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chapter Q-2, r. 19

Regulation respecting the landfilling and incineration of residual materials

Environment Quality Act (chapter Q-2, ss. 31, 31.69, 57, 64.1, 70, 124.0.1 and 124.1).

Act respecting certain measures enabling the enforcement of environmental and dam safety legislation (chapter M-11.6, ss. 30 and 45).



See Chapter III of the Regulation respecting the temporary implementation of the amendments made by chapter 7 of the Statutes of 2021 in connection with the management of flood risks (chapter Q-2, r. 32.2).

O.C. 451-2005; S.Q. 2022, c. 8, s. 1.

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CHAPTER I

DEFINITIONS, SCOPE OF APPLICATION AND PURPOSE

- **1.** For the purposes of this Regulation,
- (1) "fly ash" means particulate matter entrained in and carried by the combustion gases from a residual materials incineration facility and collected by a flue gas cleaning system or an energy recovery system, and includes residue generated by those systems that contains fly ash;
 - (2) "landfilling" means the final deposit of residual materials onto or into land;
 - (3) "operator" includes a person having the charge, management or control of a disposal facility;
- (4) "watercourse or body of water" includes ponds, marshes and swamps, but excludes intermittent watercourses, peatlands and ditches. The relative distance to a watercourse or body of water is measured from the boundary of the littoral zone as defined in the Protection Policy for Lakeshores, Riverbanks, Littoral Zones and Floodplains (chapter Q-2, r. 35) adopted pursuant to section 2.1 of the Environment Quality Act (chapter Q-2);
- (5) "inedible meat" refers to inedible meat referred to in the Regulation respecting food (chapter P-29, r. 1).

O.C. 451-2005, s. 1; O.C. 1463-2022, s. 1; I.N. 2024-08-01.

- 2. This Regulation applies to the following residual materials disposal facilities:
 - (1) landfills in the following classes, governed respectively by Divisions 2 to 6 of Chapter II:
 - engineered landfills;
 - trench landfills;
 - northern landfills;
 - construction or demolition waste landfills;
 - remote landfills;
 - (2) incineration facilities governed by Chapter III.

Residual materials transfer stations are governed by Chapter IV of this Regulation.

O.C. 451-2005, s. 2.

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.

O.C. 451-2005, s. 3; O.C. 868-2020, s. 1.

3.1. Inedible meat must be disposed of only on the conditions prescribed by the Food Products Act (chapter P-29) and the regulations made under that Act.

O.C. 1463-2022, s. 2.

CHAPTER II

LANDFILLS

DIVISION 1

GENERAL

- **4.** The following may not be disposed of in a landfill to which this Chapter applies:
 - (1) residual materials generated outside Québec;
- (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, other than the materials referred to in paragraph 8 of section 4 of the Regulation respecting hazardous materials (chapter Q-2, r. 32) treated using a stabilization process such that they are no longer leachable materials within the meaning of section 3 of that Regulation;
 - (3) residual materials in a liquid state at 20 °C, except residual materials from household waste;
- (4) residual materials which, when tested by a laboratory accredited by the Minister of Sustainable Development, Environment and Parks under section 118.6 of the Environment Quality Act, contain a free liquid, except in a remote landfill to which Division 6 applies;
 - (5) livestock waste within the meaning of the Agricultural Operations Regulation (chapter Q-2, r. 26);
 - (6) pesticides within the meaning of the Pesticides Act (chapter P-9.3);
- (7) biomedical waste to which the Regulation respecting biomedical waste (chapter Q-2, r. 12) applies, that is not treated by disinfection;
 - (8) sludge with a dryness lower than 15%, except in a remote landfill to which Division 6 applies;
- (9) soils that, because of human activity, contain 1 or more contaminants in concentrations exceeding the limit values set out in Schedule I to the Land Protection and Rehabilitation Regulation (chapter Q-2, r. 37), and any product resulting from the treatment of such soils by a stabilization, fixation or solidification process;
 - (10) derelict motor vehicles;
- (11) mill residual materials within the meaning of section 1 of the Regulation respecting pulp and paper mills (chapter Q-2, r. 27) with a dryness lower than 25%, other than
- sludge from the biological treatment of process water, which may be disposed of by landfilling as soon as its dryness is 15% or greater; or
- lime sludge and residue from lime slaking, which may be disposed of by landfilling only if its dryness is 55% or greater;
- (12) used tires within the meaning of the Regulation respecting used tire storage (chapter Q-2, r. 20), except in a northern landfill and in a remote landfill to which Divisions 4 and 6 apply respectively.

O.C. 451-2005, s. 4; O.C. 808-2007, s. 145; O.C. 451-2011, s. 1; O.C. 868-2020, s. 2.

5. (*Revoked*).

O.C. 451-2005, s. 5; O.C. 1463-2022, s. 3.

- **6.** 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 m³;
 - (2) soil excavated from land that has not been contaminated by human activity;
- (3) plant species the transportation of which is likely to result in the propagation of invasive exotic species;
 - (4) wood debris removed from the surroundings of dams.

Despite the provisions of the first paragraph, the following may be disposed of in a landfill authorized for that purpose by the Minister under section 22 of the Environment Quality Act:

- (1) fibrous waste from sawmills;
- (2) fibrous waste of the same nature as fibrous waste from sawmills that originates from oriented strandboard manufacturing plants; and
- (3) ash, soils or sludge from the establishments referred to in subparagraphs 1 and 2 and that contain such waste.

Despite the first paragraph, animal carcasses that are not considered inedible meat and their ashes may be disposed of in an animal cemetery that may legally receive them under the Environment Quality Act.

O.C. 451-2005, s. 6; O.C. 451-2011, s. 2; O.C. 868-2020, s. 3; O.C. 1463-2022, s. 4.

DIVISION 2

ENGINEERED LANDFILLS

- § 1. General
- 7. For the purposes of this Regulation, "engineered landfill" means any landfill developed and operated in accordance with this Division.

O.C. 451-2005, s. 7.

- **8.** The following residual materials may be landfilled only in engineered landfills:
 - (1) residue from the shredding of derelict motor vehicles;
- (2) residue from any residual materials incineration facility, including biomedical waste incinerators, in particular bottom ash and fly ash. This provision does not apply to bottom ash generated by a facility incinerating residual materials produced in a territory referred to in section 87, which may also be landfilled in a trench landfill or northern landfill to which Divisions 3 and 4 apply respectively;
- (3) subject to the provisions of Chapter VI of the Regulation respecting pulp and paper mills (chapter Q-2, r. 27), mill residual materials within the meaning of section 1 of that Regulation;
- (3.1) subject to the second paragraph of section 6 of this Regulation, fibrous waste from sawmills and fibrous waste of the same nature that originates from oriented strandboard manufacturing plants, as well as ash and soils or sludge from those establishments and that contain such waste;

- (4) oil refinery sludge; and
- (5) inedible meat that, under the Food Products Act (chapter P-29) and the regulations made under that Act, may be disposed of in a landfill and that consists of animal carcasses or animal parts in respect of which a disposal order has been made under section 3.4, 11.1 or 11.2 of the Animal Health Protection Act (chapter P-42) or section 114 of the Health of Animals Regulations (C.R.C., c. 296).

O.C. 451-2005, s. 8; O.C. 808-2007, s. 145; O.C. 451-2011, s. 3.

9. Fly ash and incineration residue that contains fly ash must be landfilled in separate disposal areas reserved exclusively for that type of residual material and sited as provided by the applicable provisions of sections 20 to 24.

That requirement does not apply to ash or residue that has been decontaminated by means of a contaminant extraction process and that presents a risk to the environment no greater than that for other residual materials that may be accepted at the landfill.

O.C. 451-2005, s. 9.

- 10. The operator of an engineered landfill must accept the eligible residual materials that are generated
 - (1) in the territory of the regional county municipality in which the landfill is situated;
- (2) in the territory of the city or town in which the landfill is situated, in the case of a city or town constituted on or after 1 January 2002 and whose territory is not within the territory of a regional county municipality;
- (3) in the territory of any local municipality of fewer than 2,000 inhabitants if no other engineered landfill accessible by a road open year-round is situated closer to the municipality. For the purposes of this subparagraph, the population of a municipality is the number of inhabitants determined in the order made under section 29 of the Act respecting municipal territorial organization (chapter O-9);
- (3.1) in any territory if the materials are waste from a sorting facility for construction and demolition materials and no other engineered landfill accessible by a road open year-round is situated closer to that facility; and
 - (4) in any territory that is not organized into a local municipality.

Subparagraph 3.1 of the first paragraph applies to the operator of an engineered landfill despite the first paragraph of section 12 and any contrary provision in an authorization issued under the Environment Quality Act (chapter Q-2) before 1 September 2022.

O.C. 451-2005, s. 10; O.C. 1463-2022, s. 5.

- 11. The operator of an engineered landfill must also accept
- (1) inedible meat referred to in paragraph 5 of section 8 from the administrative region in which the landfill is situated; and
- (2) inedible meat and other residual materials from the administrative region in which the landfill is situated in respect of meat and other residual materials subject to section 3.9 of the Regulation respecting the sale, importation, possession and disposal of an animal or wildlife by-product (chapter C-61.1, r. 33.1).

In cases where the meat and other residual materials referred to in the first paragraph are from an administrative region where there is no engineered landfill, the operator of the engineered landfill situated closest to the place where they were generated is required to accept them.

For the purposes of this section, "Administrative region" means any region established by the Décret concernant la révision des limites des régions administratives du Québec (chapter D-11, r. 1).

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O.C. 451-2005, s. 11; O.C. 1342-2024, s. 1.
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12. The operator of an engineered landfill is required, however, to accept residual materials as provided in sections 10 and 11 only if the prices payable are paid and all other conditions, if any, in the authorization are complied with.

The requirement to accept residual materials does not apply to landfills reserved exclusively for the use of an industrial, commercial or other establishment or in respect of the following residual materials:

- (1) mill residual materials within the meaning of section 1 of the Regulation respecting pulp and paper mills (chapter Q-2, r. 27);
- (2) fibrous waste from sawmills with an annual production capacity of 10,000 m³ or more and ash and soils or sludge from such sawmills that contain such waste;
- (3) sludge that is not from municipal water or sludge treatment or collection works, other sanitary wastewater collection or treatment works or treatment works for sludge from such works, or from sewer cleaning;
- (4) residue from residual materials incineration facilities including biomedical waste incinerators, in particular bottom ash and fly ash;
- (5) residual materials from an industrial process, except waste referred to in subparagraph 2 from sawmills with an annual production capacity of less than 10,000 m³.

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O.C. 451-2005, s. 12; O.C. 808-2007, s. 145; O.C. 868-2020, s. 4.
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§ 2. — *Siting*

General siting conditions

13. The disposal areas in an engineered landfill and the treatment system for leachate or water from those areas, other than surface water sediment basins, must be sited at a minimum distance of 1 km from any surface water or groundwater collection facility if the facility is used for the production of spring water or mineral water within the meaning of the Regulation respecting bottled water (chapter P-29, r. 2) or for the supply of a waterworks authorized under the Environment Quality Act (chapter Q-2).

The foregoing does not apply if the disposal areas or treatment system are not likely to alter the quality of the water.

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O.C. 451-2005, s. 13.
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14. The siting of an engineered landfill in the flood zone of a watercourse or body of water situated within the low-velocity flood zone is prohibited.

"low-velocity flood zone" means the line that corresponds to the limit line of a flood likely to occur once every 100 years.

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O.C. 451-2005, s. 14.
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15. The siting of an engineered landfill in an area where ground movement is likely to occur is prohibited.

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O.C. 451-2005, s. 15.
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16. The siting of an engineered landfill on land underneath which there is free groundwater having a high potential aquifer is prohibited.

For the purposes of this section, a "high potential aquifer" exists where at least 25 m³ of water per hour may be drawn on a permanent basis from the same well.

O.C. 451-2005, s. 16.

- 17. An engineered landfill must integrate into the surrounding landscape. To that end, the following must be taken into account:
- (1) the physical characteristics of the landscape within a radius of 1 km, among other things its topography and the shape, surface area and height of its landforms;
- (2) the visual characteristics of the landscape, also within a radius of 1 km, including its visual accessibility and recreational and tourist interest (visibility, landscape organization and structure, aesthetic value, integrity, etc.);
 - (3) the ability of the landscape to integrate or accommodate an engineered landfill;
- (4) the effectiveness of measures to mitigate visual impacts (screen, buffer zone, revegetation, reforestation, etc.).

O.C. 451-2005, s. 17.

18. In order to mitigate the nuisances that an engineered landfill may generate and to allow for the carrying out of any necessary remedial measures, a buffer zone at least 50 m wide must be maintained on the perimeter of the landfill or the disposal areas and the leachate or water treatment system sites, other than surface water sediment basins, and if present, the stockpiling platform for contaminated soil or other residual materials intended to be used as cover material, the biogas gas pumping system and the removal facility. The buffer zone must be an integral part of the engineered landfill.

A buffer zone must not have any watercourse or body of water within it. Its interior and exterior boundaries must be maintained so that they are capable of being located at all times.

Only activities necessary to access and monitor the facilities, and activities consistent with the purposes referred to in the first paragraph are permitted in a buffer zone. That restriction does not prevent the establishment of all or part of a buffer zone on an existing landfill, so long as the achievement of those purposes is not compromised.

O.C. 451-2005, s. 18; O.C. 868-2020, s. 5.

19. The siting of an engineered landfill must take into account the inherent geotechnical constraints of the natural materials present and the synthetic materials used as well as the prevailing hydrogeological conditions that may be altered as a consequence of the proposed landfill siting.

O.C. 451-2005, s. 19.

Containment protection

20. In order to protect the soil and groundwater from leachate contamination, engineered landfills may be sited only on land where the unconsolidated deposits on which the residual materials will be deposited form a natural homogenous layer with a constant hydraulic conductivity of 1×10^{-6} cm/s or less to a minimum depth of 6 m, the hydraulic conductivity to be established *in situ*.

The surface of the natural layer must be graded to an inclination of at least 2% to allow leachate to flow by gravity towards the drains.

O.C. 451-2005, s. 20.

- **21.** Despite section 20, an engineered landfill may be sited on land where the underlying unconsolidated deposits meeting the requirements of that section are at a greater depth, provided that the disposal areas have
 - (1) an impermeable sideslope liner system
 - consisting of materials with a constant hydraulic conductivity of 1 x 10⁻⁶ cm/s or less;
 - at least 1 m wide;
 - extending upwards to ground level;
- the base of which extends at least 1 m into the unconsolidated deposits meeting the requirements of section 20; or
- (2) an alternative sideslope liner system if the alternative liner system is at least as effective as the liner system described in subparagraph 1.

Excavation in a disposal area that has an impermeable sideslope liner system must in no case compromise compliance with the requirements of the first paragraph of section 20.

O.C. 451-2005, s. 21.

- 22. An engineered landfill may also be sited on land where the unconsolidated deposits do not meet the impermeability requirements of section 20, provided that the disposal areas have a double liner system on the bottom and sideslopes that is composed of
 - (1) a lower composite liner consisting of
 - (a) a layer of clayey materials at least 60 cm thick after compaction
- that consists of at least 50% by weight of particles 0.08 mm or finer in diameter and at least 25% by weight of particles 0.005 mm or finer in diameter;
 - with a constant hydraulic conductivity of 1 x 10^{-7} cm/s or less throughout its thickness;
 - (b) a geomembrane at least 1.5 mm thick placed over the layer of clayey materials; and
 - (2) an upper liner consisting of a second geomembrane at least 1.5 mm thick.

The geomembranes must be of the high-density polyethylene (HDPE) type or have equivalent properties; they must be installed with an inclination of at least 2% to allow leachate to flow by gravity towards the drains.

An alternative double liner system may also be used in the case referred to in the first paragraph if it is at least as effective as the system required by the first paragraph.

O.C. 451-2005, s. 22; O.C. 451-2011, s. 4.

23. The base of the lower composite liner of an engineered landfill with a double liner system installed as provided in section 22 must be situated above the groundwater level. The lowering of the groundwater level by pumping, drainage or otherwise is permitted only on land where the unconsolidated deposits form a natural homogenous layer with a constant hydraulic conductivity of 5×10^{-5} cm/s or less through a minimum thickness of 3 m, the hydraulic conductivity to be established *in situ*.

