that have not received a final cover prescribed by section 50, or on a stockpiling platform complying with the requirements of section 24.1.".

- **15.** The Regulation is amended by inserting the following after section 42:
- **"42.1.** Any material used for the construction of access roads in residual materials disposal areas must comply with the same requirements as those applicable to materials used to cover residual materials.".
- **16.** Section 44 of the Regulation is amended by deleting "at the frequency specified in the authorization obtained pursuant to section 22 or 31.5 of the Environment Quality Act (chapter Q-2)".
- **17.** The Regulation is amended by inserting the following after section 48:
- **"48.1.** Where the release of odours causes odour nuisances beyond the limits of the engineered landfill, the operator must, as soon as possible, produce a characterization of the landfill for the purpose of identifying and analyzing all odour sources.

As soon as it is completed, the operator must send to the Minister the results of the characterization, as well as a report detailing the remedial measures the operator has taken or intends to take to deal with those nuisances and the timetable for the work's completion.".

### **18.** Section 50 of the Regulation is amended

- (1) by replacing "and 3" by "to 4" in the third paragraph;
- (2) by replacing ", the material meets where applicable the requirements of the third paragraph and the minimum thickness of the layers is as prescribed in those subparagraphs" by "and the minimum thickness of the layers is as prescribed in those subparagraphs. In addition, the material used must, for the layers referred to in subparagraphs 2 to 4 of the second paragraph, comply with the requirements of the third paragraph" in the fourth paragraph.

# **19.** Section 52 of the Regulation is amended

- (1) by replacing "sections 39 and 40" by "section 39" in subparagraph 1 of the first paragraph;
- (2) by replacing subparagraph 3 of the first paragraph by the following:
- "(3) the results of the testing or measurements performed pursuant to sections 38, 63, 64, 66 and 68, other than the results sent to the Minister pursuant to section 71, and a summary of the results of the testing, analyses or measurements made pursuant to sections 38, 39, 40.1, 42, 63, 66, 67 and 68, along with their interpretation;";
- (3) by adding the following paragraphs at the end of the first paragraph:
- "(7) the prices for the operator's services that are postedat the entrance to the landfill in accordance with section 64.11 of the Environment Quality Act (chapter Q-2);
- (8) where applicable, the new tariff and the date fixed for the coming into force of that tariff, along with a summary of the actions taken by the operator in accordance with section 64.3 of the Environment Quality Act.";
  - (4) by replacing the second paragraph by the following:

"The report must be signed by the operator, certify the accuracy of the information it contains and be sent to the Minister in a computer medium using the technology-based documents prescribed by the Minister, if applicable, within 90 days following the end of each year of operation. The report must include any other information the Minister may require under section 68.1 of the Environment Quality Act (chapter Q-2).

The information contained in the report is public.".

**20.** Section 63 of the Regulation is amended by inserting ", other than fecal coliforms" after "section 53" in subparagraph 2 of the first paragraph.

# **21.** Section 65 of the Regulation is amended

- (1) by replacing "or a leachate or water treatment system are" by ", a leachate or water treatment system or a stockpiling platform for contaminated soil or other residual materials intended to be used as cover material is" in the first paragraph;
- (2) by replacing "the treatment system location" by "the location of the treatment system and the stockpiling platform, if applicable," in the second paragraph;
- (3) by replacing "and the treatment system" by ", the treatment system and the stockpiling platform, if applicable" in the part of the third paragraph preceding subparagraph 1;
- (4) by replacing subparagraph 2 of the third paragraph by the following:
- "(2) the observation wells must be situated at a maximum distance of 150 m hydraulically downgradient from the disposal areas or the location of the treatment system or stockpiling platform, if applicable, so that the quality of the groundwater reaching that distance can be monitored. If all or part of a buffer zone has been established on an existing landfill, the monitoring perimeter may be extended to include the landfill, but without exceeding the distance of 150 m from the disposal areas or related treatment system or stockpiling platform;";
- (5) by replacing "or treatment system are" by ", treatment system or stockpiling platform, where applicable, is" in subparagraph 4 of the third paragraph.
- **22.** Section 70 of the Regulation is amended by inserting the following after the first paragraph:

"Where there is no laboratory accredited for analyzing a substance referred to in this Regulation, the samples taken pursuant to this Regulation must, for the purpose of analyzing the substance concerned and despite the provisions of the first paragraph, be sent to a laboratory that meets ISO/CEI 17025, General requirements for the competence of testing and calibration laboratories, which is published jointly by the International Organization for Standardization and the International Electrotechnical Commission."

