### Regulations and other acts

Gouvernement du Québec

### **O.C. 866-2002,** 10 July 2002

Highway Safety Code (R.S.Q., c. C-24.2)

#### **Transportation of Dangerous Substances**

Transportation of Dangerous Substances Regulation

WHEREAS, under section 622 of the Highway Safety Code (R.S.Q., c. C-24.2), the Government may make regulations on the matters mentioned therein;

WHEREAS, in accordance with sections 10 and 11 of the Regulations Act (R.S.Q., c. R-18.1), a draft of the Transportation of Dangerous Substances Regulation was published in Part 2 of the *Gazette officielle du Québec* of 15 May 2002 with a notice that it could be made by the Government upon the expiry of 45 days following that publication;

WHEREAS the comments received have been studied;

WHEREAS it is expedient to make the Regulation with amendments;

IT IS ORDERED, therefore, upon the recommendation of the Minister of Transport:

THAT the Transportation of Dangerous Substances Regulation, attached to this Order in Council, be made.

JEAN ST-GELAIS, Clerk of the Conseil exécutif

# **Transportation of Dangerous Substances Regulation**

Highway Safety Code (R.S.Q., c. C-24.2, s. 622, subpars. 1 to 8)

# **DIVISION I**DEFINITIONS AND GENERAL

1. In this Regulation,

"consignor" means a person who offers dangerous substances for transport (expéditeur);

"farm vehicle" means any farm machinery, farm trailer, farm tractor, or farm motor vehicle as defined in the Regulation respecting road vehicle registration made by Order in Council 1420-91 dated 16 October 1991 (véhicule agricole);

"handling" means the operations of loading, unloading, putting into containers, and packing dangerous substances transported, or to be transported, on a public highway (manutention);

"operator" means the operator of heavy vehicles within the meaning of subparagraph 2 of the first paragraph of section 2 of the Act respecting owners and operators of heavy vehicles (R.S.Q., c. P-30.3) (exploitant);

"tank truck" means any highway tank described in CSA Standard B620-98: Highway Tanks and Portable Tanks for the Transportation of Dangerous Goods, as amended, such as a single unit truck carrying a cargo tank, a tractor and semi-trailer tank or a combination of these vehicles (*camion-citerne*); and

"Transportation of Dangerous Goods Regulations" means the Transportation of Dangerous Goods Regulation made by Order in Council P.C. 2001-1366 dated 1 August 2001, SOR/2001-286, dated 1 August 2001, and published in the Canada Gazette, Part II, on 15 August 2001 (Règlement sur le transport des marchandises dangereuses).

Subject to the first paragraph, the definitions and abbreviations contained in the Transportation of Dangerous Goods Act (Statutes of Canada, 1992, chapter 34) and the Transportation of Dangerous Goods Regulations, as they read on 15 August 2002 apply to this Regulation, except the definitions of "inspector," "minister," and "order."

Where there is a conflict between the provisions of the Transportation of Dangerous Goods Regulations and those of this Regulation, the latter shall apply.

- **2.** This Regulation applies to dangerous substances transported, or to be transported, on public highways, particularly the handling and offering for transport of these substances.
- **3.** The safety standards and safety requirements referred to in section 1.3 and Schedules 1, 2 and 3 to the Transportation of Dangerous Goods Regulations apply to this Regulation.

- **4.** Sections 1.5 to 1.29 and 1.31 to 1.47 of the Transportation of Dangerous Goods Regulations apply to this Regulation.
- 5. Despite the exemption provided for in sections 1.21 and 1.22 of the Transportation of Dangerous Goods Regulations for a farm vehicle or a vehicle used for farming purposes, as of 15 August 2004, it is prohibited to transport petroleum products in the large means of containment referred to in section 22 of this Regulation unless they comply with that section.
- **6.** Despite the exemptions provided for in section 1.35 of the Transportation of Dangerous Goods Regulations, it is prohibited to transport the petroleum products referred to therein unless the large means of containment are being transported in a single-unit vehicle whose total gross mass does not exceed its load-carrying capacity.

