

Draft Regulation

Building Act
(chapter B-1.1)

Safety Code — Amendment

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the Regulation to amend the Safety Code, appearing below, may be approved by the Government, with or without amendment, on the expiry of 45 days following this publication.

The draft Regulation replaces Chapter III, Gas, of the Safety Code (chapter B-1.1, r. 3), to update the regulation according to the latest amendments made to the Building Act (chapter B-1.1) with respect to permits.

The draft Regulation also increases the safety level of certain large gas installations, particularly by amending certain requirements respecting the drafting of risk assessment reports and operation permits.

In addition, it provides new requirements in respect of overpressure protection devices on gas tanks and installations intended to use, store or distribute hydrogen.

The draft Regulation should generate costs of about 15.6 million dollars for enterprises for the period included between 2025 and 2029.

Further information on the draft Regulation may be obtained by contacting Boussaad Hamou L'Hadj, engineer, Régie du bâtiment du Québec, 255, boulevard Crémazie Est, 1^{er} étage, bureau 100, Montréal (Québec) H2M 1L5; email: projet.reglement@rbq.gouv.qc.ca.

Any person wishing to comment on the draft Regulation is requested to submit written comments within the 45-day period to Caroline Hardy, Secretary General and Director of Institutional Affairs, Régie du bâtiment du Québec, 800, place D'Youville, 16^e étage, Québec (Québec) G1R 5S3; email: projet.reglement.commentaires@rbq.gouv.qc.ca.

JEAN BOULET
Minister of Labour

Regulation to amend the Safety Code

Building Act
(chapter B-1.1, s. 175, 1st par., 2nd par., 3rd par., subpars. 1, 3, 4, 5, 6 and 7, ss. 176, 176.1, 178, 179, 185, pars. 0.1, 5.1, 5.2, 6.1, 6.4, 22, 24, 33, 36, 37 and 38, and s. 192).

I. The Safety Code (chapter B-1.1, r. 3) is amended by replacing Chapter III by the following:

“CHAPTER III GAS

DIVISION I DEFINITIONS

27. In this Chapter, unless the context indicates otherwise,

“appliance” means a device to convert gas into energy or compress it for fuelling and that includes the components, controls, wiring and piping or tubing that is an integral part of the device; (*appareil*)

“combustion products” means products that result from the combustion of gas in the presence of oxygen in the air, including inert gases, but not excess air; (*produits de combustion*)

“connector” means a factory-fabricated assembly consisting of gas conduit and related fittings designed to convey gaseous fuel from a gas supply piping to the gas inlet of an appliance; (*tuyau de raccordement*)

“container” means a cylinder, a tank or any other container used to store gas; (*réipient*)

“cylinder” means a container designed and manufactured according to the specifications of Transport Canada or the United States Department of Transportation (DOT) for the storage and transportation of gas; (*bouteille*)

“enclosure” means a secondary structure or room within or attached to a structure in which an appliance is installed; (*enceinte*)

“filling plant” means an installation intended for the distribution, storage or transfer of propane that has a fixed, unconnected, portable or in transit storage capacity of more than 5,000 US gal (18,927 litres) in water capacity, or a fixed or mobile transfer unit. A mobile transfer unit is a device not permanently fixed or that may be used in a manner not permanently fixed and used for the transfer of propane from one container to another; (*station de remplissage*)

“gas” means natural gas, biomethane, manufactured gas, and mixtures of propane gas and air, propane, propylene, butanes (normal butane or isobutane) and butylenes, and a type or a mixture of those gases, as well as hydrogen; (*gaz*)

“gas installation” means a fixed, mobile or portable installation, including its immediate piping or tubing, intended to use, store or distribute gas, and a container mounted on a vehicle and intended to store or distribute gas, including gas transfer, when the vehicle is stationary; (*installation de gaz*)

“hose” means a factory-fabricated flexible hose assembly and related fittings designed to convey gaseous or liquid fuel; (*tuyau souple*)

“liquefied petroleum gas” means propane, propylene, butanes (normal butane or isobutane) and butylenes, and a type or a mixture of those gases; (*gaz de pétrole liquéfié*)

“natural gas” means natural gas, biomethane, mixtures of propane gas and air, and a type or a mixture consisting mainly of those gases; (*gaz naturel*)

“overpressure protection device” means an automatic device, also known as relief or safety valve and relief device, that acts to reduce, restrict or discharge the gas of a system under abnormal conditions to prevent gas pressure from exceeding the rated pressure in that system; (*dispositif de protection contre la surpression*)

“point of transfer” means the dispensing hose inlet connection; (*point de transvasement*)

“propane” means a liquefied petroleum gas consisting mainly of propane and, in a smaller proportion, of propylene, butanes, butylenes, and a type or a mixture consisting mainly of those gases; (*propane*)

“refill centre” means a location, including any building, in which gas is distributed in containers and where gas storage containers, piping, tubing and associated equipment, including transfer, cylinder weighing or measuring and distribution devices, are found; (*centre de ravitaillement*)

“safety limit control” means a safety device intended to prevent an unsafe condition of temperature, pressure or liquid level; (*limiteur de sécurité*)

“safety shut-off valve” means a valve that automatically shuts off the supply of gas when de-energized by the loss of actuating medium or by the stop command of a combustion safety control or safety limit control; (*robinet d’arrêt de sûreté*)

“structure” means the entire building in which an appliance or equipment is installed; (*structure*)

“tank” means a container designed and manufactured in accordance with CSA Standard B51, Boiler, pressure vessel, and pressure piping code, published by CSA Group, for storing gas; (*réservoir*)

“venting system” means a system for the removal of flue gases to the outdoors by means of a chimney, vent connector, vent, or a natural or mechanical exhaust system. (*système d’évacuation*)

DIVISION II

SCOPE

28. This Chapter applies to every gas installation subject to the Act, including its surroundings, and used to produce energy, heat or light from a gas.