Where the unconsolidated deposits meeting the requirements of the first paragraph are at a greater depth, the disposal areas must also have an impermeable sideslope liner system that complies with the requirements of the first paragraph of section 21; excavation in those disposal areas must not compromise compliance with the requirements of the first paragraph as regards the unconsolidated deposits.

O.C. 451-2005, s. 23.

- **24.** An engineered landfill may also be sited in a quarry within the meaning of the Regulation respecting sand pits and quarries (chapter Q-2, r. 7.1) or a mine so long as
 - (1) the quarry or mine is an open pit;
 - (2) the quarry or mine floor is situated below the groundwater level; and
- (3) the average groundwater infiltration rate, calculated on an annual basis, is 5 x 10⁻⁴ m³ or less of water per square metre of quarry or mine wall situated below the groundwater level.

O.C. 451-2005, s. 24; O.C. 868-2020, s. 6.

- **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 x 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 1×10^{-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.

O.C. 868-2020, s. 7.

Leachate and water collection and treatment

- **25.** An engineered landfill must have a system capable of collecting leachate and conveying it towards a treatment or discharge site. The collection system must incorporate the following components:
- (1) a drainage layer placed across the base and sideslopes of the disposal areas over the soil liner or the geomembrane, as the case may be, and which, to a minimum depth of 50 cm,
 - consists of materials having less than 5% by weight of particles 0.08 mm or finer in diameter;
 - has a constant minimum hydraulic conductivity of 1 x 10⁻² cm/s.

The drainage layer must not impair the integrity of the underlying geomembrane, if any;

			of drainage		and	collectors	embedded	within	the	drainage	layer	on	the	bottom	of the
dispo	sal	l areas. Th	e pipes must	; -						_					

- have a smooth interior and a minimum diameter of 150 mm;
- have no synthetic filter sock;
- have a minimum slope of 0.5%;
- have cleanout ports.

Despite the foregoing, if, pursuant to section 21, an engineered landfill has an impermeable sideslope liner system, the leachate may be collected and removed by means of another system if the system ensures compliance with the requirements of section 27.

If any portion of the collection system used to convey the leachate to the treatment site is situated outside the landfill disposal areas, the pipes in that portion must be leakproof.

O.C. 451-2005, s. 25.

- **26.** An engineered landfill which under this Regulation must have a double liner system must also have, in addition to the leachate collection system to be installed pursuant to section 25 over the upper geomembrane, a secondary leachate collection system placed between the 2 geomembranes and that consists of
- (1) a system that incorporates the components prescribed by subparagraphs 1 and 2 of the first paragraph of section 25, except that
 - the minimum thickness of the drainage layer must be 30 cm;
 - the minimum diameter of the pipes must be 100 mm; or
 - (2) any other system if the system is at least as effective as the system referred to in subparagraph 1.

The secondary collection system must be designed to be monitored independently from the other collection systems on the site.

O.C. 451-2005, s. 26.

27. The leachate collection systems prescribed by this Regulation must be designed and installed so that the leachate head likely to accumulate at the base of the disposal areas cannot reach the level of the residual materials.

In addition, in the case of landfills sited as provided in section 22, the leachate head likely to accumulate over the upper liner must not exceed 30 cm, except at the sump pump.

O.C. 451-2005, s. 27.

28. Every component of a treatment system for leachate or water from an engineered landfill must be leakproof, except surface water sediment basins.

Every pond or basin that receives such leachate or water must, if sited on land where the unconsolidated deposits do not meet the requirements of the first paragraph of section 20, have a containment liner system on its bottom and sides consisting of the components described in subparagraphs a and b of subparagraph 1 of the first paragraph of section 22, or an alternative system if the alternative system is at least as effective.

Any liner system installed as of 17 September 2020 must be adequately protected from natural or manmade damage that might affect its effectiveness.

O.C. 451-2005, s. 28; O.C. 868-2020, s. 8.

29. Access to the leachate or water treatment system must be restricted by having the system situated inside a building or surrounded by a fence. The system must be accessible at all times by a road open to vehicular traffic. This section does not apply to surface water sediment basins.

O.C. 451-2005, s. 29.

30. An engineered landfill must be built so that surface water cannot flow into the disposal areas, in particular by the use of perimeter trenches or any other collection system.

O.C. 451-2005, s. 30.

31. If the liner containment system for the disposal areas and the components of the leachate or water treatment system are below groundwater level, the disposal areas must, if the pressure exerted by the groundwater is likely to impair the integrity of the containment system, have a system that collects and evacuates the groundwater so as to reduce the pressure.

The groundwater collection system must

- (1) incorporate all the components prescribed by section 25, except that
- the minimum thickness of the drainage layer must be 30 cm;
- the minimum diameter of the pipes must be 100 mm; or
- (2) incorporate other components if the components are at least as effective as the components referred to in subparagraph 1.

The system must be designed to be monitored independently from the other collection systems on the site.

The operation of the groundwater collection system may be halted if the hydraulic pressure exerted by the groundwater is offset by the weight of the landfilled residual materials or by the liquid accumulated in the disposal areas and in the ponds or basins forming part of the leachate or water treatment system.

O.C. 451-2005, s. 31.

Collection and removal of biogas

32. An engineered landfill must have a system capable of collecting all biogas produced in the disposal areas and of releasing it into the environment or of directing it towards a reclamation or removal facility, so as among other things to ensure compliance with the limit values prescribed by section 60.

In the case of landfills having a maximum capacity greater than 1,500,000 m³ or sited as provided in section 24, or as soon as a landfill receives 50,000 tons or more of residual materials per year, the biogas collection system must have a gas pumping device except if such a device is not warranted because of the nature of the residual materials received and the low quantity of biogas likely to be produced.

In addition, if it is not reclaimed, the biogas collected in engineered landfills referred to in the second paragraph must be removed by means of thermal destruction equipment capable of destroying at least 98% of the organic compounds other than methane, or capable of reducing the concentration of those compounds to less than 20 ppm hexane equivalent, by volume, measured on a dry basis at 3% oxygen. The destruction equipment must be designed for a minimum retention time of 0.3 seconds at a minimum temperature of

760 °C. The biogas removal requirements are mandatory as long as the concentration of methane generated by the residual materials exceeds 25% by volume.

Biogas may also be removed as provided in the third paragraph using any other destruction equipment if the destruction equipment is at least as efficient as the equipment required by that paragraph and allows for continuous monitoring of its operation and for annual testing of its efficiency in destroying organic compounds other than methane.

O.C. 451-2005, s. 32; O.C. 451-2011, s. 5; O.C. 868-2020, s. 9.

33. Access to the gas pumping device and biogas removal facility, if any, must be restricted by having them situated inside a building or surrounded by a fence. The device and facility must be accessible at all times by a road open to vehicular traffic.

O.C. 451-2005, s. 33.

Quality assurance and control

34. The size, choice and placement of materials must be such that the landfill containment liner system, leachate and water collection and treatment systems, the biogas collection and removal system and network of groundwater observation wells referred to in section 65 and which are present in an engineered landfill pursuant to this Regulation will operate properly, even on a long-term basis, considering the physical, chemical and biological processes that may take place in the landfill during the development, operation and post-closure management periods.

The systems must also be designed to be monitored, maintained and cleaned throughout the entire period.

O.C. 451-2005, s. 34.

35. All the materials and equipment to be used in the development of an engineered landfill, whether for containment purposes or for the installation of a system referred to in section 34, must be verified by independent experts before and during the development or installation and by laboratory or *in situ* tests to ensure that the materials or equipment comply with the applicable standards.

O.C. 451-2005, s. 35.

36. The landfill development work must be performed under the supervision of independent experts who must among other things verify the qualifications of the workers assigned to performing the work, as well as the quality of the techniques used and the systems installed.

As and when the development work is completed, the operator of a landfill must send to the Minister the reports of the independent experts in charge of verifying and supervising the work as required by section 35 and this section confirming compliance of the installation with the applicable standards, or indicating cases of non-compliance with those standards and remedial measures to be taken.

O.C. 451-2005, s. 36; O.C. 666-2013, s. 1.

§ 3. — *Operation*

General operating conditions

37. The operator of an engineered landfill must verify whether the residual materials received may be landfilled, in particular by a visual inspection.

O.C. 451-2005, s. 37.

38. Residual materials received for landfilling in an engineered landfill must be weighed and undergo radiological testing by devices capable of detecting the presence of radioactive materials.

The devices for weighing the residual materials and for testing the residual materials for radioactivity must be installed at the entrance to the site, be used and maintained so as to provide reliable data and be calibrated at least once a year.

The provisions of this section regarding the weighing of residual materials do not apply to a landfill reserved exclusively for the use of an industrial, commercial or other establishment if the data relating to the quantity of residual materials (in weight) that are landfilled may be obtained otherwise and under the same conditions of accessibility and conservation as those set out in section 39.

Similarly, the provisions of this section regarding the testing of residual materials for radioactivity do not apply to the landfill referred to in the third paragraph if, by reason of the nature of the activities of the establishment using the landfill and the composition of the residual materials landfilled, the residual materials cannot contain any radioactive material.

O.C. 451-2005, s. 38.

- **39.** For every load of residual materials brought to an engineered landfill, whether they are to be landfilled or used to cover the residual materials received in the disposal areas, the operator must enter in a log
 - (1) the name of the carrier;
- (2) the nature of the residual materials and, in the case of decontaminated sludge, fly ash or soil, or soil from rehabilitation work on land, on a contaminated soil stockpiling site or on a contaminated soil processing site, the results of the analyses or measures establishing that they may be landfilled;
- (3) the municipality that is the source of the residual materials and, if they result from an industrial process, the name of the producer;
 - (4) the quantity of residual materials, expressed in weight and broken down according to their source; and
 - (5) the date on which they were landfilled.

The logs and their appendices must be kept on the premises of the landfill site for the duration of its operation and be made available to the Minister. Following closure of the site, the logs must be kept by the operator until the operator is released under section 85 from all obligations.

O.C. 451-2005, s. 39; O.C. 451-2011, s. 6; O.C. 868-2020, s. 10.

40. (*Revoked*).

O.C. 451-2005, s. 40; O.C. 451-2011, s. 7; O.C. 868-2020, s. 11.

40.1. The operator is required to confirm the acceptance of soil when soil referred to in subparagraph 2 of the first paragraph of section 39 is received. For that purpose, for each batch of soil of 200 tons or less, the operator must have a sample taken to have it analyzed for all contaminants likely to be present in the soil among those referred to in the second paragraph of section 42 and the third paragraph of section 50, in the case of soil used to cover residual materials, or in Schedule I to the Land Protection and Rehabilitation Regulation (chapter Q-2, r. 37) in the case of soil intended for landfilling.

For every batch of soil of more than 200 tons, in addition to the sampling provided for in the first paragraph, the operator must have an additional sample taken and have it analyzed for each additional fraction of soil of 400 tons or less.

Where the soil referred to in the first and second paragraphs is from a contaminated soil stockpiling site or contaminated soil treatment site authorized under the Environment Quality Act (chapter Q-2), the operator may have an independent expert take the samples referred to in 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).

The results of the analyses must be entered in the log.

O.C. 451-2011, s. 8; O.C. 868-2020, s. 12.

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.

O.C. 868-2020, s. 13.

41. As soon as they are deposited in a disposal area, residual materials must be spread and compacted except in the case of sludge, soil referred to in subparagraph 2 of the first paragraph of section 39, residual materials that are baled and animal carcasses or animal parts.

In order to minimize the release of odours, the spread of fires, the proliferation of animals or insects, and blowing litter, the residual materials must be covered at the end of each day of operation with a layer of soil or other materials referred to in section 42, or be covered in another manner enabling the above purposes to be accomplished.

The daily cover requirement does not apply to a landfill reserved exclusively for the use of an industrial, commercial or other establishment if the residual materials received are not likely to generate the nuisances referred to above.

Residual materials containing asbestos or that are likely to release dust into the atmosphere, and animal carcasses or animal parts, must be covered with other materials as soon as they are deposited in the disposal area, even before being compacted. For the purposes of this paragraph, "containing asbestos" has the meaning assigned by section 1.1 of the Safety Code for the construction industry (chapter S-2.1, r. 4).

Residual materials at a temperature likely to create fires, in particular bottom ash, fly ash and any other incineration residue, is to be landfilled only once it has cooled sufficiently to prevent any risk of fire.

O.C. 451-2005, s. 41; O.C. 451-2011, s. 9.

42. The soil used for the daily cover of the residual materials must have a constant minimum hydraulic conductivity of 1×10^{-4} cm/s and less than 20% by weight of particles 0.08 mm or finer in diameter.

The soil 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) for volatile organic compounds and in Schedule II to that Regulation for other contaminants. Those limit values do not apply to contaminants that do not originate from human activity. The thickness of the cover layer consisting of such contaminated soil must not exceed 60 cm.

Other material may be used to cover the residual materials if the other material meets the requirements of the first paragraph, does not contain substances that are not accepted at the landfill, and is capable of accomplishing the purposes referred to in the second paragraph of section 41.

The operator must take or have taken, for each batch of 4,000 tons or less of the same material used for the purpose of covering residual materials, or once a year where the quantity of that material used annually is less than 4,000 tons, 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.

Despite the foregoing, residual materials may be covered temporarily using materials other than soil that does not meet the requirements of the first paragraph. In such a case, no residual materials may be subsequently deposited until the temporary cover has been removed or brought into conformity with that paragraph.

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.

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O.C. 451-2005, s. 42; O.C. 451-2011, s. 10; O.C. 868-2020, s. 14.
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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.

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O.C. 868-2020, s. 15.
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43. Residual materials must be landfilled in limited disposal areas which, as they successively fill up, allow for progressive redevelopment of the landfill in compliance with sections 50 and 51.

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O.C. 451-2005, s. 43.
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44. The leachate and water collection and treatment systems, the biogas collection and removal systems and the network of groundwater observation wells referred to in section 65 must at all times be maintained in proper working order. For that purpose, they must be periodically inspected and maintained or cleaned. In addition, the leachate collection systems must function in such manner as to comply with the requirements of section 27.

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O.C. 451-2005, s. 44; O.C. 868-2020, s. 16.
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- **45.** Every engineered landfill must have, at the landfill entrance,
- (1) a conspicuous sign indicating the type of landfill, the name, address and telephone number of the operator and any other person in charge of the landfill, as well as the business hours; and
- (2) a barrier or other device restricting access to the landfill after business hours or in the absence of the personnel in charge of overseeing the acceptance of residual materials or their compaction and covering.

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O.C. 451-2005, s. 45.
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46. The landfilling operations in an engineered landfill must not be visible from a public area or from the ground floor of a dwelling located within a radius of 1 km, that distance to be measured from the disposal areas.

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O.C. 451-2005, s. 46.
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47. No person may burn residual materials in an engineered landfill. An operator may not allow the burning of such materials in an engineered landfill.

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O.C. 451-2005, s. 47; O.C. 451-2011, s. 11.
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48. The operator of an engineered landfill must take the necessary measures to minimize the release of odours that cause odour nuisances beyond the limits of the landfill and to prevent wind dispersal or scattering of residual materials and the emission of dust visible in the atmosphere more than 2 m from the emission source.

As needed, the operator must clean on-site roads, the entrances and devices installed to contain the residual materials in the disposal areas and the immediate surroundings so that no residual materials remain in those areas.

O.C. 451-2005, s. 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.

O.C. 868-2020, s. 17.

49. The operator of an engineered landfill must take the necessary measures to prevent or eliminate any infestation of pests on the landfill site and in the immediate surroundings.

O.C. 451-2005, s. 49.

50. The residual materials landfilled in the disposal areas of an engineered landfill must, once they have reached the maximum authorized height or landfilling operations are terminated, be covered with a final cover as soon as climatic conditions permit.

The final cover system must have, from the bottom up,

- (1) a drainage layer consisting of soil with a constant minimum hydraulic conductivity of 1×10^{-3} cm/s through a minimum thickness of 30 cm, designed to collect landfill gas while allowing the circulation of liquids;
- (2) an impermeable soil layer with a constant maximum hydraulic conductivity of 1×10^{-5} cm/s through a minimum thickness of 45 cm after compaction, or a geomembrane at least 1 mm thick;
- (3) a barrier soil layer at least 45 cm thick, having characteristics that preserve the integrity of the impermeable layer; and
 - (4) a soil layer at least 15 cm thick, suitable for vegetation.