#### **DIVISION II**

CLASSIFICATION OF DANGEROUS SUBSTANCES AND CONTAMINATED SOIL

- **7.** Any substance designated dangerous goods within the meaning of the Transportation of Dangerous Goods Act or the Transportation of Dangerous Goods Regulations is a dangerous substance.
- **8.** A dangerous substance belongs to the class assigned to it in accordance with Schedule 1 or Part 2 of the Transportation of Dangerous Goods Regulations.
- **9.** For the purposes of sections 11, 17 and 18 of this Regulation, contaminated soil is soil whose properties correspond to criterion B or C in the Soil Protection and Contaminated Sites Rehabilitation Policy of the Ministère de l'Environnement.
- **10.** Before offering any dangerous substance for transport, the consignor must classify it in accordance with subsections (1) to (5) of section 2.2 of the Transportation of Dangerous Goods Regulations.
- ■ Before offering contaminated soil for transport, the consignor must classify it in accordance with the Soil Protection and Contaminated Sites Rehabilitation Policy of the Ministère de l'Environnement or, if applicable, in accordance with Part 2 of the Transportation of Dangerous Goods Regulations.

### **DIVISION III**SHIPPING DOCUMENTS

**12.** The shipping documents prescribed by sections 3.1, 3.2, 3.4, 3.7, 3.10 and 3.11 of the Transportation of Dangerous Goods Regulations apply to this Regulation.

**13.** The minimum information that the shipping document must contain is that prescribed in sections 3.5 and 3.6 of the Transportation of Dangerous Goods Regulations.

#### **DIVISION IV** SAFETY MARKS

**14.** The safety marks that must be displayed on dangerous substances means of containment and the standards for displaying them are those prescribed in Part 4 of the Transportation of Dangerous Goods Regulations.

#### **DIVISION V**

MEANS OF CONTAINMENT

**15.** No one may handle, offer for transport or transport dangerous substances in a means of containment unless the means of containment complies with the provisions of Part 5 of the Transportation of Dangerous Goods Regulations.

# **DIVISION V.I**CONTAMINATED SOIL

- **16.** Contaminated soil corresponding to the criteria of one or more classes of Part 2 of the Transportation of Dangerous Goods Regulations must be transported in a watertight means of containment that complies with the means of containment requirements for solid dangerous substances prescribed by sections 5.1 to 5.6 and 5.12 to 5.15 of the Transportation of Dangerous Goods Regulations.
- **17.** Contaminated soil with a level of contamination falling within the B and C criteria of the Soil Protection and Contaminated Sites Rehabilitation Policy of the Ministère de l'Environnement must be transported either in a closed means of containment or body or in a dump vehicle with an impermeable tarpaulin retaining the load inside the vehicle.

To the extent that liquids may be released from such soil, the means of containment or body must be watertight.

18. Soil with a level of contamination equal to or higher than the C criterion of the Soil Protection and Contaminated Sites Rehabilitation Policy of the Ministère de l'Environnement must be transported either in a closed means of containment or in a dump vehicle that is equipped with a waterproof tarpaulin completely covering the top of the body and the load. In the latter case, the tarpaulin must be installed in such a manner as to prevent rain or snow from reaching the load or causing contaminant release or leakage.

To the extent that liquids may be released from such soil, the container or body must be watertight.

### **DIVISION V.II**PETROLEUM PRODUCTS

**19.** This division applies to the Class 3 petroleum products listed below:

Shipping Name	UN Number	Packing Group
Aviation Fuel	UN1863	I, II or III
Gasoline; Motor Spirit; or Petrol	UN1203	II
Diesel Fuel; Fuel Oil or Light Heating Oil	UN1202	III
Petroleum Products, N.O.S.; or Petroleum Distillates, N.O.S.	UN1268	I, II or III

- **20.** The handling and transportation of petroleum products must comply with the requirements stipulated in sections 21 to 30 in addition to the requirements of the safety standards prescribed in Part 5 of the Transportation of Dangerous Goods Regulations.
- **21.** Subject to section 15, petroleum products may be loaded for transport in small means of containment with a capacity of 450 litres or less complying with CAN/CGSB Standard 43.150-97 or one of the equivalent standards listed in Table 1 of Schedule 1.
- **22.** It is prohibited to load petroleum products for transportation in large means of containment with a capacity of more than 450 litres but not more than 3 000 litres except if such means of containment meet the requirements of Part 5 of the Transportation of Dangerous Goods Regulation.
- **23.** It is prohibited to load for transport or to transport petroleum products unless they are loaded in
- (1) a TC406 tank truck complying with CSA Standard B620-98; or
- (2) one of the equivalent tank trucks listed in Table 1 of CSA Standard B621-98 that have undergone all the tests prescribed under Clause 5.4 of that standard, including periodic repeat tests.
- **24.** It is prohibited to transport petroleum products in a tank truck unless there are two wheel chocks on board.
- **25.** The tank and the tank truck's chassis must be coupled to ensure electrical conduction. The tank truck