It does not apply to installations intended to

- (1) transport gas using a container mounted on a vehicle as long as the container is not used for storage at the point of use;
- (2) use gas to ensure the motive power of a vehicle;
- (3) use gas in a refinery, regardless of its origin, as raw material for the petroleum refining process or for the process of a petrochemical plant;
- (4) store, in a refinery, gas resulting from the refining of petroleum;
- (5) store or use gas on boats;
- (6) use gas as a refrigerant;
- (7) store gas in underground natural formations or hollows in the ground, including the pipeline systems to transport gas on the site and associated facilities such as pumps, compressors, pumping stations and surface reservoirs intended to inject, withdraw or transport gas to the connection to the intraprovincial gas pipeline systems; and
- (8) use or store on the premises gas collected from a landfill or gas from an anaerobic digester.

The use of propane as propellant in spray cans, and the storage, distribution or use of butane in containers having a capacity of 175 g (6.2 oz) or less are also exempt from the application of this Chapter.

DIVISION III REFERENCES

29. In this Chapter, a reference to the standards CSA B108.1, Compressed natural gas fuelling stations installation code, CSA B108.2, Liquefied natural gas refuelling stations installation code, CSA B149.1, Natural gas and propane installation code, CSA B149.2, Propane storage and handling code, CSA B149.3, Code for the field approval of fuel-burning appliances and equipment, CSA Z276, Liquefied Natural Gas (LNG) - Production, Storage and Handling, CSA Z662, Oil and gas pipeline systems, or BNQ 1784-000, Canadian Hydrogen Installation Code, published by CSA Group or the Bureau de normalisation du Québec, is a reference to the standard referred to in Chapter II of the Construction Code (chapter B-1.1, r. 2) made under the Building Act (chapter B-1.1).

29.1. A reference in this Chapter to a standard or a code is a reference to that standard or code as adopted by the chapter of the Construction Code (chapter B-1.1, r. 2) or Safety Code (chapter B-1.1, r. 3) or other regulation made under the Building Act (chapter B-1.1) that refers to it.

29.2. In this Chapter, a reference to a standard refers to the most recent edition and includes any subsequent amendments made to that edition.

The amendments and editions published after (*insert the date of coming into force of this Regulation*) apply to gas installations only from the last day of the sixth month following the date of publication of the French and English versions of the texts. Where those versions are not published at the same time, the time limit runs from the date of publication of the last version.

DIVISION IV GENERAL

30. A gas installation must be used for the purposes for which it was designed. It must be used and serviced according to the manufacturer's instructions.

31. A gas installation must be kept in safe and proper working order.

It must be used and serviced so as not to constitute fire, explosion or intoxication hazards.

32. The vicinity of a gas installation must not be modified in such manner that the gas installation does not comply with Chapter II of the Construction Code (chapter B-1.1, r. 2).

33. The necessary corrections must be made to a gas installation if, following intensive use, wear, aging or modifications, the operating conditions have become dangerous.

34. A gas leak may not be detected by means of a match, candle, flame or any other source of ignition.

35. When gas leaks are detected, it is prohibited to use a light, including a flashlight, unless it is certified as explosion-proof for use in a hazardous location of Class 1, Group II A type, in accordance with Subrule 18-050(2) of the Canadian Electrical Code, as adopted by Chapter V of the Construction Code (chapter B-1.1, r. 2).

36. An electric switch located either in the room or adjacent to an area of gas leakage must not be operated unless it is certified as explosion-proof equipment for use in a hazardous location of Class 1, Group II A type, in accordance with Subrule 18-050(2) of the Canadian Electrical Code, as adopted by Chapter V of the Construction Code (chapter B-1.1, r. 2).

37. A safety shut-off valve, a safety limit control, a relief valve or an overpressure protection device must not be isolated, by-passed or made inoperative.

38. Where there are signs of wear or deterioration or where other damage shows in the reinforcement material or connectors of a hose or hose connector, the hose must be replaced immediately.

38.1. A dedicated parking area must be provided for each vehicle equipped with a gas container and intended for the transportation, storage or distribution of gas, including transportation in transit, on the site of an installation independent of a building and intended to store or distribute gas with gas transfer.

The parking area must be situated in a location different from the location where gas is transferred and be at least 3 metres from fixed tanks, without obstructing traffic routes.

§1. Register

38.2. Subject to the second paragraph, the owner of an installation independent of a building and intended to store or distribute gas with gas transfer must keep in a register or attach to it, as the case may be, the following related information and documents:

(1) the verification reports provided for in section 38.3;

(2) the risk assessment report where required under section 85;

(3) as regards any tank of the installation,

(a) the date and the results of the inspection or periodic visual examination where required under section 63.1, 71.3, 72.2 or 73.4;

(b) the Canadian registration number and serial number of the tank;

(c) the date of the maintenance, rebuilding and recertification or replacement of the overpressure protection device;

(d) the serial number or, where applicable, the model number of the overpressure protection device; and

(e) the date of manufacture indicated on the overpressure protection device;

(4) any remedial notice or order issued by the Board under the Building Act (chapter B-1.1);

(5) any other information or any other relevant document related to the operation, maintenance or emergency measures of the installation, including operations and maintenance procedures where required under section 52, and the environmental emergency plan required under the Environmental Emergency Regulations (SOR/2019-51);

(6) the identification of any safety device having interrupted the operation of the installation and the measures taken to remedy the event;

(7) the breakdowns and accidents that occurred while operating the installation;

(8) the history and description of the maintenance, repairs, replacements, including technical bulletins issued by the manufacturer, and alterations made on the site or installation.