The soil referred to in subparagraph 1 of the second paragraph may 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) for volatile organic compounds and in Schedule II to that Regulation for other contaminants. The soils referred to in subparagraphs 2 to 4 of the second paragraph may also contain such contaminants in a concentration equal to or lower than the limit values set out in Schedule I to that Regulation. The limit values prescribed by this paragraph do not apply to contaminants that do not originate from human activity.

The layers referred to in subparagraphs 1 to 4 of the second paragraph may consist of another material if the material will achieve protection efficiency at least equivalent to that of the materials prescribed in those subparagraphs 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.

The final cover slope must be of at least 2% and no more than 30% to allow water to flow away from the disposal areas and limit soil erosion. In addition, in the case of disposal areas that have an impermeable sideslope liner system pursuant to section 21, surface water infiltration into the disposal areas must be

reduced by extending the layers referred to in subparagraphs 2, 3 and 4 of the second paragraph beyond the liner perimeter, or by another cover procedure that reduces water infiltration into the disposal areas.

The provisions of sections 34 to 36 relating to quality assurance and control apply, with the necessary modifications, to the final cover of disposal areas prescribed by this section.

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O.C. 451-2005, s. 50; O.C. 451-2011, s. 12; O.C. 868-2020, s. 18.
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51. Not later than 1 year after installation of the final cover, the final layer must be given a vegetative layer consisting of species not likely to impair the impermeability of the cover.

Damage such as holes, fissures or subsidence that may occur in the final cover must be repaired immediately to prevent water from pooling over or infiltrating into the disposal areas, until the areas have been fully stabilized.

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O.C. 451-2005, s. 51.
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- 52. The operator of an engineered landfill must prepare, for each year of operation, a report containing
- (1) a compilation of the data collected pursuant to section 39 relating to the nature, the source and quantity of residual materials landfilled and materials received for cover purposes;
- (2) a plan and data showing the progression on the site of the landfilling operations, including filled disposal areas, areas in operation and current available landfill capacity;
- (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;
- (4) a certificate stating that the measurements and samples prescribed by this Regulation were taken in compliance with best practices and the provisions of this Regulation, as the case may be;
- (5) any information or document indicating the places where the measurements or samples were taken, in particular the number and location of the monitoring points, the methods and devices used and the names of the laboratories or persons taking the measurements or samples;
 - (6) a summary of the work carried out pursuant to this Regulation;
- (7) the prices for the operator's services that are posted at the entrance to the landfill in accordance with section 64.11 of the Environment Quality Act (chapter Q-2); and
- (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.

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.

The information contained in the report is public.

O.C. 451-2005, s. 52; O.C. 451-2011, s. 13; O.C. 868-2020, s. 19.

Leachate and water

53. The leachate and water collected by a collection system in an engineered landfill may be discharged into the environment only if there is compliance with the following limit values:

Parameters -	Limit values	Average monthly	
Substances		limit values*	
Ammoniacal nitrogen			
(expressed as N)	25 mg/l	10 mg/l	
Fecal coliforms		1,000 CFU/100 ml	
Phenolic compounds	0.085 mg/l	0.030 mg/l	
5-day biochemical			
oxygen demand (BOD ₅)	150 mg/l	65 mg/l	
Suspended solids	90 mg/l	35 mg/l	
Zinc (Zn)	0.17 mg/l	0.07 mg/l	

pH greater than 6.0 but lower than 9.5

In addition, the Minister may determine parameters to be measured or substances to be analyzed according to the composition of the materials received for disposal, and set the limit values to be complied with for those parameters or substances. The limit values may be in addition to or in substitution for the limit values previously set.

A batch discharge is prohibited.

For the purposes of this Regulation, a discharge into the environment includes a discharge into a sewer system that does not convey wastewater to a treatment facility established and operated in accordance with an authorization issued under the Environment Quality Act (chapter Q-2).

O.C. 451-2005, s. 53; O.C. 451-2011, s. 14.

54. The limit values prescribed by section 53 do not apply to surface water collected within the perimeter of a buffer zone established pursuant to section 18 if an analysis of the surface water shows that there is no compliance with the limit values before the surface water enters the buffer zone.

^{*} The average monthly limit values apply only to water or leachate discharged after treatment. They are established using an arithmetic average, except for the limit value relating to fecal coliforms which is established using a geometric average.

In that case, the quality of the surface water must not, in relation to the parameters or substances listed in section 53, be deteriorated in any manner before it reaches the outside perimeter of a buffer zone established pursuant to section 18.

O.C. 451-2005, s. 54.

55. Leachate and water collected by a collection system that does not comply with the limit values prescribed by section 53 must not be diluted in any manner before being discharged into the environment, other than dilution caused by precipitation.

O.C. 451-2005, s. 55.

- **56.** Artificial infiltration of leachate or water into disposal areas is permitted only in engineered landfills for the purpose of accelerating the degradation of the residual materials, subject to the following conditions:
 - (1) prior authorization under the Environment Quality Act (chapter Q-2);
- (2) the infiltration must take place in areas where there has been a deposit of a minimum thickness of 4 m of residual materials;
- (3) if the infiltration is the result of surface spraying or sprinkling techniques, it can take place only in disposal areas that do not have a final cover and those techniques must not cause surface pooling or aerosol formation.

O.C. 451-2005, s. 56.

Groundwater

57. Subject to section 59, groundwater migrating into the soil where disposal areas or a leachate or water treatment system are sited must comply with the following limit values at the observation wells installed pursuant to section 65:

Parameters - Substances	Limit values*	
Ammoniacal nitrogen (expressed as N)	1.5 mg/l	
Benzene	0.005 mg/l	
Boron (B)	5 mg/l	
Cadmium (Cd)	0.005 mg/l	
Chlorides (expressed as Cl ⁻)	250 mg/l	
Chromium (Cr)	0.05 mg/l	
Fecal coliforms	0 CFU/100 ml	
Total cyanides (expressed as CN ⁻)	0.2 mg/l	
Ethylbenzene	0.0024 mg/l	
Iron (Fe)	0.3 mg/l	
Manganese (Mn)	0.05 mg/l	
Mercury (Hg)	0.001 mg/l	
Nickel (Ni)	0.02 mg/l	
Nitrates + nitrites (expressed as N)	10 mg/l	

Lead (Pb)	0.01 mg/l
Sodium (Na)	200 mg/l
Total sulphates (SO ₄ ⁻²)	500 mg/l
Total sulphides (expressed as S^{-2})	0.05 mg/l
Toluene	0.024 mg/l
Xylene (o, m, p)	0.3 mg/l
Zinc (Zn)	5 mg/l

^{*} The limit values correspond to the limit values that apply to water intended for human consumption.

In addition, the Minister may determine the parameters to be measured or substances to be analyzed on the basis of the composition of the residual materials received for disposal, and set the limit values to be complied with for those parameters or substances. The limit values may be in addition to or in substitution for the limit values set out in the first paragraph.

58. The limit values listed in section 57 do not apply if an analysis of the groundwater shows that there is no compliance with those limit values before the groundwater migrates into the soil where the disposal areas or the leachate or water treatment system are situated.

In that case, the quality of the groundwater must not, in relation to the parameters or substances listed in section 57, be deteriorated in any manner as a result of its migration into that soil.

59. Groundwater that re-emerges within the monitoring perimeter established under section 65 is subject to section 53, except as regards suspended solids.

The same applies to any groundwater that is collected in the perimeter and discharged on the surface.

O.C. 451-2005, s. 59.

Biogas

60. The concentration of methane in biogas produced by the residual materials disposed of in an engineered landfill must not exceed 25% of its lower explosive limit, or 1.25% by volume, if it is emitted or migrates into and accumulates in the soil and the buildings or facilities (other than the leachate, water and biogas collection or treatment systems) situated at a maximum distance of 150 m from the disposal areas without exceeding the outside perimeter of any buffer zone established under section 18.

For the purposes of this section, "lower explosive limit" means the lowest concentration, by volume, of a gas in a gas mixture above which a flare may sustain itself at a temperature of 25°C and a pressure of 101.325 kPa.

O.C. 451-2005, s. 60.

61. The operation of the biogas collection system in an engineered landfill must begin not later than 1 year after a disposal area has received a final cover.

However, in the case of landfills referred to in the second paragraph of section 32, the biogas collection system and the biogas removal equipment must be designed to operate so that the collection and removal of any biogas produced by the landfilled residual materials may begin, even though the disposal area has not yet received a final cover, not later than 5 years after the landfilling in the case of landfills receiving 100,000 tons or less of residual materials per year or, in the case of landfills receiving more than 100,000 tons per year, not later than 1 year after the landfilling.

The operation of a biogas collection system must not result in an increase in temperature likely to cause a fire in a disposal area.

O.C. 451-2005, s. 61.

62. During the operating period of a biogas collection system that has a gas pumping device pursuant to the second paragraph of section 32, the concentration of nitrogen or oxygen must be respectively less than 20% and 5% by volume in each drain and wet well in the system situated in every section of disposal areas that have received a final cover.

In addition, the concentration of methane at the surface of the disposal areas served by the system must be less than 500 ppm, in volume, in that operating period regardless of whether or not the areas have received a final cover.

The operation of a gas pumping device for the biogas produced in all or part of a disposal area may be halted if, throughout a period of 5 years, all the measurements of the methane generated by the residual materials in the disposal area show a concentration of less than 25% by volume.

O.C. 451-2005, s. 62.

Monitoring and supervision measures

- **63.** The operator of an engineered landfill must, at the frequency indicated below, take or have a sample taken of the leachate or water collected by each collection system in the landfill and in resurgent water within the groundwater monitoring perimeter established under section 65, and have the samples analyzed
- (1) at least once a year, for the purpose of measuring the parameters or substances referred to in sections 53, 57 and 66;
- (2) at least 3 times a year, in the spring, summer and fall, if the leachate or water is not conveyed to a treatment system, for the purpose of measuring the parameters or substances listed in section 53, other than fecal coliforms; or
- (3) at least once a month, if the leachate or water is conveyed to a treatment facility established and operated pursuant to an authorization issued under the Environment Quality Act (chapter Q-2), for the purpose of measuring the parameters or substances referred to in section 53, except fecal coliforms.

The leachate and water to be sampled pursuant to the first paragraph must be sampled before being discharged into the environment or, if applicable, before being treated or discharged towards a treatment

facility. For the purposes of this section, there is a discharge of surface water into the environment if the water flows out of a buffer zone established under section 18.

If the surface water does not comply with the limit values listed in section 53 before flowing into the buffer zone established under section 18, the water must also be sampled and analyzed as provided in subparagraph 2 of the first paragraph before entering the buffer zone.

The operator must also take or have a weekly sample taken of the discharges into the environment from every leachate or water treatment system in the landfill, other than surface water sediment basins, and have the samples analyzed to measure the parameters or substances listed in section 53.

Each of the samples must be a single sample (grab sample). In the case of resurgent water, the sampling must be carried out at the resurgence point.

The flow of the leachate collected by the collection systems prescribed by sections 25 and 26 and the flow of the discharges from the treatment system in the landfill must be separately and continuously measured and the results recorded.

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O.C. 451-2005, s. 63; O.C. 451-2011, s. 15; O.C. 868-2020, s. 20.
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64. At least once a year, the operator of an engineered landfill must leak test or have the pipes in the leachate or water collection system that are situated outside the disposal areas leak tested.

Before being put into service and every 3 years thereafter, each component of the leachate or water treatment system likely to release leachate or water must be leak tested.

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O.C. 451-2005, s. 64.
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65. In order to monitor the quality of the groundwater migrating into the soil where the disposal areas, 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 sited, the operator must install 1 or more networks of observation wells in accordance with the following provisions.

If the leachate or water treatment system is situated in whole or in part within 150 m of the disposal areas, a single network of observation wells is required, otherwise the disposal areas and the location of the treatment system and the stockpiling platform, if applicable, must each have its own network.

The number of wells in a network of observation wells depends on the surface area occupied by the disposal areas, the treatment system and the stockpiling platform, if applicable. The location of the wells and the number of sampling points required depends on the hydrogeological conditions of the sites, subject to the following:

- (1) no observation well is to be situated beyond the outside perimeter of a buffer zone established pursuant to section 18;
- (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;
- (3) a network of observation wells must consist of at least 3 wells for the first 8 ha of land and 1 well for each additional 8-ha portion of land or remaining portion of less than 8 ha;

(4) at least 1 additional observation well to monitor the quality of groundwater before its migration into the soil where the disposal areas, treatment system or stockpiling platform, where applicable, is situated must be installed hydraulically upgradient, or if the hydraulic upgrade cannot be determined because of hydrogeological conditions, at any other location making it possible to ascertain the quality of the groundwater representative of the groundwater migrating into the monitoring perimeter established under this section.

For the purposes of this section, a pond, basin or reservoir, except surface water sediment basins, in which water accumulates that does not comply with the limit values set out in section 53 is considered to form an integral part of the water treatment system.

O.C. 451-2005, s. 65; O.C. 451-2011, s. 16; O.C. 868-2020, s. 21.

- **66.** At least 3 times a year, in the spring, summer and fall, the operator of an engineered landfill must take or have a groundwater sample taken at each sampling point of the observation wells installed pursuant to section 65, and have the samples analyzed to monitor the parameters or substances listed in section 57 and compliance with section 58, and to measure the following indicative parameters or substances:
 - (1) electrical conductivity;
 - (2) phenolic compounds;
 - (3) 5-day biochemical oxygen demand (BOD5);
 - (4) chemical oxygen demand (COD);
 - (5) iron.

During sampling, the groundwater piezometric level must also be measured.

After a minimum 2-year monitoring period, the samples taken need no longer be analyzed for the parameters or substances whose concentration measured in the leachate before treatment, if any, has consistently been lower than the limit values listed in section 57, except in the case of indicative parameters or substances. The reduction in the number of parameters or substances to be analyzed applies as long as the annual analyses of leachate, before treatment, show that that condition is met. In addition, the analysis for 2 of the 3 required annual samplings may pertain only to the indicative parameters or substances listed in the first paragraph.

The Minister may establish a different list of indicative parameters or substances according to the composition of the residual materials received for disposal, in which case the parameters or substances may be in addition to or in substitution for the parameters or substances listed above.

Despite the foregoing, as soon as the analysis of a sample shows significant fluctuation for a parameter or substance or that a limit value has been exceeded, all the subsequent samples taken at the sampling point concerned must undergo a comprehensive analysis of the parameters or substances listed in section 57 until the situation is remedied.

O.C. 451-2005, s. 66.

67. At least 4 times a year, at intervals spread evenly throughout the year, the operator of an engineered landfill must monitor or have the concentration of methane in the soil and inside the buildings and facilities monitored in order to ensure compliance with the requirements of section 60. The operator is, however, exempt from that monitoring requirement if the landfilled residual materials are not likely to generate methane.

The number and location on the site of the methane monitoring points are determined according to the geological and hydrogeological conditions and the siting features, subject to the following:

- (1) the measurements in the soil must be taken at a minimum of 4 monitoring points distributed evenly around the disposal areas;
- (2) if the disposal areas exceed 8 ha, a monitoring point must be added for each additional 8-ha portion of land or remaining portion of less than 8 ha.

The date, time, temperature and barometric pressure must be recorded every time a measurement is taken pursuant to the second paragraph.

O.C. 451-2005, s. 67.

- **68.** During the operating period of a biogas collection system that has a gas pumping device pursuant to the second paragraph of section 32, the flow of biogas must be continuously measured and the results recorded. For the purpose of ensuring compliance with the requirements of section 62, the operator must also monitor or have the following monitored:
 - (1) at least every 3 months:
 - the concentration of methane generated by the residual materials;
 - the concentration of nitrogen or oxygen and the temperature in each drain and wet well;
- (2) at least once a year, the concentration of methane at the surface of the disposal areas of an engineered landfill that receives 100,000 tons or less of residual materials per year; or
- (3) at least 3 times a year, in the spring, summer and fall, the concentration of methane at the surface of the disposal areas of an engineered landfill that receives more than 100,000 tons of residual materials per year. The frequency may, however, be reduced to once a year for all or part of a disposal area that has received a final cover if, after a minimum 2-year monitoring period of that area or part of area, none of the measurements has shown that the limit value set out in the second paragraph of section 62 has been exceeded. The reduction applies as long as the annual monitoring shows compliance with the limit value, otherwise the frequency of the measurements is 3 times a year until the situation is remedied for that area or part of area.