**23.** Section 71 of the Regulation is amended by inserting ", if applicable" after "prescribed by the Minister" in the first paragraph.

- **24.** Section 77 of the Regulation is amended by replacing "certificates of authorization" by "authorizations" in the second paragraph.
- **25.** Sections 80 and 81 of the Regulation are replaced by the following:
- **"80.** The operator must begin the process of closing the engineered landfill on the day when it permanently ceases accepting residual materials for disposal, whether because the landfill has reached its maximum capacity or because landfilling operations have otherwise been terminated. The operator must immediately notify the Minister in writing of that date.

The operator must, no later than one year from that date, permanently close the landfill by installing the final cover and any other siting feature or equipment required under this Regulation or pursuant to the authorization obtained under section 22 or 31.5 of the Environment Quality Act (chapter Q-2).

- **81.** Within 6 months following the date indicated in the first paragraph of section 80, the operator must send to the Minister a closure report prepared by independent experts, attesting to
- (1) the working order, effectiveness and reliability of the landfill liner system, the leachate or water collection and treatment systems, the biogas collection and evacuation or removal system and the network of groundwater observation wells installed at the landfill in accordance with this Regulation;
- (2) compliance with the limit values that apply to discharges of leachate or water, to emissions of biogas and to groundwater; and
- (3) compliance with the requirements of this Regulation or with the authorization as regards the final cover and the integration of the landfill into the surrounding landscape.

The closure report must specify any instances of non-compliance with the provisions of this Regulation or with the authorization and indicate the remedial measures to be taken. It must also specify any work remaining to be completed to permanently close the landfill, for which the operator must also include a timetable for the work's completion.

The operator must notify the Minister in writing of the date on which the landfill is permanent closed.".

**26.** Section 91 of the Regulation is amended by deleting "With the exception of the layer of soil or other material suitable for vegetation," at the beginning of the second paragraph.

- **27.** Section 102 of the Regulation is amended by deleting the second paragraph.
- **28.** Section 103 of the Regulation is amended
  - (1) by deleting the first paragraph;
- (2) by replacing "landfill referred to in the first paragraph" by "construction or demolition waste landfill" in the second paragraph.
- **29.** Section 105 of the Regulation is amended by replacing the fourth paragraph by the following:

"The operator must take or cause to be taken, for each batch of 2,000 tons or less of the same material used for the purpose of covering residual materials and each time that a material of a different type is used, a sample of that material for it to be measured and analyzed to ensure compliance with the requirements of subparagraph 1 of the second paragraph. If two or more materials of different types are mixed together to be used for such a purpose, they must be mixed evenly and the result of the mixing must comply with the requirements of subparagraph 1 of the second paragraph. The results of the measurements and analyses must appear in the report referred to in section 52."

- **30.** Section 106 of the Regulation is amended by deleting "With the exception of the layer of soil or material suitable for vegetation," at the beginning of the third paragraph.
- **31.** Section 119 of the Regulation is amended by inserting the following after the first paragraph:

"The soil used to cover residual materials may also contain contaminants in a concentration equal to or lower than the limit values set out in Schedule I to the Land Protection and Rehabilitation Regulation (chapter Q-2, r. 37); those limit values do not apply to contaminants that do not originate from human activity."

- **32.** Section 121 of the Regulation is amended
- "(1) by replacing "collected by or for a municipality" by ", whether or not it has been subjected to physical treatment such as sorting, drying, compaction or pressurization, chemical treatment such as adding acid or liming agents, or biological treatment" in paragraph 1;
- (2) by inserting ", whether or not it has been subjected to biological treatment," after "sludge" in paragraph 2;
  - (3) by adding the following paragraph at the end:

"For the purposes of this section, the expression "incineration facility" has the meaning assigned by section 101 of the Clean Air Regulation (chapter Q-2, r. 4.1) to the term "incinerator"."