The owner of a propane refill centre or a compressed natural gas refill centre of less than 4.5 metric tons in total capacity is required to keep a register or append thereto, as the case may be, the documents specified in subparagraphs 1, 3 and 5 to 8 of the first paragraph only.

For subparagraphs 6 to 8 of the first paragraph, the dates and the name of the persons who identified and corrected the event must appear in the register.

The register must be kept on the premises where the installation is operated, as long as the installation is not dismantled. The owner must take the necessary measures to prevent the loss or destruction of the register. The register must be available for consultation by the Board.

§2. Annual verification

38.3. The owner of an installation independent of a building and intended to store or distribute gas with gas transfer must have it verified each year by an engineer, by the holder of an appropriate certificate of qualification issued under the Act respecting workforce vocational training and qualification (chapter F-5), or by a contractor holding an appropriate licence in the field of gas issued by the Board.

38.4. Where the engineer, the holder of a certificate of qualification or the contractor in charge of the verification notices the presence of hazardous conditions, the engineer, certificate holder or contractor must so inform immediately in writing the owner, the Board and the regional county municipality or local municipality.

38.5. The verification report establishing the safety of the installation must be drafted objectively and impartially and must contain the following information and documents:

(1) the address of the place where the installation is located;

(2) the name, signature and contact information of the person having carried out the inspection and a copy of the person's certificate of qualification, contractor's licence or membership number of the Ordre des ingénieurs du Québec;

(3) the scope of the annual verification and testing made on the safety devices or components by the person who has carried out the verification and tests;

(4) a description of the corrective work required to ensure that the installation is safe, and the schedule recommended for its implementation;

(5) a summary of the report confirming that the installation is not in a dangerous condition and, where applicable, that recommendations have been submitted to the owner concerning ways to correct the defects observed that may contribute to the development of a dangerous condition;

(6) appendices containing photographs, drawings and any other relevant information obtained during the verification, to complete the report.

The verification report must also include the signature of the owner of the installation certifying having taken cognizance of the report and, where applicable, of the recommendations contained in the report.

DIVISION V GAS INSTALLATION

39. An appliance must be serviced in accordance with the manufacturer's instructions.

40. An appliance may not be used if damaged by fire, water or an explosion unless it has been verified by a person holding the appropriate certificate of qualification issued under the Act respecting workforce vocational training and qualification (chapter F-5). The holder of the certificate of qualification must ensure that the appliance is still in a condition of safe operation.

Proof of the verification must be given in writing to the owner and the owner must keep it for consultation by the board for as long as the appliance is used.

41. No appliance may be used in a room where there are corrosive vapours, unless approved for that type of location in accordance with Division V of Chapter II of the Construction Code (chapter B-1.1, r. 2).

42. Appliance clearance must allow the appliance to be serviced without moving it or modifying the building that shelters it or modifying neighbouring equipment, in accordance with the manufacturer's instructions and Chapter II of the Construction Code (chapter B-1.1, r. 2).

43. An appliance may be used only if it complies with Division V of Chapter II of the Construction Code (chapter B-1.1, r. 2).

44. Where a part of an appliance must be replaced, the replacement part must have the same operational characteristics as the original part.

45. In an enclosure or a structure housing an appliance, the air supply, that is, the combustion air, including excess air, the dilution air of combustion gas and the ventilation air, must comply with Chapter II of the Construction Code (chapter B-1.1, r. 2) to ensure complete combustion and total venting of combustion products.

46. The air supply of an appliance must be free of any encumbrance.

47. The surface temperature of neighbouring combustible materials of an appliance and its venting system must not exceed 90 °C.

For the purposes of this section,

“combustible” means a material that does not meet the requirements of CAN/ULC Standard S114, Standard Method of Test for Determination of Non-Combustibility in Building Materials, published by the Underwriters Laboratories of Canada.

48. The venting system of an appliance must ensure total venting of combustion products to the outdoors.

49. Where no appliance is connected to a piping outlet, the outlet must be tightly plugged or capped.

50. Vehicles equipped with a propane appliance must not be parked or stored inside a building, except if

(1) the propane cylinders are removed; or

(2) the propane tanks have contents in propane of not more than 50% of the maximum filling capacity allowed and all shut-off valves are closed.

DIVISION VI USE, STORAGE AND DISTRIBUTION OF PROPANE IN CONTAINERS

51. Propane in containers must be used, stored, transferred and distributed in accordance with CSA Standard B149.2.

52. An installation independent of a building and intended to transfer, store or distribute propane must be operated and maintained in accordance with Clause 7.22 of CSA Standard B149.2.

For the purposes of the operations and maintenance procedures prescribed by Clause 7.22 of CSA Standard B149.2, the owner of the installation must take into account Clauses 5, 6.1, 6.4, 7.1, 7.3, 8.1 and 8.2 of CSA Standard Z767, Process safety management, published by CSA Group.

53. For the purposes of Clause 6.5 of CSA Standard B149.2, all stored or unconnected cylinders, whether filled or empty, are considered as filled at the maximum filling capacity allowed.

53.1. Where a propane cylinder is disconnected from the filling piping, its mass must be verified using a weigh scale on which a tag is affixed certifying that the weigh scale is approved and certified as meeting the requirements of the Weights and Measures Act (R.S.C. 1985, c. W-6) and the Weights and Measures Regulations (C.R.C., c. 1605). If the maximum filling rate permitted is exceeded, the excess must be removed in a safe manner.