Where thermal destruction equipment for biogas is required pursuant to the second paragraph of section 32, the destruction temperature and flow rate of the biogas must be continuously measured and recorded and the destruction efficiency for the organic compounds other than methane must be verified at least once a year.

O.C. 451-2005, s. 68.

69. The leachate or water samples taken pursuant to this Regulation must not be filtered in any manner during sampling or prior to analysis.

The groundwater samples taken for analysis of metals and metalloids may be filtered during sampling as long as they are filtered at all sampling points.

O.C. 451-2005, s. 69.

70. The samples taken pursuant to this Regulation must be sent for analysis to laboratories accredited by the Minister under section 118.6 of the Environment Quality Act (chapter Q-2).

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.

The analysis reports prepared by the laboratories must be kept by the operator for a minimum of 5 years after the date on which they were prepared.

O.C. 451-2005, s. 70; O.C. 868-2020, s. 22.

71. The operator must, within 30 days following the last day of the month of the sampling, send the results of the analyses of the samples taken pursuant to this Regulation to the Minister in a computer medium using the technology-based documents prescribed by the Minister, if applicable.

If limit values prescribed by this Regulation have been exceeded, the operator must, within 15 days after being so informed, report to the Minister on the measures taken or to be taken to remedy the situation.

The operator must also, within 30 days after the last day of the month during which the operator is so informed, send to the Minister the results of the measures taken pursuant to section 67 and the results of the measurements of the methane concentration at the surface of the disposal areas and the destruction efficiency verification for organic compounds carried out pursuant to section 68.

O.C. 451-2005, s. 71; O.C. 451-2011, s. 17; O.C. 868-2020, s. 23.

Watchdog committee

72. The operator of an engineered landfill must form a committee within 6 months after landfilling operations commence that is to exercise the function provided for in section 57 of the Environment Quality Act (chapter Q-2).

To that end, the operator is to invite in writing the following bodies and groups to designate a representative on the committee:

- (1) the local municipality in which the landfill is situated;
- (2) the metropolitan community and the regional county municipality in which the landfill is situated;
- (3) the persons residing in the vicinity of the landfill;
- (4) a local or regional environmental protection group or body;
- (5) a local or regional group or body likely to be affected by the landfill.

The operator's representative designated by the operator is also to sit on the committee.

Any vacancy on the committee is to be filled in keeping with the procedure described in the second paragraph.

Failure by 1 or more bodies or groups to designate a representative does not prevent the committee from operating; the committee is to exercise its functions even though 1 or more members have yet to be designated.

O.C. 451-2005, s. 72.

73. The committee may, if the majority of the members agree, invite other bodies or groups to sit on the committee and designate a representative.

O.C. 451-2005, s. 73.

74. The members of the committee designate a chair and a secretary from among their number; if the majority of the members agree, a person who is not a member of the committee may be designated as secretary.

O.C. 451-2005, s. 74.

75. The members of the committee must meet at least once a year.

Unless a majority of the members decide otherwise, the meetings of the committee are held in the territory of the local municipality in which the landfill is situated.

O.C. 451-2005, s. 75.

76. The secretary must post the agenda of every committee meeting at least 10 days prior to the meeting in the places indicated by the municipal bodies referred to in the second paragraph of section 72.

The secretary must also post the minutes of the meeting in the same places within 30 days following the meeting and send a copy of the minutes to the Minister.

The minutes of the committee meetings are available to any person on request to the secretary.

O.C. 451-2005, s. 76.

77. The operator must inform the committee of any application for authorization pertaining to the landfill made under the Environment Quality Act (chapter Q-2), and of any change in management responsibility for the landfill.

The operator must also, in a timely manner, make available to or provide the committee with all the documents or information necessary for the exercise of its functions, in particular the authorizations pertaining to the landfill, the logs after removing the names of the residual materials carriers and producers, the annual reports, the results of the analyses, monitoring or measurements required by this Regulation, the closure report prepared under section 81 and the status report prepared under section 84.

O.C. 451-2005, s. 77; O.C. 451-2011, s. 18; O.C. 868-2020, s. 24.

78. All operating expenses of the committee, including the costs of the meeting room and the material resources necessary for the committee to exercise its functions, are payable by the operator.

The expenses incurred for the meetings of the committee are payable by the operator for a maximum of 4 meetings per year.

O.C. 451-2005, s. 78.

79. The operator must allow committee members free access during the landfill's business hours to the landfill and to any equipment or facility at the landfill.

O.C. 451-2005, s. 79.

§ 4. — *Closure*

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, within a maximum period of 18 months 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).

O.C. 451-2005, s. 80; O.C. 868-2020, s. 25.

- **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.

O.C. 451-2005, s. 81; O.C. 868-2020, s. 25.

82. A conspicuous sign must be posted at the entrance to an engineered landfill that has been permanently closed stating that the landfill is closed and that the disposal of residual materials is prohibited.

O.C. 451-2005, s. 82.

- § 5. Post-closure management
- **83.** The requirements of this Division continue to apply, with the necessary modifications, to a permanently closed engineered landfill, for as long as the landfill is likely to be a source of contamination.

Once a landfill is closed, the owner is responsible, in particular,

- (1) for maintaining the integrity of the final cover over the landfilled residual materials;
- (2) for monitoring and maintaining the leachate or water collection and treatment systems, the biogas collection and evacuation or removal system and the network of groundwater observation wells;
 - (3) for the carrying out of samplings, analyses and measurements of leachate, water and biogas; and
- (4) for leak testing the leachate or water collection pipes situated outside the landfill disposal areas and every component in the leachate or water treatment system.

O.C. 451-2005, s. 83.

84. The operator of an engineered landfill may apply to the Minister to be released from any environmental monitoring or maintenance obligation under this Regulation if, during a post-closure monitoring period of a minimum duration of 5 years,

- (1) none of the parameters or substances analyzed in the leachate or water samples taken before treatment has exceeded the limit values set out in section 53;
- (2) none of the parameters or substances analyzed in the groundwater samples has contravened sections 57 to 59; and
- (3) the concentration of methane has been measured in the components of the biogas collection system at a frequency of at least 4 times per year at intervals spread evenly throughout the year, and all the measurements have indicated a concentration of methane less than 1.25% by volume.

To that end, the operator must have a status report pertaining to the state of the landfill and, where applicable, its environmental impacts, prepared by independent experts; the operator must send the status report to the Minister.

O.C. 451-2005, s. 84.

85. If it is established, particularly in the light of the status report prepared pursuant to section 84, that there is compliance with the conditions referred to in the first paragraph of that section, that the landfill complies in every respect with the applicable standards and that it is no longer likely to be a source of contamination, an operator who so requests is released by the Minister from the environmental monitoring and maintenance obligations under this Regulation.

O.C. 451-2005, s. 85.

DIVISION 3

TRENCH LANDFILLS

86. Trench landfills may be established in the territories enumerated in section 87, in which only residual materials generated in the territories are accepted, including sludge which, although generated elsewhere, is treated in the territories.

Trench landfills must be sited and operated in accordance with this Division, which also prescribes the conditions that apply to their closure and post-closure management.

O.C. 451-2005, s. 86.

- **87.** Trench landfills are permitted in the following territories only:
 - (1) in the North, as defined in section 94;
- (2) in any part of territory that is not organized into a local municipality and that is situated more than 100 km by a road open year-round from an engineered landfill site that is not reserved exclusively for the use of an industrial, commercial or other establishment;
- (3) in the territory of the James Bay region, as described in the schedule to the James Bay Region Development and Municipal Organization Act (chapter D-8.2), excluding the towns of Chibougamau and Chapais;
- (4) in any territory inaccessible by a road open year-round, including every island that is not connected to the mainland by a bridge or a boat service operational year-round;
 - (5) in the regional county municipalities of Minganie and Caniapiscau;
 - (6) in the part of the territory of Ville de la Tuque situated west of the 73rd meridian.

O.C. 451-2005, s. 87; O.C. 451-2011, s. 19.

88. Subject to the conditions set out in the second paragraph, sections 13 to 16, 18, 19, 28 to 30 and 34 to 36 apply, with the necessary modifications, to the siting of a trench landfill.

The siting is also subject to the following conditions:

- (1) the minimum distance between the trench area and any watercourse or body of water must be 150 m;
- (2) the minimum distance between the trench area and any catchment installation for surface water or groundwater intended for human consumption must be 500 m. That requirement does not apply if the landfill is not likely to alter the quality of the water;
- (3) the bottom of the trenches must be at least 1 m above the rock and the groundwater level. Any lowering of the groundwater level by pumping, draining or otherwise is prohibited.

O.C. 451-2005, s. 88.

89. Sections 37, 39, 40.1, 40.2, 43 to 49, 52 to 55, 57 to 59, 63 to 66 and 69 to 71 apply to the operation of a trench landfill, with the necessary modifications, in particular as follows: the quantity of residual materials referred to in subparagraph 4 of the first paragraph of section 39 may be expressed in volume, and the maximum distance authorized by subparagraph 2 of the third paragraph of section 65 for the installation of groundwater quality monitoring wells is extended to 300 m from the trench area.

The provisions of sections 63, 65 and 66 do not apply to a trench landfill that is completely sited on a mine tailings heap if the monitoring and supervision measures prescribed by those sections cannot be implemented due to physical constraints inherent to the heap. In that case, the operator must see to the implementation of substitution measures that, in addition to being better adapted to those constraints, allow water monitoring and supervision as close as possible to those prescribed by sections 63, 65 and 66.

O.C. 451-2005, s. 89; O.C. 451-2011, s. 20; O.C. 868-2020, s. 26.

- **90.** The operation of a trench landfill is also subject to the following conditions:
- (1) in order to minimize the release of odours, the spread of fires, the proliferation of animals or insects, and blowing litter, the residual materials deposited in the trenches must, at least once a week from May to October, be covered with a layer of soil or other material referred to in paragraph 4, or be covered in another manner if the above purposes are accomplished. The weekly cover requirement does not apply to a landfill reserved exclusively for the use of an industrial, commercial or other establishment if the residual materials received are not likely to generate the nuisances referred to above;
- (2) residual materials containing asbestos, sludge and animal carcasses or animal parts must be covered with other materials as soon as they are deposited. That requirement does not apply if the residual materials deposited are covered in another manner as provided for in paragraph 1. The words "containing asbestos" have the same meaning as in the fourth paragraph of section 41;
- (3) the soil used to cover the residual materials may 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) for volatile organic compounds and in Schedule II to that Regulation for other contaminants. Those limit values do not apply to contaminants that do not originate from human activity. The thickness of the cover layer consisting of such contaminated soil may not exceed 60 cm;
- (4) other material may be used to cover the residual materials deposited in trenches if the other material does not contain any substance that is not accepted in a trench landfill and is capable of accomplishing the purposes referred to in paragraph 1.

O.C. 451-2005, s. 90.

91. When the height of the residual materials deposited in a trench reaches the ground surface at the perimeter of the trench area, the trench area must be covered with a soil layer at least 60 cm thick including, in its upper portion, a layer at least 15 cm thick that is suitable for vegetation. The latter layer may also consist of a layer not more than 30 cm thick of another material that is suitable for vegetation.

The trench cover may also consist of soils containing 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.

In order to allow the water to flow away from the trench area and limit soil erosion, the final cover must also be graded to a slope of at least 2% without exceeding

- (1) 5%, if the slope at the perimeter of the trench area does not exceed that percentage; or
- (2) the percentage of the slope at the perimeter of the trench area, if that slope is greater than 5%.

Not later than 1 year after installation of the final cover, the final layer must be given a vegetative layer. Damage such as holes, fissures or subsidence that may occur in the final cover must be repaired immediately to prevent water from pooling, until the trench area has been fully stabilized.

The provisions of sections 34 to 36 relating to quality assurance and control apply, with the necessary modifications, to the final trench cover prescribed by this section.

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O.C. 451-2005, s. 91; O.C. 451-2011, s. 21; O.C. 868-2020, s. 27.
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92. If all or part of a trench landfill is temporarily closed for a period of 3 months or more, and subject to the second paragraph, the residual materials deposited in a trench must be covered with at least 30 cm of soil at the latest by the expiry of the third month.

Any trench that is unused for a period of 6 months must be filled in as provided in section 91 at the latest by the expiry of the sixth month.

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O.C. 451-2005, s. 92.
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93. Sections 80 to 85 apply, with the necessary modifications, to the closure of a trench landfill and to its post-closure management.

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O.C. 451-2005, s. 93.
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DIVISION 4

NORTHERN LANDIFLLS

94. Landfills may be established in the North, in which only residual materials generated in the North are accepted, including sludge which, although generated elsewhere, is treated in the North.

Northern landfills must be sited and operated in accordance with this Division.

For the purposes of this Division, "the North" means the territories listed below:

- (1) the territory situated north of the 55th parallel;
- (2) Municipalité de Côte-Nord-du-Golfe-du-Saint-Laurent, the municipalities of Blanc-Sablon, Bonne-Espérance, Gros-Mécatina and Saint-Augustin, Ville de Schefferville and the territory within a radius of 10 km from the limits of that town, the Naskapi Village of Kawawachikamach and any other municipality

constituted under the Act respecting the municipal reorganization of the territory of Municipalité de Côte-Nord-du-Golfe-du-Saint-Laurent (1988, chapter 55; 1996, chapter 2).

O.C. 451-2005, s. 94; O.C. 451-2011, s. 22.

- 95. Northern landfills must be sited at a minimum distance of
 - (1) 150 m from any watercourse or body of water; and
- (2) 500 m from any catchment installation for surface water or groundwater intended for human consumption.

The first paragraph does not apply if the landfill is not likely to alter the quality of the water referred to in that paragraph.

O.C. 451-2005, s. 95.

- **96.** Northern landfills must be surrounded by a fence or any other device so as
 - (1) to prevent wind dispersal of the residual materials and contain them in the disposal areas;
 - (2) to prevent animals from entering the landfill; and
 - (3) to prevent access to the landfill after business hours.

The landfills must also be surrounded by a fire barrier at least 15 m wide devoid of all vegetation.

A conspicuous sign must be posted at the landfills indicating the type of landfill, the name and address of the operator and any other person in charge of the landfill, as well as the business hours.

O.C. 451-2005, s. 96.

97. The bottom of the disposal areas of a northern landfill must be above the permafrost line at a minimum distance of 30 cm above the groundwater level. Any lowering of the groundwater level by pumping, draining or otherwise is prohibited.

The removed materials must be stockpiled on the perimeter of the site to be used to cover the residual materials.

Sludge must be deposited in an area separate from the area in which other residual materials are deposited so as to facilitate the burning of the residual materials.

O.C. 451-2005, s. 97.

98. Northern landfills must have a surface water collection system to prevent the surface water from being contaminated by residual materials or from penetrating into the disposal areas. Once collected, the surface water must be discharged outside the landfill site.

O.C. 451-2005, s. 98.

99. Combustible residual materials deposited in northern landfills must be burned at least once a week, weather conditions permitting.

Residual materials containing asbestos, and animal carcasses or animal parts must be covered with soil or other residual materials as soon as they are deposited. The words "containing asbestos" have the same meaning as in the fourth paragraph of section 41.

The soil used to cover the residual materials may 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) for volatile organic compounds and in Schedule II to that Regulation for other contaminants. Those limit values do not apply to contaminants that do not originate from human activity.

O.C. 451-2005, s. 99; O.C. 451-2011, s. 23.

100. If all or part of a northern landfill is closed or unused for a period of 6 months or more, the residual materials deposited in the landfill must be covered after being burned with a layer of soil at least 30 cm thick at the latest by the expiry of the sixth month.

The soil referred to in the first paragraph may 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.

O.C. 451-2005, s. 100; O.C. 451-2011, s. 24.

DIVISION 5

CONSTRUCTION OR DEMOLITION WASTE LANDFILLS

- 101. For the purposes of this Division, "construction or demolition waste" means any material from the construction, renovation or demolition of immovables, bridges, roads or other structures, and includes stone, debris or rubble, fragments of concrete, masonry or asphalt, siding materials, wood, metal, glass, textile materials and plastics, but excludes
- (1) materials rendered unrecognizable by burning, crushing, shredding or otherwise, containers of paint, solvent, sealant, adhesive or other similar materials, wood treated to prevent the presence of mould or to increase resistance to decay, yard waste such as grass, leaves and woodchips, and materials, other than bituminous coated material, containing asbestos. The words "containing asbestos" have the same meaning as in the fourth paragraph of section 41; and
- (2) any material mingled with household garbage, materials from an industrial process or any of the materials referred to in subparagraph 1.