- **33.** Sections 126 and 127 of the Regulation are revoked.
- **34.** Section 128 is amended by replacing "paragraph 1 of section 45, sections" by "paragraph 1 of section 45, sections" in the first paragraph (only in the French version of the Regulation).
- **35.** Divisions 3, 4 and 5 of Chapter III of the Regulation are revoked.
- **36.** Section 136 of the Regulation is amended
- (1) by deleting ", except transfer stations that receive only construction or demolition waste within the meaning of section 101" in the first paragraph;
- (2) by replacing "to be prepared for further transport to another place for disposal" by "in order to be transported at a later time to another place for disposal" in the second paragraph.
- **37.** Section 137 of the Regulation is amended by inserting ", a construction or demolition waste landfill" after "landfill" in the first paragraph.
- **38.** Section 139 of the Regulation is amended
- (1) by replacing "paragraph 1 of section 45, sections 48, 49, subparagraph 1 of the first paragraph of section 52 and the second and third paragraphs of section 124" by "paragraph 1 of section 45, sections 48 and 49, subparagraph 1 of the first and second paragraphs of section 52, and the second and third paragraphs of section 124" in the first paragraph;
  - (2) by deleting the third paragraph.
- **39.** Section 139.1 of the Regulation is amended by adding ", unless it is established for the transfer of 30 metric tons or less of residual materials every week and is not used in whole or in part for the transfer of household waste" at the end of the first paragraph.
- **40.** Section 139.2 of the Regulation is amended by replacing the second paragraph by the following:

"The provisions of sections 37 and 39, subparagraph 1 of the first paragraph and second paragraphs of section 52, and the second and third paragraphs of section 124 do not apply to a low capacity transfer station where it is established for the transfer of 30 metric tons or less of residual materials every week."

- **41.** Section 141 of the Regulation is replaced by the following:
- "141. The financial guarantee must be in one of the following forms:
- (1) a bank draft or a certified cheque made out to the Minister of Finance;
- (2) a debt security in Canadian dollars issued or guaranteed by the Gouvernement du Québec or any other government in Canada having a market value at least 10% greater than the amount of the financial guarantee established in accordance with section 140 and whose term is longer than the term of the guarantee by 12 months;
- (3) a security with a waiver of the benefits of discussion and division issued by a legal person authorized to stand security under the Bank Act (S.C. 1991, c. 46), the Insurers Act (chapter A-32.1) or the Act respecting financial services cooperatives (chapter C-67.3);
- (4) an irrevocable letter of credit issued by a legal person referred to in paragraph 3.".
- **42.** Section 142 of the Regulation is amended
- (1) by replacing "sums of money, orders" by "bank drafts";
  - (2) by deleting "certificate of".
- **43.** Section 143 of the Regulation is amended
- (1) by deleting ", a financial guarantee policy" in the first paragraph;
  - (2) by adding the following paragraph at the end:

"Subject to the law applicable in Québec, a guarantee provided in the form of an irrevocable letter of credit must comply with the rules of the International Chamber of Commerce related to stand-by letters of credit as the rules read on the day the guarantee is issued."

- **44.** Section 144 of the Regulation is amended by inserting "or reimburse" after "pay".
- **45.** The title du Chapter VI of the Regulation is replaced by the following:

### "CHAPTER VI OWNERSHIP OF LAND".

**46.** Sections 146, 147 and 148 of the Regulation are revoked.

- **47.** Section 149.1 of the Regulation is amended by inserting the following after paragraph 1:
- "(1.1) to send to the Minister the results of the characterization provided for in section 48.1, as well as the report referred to in that section;".
- **48.** Section 149.2 of the Regulation is amended
- (1) by replacing "the first or second paragraph of section 40 or the third paragraph of section 40.1" by "the third paragraph of section 40.1 or the second paragraph of section 139" in paragraph 3;
  - (2) by replacing "6" by "8" in paragraph 7;
  - (3) by replacing "second" by "third" in paragraph 8;
- (4) by replacing "of closure of" by "on which the person begins the process of closing" in paragraph 10;
  - (5) by replacing paragraphs 12 to 15 by the following:
- "(12) to notify the Minister in writing of the date on which the landfill is permanently closed, in accordance with the third paragraph of section 81;".
- **49.** Section 149.3 of the Regulation is amended
  - (1) by deleting subparagraph 10;
  - (2) by inserting the following after paragraph 14:
- "(14.1) to comply with the conditions provided for in section 42.1 relating to the materials used for the construction of access roads in residual materials disposal areas;";
  - (3) by replacing paragraph 27 by the following:
- "(27) to send for the purpose of analysis, to a laboratory that is accredited by the Minister or meets the standard referred to in the second paragraph of section 70, the samples taken pursuant to this Regulation, in accordance with that section;";
  - (4) by deleting paragraphs 48, 49, 50 and 51;
  - (5) by adding the following paragraph at the end:
- "(58) to comply with the conditions provided for in the first and second paragraphs of section 164.1 relating to residual materials in a site referred to in that article.".
- **50.** Section 149.4 of the Regulation is amended
  - (1) by deleting "rock" in paragraph 5;

- (2) by inserting the following after paragraph 5:
- "(5.1) to comply with the conditions provided for in section 24.1 relating to the siting of a stockpiling platform for contaminated soil or other residual materials intended to be used as cover material:";
- (3) by inserting "and that the system is adequately protected" after "leakproof" in paragraph 9;
  - (4) by inserting "other" after "soils or" in paragraph 16;
- (5) by inserting "and according to the conditions" after "in the cases" in paragraph 30;
  - (6) by deleting paragraph 37.
- **51.** Section 149.5 of the Regulation is amended
  - (1) by inserting the following after paragraph 2:
- "(2.1) mixes the soil referred to in section 40.2 at any place other than an engineered landfill;
- (2.2) fails to produce a characterization of the engineered landfill in the case and on the conditions provided for in the first paragraph of section 48.1;";
  - (2) by deleting paragraph 8.
- **52.** Section 149.6 of the Regulation is amended
  - (1) by deleting "the first paragraph of" in paragraph 6;
- (2) by deleting "the second paragraph of" in paragraph 7.
- **53.** Section 149.7 of the Regulation is amended by deleting paragraphs 9 and 10.
- **54.** Section 150 of the Regulation is amended by inserting "the second paragraph of section 48.1," after "section 45,".
- **55.** Section 151 of the Regulation is amended
- (1) by deleting "the first paragraph of section 40," in the first paragraph;
- (2) by replacing ", section 81, the fourth paragraph of section 127, section 146 or the second paragraph of section 155" by "or section 81" in the first paragraph;
- (3) by replacing "the first or second paragraph of section 40 or the third paragraph of section 40.1" by "the third paragraph of section 40.1 or the second paragraph of section 139" in subparagraph 1 of the second paragraph;

- (4) by replacing "of closure of" by "on which the person begins the process of closing" in subparagraph 3 of the second paragraph;
  - (5) by deleting subparagraph 4 of the second paragraph.
- **56.** Section 152 of the Regulation is amended
- (1) by inserting "42.1," between "section" and "43" in the first paragraph;
- (2) by inserting "or second" between "first" and "paragraph of section 70" in the first paragraph;
- (3) by replacing "or 126, the first, second or third paragraph of section 127, the second paragraph of section 134, section 138, 139.3, 140, 143 or the second paragraph of section 159" by "138, 139.3, 140 or 143, the second paragraph of section 159 or section 164.1" in the first paragraph;
  - (4) by deleting subparagraph 1 of the second paragraph.
- **57.** Section 153 of the Regulation is amended
- (1) by replacing ", 125 or 132" by "or 125" in the first paragraph;
  - (2) by replacing the second paragraph by the following:

"Every person who fails to permanently close an engineered landfill in the cases and according to the conditions provided for in section 80 also commits an offence and is liable to the same fines."