54. Propane that is used, stored or distributed must emit a characteristic odour in accordance with CAN/CGSB Standard 3.14, Propane for Fuel Purposes, published by the Canadian General Standards Board.

54.1. The transfer of propane from the container of a vehicle to a cylinder of less than 100 lb is prohibited.

55. Propane may not be transferred from the container of a vehicle to a cylinder of 100 lb or more or to a tank in a location other than the location where they are used.

56. The transfer of propane from the container of a vehicle to the container of another vehicle is prohibited.

57. The tank of the propane supply system of a road vehicle may be filled only if it bears the appropriate sticker mandatory under the Regulation respecting safety standards for road vehicles (chapter C-24.2, r. 32).

58. Vehicles used for the transportation, storage or distribution of propane and parked at a location other than a location governed by a regulation respecting the transportation of dangerous substances made under the Highway Safety Code (chapter C-24.2) must be parked in accordance with Clauses 8.6 to 8.10 of CSA Standard B149.2.

59. A propane container must be painted.

60. Except in filling plants, propane cylinders must not be stored one stacked over the other.

60.1. It is prohibited to fill a non-refillable or single-use propane cylinder.

60.2. A refillable propane cylinder, in accordance with CSA Standard B339, Cylinders, spheres, and tubes for the transportation of dangerous goods, published by CSA Group, must be filled by the holder of an operation permit.

The holder of the operation permit must ensure that the person filling the cylinder holds the appropriate certificate of qualification issued under the Act respecting workforce vocational training and qualification (chapter F-5).

61. A filling plant must be fenced in accordance with Clause 7.15 of CSA Standard B149.2. Propane must be transferred from a container to another, including those in transit, inside a fenced area.

61.1. A filling plant that does not have a fixed tank must comply with CSA Standard B149.2.

61.2. Only a person holding the appropriate certificate of qualification issued under the Act respecting workforce vocational training and qualification (chapter F-5), a person accompanying that person or a staff member authorized by the owner may be present on the premises of a filling plant.

61.3. A process and instrumentation diagram must be posted in a conspicuous place near all transfer points of the filling plant or the propane refill centre. The diagram shows the piping, controls and instrumentation of the installation and the operations procedures of the plant or centre.

62. Signs bearing the indication or the international symbol “NO SMOKING” must be installed at a conspicuous place in filling plants at every entrance and point of transfer of propane. The letters must be red on a white background or black on a yellow background and be at least 100 mm high. The symbols must have a minimum diameter of 300 mm.

63. Signs must be installed in a conspicuous place on the tank or nearby and at the point of transfer, where propane is transferred more than 3 m from the tank of a propane refill centre, in a way that they can be seen from that point. The signs must bear the following indications:

(1) “NO SMOKING, TURN OFF ALL SOURCES OF IGNITION” in letters at least 50 mm high;

(2) “TRANSPORT CYLINDERS SECURED IN AN UPRIGHT POSITION IN A VENTILATED SPACE” in letters at least 25 mm high;

(3) “IT IS AN OFFENCE TO FILL PROPANE CYLINDERS AND MOTOR FUEL CONTAINERS IN EXCESS OF 80% CAPACITY BY VOLUME” in letters at least 25 mm high;

(4) “NO SMOKING WITHIN 3 METRES, TURN IGNITION OFF BEFORE REFUELLING” in letters at least 25 mm high for a propane distribution location for vehicles.

The international symbols for “NO SMOKING” and “TURN OFF IGNITION”, measuring at least 100 mm in diameter, may be used instead of those expressions. The symbols must be red and black on a white background.

The letters on the signs must be red on a white background or black on a yellow background.

63.1. The overpressure protection device of a connected propane tank must be inspected, serviced, replaced or rebuilt and recertified according to the prescriptions of Annex R of CSA Standard B149.2.

The replacement or rebuilding and recertification of the device and the periodic visual inspections must be carried out at the frequencies indicated in Annex R and calculated as of the date of manufacture indicated on the device.

The date of manufacture of the overpressure protection device may be reproduced to be visible at the filling point.

63.2. The date of recertification or replacement of an overpressure protection device of a connected tank must be verified and be valid at all times before filling the tank.

63.3. A propane cylinder connected to an installation and its relief valve must be inspected and serviced according to Clauses 6.1 and 6.2 of CSA Standard B149.2.

The relief valve must be replaced by a new one every 10 years, as of the date of manufacture indicated on the cylinder.

63.4. The refilling of a propane cylinder connected to an installation is prohibited if the date of requalification of the cylinder is no longer valid.

DIVISION VII TRANSPORTATION OR DISTRIBUTION OF GAS BY PIPELINE

64. Gas distributed by pipeline must emit a characteristic odour in accordance with Clause 4.21 of CSA Standard Z662.

65. A piped gas undertaking must notify all users affected by an interruption in service and ensure the safe restoration of service.

66. An installation intended to transport or distribute gas by pipeline must be operated and serviced in accordance with Chapter 10 and Clauses 10, 12.10 and 15.9 of CSA Standard Z662.

67. Every piped gas transportation or distribution undertaking must keep up to date the plans of its gas transportation and distribution systems, of its storage facilities, as well as of the location of its valves, regulators and other accessories.

68. Every piped gas transportation or distribution undertaking must send to the Board, within 90 days following the beginning of each fiscal year,

(1) its gas leak detection program for the current year; and

(2) its annual program for the maintenance of its transportation systems, gas distribution networks and storage facilities.

69. Every piped gas transportation or distribution undertaking must send to the Board, within 90 days following the end of each fiscal year,

(1) a report on the state of its transportation or distribution system containing the information referred to in Schedule I in the prescribed form; and

(2) a report of findings on leaks and measures taken to correct them.