Trees, branches and stumps removed to allow for construction work, soil excavated from land including soil containing 1 or more contaminants in a concentration lower than or equal to the limit values set out in Schedule I to the Land Protection and Rehabilitation Regulation (chapter Q-2, r. 37), and residual materials from a facility that recovers or reclaims construction or demolition waste or from another recovery or reclamation facility authorized under the Environment Quality Act (chapter Q-2) are considered to be construction or demolition waste to which this Division applies insofar as in all cases the materials, although of a composition similar to that of construction or demolition waste, were unable to be recovered or reclaimed. The limit values referred to in this paragraph for contaminants do not apply to contaminants that do not originate from human activity.

O.C. 451-2005, s. 101.

102. Any establishment or enlargement of construction or demolition waste landfills is prohibited. The term "enlargement" includes any alteration that results in an increase in landfill capacity.

O.C. 451-2005, s. 102; O.C. 868-2020, s. 28.

103. Only construction or demolition waste within the meaning of section 101 of this Regulation may be disposed of in a construction or demolition waste landfill.

O.C. 451-2005, s. 103; O.C. 868-2020, s. 29.

104. Subject to the conditions set out in the second paragraph, sections 13 to 16, 19, 28 to 30 and 34 to 36 apply, with the necessary modifications, to the siting of construction or demolition waste landfills.

The siting is also subject to the following conditions:

- (1) the minimum distance between the disposal areas and any watercourse or body of water must be 150 m;
- (2) the bottom of the disposal areas must be at least 1 m above the groundwater level. The lowering of the groundwater level by pumping, draining or otherwise is prohibited. That prohibition does not apply to landfills in operation on 19 January 2006 if their siting complies with the provisions of this Regulation that apply to containment and the collection of leachate in engineered landfills. In such a case, the leachate collection system must be designed and installed so that the hydraulic head at the base of the disposal areas cannot reach the level of the residual materials deposited in the disposal areas.

The minimum distances prescribed by the second paragraph are measured from the disposal areas in the pit or quarry.

O.C. 451-2005, s. 104.

105. Sections 37 to 40.2, 43 to 49, 52 to 55, 57 to 60, 63 to 67 and 69 to 79 apply to the operation of construction or demolition waste landfills, with the necessary modifications and in particular as follows: the maximum distance authorized under subparagraph 2 of the third paragraph of section 65 for the installation of groundwater quality monitoring wells must not exceed the perimeter of the landfills.

The operation of the landfills is also subject to the following conditions:

- (1) subject to subparagraph 2, construction or demolition waste deposited in the landfills must, at least once a month during the operation period, be graded and covered with a layer of soil or material that
 - consists of less than 20% by weight of particles 0.08 mm or finer in diameter;
 - has a constant minimum hydraulic conductivity of 1 x 10⁻⁴ cm/s;
 - does not contain material that is not accepted in such a landfill;
 - accomplishes the purposes referred to in the second paragraph of section 41;
- (2) bituminous coated material containing asbestos must be covered with other materials on being unloaded in a disposal area. The words "containing asbestos" have the same meaning as in the fourth paragraph of section 41;
 - (3) (subparagraph revoked).

The soil used to cover construction or demolition waste 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.

The operator must take or have taken, for each batch of 4,000 tons or less of the same material used for the purpose of covering residual materials, or once a year where the quantity of that material used annually is less than 4,000 tons, 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.

O.C. 451-2005, s. 105; O.C. 451-2011, s. 25; O.C. 868-2020, s. 30.

- 106. When the height of landfilled construction or demolition waste reaches a level that is 90 cm below the ground surface at the perimeter of a disposal area, the area must receive a final cover consisting of, from the bottom up,
- (1) an impermeable soil layer with a constant maximum hydraulic conductivity of 1 x 10⁻⁵ cm/s, through a minimum thickness of 45 cm after compaction, or a geomembrane at least 1 mm thick placed on a soil layer at least 30 cm thick having characteristics that preserve the integrity of the geomembrane; and
- (2) a barrier soil layer at least 45 cm thick if the above-mentioned impermeable layer is a soil layer, or 60 cm thick if the impermeable layer is a geomembrane. The upper portion of the layer prescribed by this subparagraph must also, to a depth of between 15 and 30 cm, consist of soil or materials suitable for vegetation. The characteristics of the soil or other materials used must be such as to preserve the integrity of the impermeable layer.

In addition, any raising of the ground surface at the perimeter of a disposal area is prohibited.

The layers referred to in subparagraphs 1 and 2 of the first paragraph may also consist of soils containing 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. The layers may also consist of other material if the material meets where applicable the requirements of this paragraph and the minimum thickness of the layers is as prescribed in those subparagraphs.

In order to allow the water to flow away from the disposal area and limit soil erosion, the final cover must also be graded

- (1) to a slope of 2%, if the slope at the perimeter of the disposal area does not exceed that percentage; or
- (2) to a slope that equals the slope percentage at the perimeter of the disposal area, if that perimeter slope is greater than 2%.

Not later than 1 year after installation of the final cover, the final layer must be given a vegetative layer. Damage such as holes, fissures or subsidence that may occur in the final cover must be repaired immediately to prevent water from pooling over or infiltrating into the disposal area, until the disposal area has been fully stabilized.

The provisions of sections 34 to 36 relating to quality assurance and control apply, with the necessary modifications, to the final cover of disposal areas prescribed by this section.

O.C. 451-2005, s. 106; O.C. 451-2011, s. 26; O.C. 868-2020, s. 31.

107. Every construction or demolition waste landfill must have a system that collects and removes the biogas produced in the landfill.

The system must be in operation not later than 1 year after a disposal area has received a final cover.

O.C. 451-2005, s. 107.

108. The final profile of filled construction or demolition waste landfills including the final cover must not exceed the ground surface at the perimeter of the disposal areas, except to the extent that the raising of the surface of the disposal areas relative to the ground is necessary to meet the requirements of the fourth

paragraph of section 106, in which case the height of the landfilled residual materials may exceed the limit prescribed by that section.

O.C. 451-2005, s. 108.

109. Residual materials in a construction or demolition waste landfill that has been unused for a period of 12 months or more must, at the latest by the expiry of the twelfth month, be covered as required by sections 106 and 108 which apply with the necessary modifications.

O.C. 451-2005, s. 109.

110. Sections 80 to 85 apply, with the necessary modifications, to the closure of construction or demolition waste landfills and to their post-closure management.

O.C. 451-2005, s. 110.

DIVISION 6

REMOTE LANDFILLS

111. Landfills may be established in the territories referred to in section 112, in which only residual materials generated in those territories are accepted.

The landfills, referred to as "remote landfills", must be sited and operated in accordance with this Division, which also prescribes the conditions that apply to their closure.

O.C. 451-2005, s. 111.

- **112.** Remote landfills are permitted in the following territories only:
 - (1) territories that are not organized into local municipalities;
- (2) territories inaccessible by road and every island that is not connected to the mainland by a bridge or a boat service;
- (3) the territory of the James Bay region, as described in the schedule to the James Bay Region Development and Municipal Organization Act (chapter D-8.2);
 - (4) the territories referred to in the third paragraph of section 94; and
 - (5) the part of the territory of Ville de La Tuque situated west of the 73rd meridian.

Except the territories referred to in subparagraph 4 of the first paragraph, those landfills may not serve more than 100 persons on average, on a yearly basis.

In addition, in the territories referred to in subparagraphs 1, 3 and 5 of the first paragraph, only the following persons or municipalities may establish and operate a remote landfill:

- (1) the Minister of Natural Resources and Wildlife or another authority responsible under the Act for the management of lands in the domain of the State;
 - (2) a regional county municipality;
- (3) the manager of an outfitting operation or of a controlled territory within the meaning of the Act respecting the conservation and development of wildlife (chapter C-61.1);
- (4) the person responsible for an industrial camp governed by the Regulation respecting sanitary conditions in industrial or other camps (chapter S-2.1, r. 5.1);

- (5) Municipalité de Baie-James;
- (6) the person appointed under section 166 of the Environment Quality Act (chapter Q-2) to exercise the functions, duties and powers of the Minister of Sustainable Development, Environment and Parks on Category I land in the territory referred to in section 133 of that Act;
 - (7) Ville de La Tuque.

O.C. 451-2005, s. 112; O.C. 451-2011, s. 27.

- 113. A remote landfill may not accept residual materials from
- (1) a dwelling or an establishment served by a residual materials collection service or situated 100 km or nearer by road from an engineered landfill that is not reserved exclusively for the use of an industrial, commercial or other establishment, or from an incineration facility referred to in section 121, as long as those disposal facilities remain accessible by road; or
- (2) an establishment in which more than 100 people are lodged, on a yearly basis or the equivalent.

O.C. 451-2005, s. 113; O.C. 451-2011, s. 28.

- **114.** Remote landfills must be sited at a minimum distance of
 - (1) 150 m from any watercourse or body of water; and
- (2) 500 m from any catchment installation for surface water or groundwater intended for human consumption. That requirement does not apply if the landfill is not likely to alter the quality of the water.

O.C. 451-2005, s. 114.

115. No person may burn residual materials in a remote landfill. An operator may not allow the burning of such materials in a remote landfill.

The prohibition in the first paragraph is however not applicable to a remote landfill in the North as defined in section 94 that has a fire barrier at least 15 m wide and devoid of all vegetation extending outward from the burning area.

O.C. 451-2005, s. 115; O.C. 451-2011, s. 29.

116. The bottom of the disposal areas of every remote landfill must be a minimum distance of 30 cm above bedrock and the groundwater level. Any lowering of the groundwater level by pumping, draining or otherwise is prohibited.

O.C. 451-2005, s. 116.

117. From May to October, the residual materials deposited in a remote landfill must be covered at the end of each day of use or at least once a week where those materials are burned pursuant to the second paragraph of section 115, with a layer of soil or with a layer of lime, or be covered in another manner that minimizes the release of odours, the spread of fires, the proliferation of animals or insects, and blowing litter.

Residual materials containing asbestos, and animal carcasses or animal parts must be covered with other residual materials as soon as they are deposited. That requirement does not apply if the residual materials deposited in the remote landfill are covered in another manner as provided for in the first paragraph. The words "containing asbestos" have the same meaning as in the fourth paragraph of section 41.

The soil referred to in the first paragraph may 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) for volatile organic compounds and in Schedule II to that Regulation for other contaminants; those limit values do not apply to contaminants that do not originate from human activity.

O.C. 451-2005, s. 117; O.C. 451-2011, s. 30; O.C. 868-2020, s. 32.

118. Sludge with a dryness lower than 15% to be landfilled in a remote landfill must be landfilled in a separate pit reserved exclusively for that type of residual material.

O.C. 451-2005, s. 118.

119. When the height of the residual materials reaches the ground surface at the perimeter of the landfill, the remote landfill must be covered with a layer of materials at least 30 cm thick consisting of soil including a layer at least 15 cm thick that is suitable for vegetation, or consisting of a layer of another material not more than 30 cm thick that is suitable for vegetation. Any raising of the ground surface at the perimeter of the landfill is prohibited.

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.

In order to allow water to flow away from the landfill and limit soil erosion, the final cover must also be graded to a slope of at least 2% without exceeding

- (1) 5%, if the slope at the perimeter of the remote landfill does not exceed that percentage; or
- (2) the percentage of the slope at the perimeter of the remote landfill if that slope is greater than 5%.

O.C. 451-2005, s. 119; O.C. 868-2020, s. 33.

120. If a remote landfill is temporarily closed for a period of 3 months or more, and subject to the second paragraph, the residual materials deposited in the landfill must be covered with at least 30 cm of soil at the latest by the expiry of the third month.

A remote landfill that is unused for a period of 12 months must be filled in at the latest by the expiry of that period and section 119 applies, with the necessary modifications.

O.C. 451-2005, s. 120.

CHAPTER III

RESIDUAL MATERIALS INCINERATION FACILITIES

DIVISION 1

GENERAL

- **121.** This Chapter applies to incineration facilities that incinerate at least 1 of the following types of residual materials:
- (1) household garbage, 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;
- (2) sludge, whether or not it has been subjected to biological treatment, from municipal water or sludge treatment or collection works, other sanitary wastewater collection or treatment works or treatment works for sludge from such works, or from sewer cleaning.

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".

O.C. 451-2005, s. 121; O.C. 868-2020, s. 34.

122. The provisions of the Regulation respecting biomedical waste (chapter Q-2, r. 12) and the Clean Air Regulation (chapter Q-2, r. 4.1) that apply to biomedical waste incineration facilities also apply to the residual materials incineration facilities governed by this Chapter that receive biomedical waste referred to in section 1 of the Regulation respecting biomedical waste.

Where this Regulation is inconsistent with the above regulations, the provisions that ensure greater environmental protection are to prevail.

O.C. 451-2005, s. 122; O.C. 666-2013, s. 2.

123. Residual materials that, under paragraphs 1 to 6, 8 to 10 and 12 of section 4, may not be disposed of in an engineered landfill may not be disposed of in an incineration facility governed by this Chapter.

O.C. 451-2005, s. 123; O.C. 1463-2022, s. 6.

DIVISION 2

SITING AND OPERATION

124. The incineration facilities governed by this Chapter must have a handling area or pit where the residual materials are received and that must be situated inside a building.

The handling area and pit must be impermeable.

The handling area must be cleaned at the end of each day of operation.

No non-incinerated residual material or incinerator ash may be stored outside the incineration facility buildings; no truck containing residual materials, including ash, may be parked on the premises of the facility for a period of more than 1 hour.

O.C. 451-2005, s. 124; O.C. 451-2011, s. 31.

125. An incineration facility governed by this Chapter that receives biomedical waste referred to in paragraphs 1 to 3 of section 1 of the Regulation respecting biomedical waste (chapter Q-2, r. 12), or animal carcasses or animal parts, must be laid out so that the residual materials are unloaded in an area separate from the area where the other types of residual materials are deposited, and are conveyed to the combustion chamber or chambers by means of an independent feed system.

The requirements of the first paragraph do not apply in the case of animal carcasses or animal parts of domestic pets that are not from establishments that breed or sell domestic pets or that shelter, care for or protect them.

O.C. 451-2005, s. 125.

126. (*Revoked*).

O.C. 451-2005, s. 126; O.C. 868-2020, s. 35.

127. (*Revoked*).

O.C. 451-2005, s. 127; O.C. 868-2020, s. 35.

128. Sections 37 to 39, paragraph 1 of section 45, sections 48, 52 and 72 to 79 apply, with the necessary modifications, to the operation of every incineration facility governed by this Chapter.

Sections 38 and 72 to 79 do not apply to an incineration facility that disposes of residual materials generated in any of the territories referred to in section 87 or 94.

O.C. 451-2005, s. 128.

DIVISION 3

(Revoked)

O.C. 451-2005, Div. 3; O.C. 868-2020, s. 37.

129. (*Revoked*).

O.C. 451-2005, s. 129; O.C. 868-2020, s. 37.

130. (*Revoked*).

O.C. 451-2005, s. 130; O.C. 868-2020, s. 37.

DIVISION 4

(Revoked)

O.C. 451-2005, Div. 4; O.C. 868-2020, s. 37.

131. (*Revoked*).

O.C. 451-2005, s. 131; O.C. 868-2020, s. 37.

132. (*Revoked*).

O.C. 451-2005, s. 132; O.C. 868-2020, s. 37.

133. (*Revoked*).

O.C. 451-2005, s. 133; O.C. 868-2020, s. 37.

134. (*Revoked*).

O.C. 451-2005, s. 134; O.C. 868-2020, s. 37.

DIVISION 5

(Revoked)

O.C. 451-2005, Div. 5; O.C. 868-2020, s. 37.

135. (*Revoked*).

O.C. 451-2005, s. 135; O.C. 868-2020, s. 37.

CHAPTER IV

RESIDUAL MATERIALS TRANSFER STATIONS

DIVISION 1

GENERAL

O.C. 451-2011, s. 33.