- **58.** Section 154 of the Regulation is amended by replacing paragraph 1 by the following:
- "(1) contravenes the first paragraph of section 6, section 13, 14, 15, 16 or 40.2, the first paragraph of section 48.1, the second paragraph of section 71, the first paragraph of section 86, section 87 or 88, the first paragraph of section 94, 95 or 97, the second paragraph of section 104, the first paragraph of section 111, section 112, 113, 114 or 116, the first paragraph of section 139.1, the fourth paragraph of section 139.2, section 145 or the second, third or fifth paragraph of section 161,"
- **59.** Section 154.1 of the Regulation is amended by replacing "8 or 47, the first paragraph of section 102, the second paragraph of section 103, section 115" by "section 8, 47, 102, 103 or 115".
- **60.** Section 154.2 of the Regulation is amended by replacing "the second paragraph of section 62, the first paragraph of section 129 or section 130" by "or the second paragraph of section 62" in the first paragraph.

- **61.** Section 155 of the Regulation is revoked.
- **62.** Section 155.1 of the Regulation is amended by replacing "tariffs" by "prices".
- **63.** The Regulation is amended by inserting the following after section 164:
- "164.1. The custodian of any land that was used as a residual materials disposal site, has been decommissioned and was subject to a cover requirement at the time it was closed is required to ensure that the residual materials remain completely covered with soil at all times.

If the custodian fails to do so, the custodian must

- (1) collect any residual materials that have been scattered;
- (2) grade the residual materials and cover them with a soil layer at least 60 cm thick;
- (3) establish a vegetative layer of herbaceous plants on the soil layer.

This section applies to any residual materials disposal site where such materials are landfilled or deposited and that was subject to a cover requirement at the time it was closed or decommissioned, such as a dump closed pursuant to section 126 of the Regulation respecting solid waste (chapter Q-2, r. 13). This section does not apply to the facilities listed in section 2 of this Regulation.".

- **64.** Schedules I and II to the Regulation are revoked.
- **65.** This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*, with the exception of sections 45 and 46, paragraph 2 of section 55, and section 61, which come into force on 31 December 2020.

# Regulation to amend the Clean Air Regulation

Environment Quality Act (chapter Q-2, ss. 53 and 95.1)

**1.** The Clean Air Regulation (chapter Q-2, r. 4.1) is amended in section 15 by replacing ", to fugitive particle emissions to which Division III of Chapter II of this Title applies and to emissions from residual materials incineration facilities referred to in Chapter III of the Regulation respecting the landfilling and incineration of residual materials (chapter Q-2, r. 19)" by "and to fugitive particle emissions to which Division III of Chapter II of this Title applies".

- 2. Section 102 is amended by replacing "crematoriums, animal incinerators or residual materials incineration facilities referred to in Chapter III of the Regulation respecting the landfilling and incineration of residual materials (chapter Q-2, r. 19)" by "animal incinerators".
- **3.** Section 214 is revoked.
- **4.** Schedule H is replaced by the following:

## "SCHEDULE H

(ss. 75, 77, 87, 91, 92, 97, 153, 156 and 197) AIR DISPERSION MODEL

### **Dispersion models**

The dispersion models that may be used are those in the latest edition of the US-EPA Guideline on Air Quality Models (Appendix W to Part 51). A recognized alternative may be used if the operator establishes that, in the case at hand, that model performs better than the models indicated in the guideline. The latest version of the model must be used.

# Calculation of the concentration of a contaminant in the atmosphere

Using the model, the operator must calculate the concentration in the atmosphere of each contaminant emitted for which a limit value is prescribed by sections 75 and 153 and in Schedules G and K.

The concentration of a contaminant in the atmosphere for a single source must be calculated by modeling with one of the following methods:

- (1) a simple model, called a level 1 model, for a single source; or
- (2) a multi-source complex model, called a level 2 model, simulating a single source.

Modeling with a level 2 model is required if the concentration of contaminants calculated with a level 1 model is deemed significant according to the following formula:

$$C \ge (LV-IC)/2$$

where LV and IC are, respectively, the limit value and the initial concentration provided for in Schedules G and K.

If the establishment has several emission sources, the concentrations of contaminants in the atmosphere must be calculated using a level 2 model.