DIVISION VIII USE, STORAGE AND DISTRIBUTION OF NATURAL GAS IN CONTAINERS

70. The tank of the natural gas supply system of a road vehicle may be filled only if it bears the appropriate sticker mandatory under the Regulation respecting safety standards for road vehicles (chapter C-24.2, r. 32).

70.1. Natural gas distributed, except liquefied natural gas distributed, must emit a characteristic odour in accordance with Clause 4.21 of CSA Standard Z662.

70.2. The transfer of natural gas from the container of a vehicle to the container of another vehicle is prohibited.

§1. Compressed natural gas cylinders

70.3. Where natural gas cylinders are filled, stored and used elsewhere than in a refill centre for vehicles, it must be done in accordance with Clauses 9.2 to 9.5 of Clause 9 of CSA Standard B149.1.

70.4. A natural gas cylinder and its relief valve must be inspected and serviced according to CSA Standard B339, Cylinders, spheres, and tubes for the transportation of dangerous goods.

The relief valve must be rebuilt and recertified or replaced periodically according to CGA Standard S-1.1, Pressure Relief Device Standards-Part 1-Cylinders for Compressed Gases, published by the Compressed Gas Association, as of the date of manufacture indicated on the cylinder.

§2. Natural gas refill centre

71. A liquefied natural gas refill centre must be operated and maintained in accordance with Annex A of CSA Standard B108.2.

71.1. In a refill centre for vehicles, compressed natural gas must not be distributed at a pressure in excess of that provided for in Clause 4.6 of CSA Standard B108.1.

71.2. A process and instrumentation diagram must be posted in a conspicuous place near all transfer points of a natural gas refill centre. The diagram shows the piping, controls and instrumentation of the installation and the operations procedures of the centre.

71.3. The overpressure protection device of a tank connected to a natural gas refill centre must be inspected, serviced, replaced or rebuilt and recertified according to Clauses 12.4 and 12.5 of CSA Standard B51, Part 1.

The replacement or rebuilding and recertification of the device and the periodic visual examinations must be carried out at the frequencies indicated in Clauses 12.4 and 12.5 of CSA Standard B51 and calculated as of the date of manufacture indicated on the device.

The date of recertification or replacement of the overpressure protection device may be reproduced to be visible at the filling point.

§3. *Liquefied natural gas plant*

72. A liquefied natural gas plant, that is, an installation independent of a building and intended to store or distribute liquefied natural gas or a group of such installations situated on a site and that can operate as a unit, must be operated and maintained in accordance with Clause 13 of CSA Standard Z276.

72.1. A process and instrumentation diagram must be posted in a conspicuous place near all transfer points of the liquefied natural gas plant. The diagram shows the piping, controls and instrumentation of the installation and the operations procedures of the plant.

72.2. The overpressure protection device of a connected natural gas tank must be inspected, serviced, replaced or rebuilt and recertified at the intervals indicated in Clause 13.4.5.2 d) of CSA Standard Z276 or Clause B.13.9.4.2 d) of Annex B of that standard and calculated as of the date of manufacture indicated on the device.

The date of recertification or replacement of the overpressure protection device may be reproduced to be visible at the filling point.

DIVISION IX USE, STORAGE AND DISTRIBUTION OF HYDROGEN IN CONTAINERS

73. Hydrogen in containers must be used, stored and distributed in accordance with BNQ Standard 1784-000.

73.1. A hydrogen installation must be operated and maintained,

(1) for gaseous hydrogen, in accordance with Clauses 7.15 and 7.16 of BNQ Standard 1784-000; and

(2) for liquid hydrogen, in accordance with Clauses 8.13 and 8.14 of BNQ Standard 1784-000.

73.2. A hydrogen installation must be equipped with a ventilation system and a hydrogen detection system complying with the requirements of BNQ Standard 1784-000.

A ventilation system is not required for unattended enclosures or outdoor structures containing hydrogen equipment.

73.3. A process and instrumentation diagram must be posted in a conspicuous place near all transfer points of the hydrogen refill centre. The diagram shows the piping, controls and instrumentation of the installation and the operations procedures of the centre.

73.4. The overpressure protection device of a connected hydrogen tank must be inspected, serviced, replaced or rebuilt and recertified according to Clauses 12.4 and 12.5 of CSA Standard B51, Part 1.

The replacement or rebuilding and recertification of the device and the periodic visual examinations must be carried out at the frequencies indicated in Clauses 12.4 and 12.5 of CSA Standard B51 and calculated as of the date of manufacture indicated on the device.

The date of recertification or replacement of the overpressure protection device may be reproduced to be visible at the filling point.

73.5. Refilling a hydrogen container is prohibited if the date of requalification of its overpressure protection device is no longer valid.

DIVISION X OPERATION PERMIT

§1. *General*

74. The owner of an installation independent of a building and intended to store or distribute gas must obtain an operation permit for each place of operation of the installation or for each vehicle intended to distribute gas if the owner has no establishment in Québec.

The owner of an installation independent of a building and intended to store or distribute gas is exempt from the requirement to obtain an operation permit

(1) where gas is stored therein in no-refill containers the maximum internal volume of which is 75 in³ (1,229 ml); and

(2) where natural gas is distributed through pipelines.