136. This Chapter applies to residual materials transfer stations.

"Transfer station" means any facility where residual materials are unloaded in order to be transported at a later time to another place for disposal.

O.C. 451-2005, s. 136; O.C. 868-2020, s. 38.

137. The only residual materials that may be accepted at a transfer station are those authorized by this Regulation to be disposed of in an engineered landfill, a construction or demolition waste landfill or an incineration facility to which Chapters II and III apply respectively.

Despite the foregoing, sludge with a dryness lower than 25% may not be accepted at a transfer station.

O.C. 451-2005, s. 137; O.C. 451-2011, s. 32; O.C. 868-2020, s. 39.

138. The operations at a transfer station involving the loading and unloading of residual materials must be carried out inside a building. No residual material may be stockpiled outside the building. No truck containing residual materials may be parked on the premises of the transfer station for a period of more than 1 hour.

When transfer activities cease for a period of more than 12 hours, all the residual materials received must be conveyed to their destination so that no residual materials remain inside the building or on the premises of the transfer station. That requirement does not apply if the building referred to in the first paragraph has an air collection and treatment system that prevents any nuisance odour caused by the residual materials remaining in the building for a period of more than 12 hours.

O.C. 451-2005, s. 138.

139. Subject to section 139.2, sections 37 to 39, paragraph 1 of section 45, sections 48 and 49, subparagraph 1 of the first paragraph and the second paragraph of section 52, and the second and third paragraphs of section 124 apply, with the necessary modifications, to residual materials transfer stations.

The operations logs maintained by a transfer station must also indicate the destination of the transferred residual materials and the data must be compiled in the annual reports of those stations. The logs are not required to be kept after a transfer station is closed if the information entered in them has been transferred into the operations logs of the disposal facilities that received the residual materials.

O.C. 451-2005, s. 139; O.C. 451-2011, s. 34; O.C. 868-2020, s. 40.

DIVISION 2

LOW CAPACITY TRANSFER STATIONS

O.C. 451-2011, s. 35.

139.1. A low capacity transfer station established in accordance with this Division may be operated only by or for a municipality, 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.

"Low capacity transfer station" means a transfer station that is established for the transfer of 200 metric tons or less of residual materials every week.

O.C. 451-2011, s. 35; O.C. 868-2020, s. 41.

139.2. Despite the provisions of section 139, the provisions of section 38 do not apply to a low capacity transfer station. The quantity of residual materials entered in the operations logs of such a station pursuant to subparagraph 4 of the first paragraph of section 39 may be expressed in volume.

The provisions of sections 37 and 39, subparagraph 1 of the first paragraph and second paragraph 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.

In addition, the provisions of section 138 do not apply to a low capacity transfer station where the residual materials are deposited in a closed and watertight container and conveyed to a disposal facility at least once a week from May to October.

A local municipality may only have on its territory 1 low capacity transfer station established for the transfer of more than 30 metric tons of residual materials every week. This also applies to a transfer station established for the transfer of 30 metric tons or less of residual materials every week and used in whole or in part for the transfer of household garbage.

O.C. 451-2011, s. 35; O.C. 868-2020, s. 42.

139.3. The maximum volume of residual materials that may be stored in a low capacity transfer station must not at any time exceed 300 m³. In the case of a station established for the transfer of 30 metric tons or less of residual materials every week, the volume may not exceed 100 m³.

O.C. 451-2011, s. 35.

139.4. Despite the provisions of section 139.1, where a low capacity transfer station is situated in a territory inaccessible by a road open year-round within the meaning of paragraph 4 of section 87, a quantity of residual materials greater than 200 metric tons may be transferred every week from November to April. In addition, during the same period, the provisions of section 139.3 do not apply to such a station.

O.C. 451-2011, s. 35.

CHAPTER V

FINANCIAL GUARANTEE

140. The operation of the facilities to which Divisions 2, 3 and 5 of Chapter II and Chapters III and IV apply, except a transfer station referred to in the second paragraph of section 139.2, is subject to the provision of a financial guarantee by the operator or by a third party on the operator's behalf to guarantee, during the operation and on closure, the performance of the operator's obligations under the Environment Quality Act (chapter Q-2), the regulations, an order or an authorization.

The amount of the financial guarantee is established as follows:

Class of facility	Guarantee		
Engineered landfill and construction or demolition waste landfill			
- receiving less than 20,000 tons per year	\$100,000		
- receiving from 20,000 to 100,000 tons per year	\$300,000		
- receiving more than 100,000 tons per year without exceeding 300,000 tonnes per year	\$500 , 000		
- receiving more than 300,000 tons per year	\$1,000,000		
Trench landfill	\$50,000 per landfill,		
	maximum \$250,000 for the operator of		
	more than 1 landfill		
Incineration facility	1% of capital cost,		
Incineration facility	minimum \$100,000		
	maximum \$2,000,000		
Transfer station	\$100,000		

O.C. 451-2005, s. 140; O.C. 451-2011, s. 36.

- **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.

O.C. 451-2005, s. 141; O.C. 488-2017, s. 19; O.C. 868-2020, s. 43.

142. The bank drafts, cheques or bonds provided as a guarantee must be deposited with the Bureau général de dépôts pour le Québec for the operational period of the facility and for a period of 12 months following the closure of the facility or the revocation or transfer of the authorization, whichever occurs first.

O.C. 451-2005, s. 142; O.C. 488-2017, s. 20; O.C. 868-2020, s. 44.

143. A financial guarantee provided in the form of security or a letter of credit must have a term of not less than 12 months. At least 60 days before the expiry of the financial guarantee, the proponent must send renewal of the financial guarantee or any other financial guarantee that meets the requirements of sections 140 and 141 to the Minister of Sustainable Development, Environment and Parks.

The financial guarantee must also contain a clause setting the time period for filing a claim based on a failure by the operator to perform obligations at not less than 12 months after expiry of the financial guarantee or, as the case may be, its revocation, rescission or cancellation.

A clause of revocation, rescission or cancellation of a financial guarantee may take effect only if prior notice of at least 60 days is sent to the Minister by registered mail.

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.

O.C. 451-2005, s. 143; I.N. 2016-01-01 (NCCP); O.C. 868-2020, s. 45.

144. If the operator fails to perform an obligation and the default persists after a notice from the Minister to remedy the failure, the Minister may use the financial guarantee provided pursuant to section 140 to pay or reimburse expenses necessary for performance of the obligation. In such a case, the sums required to fulfil a financial guarantee provided under this Chapter become payable.

O.C. 451-2005, s. 144; O.C. 868-2020, s. 46.

CHAPTER VI

OWNERSHIP OF LAND

O.C. 451-2005, c. VI; O.C. 868-2020, s. 47.

145. No person may establish or enlarge an engineered landfill or a construction or demolition waste landfill referred to in the second paragraph of section 102 without being the owner of the land on which the landfill is to be established or enlarged, including the land on which any system necessary to its operation is to be situated if the land is not the land on which the disposal areas and other landfill equipment or facilities are to be situated.

After its establishment or enlargement, the landfill and the land on which the landfill or any system necessary to its operation is situated must continue to be owned by the same person or municipality, including after a transfer of the disposal facility.

O.C. 451-2005, s. 145.

146. (Revoked).

O.C. 451-2005, s. 146; O.C. 451-2011, s. 37; O.C. 868-2020, s. 48.

147. (*Revoked*).

O.C. 451-2005, s. 147; O.C. 451-2011, s. 38; O.C. 868-2020, s. 48.

148. (*Revoked*).

O.C. 451-2005, s. 148; O.C. 868-2020, s. 48.

149. (*Revoked*).

O.C. 451-2005, s. 149; O.C. 441-2008, s. 10.

CHAPTER VI.1

MONETARY ADMINISTRATIVE PENALTIES

O.C. 666-2013, s. 3.

- **149.1.** A monetary administrative penalty of \$250 in the case of a natural person or \$1,000 in other cases may be imposed on any person who fails
 - (1) to have, at the landfill entrance, a sign complying with paragraph 1 of section 45;
- (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;
- (2) to form a watchdog committee within the period and in the manner provided for in the first and second paragraphs of section 72 or to ensure the operation of the committee in the case provided for in the fifth paragraph of that section;
- (3) to fill any vacancy on the watchdog committee according to the terms referred to in the fourth paragraph of section 72;
- (4) to inform the watchdog committee of any situation referred to in the first paragraph of section 77 or to make available to or provide the committee with, in a timely manner, all the documents or information prescribed by the second paragraph of that section;
 - (5) to pay all operating expenses of the watchdog committee in accordance with section 78;
- (6) to post at the entrance to a landfill that has been permanently closed a sign complying with section 82 or the third paragraph of section 96, as the case may be.

O.C. 666-2013, s. 3; O.C. 868-2020, s. 49.

- **149.2.** A monetary administrative penalty of \$350 in the case of a natural person or \$1,500 in other cases may be imposed on any person who fails
 - (1) to comply with the accessibility conditions prescribed by section 29 or 33;
- (2) to obtain the reports referred to in the second paragraph of section 36 or to send them to the Minister in accordance with that paragraph;
- (3) to enter in a log the information prescribed by the first paragraph of section 39, the fourth paragraph of section 40.1 or the second paragraph of section 139;
- (4) to keep the log and its appendices referred to in section 39 or to make them available to the Minister, for the periods and on the conditions provided for in the second paragraph of section 39;
- (5) to enter the results referred to in the fourth paragraph of section 42 or 105 in the annual report provided for in section 52;
 - (6) to have, at the landfill entrance, a barrier or other device complying with paragraph 2 of section 45;

- (7) to prepare an annual report containing the data, documents or information provided for in subparagraphs 1 to 8 of the first paragraph of section 52 or to comply with the periods and conditions for sending the report provided for in the second paragraph of section 52;
- (8) to keep the analysis reports referred to in the third paragraph of section 70 during the period provided for therein;
- (9) to send to the Minister the results referred to in the first or third paragraph of section 71 in accordance with the periods and conditions for transmission provided for therein;
- (10) to immediately notify the Minister in writing of the date on which the person begins the process of closing a landfill in accordance with section 80;
- (11) to have prepared or to send to the Minister, within the period provided for in section 81, the closure report referred to therein containing the elements prescribed by subparagraphs 1 to 3 of the first paragraph or the second paragraph of that section;
- (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;
 - (13) (paragraph replaced);
 - (14) (paragraph replaced);
 - (15) (paragraph replaced).

O.C. 666-2013, s. 3; O.C. 868-2020, s. 50.

- **149.3.** 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 fails
- (1) to accept, in an engineered landfill, the eligible residual materials generated in the territories referred to in paragraphs 1 to 4 of section 10 or the inedible meat and other residual materials referred to in section 11;
- (2) to comply with the conditions provided for in section 17 relating to the integration of an engineered landfill into the surrounding landscape;
- (3) to maintain a buffer zone complying with the first or second paragraph of section 18 or to comply with the activity restrictions in such a zone in accordance with the third paragraph of that section;
 - (4) to meet the conditions provided for in section 19 or 30 relating to the siting of a landfill;
- (5) to provide the zones or components referred to in the first paragraph of section 31 with a groundwater collection system in the cases provided for therein;
- (6) to ensure that a groundwater collection system referred to in the first paragraph of section 31 complies with the conditions provided for in the second or third paragraph of that section or that it be halted only in the case provided for in the fourth paragraph of that section;
- (7) to verify whether the residual materials received in a landfill may be landfilled in accordance with section 37;
- (8) to weigh residual materials received for landfilling in a landfill or to perform radiological testing as soon as the materials are received and in the manner prescribed by the first paragraph of section 38;
- (9) to comply with the conditions for the installation, use or maintenance of the devices referred to in the second paragraph of section 38, as provided for in that paragraph;

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- (10) (paragraph revoked);
- (11) to verify the acceptance of soils referred to in section 40.1 by having taken to have them analyzed the samples referred to in the first or second paragraph of that section in accordance with the conditions provided for in that section;
- (12) to comply with the conditions relating to the deposit or covering of the residual materials provided for in the first or second paragraph of section 41;
- (13) to comply with the conditions provided for in the first, second, third or fifth paragraph of section 42 relating to soils or other materials that may be used to cover residual materials;
- (14) to make the periodic verifications prescribed by the fourth paragraph of section 42 according to the frequency and conditions provided for therein;
- (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;
 - (15) to landfill residual materials in the zones prescribed by section 43;
- (16) to comply with the visibility conditions provided for in section 46 regarding residual materials landfilling operations;
- (17) to take the measures prescribed by the first paragraph of section 48 to prevent wind dispersal or scattering of residual materials referred to therein;
- (18) to proceed with the cleaning prescribed by the second paragraph of section 48 in the case and on the conditions provided for therein;
- (19) to take the necessary measures to prevent or eliminate any infestation of pests in accordance with section 49;
- (20) to cover the landfilled residual materials with a final cover in the cases provided for in the first paragraph of section 50 and in accordance with paragraphs second, third, fourth, fifth and sixth of that section;
- (21) to comply with the conditions provided for in the first or second paragraph of section 51 relating to the vegetative layer or the repair of a final cover of an engineered landfill;
- (22) to comply with the conditions provided for in section 56 permitting the infiltration of leachate or water into residual materials disposal areas;
- (23) to measure the groundwater piezometric level in the case provided for in the second paragraph of section 66;
- (24) to continuously measure the flow of biogas during the operating period of a biogas collection system referred to in section 68 or record the results in accordance with the first paragraph of that section;
- (25) to monitor or have monitored every 3 months the concentrations prescribed by subparagraph 1 of the first paragraph of section 68;
- (26) to comply with the conditions provided for in the first or second paragraph of section 69 relating to the samples referred to therein;
- (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;

- (28) to allow watchdog committee members free access to the landfill and to any equipment or facility at the landfill in accordance with section 79;
- (29) to comply with the conditions provided for in paragraphs 1, 3 or 4 of section 90 relating to a trench landfill;
- (30) to comply with the conditions provided for in the first, second, third or fourth paragraph of section 91 relating to the final cover of a trench landfill;
- (31) to comply with the conditions provided for in the first or second paragraph of section 92 in case of a temporary closure of all or part of a trench landfill for a period of 3 months or more;
- (32) to surround a northern landfill by a fence or any other device complying with subparagraphs 1 to 3 of the first or a fire barrier complying with the second paragraph of section 96;
- (33) to comply with the conditions provided for in the second or third paragraph of section 97 relating to the materials removed or sludge from a northern landfill;
- (34) to provide a northern landfill with a surface water collection system or to discharge the water collected outside the landfill site in accordance with section 98;
- (35) to burn the combustible residual materials referred to in the first paragraph of section 99 at the frequency and on the conditions provided for therein;
- (36) to comply with the concentrations of contaminants prescribed by the third paragraph of section 99 or the second paragraph of section 100 relating to the soil used as final cover of the residual materials;
- (37) to comply with the conditions provided for in the first paragraph of section 100 in the case of closure or non-use of a northern landfill for a period of 6 months or more;
- (38) to comply with the conditions provided for in subparagraph 1 of the second paragraph of section 105 relating to a construction or demolition waste landfill;
- (39) to comply with the concentrations of contaminants prescribed by the third paragraph of section 105 or 106 relating to the soil used as final cover for the construction or demolition waste;
- (40) to make the periodic verifications prescribed by the fourth paragraph of section 105 at the frequency and on the conditions provided for therein;
- (41) to comply with the conditions provided for in the first, third, fourth or fifth paragraph of section 106 relating to the final cover of a construction or demolition waste landfill;
- (42) to comply with the prohibition to raise the ground surface provided for in the second paragraph of section 106;
- (43) to comply with the conditions provided for in the first paragraph of section 117 relating to the cover of residual materials deposited in a remote landfill;
- (44) to comply with the landfilling conditions provided for in section 118 relating to the sludge referred to therein;
- (45) to comply, as the case may be, with the conditions provided for in the first or second paragraph of section 120 in the case of closure or non-use of a remote landfill;
- (46) to provide an incineration facility referred to in the first paragraph of section 124 with a handling area or pit complying with the first or second paragraph of that section or clean the handling area in accordance with the third paragraph of that section;

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- (47) to comply with the conditions provided for in the fourth paragraph of section 124 relating to storage or parking outside an incineration facility;
 - (48) (paragraph revoked);
 - (49) (paragraph revoked);
 - (50) (paragraph revoked);
 - (51) (paragraph revoked);
- (52) to comply with the conditions provided for in the first paragraph of section 138 relating to the loading and unloading of residual materials at a transfer station, the stockpiling or parking outside such a station;
- (53) to comply with the conditions provided for in the second paragraph of section 138 where residual materials transfer activities cease for a period of more than 12 hours;
- (54) to comply with the maximum volumes of residual materials that may be stored in a transfer station in the cases and on the conditions provided for in section 139.3;
- (55) to obtain a guarantee the amount of which is established by section 140 in the cases and on the conditions provided for therein;
- (56) to send renewal of the guarantee or another guarantee to the Minister in the cases referred to in section 143 according to the time limits and conditions provided for in that section;
- (57) to comply with the conditions provided for in the second paragraph of section 159 relating to the height of the residual materials layers;
- (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 section.