must be equipped with a grounding plug. The tank truck's electrical wiring must be encased in plastic tubes compatible with petroleum products.

A tank truck's lighting and power circuits must be in good condition, and fused and protected so that a short circuit or sparking is not likely to occur.

Switches must be liquid tight and vaportight with respect to petroleum products.

**26.** It is prohibited to transport petroleum products with different UN numbers in a compartmentalized tank truck at the same time unless there is a free space between each compartment. The capacity of the compartments of a compartmentalized tank truck used to transport gasoline (UN1203) or aviation fuel (UN1863) must not exceed 16 000 litres.

It is prohibited to discharge two or more petroleum products with different UN numbers by pumping unless a separate unloading system is used for each product. Shutoff valves and safety valves must remain closed at all times except during delivery.

**27.** The owner of a tank truck used to transport petroleum products must have one or two dry chemical fire extinguishers with an effective total rating of at least 20 BC installed near the tank.

The owner of a tank truck or vehicle used to transport petroleum product means of containment must have a fire extinguisher with an effective total rating of at least 5 BC installed in its bracket in a conspicuous place in the truck's cab or affixed outside the cab.

The owner must have fire extinguishers immediately recharged after each use and shall have them inspected each year in accordance with the North American Standard NFPA 10: Standard for Portable Fire Extinguishers. An inspection sticker must be placed on the extinguisher.

- **28.** The driver of a tank truck must apply the parking brake and set two chock blocks to ensure the truck does not move during the loading and unloading of petroleum products. Wheel chocks are not necessary when unloading light heating oil (UN1202) unless the truck is parked on a slope.
- **29.** Where the tank truck is not supervised by a person holding a training certificate in accordance with Part 6 of the Transportation of Dangerous Goods Regulations, the driver must detach the handle of the safety valve and place it under lock and key, or lock the valve or valve cabinet, and remove the ignition key to another location away from the tank truck.

**30.** The driver of a tank truck may not use it to fill a means of containment or the tank of a road vehicle except to refill the permanent tank of a heating system with light heating oil (UN 1202).

#### **DIVISION V.III**

LIQUEFIED PETROLEUM GAS

**31.** The handling and transportation of any Class 2 liquefied petroleum gas referred to below shall comply with the specifications set out in Part 5.6 and clauses 6.21.1, 6.21.3, 6.21.4, 7.6.1, 7.6.2, 7.11.1, 7.11.2 and 7.12.1 of CSA Standard B149.2-00: Propane Storage and Handling Code, including subsequent amendments to the 2000 edition, in addition to complying with the safety requirements prescribed in sections 5.1, 5.2, 5.4, 5.5, and 5.10 of the Transportation of Dangerous Goods Regulations.

Shipping Name	UN Number	
Butane	UN1011	
Butylene	UN1012	
Isobutane	UN1969	
Propane	UN1978	
Propylene	UN1077	

#### **DIVISION VI** TRAINING

**32.** Sections 6.1 to 6.6 of Part 6 of the Transportation of Dangerous Goods Regulations apply to this Regulation.

#### DIVISION VII

EMERGENCY RESPONSE ASSISTANCE PLAN

**33.** The emergency response assistance plan reference number referred to in section 3.6 of the Transportation of Dangerous Goods Regulations applies to this Regulation.

### **DIVISION VIII** EMERGENCIES

**34.** A person who is responsible for dangerous substances at the time of an accidental release or imminent accidental release must immediately report the emergency to the local police in accordance with Part 8 of the Transportation of Dangerous Goods Regulations.