74.1. For the purposes of this Division,

“total capacity” means the water capacity, calculated in American gallons (US gal) or in litres, or in mass, calculated in metric tons, that a container may contain at a temperature of 15 °C, for the location of the installation and includes, where applicable,

(1) the fixed capacity, namely, the total number of fixed storage tanks that are connected to the installation and their individual capacity;

(2) the transit capacity, namely, the total number of containers in transit that are normally kept at the place of operation and their individual capacity, including tank trucks, cargo liners, tank trailers and tank cars;

(3) the portable capacity, namely, the total number of cylinders and their individual capacity; and

(4) the unconnected capacity, namely, the total number of tanks not connected to the installation and their individual capacity;

“total limit capacity” means the maximum acceptable capacity of the place of operation set by an engineer in a risk assessment report, based on the total capacity of all the fixed, in transit, portable or unconnected capacity containers of the gas installation present in that place or that could be present periodically.

§2. Conditions and terms of issue, renewal or modification

75. The owner who applies for the issue or renewal of an operation permit must provide to the Board, at least 60 days before the date set for the beginning of the operation of the installation or the date of renewal of the permit,

(1) the name, domicile address and telephone number of the owner and, where applicable, the Québec business number assigned under the Act respecting the legal publicity of enterprises (chapter P-44.1);

(2) if the application is made for a partnership or a legal person, its name, and any other business name that it is legally authorized to use in Québec and that is related to the operation of a gas installation, the address and telephone number of its head office and, where applicable, the business number referred to in subparagraph 1;

(3) the address and telephone number of the place of operation of the installation, and the name and contact information of the person in charge of the place or, if the owner has no installation in Québec, the registration number of the vehicle intended to distribute gas;

(4) for the place of operation or for each vehicle intended to store or distribute gas if the owner has no installation in Québec,

(a) the quantity of gas sold in Québec during the preceding fiscal year;

(b) the quantity of gas bought during the preceding fiscal year

i. in Québec from a refinery;

ii. from a source of supply outside Québec; and

iii. in Québec elsewhere than from a refinery;

(c) the date on which the place began operating;

(d) the use of the installation;

(e) the names of the persons who operate the installation and who hold certificates of qualification issued under the Act respecting workforce vocational training and qualification (chapter F-5);

(f) the fixed, in transit, portable or unconnected capacity and the total capacity of the place; and

(g) where a risk assessment report is required, a copy of the report, the total limit capacity indicated therein, and a declaration according to which the owner has given a copy of the report to a regional county municipality or a local municipality;

(5) in the case of an installation independent of a building and intended to store or distribute gas with gas transfer, that is new or that has been altered, a certified true copy of any document issued by the regional county municipality or the local municipality permitting the construction work at the address of the installation covered by the application, such as a construction permit or a certificate of authorization; and

(6) the attestation of the insurer provided for in section 84.

Every application for an operation permit must be made using the prescribed form made public by the Board on its website, be accompanied by an attestation that the information and documents provided under the first paragraph are accurate and must be signed by the owner or the authorized representative.

76. The holder of an operation permit must notify the Board of any change in the information or documents provided under section 75 by filing a permit modification application within 30 days following the change.

The Board must, however, be notified immediately and in writing in the case of an alteration to the gas installation affecting the level of risk determined in the risk assessment report or making it necessary to obtain such a report. A permit modification application must be filed within 30 days following the change and must include the copy of the risk assessment report that takes into account the alteration made to the installation, and a declaration according to which the owner has given a copy of the report to the regional county municipality or the local municipality.

76.1. An application for the issue, modification or renewal of a permit is deemed to be received only if it is signed, contains all the required information and documents and includes the fees payable under section 79, if applicable.

76.2. In the case of an application for the modification or renewal of a permit, only the changes to the information or documents already filed with the Board must be provided to the Board.

77. The Board issues, modifies or renews an operation permit on the following conditions:

(1) the owner provided, as the case may be, the information and documents required under section 75;

(2) the owner complied with all the provisions of this Chapter and those of Chapter II of the Construction Code (chapter B-1.1, r. 2) that apply to the gas installation covered by the permit application;

(3) where applicable, the owner complied after having received a notice or order under the Building Act (chapter B-1.1) or after having been convicted of an offence under any of the provisions of this Chapter or to a supplementary measure required under section 122 of the Building Act (chapter B-1.1);

(4) where applicable, the owner complied with all the conditions set out in the risk assessment report.

78. The holder of an operation permit must cease the operation of an installation independent of a building and intended to store or distribute gas in the following cases:

(1) the holder of the permit increases the total capacity indicated on the permit and exceeds a total capacity in water of 5,000 US gal (18,927 litres) for propane or a total capacity of 4.5 metric tons for natural gas or hydrogen;

(2) where a risk assessment report is required, the holder of the permit exceeds the total limit capacity indicated in the report.

The holder of the permit must notify the Board immediately and in writing of the reason for the cessation and the date on which the operation of the installation has ceased. The permit holder must also send to the Board, where applicable, a permit modification application in accordance with the second paragraph of section 76.

78.1. The holder of an operation permit must also cease the operation of an installation independent of a building and intended to store or distribute gas where any of the conditions entered in the risk assessment report, including the safety measures for the reduction or mitigation of the risk set by an engineer in accordance with subparagraph 14 of the first paragraph of section 85.1, are not met.

The permit holder must notify the Board immediately and in writing of the reason for the cessation and the date on which the operation of the installation has ceased. The permit holder must also notify the Board in writing of the rectifications made to the gas installation before resuming the operation.

§3. Fees

79. The fee payable for the issue or renewal of an operation permit is \$206.30. Despite the foregoing, the fee is \$60.69 for an installation independent of a building and intended to store or distribute gas and if gas is not transferred there.