#### **Parameters**

All the parameters required for the model must be presented, namely:

- (1) the model used and its version;
- (2) the non-default options;
- (3) the choice of environment (rural/urban);
- (4) the dimensions of the modeling domain;
- (5) the modeling scenario or scenarios;
- (6) the physical features of the emission sources;
- (7) the calculations made to obtain the emission rates; and
- (8) a list of sources within a 5 km radius that emit the same contaminants as the sources that are the subject of the modeling.

For level 2 modeling, the following parameters must also be presented:

- (1) a description of the calculation points table;
- (2) the origin and period of the meteorological data; and
- (3) the surface characteristics required to prepare the meteorological data files.

### Modeling scenarios

The modeling scenarios must make it possible to reproduce the highest projected concentrations of contaminants on the basis of the period of application of the limit value. However, those scenarios do not include contaminant emissions attributable to unplanned and unpredictable situations, such as the use of generators in an emergency.

By using the concentration obtained for the calculation with a level 1 model, the daily and annual concentrations are obtained in the following manner:

$$C_{\text{daily}} = C_{\text{MAX-H}} \times 0.24$$

$$C_{AN} = C_{MAX-H} \times 0.04$$

where  $C_{_{\text{daily}}}$  is the daily concentration,  $C_{_{AN}}$  is the annual concentration and  $C_{_{MAX\text{-}H}}$  is the highest hourly concentration calculated.

For a level 2 model, the operator must prepare meteorological data files on the basis of 5 years of complete meteorological data representative of the location of the establishment. When such files are made available by the Ministère du Développement durable, de l'Environnement et des Parcs, they must be used.

In the case of a contaminant referred to in Schedule K for which the limit value established in column 1 is over a period of less than 1 hour, the concentration is calculated using the following formula:

$$C(T) = C_{MAX-H} \times 0.97 \text{ T}^{-0.25}$$

where T is the time in hours and  $C_{\text{MAX-H}}$  is the maximum concentration for 1 hour.

The operator must take into account the topography and include calculation points on the property limits or the limits of the industrial zone.

The initial concentrations of contaminants in the atmosphere, without the contribution of the source or sources considered for the modeling, must be added to the concentrations calculated. The resulting concentrations must be presented to enable comparison with the limit values prescribed by Schedules G and K.

### Information to be retained

The operator must retain the following information and documents for a minimum of 5 years:

- (1) one or more topographic maps showing the region for which the calculations have been made, indicating the pertinent geographical, physical and human elements. Each map must include a scale and the direction of geographical North;
- (2) a top view and a sectional view indicating the dimensions of the establishment's buildings, as taken into account in the model, and the location of the sources;
- (3) the physical features of each source and the operating characteristics;
- (4) for each contaminant and each period for which a limit value is prescribed, a table showing the maximum annual concentrations calculated for all the calculation points and years and their locations; the initial concentrations, the sum of the maximum concentrations calculated and the initial concentrations, and the limit value. When preparing that table, the calculation points located within the property limits or the limits of the industrial zone are excluded;

- (5) the input data required for the operation of the model in a form compatible with its use (model input file) for the modeling carried out; and
- (6) the data generated by the operation of the model in a form compatible with its use (model input file) for the modeling carried out.

For level 2 modeling, the operator must also retain the following information and documents for a minimum of 5 years:

- (1) the map or maps provided for in subparagraph 1 of the first paragraph, which will show the calculation points table, the establishment, and the property limits or the limits of the industrial zone;
- (2) a 16-direction wind rose obtained from the meteorological data used in the model and indicating the average wind speed, the calm wind frequency and the proportion of missing data;
- (3) for each contaminant whose modeled concentration is significant and each period for which a limit value is prescribed, maps showing the modeling calculation results in the form of isopleth curves for each calculation point, except for the points located within the property limits, and for the entire calculation period. For each map, the results presented must include the initial concentration;
- (4) for each contaminant and each applicable period, maps showing the number of exceedances for each calculation point, except for the points located within the property limits, and for the entire calculation period. The number of exceedances is calculated taking into account the initial concentration; and
- (5) the table provided for in subparagraph 4 of the first paragraph, which will also show the maximum number of exceedances calculated at the worst calculation point for all the calculation points and years, and their locations. When preparing that table, the calculation points located within the property limits or the limits of the industrial zone are excluded."
- **5.** This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette* officielle du Québec.

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