#### DIVISION IX

CROSS-BORDER AND INTERMODAL TRANSPORT

- **35.** The safety requirements effective in the United States may be applied to cross-border road transportation of dangerous substances in accordance with Part 9 of the Transportation of Dangerous Goods Regulations.
- **36.** Safety requirements applicable to other modes of transport may be applied to road transportation of dangerous substances by those modes in accordance with Part 9 of the Transportation of Dangerous Goods Regulations.

# **DIVISION X**SAFETY STANDARDS AND REQUIREMENTS

**37.** It is prohibited to transport gas cylinders in a road vehicle unless the cylinders are secured in a standing position in such a manner that they will not move during transport. Each cylinder shall either be fitted with a valve protection cap or a permanent protective device attached to it.

All the other goods in the vehicle must also be firmly secured to ensure that no item will damage the gas cylinders.

- **38.** It is prohibited to transport dangerous substances in a road vehicle unless the substances are secured to the vehicle. All the other goods in the vehicle that do not contain dangerous substances must also be secured to ensure that no item will damage the dangerous substances means of containment.
- **39.** The transportation of dangerous substances by a double train tank truck must be in a Type B double train within the meaning of subparagraph 8 of the first paragraph of section 4 of the Vehicle Load and Size Limits Regulation made by Order in Council 1299-91 dated 18 September 1991.

It is prohibited to use

(1) a Type A or C double train within the meaning of subparagraph 9 and clause *b* of subparagraph 8 of the first paragraph of section 4 of the Vehicle Load and Size Limits Regulation for the transportation of dangerous substances by tank truck within the meaning of the Regulation respecting special permits made by Order in Council 1444-90 dated 3 October 1990; or

- (2) a road train with an overall length of more than 25 metres for the transportation of dangerous substances.
- **40.** As of 15 August 2004, a tank truck transporting dangerous substances must be equipped with a speed recording system capable of recording the date and the time the speed was recorded.
- **41.** It is prohibited to transfer dangerous substances from one tank truck to another except in the case of accidental release or an emergency. The tank trucks containing flammable substances must be connected to one another by a ground wire.
- **42.** The driver of a tank truck that contains flammable substances or vapors of flammable substances must ensure that no person smokes or lights a flame inside the truck cab regardless of whether the truck is in motion or not. During loading and unloading, the driver must ensure that no person smokes or lights a flame within 8 metres of the truck.

#### DIVISION XI

REQUIREMENTS APPLYING TO THE USE OF TUNNELS

- **43.** It is prohibited to travel in the Louis-Hippolyte-Lafontaine tunnel, the Ville-Marie and Viger tunnels in Montréal, the Joseph-Samson tunnel in Québec City and the part of the approach to the Melocheville tunnel that is parallel to the lane reserved for vehicles transporting dangerous substances
- (1) with a road vehicle on which placards must be displayed in accordance with Part 4 of the Transportation of Dangerous Goods Regulations unless it is carrying only Class 9 dangerous substances;
- (2) with a road vehicle transporting a total of more than 25 litres of a Class 3 flammable liquid;
- (3) with a road vehicle transporting or using Class 2.1 flammable gas cylinders or Class 2.3 (2.1), 2.2 (5.1) or 2.3 (5.1) oxidizing gas, unless these substances are contained in at most two cylinders with a water capacity of 46 litres or less each; or
- (4) with a road vehicle equipped with working equipment that produces a naked flame.

The first paragraph does not apply

- (1) when the fuel is used for the propulsion of the vehicle and is contained in one or more tanks designed for that purpose by the vehicle manufacturer;
- (2) when the flammable liquid is used for the air conditioning of the vehicle or the load space and is contained in a tank designed for that purpose by the air conditioning manufacturer;
- (3) when the flammable liquid is intended for the operation of equipment whose tank capacity does not exceed 75 litres and the flammable liquid is contained in a tank designed for that purpose by the vehicle or equipment manufacturer:
- (4) to emergency vehicles within the meaning of section 4 of the Highway Safety Code;
- (5) to cranes equipped with a second diesel fuel tank installed by the crane manufacturer; however, only one propane cylinder with a maximum capacity of 46 litres may be used for the air conditioning of the crane's cab and the cylinder must be located above the level of the wheels; and
- (6) to maintenance vehicles used inside tunnels or at the entrances to and exits from the tunnels.