§4. Duration, content and display

80. The operation permit issued by the Board contains

(1) the name of the owner of the installation or vehicle, and any other business name that it is legally authorized to use in Québec and that is related to the operation of a gas installation;

(2) the address of the place of operation of the installation or the registration number of the vehicle for which the permit is issued if it does not own an installation in Québec;

(3) the date of issue of the permit;

(4) the Québec business number referred to in subparagraph 1 or 2 of the first paragraph of section 75, as the case may be;

(5) the fixed, in transit, portable or unconnected capacity, and the total capacity of the place of operation, where applicable;

(6) where a risk assessment report is required, the total limit capacity of the place of operation, and an indication specifying that a risk assessment report is required for that place; and

(7) the signature of the president and chief executive officer or a vice-president and that of the secretary of the Board.

81. The holder of an operation permit must post in public view in the place of operation or in the vehicle intended to distribute gas if the permit holder does not own an establishment in Québec.

81.1. A gas distribution undertaking may not refill an installation independent of a building and intended to store or distribute gas if no permit is posted in public view.

82. The term of an operation permit is 1 year.

83. An operation permit is not transferable.

§5. Insurance

84. An owner who applies for the issue or renewal of an operation permit must obtain and maintain in force, during the entire term of the permit, liability insurance of a minimum amount of \$2,000,000 for an installation independent of a building and intended to store or distribute propane of 5,000 US gal (18,927 litres) in total water capacity or less, or natural gas or hydrogen of less than 4.5 metric tons of total capacity and \$10,000,000 for an installation independent of a building and intended to store or distribute propane of more than 5,000 US gal (18,927 litres) in total capacity, or natural gas or hydrogen of 4.5 metric tons or more of total capacity to cover damage caused to another person as a result of fault or negligence in the operation of the installation. The insurance must provide for a commitment by the insurer to inform the Board of the insurer's intention to terminate the contract or modify one of its terms.

An attestation of the insurer to the effect that the insurance meets the requirements of the first paragraph must be sent to the Board with the application for the issue, modification or renewal of the operation permit.

84.1. The holder of an operation permit must notify the Board in writing of the cancellation of the holder's insurance or of any change made to it.

§6. Risk assessment report

85. The owner of an installation independent of a building and intended to store or distribute propane of more than 5,000 US gal (18,927 litres) in total water

capacity, or natural gas or hydrogen of 4.5 metric tons or more in total capacity, must obtain a risk assessment report based on CAN/CSA-ISO Standard 31000, Risk management - Principles and guidelines, published by CSA Group, and confirming that the installation is safe in order to obtain an operation permit for that installation.

The report must be drawn up by an engineer within the meaning of the Professional Code (chapter C-26), who affixes his or her seal, signature and business particulars.

85.1. Subject to section 85.3, the risk assessment report must contain the following information and relevant documents:

(1) the address of the place of operation of the installation;

(2) a description of the surroundings, zoning or subdivision by-laws applicable to the place of operation and its surroundings, the number of natural persons around the place and the distance of the buildings in relation to the place;

(3) the fixed, in transit, portable or unconnected capacities, and the total capacity of the place of operation;

(4) in the case of an existing installation, the volume of gas transferred during the year preceding the drafting of the report;

(5) the plan of the place of operation including

(a) an inventory of all the gas containers and their respective capacity;

(b) the distance between each fixed, in transit and unconnected capacity gas container and the property lines, and the distance between each cylinder lot or island and the property lines;

(c) the location of any above-ground or underground piping or tubing and of the other handling, storage or distribution installations present at the place of operation; and

(d) the location of the parking areas for the vehicles used to transport, store or distribute gas;

(6) the design details of the gas installation including its mechanical, electrical, structural and control characteristics and all other characteristics that may result in gas release;

(7) the detailed process and instrumentation diagram and the operations procedures of the gas installation;

(8) the operation conditions of the gas installation, including flow, pressure and temperature;

(9) the history of incidents or accidents that occurred at the place of operation and other places of operation including a similar gas installation;

(10) the emergency measures of the place of operation made jointly with the regional county municipality or the local municipality, including the emergency response capability of the fire safety service;

(11) the maintenance history of the gas installation required in subparagraph 8 of the first paragraph of section 38.2;

(12) an inventory of any other dangerous substance present at the place of operation and listed in Schedule 1 to the Transportation of Dangerous Goods Regulations (SOR/2001-286);

(13) risk assessment, that is, the full process of risk identification, risk analysis and risk evaluation, including the simulation provided for in section 85.2;

(14) risk treatment and, where applicable, the reduction of risk by adding additional safety measures and a reevaluation of the residual risk making the level of risk acceptable;

(15) the total limit capacity set by the engineer that may not be exceeded by the owner;

(16) as regards a propane installation,

(a) the operations and maintenance procedures prescribed by Clause 7.22 of CSA Standard B149.2;

(b) the total capacity of the propane containers calculated at 80% of the total capacity of each container at a temperature of 15 °C; and

(c) the results of the simulation of a boiling liquid expanding vapour explosion (BLEVE) of the container or system of tanks connected together having the greatest capacity, whatever its type of capacity defined in section 74.1 and its isolating devices. If individuals are within the explosion impact radius up to an overpressure of 6.9 kPa, a quantitative analysis must also be included in the report.

The report must also include a description of the method used by the engineer, including all the values used to evaluate the probabilities that a risk occurs and its consequences, and a bibliography indicating the sources and references to the documents mentioned in the report.

85.2. In accordance with subparagraph 13 of the first paragraph of section 85.1, the risk assessment report must include the reliable, objective and verifiable results of a simulation carried out using a software. The simulation must minimally include the scenario including the worst consequences and the scenario having the greatest probability of occurring based on the container or system of tanks connected together having the greatest capacity, whatever its type of capacity defined in section 74.1 and its isolation devices.