O.C. 666-2013, s. 3; O.C. 868-2020, s. 51; O.C. 1342-2024, s. 2.

- **149.4.** A monetary administrative penalty of \$750 in the case of a natural person or \$3,500 in other cases may be imposed on any person who fails
- (1) to comply with the conditions provided for in the first paragraph of section 9 relating to the landfilling of fly ash or residue that contains fly ash;
- (2) to site an engineered landfill on land that complies with the conditions, in particular the siting conditions, prescribed by section 20, the first paragraph of section 21 or section 22;
- (3) to ensure that the excavation carried out in a zone referred to in the second paragraph of section 21 complies with the conditions provided for therein;
- (4) to comply with the conditions provided for in section 23 relating to the liner system referred to therein or at groundwater level;
- (5) to comply with the conditions provided for in section 24 regarding the siting of an engineered landfill in a quarry or a mine;
- (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;

- (6) to provide an engineered landfill with a collection system complying with the first or third paragraph of section 25 or any other system in the case and on the conditions provided for in the second paragraph of that section;
- (7) to provide an engineered landfill referred to in section 26 with a second collection system complying with that section;
- (8) to comply with the conditions on design or the installation of leachate collection systems provided for in section 27:
- (9) to ensure that every component of a system referred to in the first paragraph of section 28 is leakproof and that the system is adequately protected in accordance with that section;
- (10) to provide an engineered landfill referred to in the first or second paragraph of section 32 with a biogas collection system complying with that section;
- (11) to remove biogas collected in the landfills referred to in the second paragraph of section 32 using the equipment complying with the third or fourth paragraph of that section;
- (12) to comply with the conditions provided for in the first or second paragraph of section 34 relating to the materials or the installation of the systems referred to in that section;
- (13) to have verified the materials and equipment referred to in section 35 in accordance with that section;
- (14) to have the work referred to in the first paragraph of section 36 supervised by independent experts in accordance with that section;
- (15) to comply with the conditions provided for in the fourth or fifth paragraph of section 41 relating to the cover or landfilling of the residual materials referred to therein;
- (16) to comply with the conditions provided for in the sixth paragraph of section 42 relating to the stockpiling in an engineered landfill of the contaminated soils or other residual materials referred to therein;
- (17) to maintain at all times in proper working order the systems referred to in section 44 or to control, maintain or clean those systems in accordance with that section;
- (18) to ensure that the systems referred to in section 44 work as to guarantee compliance with the requirements of section 27;
- (19) to comply with the terms provided for in the first, second or third paragraph of section 61 regarding the operation of the systems and equipment referred to therein;
- (20) to ensure that the concentration of nitrogen or oxygen prescribed by the first paragraph of section 62 are met in the cases and on the conditions referred to therein;
- (21) to comply with the conditions provided for in the third paragraph of section 62 relating to the halting of the biogas pumping system referred to therein;
- (22) to take or have taken or have analyzed the samples prescribed by section 63 according to the frequency and conditions provided for in the first, second, third, fourth and fifth paragraphs of that section;
- (23) to measure the flow of the leachate or the flow of the discharges referred to in the sixth paragraph of section 63, on the conditions referred to therein;
- (24) to leak test or have leak tested the pipes or components referred to in the first or second paragraph of section 64 according to the frequency and conditions provided for therein;

- (25) to install the required number of wells or networks of observation wells prescribed by section 65 in the cases and on the conditions provided for therein;
- (26) to take or have taken or have analyzed the samples prescribed by the first paragraph of section 66 according to the frequency and conditions provided for in the first, third, or, in the case provided for therein, the fifth paragraph of that section;
- (27) to measure or have measured the concentration of methane at the frequency and on the conditions provided for in section 67;
- (28) to measure or have measured the concentration of methane at the frequencies and on the conditions provided for in subparagraph 2 or 3 of the first paragraph of section 68 in the cases referred to therein;
- (29) to continuously measure the destruction temperature or the flow rate of the biogas referred to in the first or second paragraph of section 68 or to verify the destruction efficiency for the organic compounds other than methane in the cases and on the conditions provided for in the second paragraph of that section;
- (30) to permanently close a landfill in the cases and according to the conditions provided for in section 80;
- (31) to cover as soon as deposited the residual materials referred to in paragraph 2 of section 90 or the second paragraph of section 99 or 117 with other materials or soils in the cases provided for in those sections;
- (32) to cover as soon as deposited bituminous coated materials referred to in subparagraph 2 of the second paragraph of section 105 with other materials;
- (33) to provide a construction or demolition waste landfill with a system referred to in section 107 and to put in operation such system on the date provided for in the second paragraph of that section;
- (34) to comply with the conditions provided for in section 108 relating to the final profile of a filled construction or demolition waste landfill;
- (35) to comply with the conditions provided for in section 119 relating to the final cover of a remote landfill;
- (36) to comply with the conditions provided for in the first paragraph of section 125 relating to the layout of an incineration facility referred to in that section;
 - (37) (paragraph revoked).

O.C. 666-2013, s. 3; O.C. 868-2020, s. 52.

- **149.5.** 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
- (1) landfills the residual materials referred to in the first paragraph of section 6 elsewhere that on a landfill authorized as provided for in that section;
- (2) does not comply with the conditions and restrictions for siting provided for in section 13, 14, 15 or 16 relating to a landfill;
 - (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;

- (3) fails to send to the Minister the information provided for in the second paragraph of section 71 in the case provided for therein;
- (4) establishes a trench landfill in a territory other than those provided for in section 87 or does not comply with the conditions provided for in section 86 regarding the establishment of such landfill in one of the territories;
- (5) does not comply with the conditions provided for in section 88 relating to the siting of a trench landfill or the lowering of the groundwater level;
- (6) does not comply with the conditions permitting the establishment of a northern landfill provided for in section 94 or the conditions relating to the siting of such landfill provided for in section 95;
- (7) does not comply with the conditions provided for in the first paragraph of section 97 relating to the bottom of the disposal areas of a northern landfill or the lowering of the groundwater level;
 - (8) (paragraph revoked);
- (9) does not comply with the conditions provided for in the second paragraph of section 104 relating to the siting of a construction or demolition waste landfill;
- (10) establishes a remote landfill in a territory other than those provided for in section 112 or does not comply with the conditions provided for in section 111 or 114 regard the establishment or siting of such landfill in one of the territories;
 - (11) receives, in a remote landfill, residual materials prohibited pursuant to section 113;
- (12) does not comply with the conditions provided for in section 116 relating to the bottom of the disposal areas of a remote landfill or the lowering of the groundwater level;
- (13) operates a transfer station referred to in the first paragraph of section 139.1 while unauthorized to do so pursuant to that section;
- (14) does not comply with the restriction provided for in the fourth paragraph of section 139.2 regarding the number of low capacity transfer stations that may be established in a territory referred to therein;
- (15) establishes or enlarges a landfill referred to in section 145 without complying with the conditions provided for therein;
- (16) does not comply with the conditions provided for in the second, third or fifth paragraph of section 161 relating to the acceptance for landfilling in the sites referred to therein of residual materials or materials referred to therein.

O.C. 666-2013, s. 3; O.C. 868-2020, s. 53; O.C. 1463-2022, s. 7.

- **149.6.** A monetary administrative penalty of \$1,500 in the case of a natural person or \$7,500 in other cases may be imposed on any person who
- (1) disposes in a landfill referred to in section 4 materials, objects or substances referred to in any of paragraphs 1 or 3 to 12 of that section;
- (2) landfills residual materials listed in section 8 in a place other than a landfill, in contravention of section 8;
- (3) burns or allows to be burned residual materials in an engineered landfill, in contravention of section 47;

- (4) batch discharges of leachate or water, in contravention of the third paragraph of section 53;
- (5) dilutes, before their discharge into the environment, leachate or water referred to in section 55, in contravention of section 55;
 - (6) establishes or enlarges a construction or demolition waste landfill, in contravention of section 102;
- (7) disposes in a construction or demolition waste landfill materials other than the waste within the meaning of section 101, in contravention of section 103;
 - (8) burns or allows to be burned residual materials in a remote landfill, in contravention of section 115;
- (9) disposes in an incineration facility referred to in the first paragraph of section 123 materials, objects or substances listed in section 4;
 - (10) accepts in a transfer station materials other than those allowed pursuant to section 137;
- (11) accepts residual materials after the date provided for in the first paragraph of section 159 for the disposal areas referred to in that section;
- (12) fails to permanently close a landfill referred to in the fourth paragraph of section 161, or the area or trench of such landfill, where it is prescribed to do so by that paragraph.

O.C. 666-2013, s. 3; O.C. 868-2020, s. 54.

- **149.7.** A monetary administrative penalty of \$2,000 in the case of a natural person or \$10,000 in other cases may be imposed on any person who
- (1) disposes, in a landfill referred to in section 4, of hazardous materials or products resulting from the processing of such materials by a stabilization, fixation or solidification process, in contravention of paragraph 2 of that section;
- (2) fails to take the measures prescribed by the first paragraph of section 48 to minimize the release of odours that cause odour nuisances beyond the limits of an engineered landfill;
- (3) emits dust visible in the atmosphere more than 2 m from the emission source, in contravention of the first paragraph of section 48;
- (4) discharges into the environment leachate and water referred to in the first paragraph of section 53 that do not comply with the limit values prescribed therein or those determined by the Minister pursuant to the second paragraph of that section;
- (5) fails to ensure that the quality of the surface water referred to in the second paragraph of section 54 is not deteriorated in the case provided for therein;
- (6) fails to ensure that the groundwater referred to in the first paragraph of section 57 complies at the observation wells with the limit values prescribed or those determined by the Minister pursuant to the second paragraph of that section;
- (7) fails to ensure that the quality of the groundwater referred to in the second paragraph of section 58 is not deteriorated in the case provided for therein;
- (8) fail to ensure that the concentration referred to in section 60 or the second paragraph of section 62 complies with the values provided for therein;
 - (9) (paragraph revoked);

(10) (paragraph revoked).

O.C. 666-2013, s. 3; O.C. 868-2020, s. 55.

CHAPTER VII

PENAL SANCTIONS

O.C. 451-2005, c. VII; O.C. 666-2013, s. 4.

150. Every person who contravenes paragraph 1 of section 45, the second paragraph of section 48.1, section 72, 77, 78 or 82 or the third paragraph of section 96 commits an offence and is liable, in the case of a natural person, to a fine of \$1,000 to \$100,000 or, in other cases, to a fine of \$3,000 to \$600,000.

O.C. 451-2005, s. 150; O.C. 451-2011, s. 39; O.C. 666-2013, s. 5; O.C. 868-2020, s. 56.

151. Every person who contravenes section 29 or 33, the second paragraph of section 36 or 39, paragraph 2 of section 45, section 52 or 70, the first or third paragraph of section 71 or section 81 commits an offence and is liable, in the case of a natural person, to a fine of \$2,000 to \$100,000 or, in other cases, to a fine of \$6,000 to \$600,000.

Every person who fails

- (1) to enter in a log the information prescribed by the first paragraph of section 39, the fourth paragraph of section 40.1 or the second paragraph of section 139,
- (2) to enter the results referred to in the fourth paragraph of section 42 or 105 in the annual report provided for in section 52,
- (3) to immediately notify the Minister of the date on which the person begins the process of closing an engineered landfill in accordance with section 80,
 - (4) (subparagraph revoked),

also commits an offence and is liable to the same fines.

O.C. 451-2005, s. 151; O.C. 451-2011, s. 40; O.C. 666-2013, s. 5; O.C. 868-2020, s. 57.

152. Every person who contravenes section 10, 11, 17, 18, 19, 30, 31, 37 or 38, the first or second paragraph of section 40.1, the first or second paragraph of section 41, the first, second, third or fifth paragraph of section 42, section 42.1, 43 or 46, the second paragraph of section 48, section 49, 50, 51 or 56, the second paragraph of section 66, the introduction or subparagraph 1 of the first paragraph section 68, section 69, the first or second paragraph of section 70, section 79, paragraph 1, 3 or 4 of section 90, the first, second, third or fourth paragraph of section 91, section 92, the first or second paragraph of section 96, the second or third paragraph of section 97, section 98, the first or third paragraph of section 99, section 100, subparagraph 1 of the second paragraph or third paragraph of section 105, the first, second, third, fourth or fifth paragraph of section 106, the first paragraph of section 117, section 118, 120, 124, 138, 139.3, 140 or 143, the second paragraph of section 159 or section 164.1 commits an offence and is liable, in the case of a natural person, to a fine of \$2,500 to \$250,000 or, in other cases, to a fine of \$7,500 to \$1,500,000.

Every person who fails

- (1) (subparagraph revoked);
- (2) to periodically make the verifications prescribed by the fourth paragraph of section 42 or 105 at the frequency and on the conditions provided for therein,

(3) to take the measures prescribed by the first paragraph of section 48 to minimize wind dispersal or scattering of residual material referred to therein,

also commits an offence and is liable to the same fines.

O.C. 451-2005, s. 152; O.C. 451-2011, s. 41; O.C. 666-2013, s. 5; O.C. 868-2020, s. 58.

153. Every person who contravenes the first paragraph of section 9, any of sections 20 to 28, 32, 34 or 35, the first paragraph of section 36, the fourth or fifth paragraph of section 41, the sixth paragraph of section 42, section 44 or 61, the first or third paragraph of section 62, section 63, 64 or 65, the first, third or fifth paragraph of section 66, section 67, subparagraph 2 or 3 of the first paragraph or the second paragraph of section 68, paragraph 2 of section 90, the second paragraph of section 99, subparagraph 2 of the second paragraph of section 105, section 107 or 108, the second paragraph of section 117 or section 119 or 125 commits an offence and is liable, in the case of a natural person, to a fine of \$4,000 to \$250,000 or, in other cases, to a fine of \$12,000 to \$1,500,000.

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.

O.C. 451-2005, s. 153; O.C. 666-2013, s. 5; O.C. 868-2020, s. 59.

154. Every person who 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 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, or to both the fine and imprisonment, or, in other cases, to a fine of \$15,000 to \$3,000,000.

O.C. 451-2005, s. 154; O.C. 666-2013, s. 5; O.C. 868-2020, s. 60; O.C. 1463-2022, s. 8.

154.1. Every person who contravenes any of paragraphs 1 or 3 to 12 of section 4, 8 or 47, the third paragraph of section 53, section 55, section 102, 103 or 115, the first paragraph of section 123, section 137, the first paragraph of section 159 or the fourth paragraph of section 161 commits an offence and is liable, in the case of a natural person, to a fine of \$8,000 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, or to both the fine and imprisonment, or, in other cases, to a fine of \$24,000 to \$3,000,000.

O.C. 666-2013, s. 5; O.C. 868-2020, s. 61.

154.2. Every person who contravenes paragraph 2 of section 4, the first or second paragraph of section 53, the second paragraph of section 54, section 57, the second paragraph of section 58, section 60, or the second paragraph of section 62 commits an offence and is liable, in the case of a natural person, to a fine of \$10,000 to \$1,000,000 or, despite article 231 of the Code of Penal Procedure (chapter C-25.1), to a maximum term of imprisonment of 3 years, or to both the fine and imprisonment, or, in other cases, to a fine of \$30,000 to \$6,000,000.

Every person who

- (1) fails to take the measures prescribed by the first paragraph of section 48 to minimize the release of odours that cause odour nuisances beyond the limits of an engineered landfill,
- (2) emits dust visible in the atmosphere more than 2 m from the emission source, in contravention of the first paragraph of section 48,

also commits an an offence and is liable to the same fines.

O.C. 666-2013, s. 5; O.C. 868-2020, s. 62.