### DIVISION XII

**PENAL** 

- **44.** Any violation of sections 28, 29 and 30 of this Regulation constitutes an offence liable to a fine of \$90 to \$270 for the driver.
- **45.** Any violation of sections 14, 31, 32 and 42 of this Regulation concerning the application of sections 4.9, 4.15 to 4.20, 6.1, 6.2, 6.4 and 6.5 or the requirements of Schedule 2 to the Transportation of Dangerous Goods Regulations constitutes an offence liable to a fine of \$175 to \$525 for the driver.
- **46.** Any violation of sections 34 and 43 of this Regulation concerning the application of sections 3.7 and 8.1 or the requirements of Schedule 2 to the Transportation of Dangerous Goods Regulations constitutes an offence liable to a fine of \$350 to \$1050 for the driver.

- **47.** Any violation of sections 24, 25 and 27 of this Regulation constitutes an offence liable to a fine of \$175 to \$525 for the owner.
- **48.** Any violation of section 40 of this Regulation constitutes an offence liable to a fine of \$700 to \$2100 for the owner.
- **49.** Any violation of sections 17 and 18 of this Regulation constitutes an offence liable to a fine of \$175 to \$525 for the operator.
- **50.** Any violation of sections 4, 5, 6, 12, 14, 15, 16, 23, 34, 37 to 39 and 41 of this Regulation concerning the application of sections 1.5 to 1.8, 3.2, 3.7, 3.10, 3.11, 4.1, 4.5 to 4.9, 4.15 to 4.20, 5.1, 5.2, 5.4 to 5.17 and 8.1 or the requirements of Schedule 2 to the Transportation of Dangerous Goods Regulations constitutes an offence liable to a fine of \$700 to \$2100 for the operator.
- **51.** Any violation of sections 11, 13, 17, 18, 35 and 36 of this Regulation concerning the application of sections 3.1, 3.5, 3.6 and 9.1 to 9.4 or the requirements of Schedule 2 to the Transportation of Dangerous Goods Regulations constitutes on offence liable to a fine of \$175 to \$525 for the consignor.
- **52.** Any violation of sections 4, 5, 10, 12, 14, 15, 16, 23, 33 and 34 of this Regulation concerning the application of sections 1.5 to 1.8, 2.2, 3.1, 3.4 to 3.6, 3.11, 4.1, 4.3, 4.4, 4.6 to 4.8, 4.10 to 4.20, 4.22, 5.1, 5.2, 5.4 to 5.17, 7.1, 7.2 and 8.1 or the requirements of Schedule 2 to the Transportation of Dangerous Goods Regulation constitutes an offence liable to a fine of \$700 to \$2100 for the consignor.
- **53.** Any violation of sections 21, 22, 26, 31 to 32 of this Regulation concerning the application of sections 5.1, 5.2, 5.4 to 5.6, 5.12 to 5.15, 6.1 to 6.4 and 6.6 or the requirements of Schedule 2 constitutes an offence liable to a fine of \$350 to \$1050 for the consignor or operator.

#### DIVISION XIII

**FINAL** 

- **54.** This Regulation replaces the Transportation of Dangerous Substances Regulation made by Order in Council 674-88 dated 4 May 1988.
- **55.** This Regulation comes into force on 15 August 2002.

#### SCHEDULE 1

Table 1 – Small Means of Containment Equivalents (s. 21)

Small means of containment volume	Types of small means of containment compliant with CAN/CGSB Standard 43.150-97	Equivalent standard for petroleum products
0 to 45 litres (plastic)	3H 1 3H 2	NFPA 30–1996 ASTM F 852 (gasoline) ANSI /UL 1313 CSA B376-M 1980 (R1998)
0 to 45 litres (metal)	3A1 3A2	CSA B376 M1980 (R1998)
46 to 227 litres (plastic)	1H 1 1H 2	NFPA 30-1996
46 to 227 litres (metal)	1A 1 1A 2	NFPA 30-1996
228 to 450 litres	1A 1 1A 2	NFPA 30-1996 NFPA 386 ULC/ORD-C142.13- M1997

Note: The upper part of a small means of containment with a capacity of 228 to 450 litres must be fitted with a safety mechanism to limit internal pressure to the lower of the following values:

- 79 kilopascals; or
- 30% of burst pressure.

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