The scenarios must comply with the following acceptable levels of potential risk of death to an individual related to the location of the surroundings for the land occupancy around a gas installation:

(1) an acceptable level of potential risk of death to an individual related to the location of the surroundings evaluated for individuals inside and outside a building of 1 in ten thousand (1×10^{-4}) maximum per year between the property limits of the operation site and an unoccupied zone;

(2) an acceptable level of potential risk of death to an individual related to the location of the surroundings evaluated for individuals inside and outside a building between 1 in ten thousand and 1 in a hundred thousand (1×10^{-4} to 1×10^{-5}) per year for open spaces, that is a location having unobstructed open access permitting easy egress, and for spaces occupied by buildings classified according to their major occupancy as being low, medium or very high risk industrial occupancies;

(3) an acceptable level of potential risk of death to an individual related to the location of the surroundings evaluated for individuals inside and outside a building between 1 in a hundred thousand and 1 in 1 million (1×10^{-5} to 1×10^{-6}) per year for spaces occupied by residential occupancies, that consist in single-family dwellings or immovables used as dwelling units having a building height of not more than 2 storeys or having not more than 8 dwelling units, and by buildings classified according to their major occupancy as being business and personal services occupancies and mercantile occupancies, excluding civil security, fire or emergency stations and telecommunication stations;

(4) an acceptable level of potential risk of death to an individual related to the location of the surroundings evaluated for individuals inside and outside a building between 1 in 1 million and 3 in 10 million (1×10^{-6} and 0.3×10^{-6}) per year for spaces occupied by residential occupancies, other than those listed in subparagraph 3, and spaces occupied by civil security, fire or emergency stations and telecommunication stations;

(5) an acceptable level of potential risk of death to an individual related to the location of the surroundings evaluated for individuals inside and outside a building between 3 in 10 million or less (0.3×10^{-6} or less) per year for spaces occupied by buildings classified according to their major occupancy as being assembly, detention, treatment or care occupancies.

For the purposes of this section, the terms “mercantile occupancy”, “business and personal services occupancy”, “detention occupancy”, “assembly occupancy”, “care occupancy”, “treatment occupancy”, “industrial occupancy”, “residential occupancy” and “dwelling unit” have the meaning given to them by the National Building Code as adopted by Chapter I of the Construction Code (chapter B-1.1, r. 2).

85.3. With respect to an installation independent of a building and intended to store or distribute liquefied natural gas, built before (*insert the date of coming into force of this Regulation*), the risk assessment report must be drafted in accordance with Clause 14.3 of CSA Standard Z276.

DIVISION XI CONTRIBUTIONS

86. The owner or operator of an undertaking that distributes gas, except the owner or operator referred to in section 87, must pay the Board, each month, an amount of \$0.542 per 1,000 m³ of gas sold in Québec.

The volume of gas is based on a higher heating value of 37.89 MJ/m³ adjusted to the absolute pressure of 101.325 kPa and a temperature of 15 °C.

An undertaking does not have to pay the monthly fees on the volume of gas bought from an undertaking having paid the fees on the same volume of gas.

87. The wholesale owner or operator of an undertaking for the bulk distribution of liquefied petroleum gas sold in Québec must pay the Board, each month, an amount of \$1,054 per 1,000 litres or fraction of 1,000 litres of liquefied petroleum gas sold in Québec.

The volume of liquefied petroleum gas is adjusted at a temperature of 15 °C.

For the purposes of this section,

“liquefied petroleum gas sold in Québec” means, in the case of a wholesale owner or operator of an undertaking for the bulk distribution of liquefied petroleum gas, the volume of liquefied petroleum gas sold in Québec excluding the volume bought from a wholesale owner or operator of an undertaking for the bulk distribution of liquefied petroleum gas;

“wholesale owner or operator of an undertaking for the bulk distribution of liquefied petroleum gas” means any person or partnership operating an undertaking for the storage, sale or distribution of liquefied petroleum gas in Québec and buying liquefied petroleum gas from a producer in Québec or from a source outside Québec for resale in Québec.

88. Every gas distribution undertaking must keep an up-to-date list of the names and addresses of its customers. It must also indicate, for every tank installed at its customers locations and of which it remains the owner,

(1) the date of the inspection, service, rebuilding and recertification or replacement of the overpressure protection device of the tank;

(2) the Canadian registration number and the serial number of the tank;

(3) the serial number or, where applicable, the model number of the device; and

(4) the date of manufacture indicated on the device.

DIVISION XII OFFENCE

89. Any violation of any of the provisions of this Chapter, except sections 79, 86 and 87, constitutes an offence.”

2. Sections 85.1 and 85.2 of the Safety Code, as made by section 1 of this Regulation, do not apply to a gas installation that has been the subject of a risk assessment report by an engineer before (*insert the date of coming into force of this Regulation*), to the extent that the report complied with the Safety Code as it read before (*insert the date of coming into force of this Regulation*).

3. This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette officielle du Québec*, except section 63.1 of the Safety Code, as made by section 1 of this Regulation, which comes into force on (*insert the date that is 6 months after the coming into force of this Regulation*).

The owner of an installation independent of a building and intended to store or distribute hydrogen of 4.5 metric tons or more of total capacity must comply with section 85 of the Safety Code, as made by section 1 of this Regulation, and obtain a risk assessment report before (*insert the date that is 6 months after the coming into force of this Regulation*). The owner of an installation independent of a building and intended to store or distribute propane

of more than 5,000 US gal (18,927 litres) of total capacity, but whose fixed water capacity does not exceed 5,000 US gal (18,927 litres), must also comply with section 85 of the Safety Code, as made by section 1 of this Regulation, and obtain such a report before (*insert the date that is 6 months after the coming into force of this Regulation*) or before the date of renewal of the operation permit, whichever date is later.

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