154.3. Every person who contravenes any other requirement imposed by this Regulation also commits an offence and is liable, where no other penalty is provided for by this Chapter or the Environment Quality Act (chapter Q-2), to a fine of \$1,000 to \$100,000 in the case of a natural person or, in other cases, to a fine of \$3,000 to \$600,000.

O.C. 666-2013, s. 5.

CHAPTER VIII

TRANSITIONAL, AMENDING AND MISCELLANEOUS

155. (*Revoked*).

O.C. 451-2005, s. 155; O.C. 451-2011, s. 42; O.C. 868-2020, s. 63.

155.1. Sections 64.2 to 64.12 of the Environment Quality Act (chapter Q-2) related to the fixing of prices by the operator of a residual materials disposal facility apply to engineered landfills governed by Division 2 of Chapter II of this Regulation, except engineered landfills reserved exclusively for the use of an industrial, commercial or other establishment.

O.C. 451-2011, s. 43; O.C. 868-2020, s. 64.

156. This Regulation replaces the Regulation respecting solid waste (chapter Q-2, r. 13), except to the extent that Regulation continues to apply as provided in the following provisions.

O.C. 451-2005, s. 156.

- **157.** For a 3-year period beginning on 19 January 2006, the sanitary landfill sites, in-trench disposal sites for solid waste and dry materials disposal sites governed by the Regulation respecting solid waste (chapter Q-2, r. 13) that are in operation on that date continue to be governed by the Regulation respecting solid waste and the certificates of authorization or conformity issued before that date, subject to section 159 and to the following:
- (1) sections 10 to 12 relating to the requirement to accept residual materials apply, with the necessary modifications, to those sanitary landfill sites as of 19 January 2006;
- (2) sections 39 and 40 relating to the log apply, with the necessary modifications, to those sanitary landfill sites and dry materials disposal sites as of 19 January 2006;
- (3) the daily and final coverings of the residual materials deposited in the disposal areas of those sanitary landfill sites may be done using materials different from those prescribed by the Regulation respecting solid waste, provided there is compliance with the requirements of the first paragraph of section 32 and sections 42 and 50, which apply with the necessary modifications; the daily covering of the residual materials must, however, be done in compliance with section 41 as of 19 January 2006;
- (4) section 47 relating to the prohibition on the burning of residual materials applies, with the necessary modifications, to those in-trench disposal sites for solid waste as of 19 January 2006;
- (5) subparagraphs 1 and 2 of the first paragraph and the second paragraph of section 52 relating to the annual report apply, with the necessary modifications, to those sanitary landfill sites and dry materials disposal sites as of 19 January 2006;
- (6) sections 80 to 82 relating to site closure apply, with the necessary modifications, to those sanitary landfill sites, in-trench disposal sites for solid waste and dry materials disposal sites as of 19 January 2006;

- (7) as of 19 January 2006, only construction or demolition waste within the meaning of section 101 may be landfilled in those dry materials disposal sites; in addition, the prohibition on enlargement set out in section 102 applies to those dry materials disposal sites as of 19 January 2006, except for the cases provided for in the second paragraph of that section. The covering of the residual materials deposited in dry materials disposal areas may be done using materials different from those prescribed by the Regulation respecting solid waste, provided there is compliance with the requirements of the second and third paragraphs of section 105 and sections 106 and 107, as the case may be, which apply with the necessary modifications;
- (8) as of 19 January 2006, an enlargement of a sanitary landfill site or in-trench disposal site for solid waste is considered to be a project to establish an engineered landfill or trench landfill governed by this Regulation. For the purposes of this paragraph, enlargement includes any alteration that results in an increase in landfill capacity;
- (9) the provisions of Chapter V relating to the provision of a financial guarantee that apply to engineered landfills, trench landfills and construction or demolition waste landfills apply respectively, with the necessary modifications, to those sanitary landfill sites, in-trench disposal sites for solid waste and dry materials disposal sites as of the sixth month following 19 January 2006.

O.C. 451-2005, s. 157; O.C. 451-2011, s. 44.

- **158.** Not later than at the end of the thirtieth month following 19 January 2006, the operator of a site referred to in section 157 must send a notice to the Minister informing the Minister that the operator intends to
- (1) permanently cease the operation of the site on or before the expiry date of the 3-year period provided for in that section; or
 - (2) continue to operate the site after the 3-year period.

If the operator chooses to continue the operations, the notice must be sent with a report of an independent expert establishing that the disposal areas or trenches in which residual materials will be landfilled after the expiry date of the three-year period comply with the provisions of this Regulation that apply to those areas or trenches under section 161. The report must contain certification by the expert of that compliance.

O.C. 451-2005, s. 158.

159. In sanitary landfill sites in operation on the date of coming into force of this Regulation, disposal areas that do not meet the containment protection requirements of section 20, 21, 22 or 24 and that received a final cover before that date may in no case receive other residual materials after that date.

As for disposal areas that meet the containment protection requirements of section 20, 21, 22 or 24 but do not meet the other requirements of Division 2 of Chapter II, and disposal areas that do not meet those containment protection requirements and have not received a final cover before 19 January 2006, the height of the residual materials layers relative to the surrounding landform may not exceed the following limits:

- (1) the height of the outboard sideslopes, which consist of the above-grade layers of residual materials, may not exceed 4 m, that height being measured from the ground surface at the perimeter of the disposal area, excluding the final cover. Any raising of the ground surface at that perimeter is prohibited;
- (2) the disposal area must in addition be graded so that the final profile of the residual materials layers, excluding the final cover, is as follows:
 - (a) the inclination of the sideslopes referred to above must not exceed 30%; and
 - (b) the inclination of the cover deck from the crest to the sideslopes must not exceed
 - 5%, if the ground slope at the perimeter of the disposal area is equal to or lower than that percentage; or

— the percentage of the ground slope at the perimeter of the disposal area, if that slope is greater than 5%.

Disposal areas that comply with all of the provisions of Division 2 of Chapter II are, with respect to the height of the layers of residual materials, exempt from the limits set out in the second paragraph and are governed by the landscape integration rule set out in section 17.

O.C. 451-2005, s. 159.

- **160.** The following continue to be governed by the Regulation respecting solid waste (chapter Q-2, r. 13) and by their certificates of authorization or conformity, as long as they remain closed:
 - (1) disposal sites that were permanently closed before 19 January 2006;
- (2) disposal areas in the disposal sites in operation on the date of coming into force of this Regulation that received a final cover before that date or, pursuant to section 157, receive residual materials in the 3-year period following that date and receive a final cover at the latest on the expiry of that period.

O.C. 451-2005, s. 160.

161. As of the expiry date of the 3-year period following 19 January 2006, and subject to the second, third and fourth paragraphs, the sanitary landfill sites, in-trench disposal sites for solid waste and dry materials disposal sites referred to in section 157 are, except with respect to siting standards, governed by the provisions of this Regulation that apply respectively to engineered landfills, trench landfills and construction or demolition waste landfills as regards the acceptance of residual materials and the conditions for the development, operation, closure and post-closure management of the disposal areas or trenches in which residual materials will be landfilled as of the date mentioned above. The first paragraph of section 18 requiring the creation of a buffer zone does not apply to leachate or water treatment systems, gas pumping devices or biogas removal facilities in existence on 19 January 2006. In addition, in the case of the landfill used exclusively by the waste water treatment plant of Ville de Montréal in operation on that date, the minimum width of the buffer zone prescribed by the first paragraph of section 18 is reduced to 10 m around the landfill, including any future enlargement, so long as only the ash from the sludge incinerator and the sands generated by the operation of that station are landfilled.

In addition, after the expiry of the 3-year period following 19 January 2006, residual materials may be accepted in in-trench disposal sites for solid waste existing on 1 May 2000 only if the sites are located in a territory described in section 87 which at all times meets the requirements of subparagraphs 2 and 4 of that section, and the landfilling is done in trenches that meet the siting standards prescribed by section 88.

Similarly, after the expiry of the 3-year period mentioned above, construction or demolition waste may be accepted at dry materials disposal sites existing on 1 May 2000 only if the sites meet the requirements of section 103 and the landfilling is done in disposal areas that meet the siting standards prescribed by section 104. The siting standards do not apply to disposal areas if their siting complies with the provisions of this Regulation that apply to containment and the collection of leachate in engineered landfills.

A landfill referred to in the second or third paragraph, or a disposal area or a trench in such a landfill, must be permanently closed as soon as residual materials may no longer be accepted owing to non-compliance with those paragraphs.

Despite the provisions of the second and fourth paragraphs of this section, residual materials generated in the territory of Ville de Lebel-sur-Quévillon remain accepted in the in-trench disposal site operated by the municipality before 19 January 2009 and located in the territory of Ville de Senneterre, up to the landfill capacity authorized on that date so long as it is sited and operated in accordance with the provisions prescribed by sections 88 to 93.

O.C. 451-2005, s. 161; O.C. 82-2009, s. 1; O.C. 451-2011, s. 45.

162. As of 19 January 2006, waste disposal sites in the North and outfitters' waste-pits governed by the Regulation respecting solid waste (chapter Q-2, r. 13) that are in operation on that date are governed by the provisions of this Regulation that apply respectively to northern landfills and remote landfills.

O.C. 451-2005, s. 162.

- **163.** For a 3-year period beginning on 19 January 2006, the incinerators governed by the Regulation respecting solid waste (chapter Q-2, r. 13) that are in operation on that date continue to be governed by that Regulation, the Regulation respecting the quality of the atmosphere (chapter Q-2, r. 38) and the certificates of authorization or conformity issued before that date, subject to the following:
- (1) the provisions of section 128 concerning the application of section 39 and of subparagraph 1 of the first paragraph and the second paragraph of section 52 apply, with the necessary modifications, to those incinerators as of 19 January 2006;
- (2) the provisions of section 128 concerning the application of sections 72 to 79 apply to those incinerators as of the expiry of the sixth month following 19 January 2006;
- (3) paragraphs 4 and 5 of section 130 apply to those incinerators as of the expiry of the twelfth month following 19 January 2006;
- (4) the provisions of Chapter V concerning the provision of a financial guarantee that apply to incineration facilities governed by Chapter III apply to those incinerators, with the necessary modifications, as of the sixth month following 19 January 2006;
- (5) as of 19 January 2006, any increase in the incinerator capacity of those incinerators is governed by the provisions of this Regulation that apply to incineration facilities governed by Chapter III.

As of the expiry date of the 3-year period following 19 January 2006, the incinerators referred to in the first paragraph are governed by the provisions of this Regulation that apply to incineration facilities governed by Chapter III.

O.C. 451-2005, s. 163.

164. Residual materials disposal sites not governed by the Regulation respecting solid waste (chapter Q-2, r. 13) that were permanently closed before 19 January 2006 are exempt from the application of this Regulation as long as they remain closed.

If the disposal sites referred to in the first paragraph are in operation on 19 January 2006, they are also exempt from the application of the Regulation but only for the 3-year period following that date, except for any enlargement of the landfills or increase in incinerator capacity, which is governed by the third paragraph; enlargement includes any alteration that results in an increase in landfill capacity.

On the expiry of the 3-year period, those disposal sites are, except with respect to the siting standards, governed in the case of landfills by Chapter II as regards acceptance of residual materials and the conditions for the development, operation, closure and post-closure management of the disposal areas or trenches in which residual materials will be landfilled after the expiry of the 3-year period, and in the case of incinerators that receive residual materials referred to in section 121, by Chapter III.

In addition, section 158 applies, with the necessary modifications, to the operator of a landfill referred to in this section.

O.C. 451-2005, s. 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.

O.C. 868-2020, s. 65.

165. Sections 157, 163 and 164 may not operate to prevent this Regulation from applying to an existing disposal site within a time period shorter than the time period provided for in those sections if the operator chooses to bring the site into compliance with those provisions earlier than required.

O.C. 451-2005, s. 165.

166. Despite sections 157 to 165, the limit values set out in section 53 apply to the leachate or water from a disposal site to which those sections apply as soon as it is conveyed for treatment to a facility where the leachate or water from disposal areas governed by this Regulation is also treated.

The same applies to the biogas removal requirements in the third paragraph of section 32 that apply to biogas from a disposal site to which those sections apply as soon as it is conveyed for removal to a facility where biogas from disposal areas governed by this Regulation is also removed.

O.C. 451-2005, s. 166.

167. As of 19 January 2006, the mixed waste transfer stations governed by the Regulation respecting solid waste (chapter Q-2, r. 13) that are in operation on that date are governed by the provisions of Chapter IV that apply to residual materials transfer stations.

The operators of those facilities have a 6-month period to provide a financial guarantee that meets the requirements of sections 140 to 144.

O.C. 451-2005, s. 167.

168. (*Revoked*).

O.C. 451-2005, s. 168; O.C. 666-2013, s. 6.

169. (Amendment integrated into c. Q-2, r. 1.001, s. 13).

O.C. 451-2005, s. 169.

170. (Amendment integrated into c. *Q*-2, r. 2, ss. 47 and 48).

O.C. 451-2005, s. 170.

171. (Amendment integrated into c. Q-2, r. 3, s. 7).

O.C. 451-2005, s. 171.

172. (Amendment integrated into c. Q-2, r. 3, s. 15).

O.C. 451-2005, s. 172.

173. (Amendment integrated into c. Q-2, r. 3, s. 16).

O.C. 451-2005, s. 173.

174. (Amendment integrated into c. Q-2, r. 3.001, s. 36).

O.C. 451-2005, s. 174.

175. (Amendment integrated into c. Q-2, r. 3.001, s. 56).

O.C. 451-2005, s. 175.

176. (Amendment integrated into c. Q-2, r. 6.01, s. 1).

O.C. 451-2005, s. 176.

177. (Amendment integrated into c. O-2, r. 9, s. 2).

O.C. 451-2005, s. 177.

178. (Amendment integrated into c. Q-2, r. 12.2, s. 95).

O.C. 451-2005, s. 178.

179. (Amendment integrated into c. Q-2, r. 12.2, s. 101).

O.C. 451-2005, s. 179.

180. (Amendment integrated into c. Q-2, r. 12.2, s. 107).

O.C. 451-2005, s. 180.

181. (Amendment integrated into c. *Q*-2, r. 12.2, Sch. X).

O.C. 451-2005, s. 181.

182. (Amendment integrated into c. Q-2, r. 15.2, s. 2).

O.C. 451-2005, s. 182.

183. (Amendment integrated into c. Q-2, r. 20, s. 22).

O.C. 451-2005, s. 183.

184. (Amendment integrated into c. Q-2, r. 20, s. 66.1).

O.C. 451-2005, s. 184.

185. (Amendment integrated into c. Q-2, r. 20, s. 67).

O.C. 451-2005, s. 185.

186. This Regulation applies to the immovables in a reserved area or an agricultural zone established under the Act respecting the preservation of agricultural land and agricultural activities (chapter P-41.1).

O.C. 451-2005, s. 186.

187. (Omitted).

O.C. 451-2005, s. 187.

ENVIRONMENT QUALITY — LANDFILLING AND INCINERATION OF RESIDUAL MATERIALS

SCHEDULE I

(Revoked)

O.C. 451-2005, Sch. I; O.C. 868-2020, s. 66.

ENVIRONMENT QUALITY — LANDFILLING AND INCINERATION OF RESIDUAL MATERIALS

SCHEDULE II

(Revoked)

O.C. 451-2005, Sch. II; O.C. 15-2007, s. 79; O.C. 868-2020, s. 66.

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- O.C. 451-2005, 2005 G.O. 2, 1182
- O.C. 15-2007, 2007 G.O. 2, 525
- O.C. 808-2007, 2007 G.O. 2, 2581
- O.C. 441-2008, 2008 G.O. 2, 1331
- O.C. 82-2009, 2009 G.O. 2, 193
- O.C. 451-2011, 2011 G.O. 2, 1084
- O.C. 666-2013, 2013 G.O. 2, 1764
- S.Q. 2016, c. 7, s. 183
- O.C. 488-2017, 2017 G.O. 2, 1429
- S.Q. 2018, c. 23, s. 811
- O.C. 868-2020, 2020 G.O. 2, 2327A
- O.C. 1596-2021, 2022 G.O. 2, 6
- O.C. 1463-2022, 2022 G.O. 2, 3369
- O.C. 1342-2024, 2024 G.O. 2, 3514