# **Draft Regulations**

# **Draft Regulation**

Petroleum Products Act (chapter P-30.01)

## **Petroleum products**

Notice is hereby given, in accordance with sections 10 and 11 of the Regulations Act (chapter R-18.1), that the Petroleum Products Regulation, appearing below, may be made by the Government on the expiry of 45 days following this publication.

The draft Regulation replaces the Petroleum Products Regulation (chapter P-30.01, r.1). It establishes quality standards applicable to certain petroleum products defined therein, including new renewable fuels.

The quality standards of certain petroleum products established by the Canadian General Standards Board to which this draft Regulation refers govern the quality of fuels to ensure maximum protection and satisfaction regarding quality for consumers of petroleum products.

The draft Regulation has no impact on small and medium-sized businesses.

Further information on this draft Regulation may be obtained by contacting Xavier Brosseau, Direction des approvisionnements et des biocombustibles, Ministère de l'Energie et des Ressources naturelles, 5700, 4<sup>e</sup> Avenue Ouest, bureau A-422, Québec (Québec), G1H 6R1; telephone: 418 627-6385, extension 8351; fax: 418 644-1445.

Any person wishing to comment on the draft Regulation is requested to submit written comments within the 45-day period to Luce Asselin, Associate Deputy Minister for Energy, Ministère de l'Énergie et des des Ressources naturelles, 5700, 4° Avenue Ouest, bureau A-407, Québec (Québec), G1H 6R1.

PIERRE ARCAND, Minister of Energy and Natural Resources

# **Petroleum Products Regulation**

Petroleum Products Act (chapter P-30.01, ss. 5 and 96)

## CHAPTER I INTERPRETATION

**1.** The standards of the Canadian General Standards Board and ASTM International to which this Regulation refers include subsequent amendments and later editions of the standards published by those organizations.

Despite the foregoing, amendments and editions of the Canadian General Standards Board published after (*insert the date of coming into force of this Regulation*) apply only 90 days after the last day of the month of publication of the French text of the amendments or editions.

#### **CHAPTER II**

STANDARDS APPLICABLE TO PETROLEUM PRODUCTS

# **DIVISION I**MOTOR FUELS

- §1. Automotive gasoline
- **2.** Automotive gasolines are motor fuels to which no lead or phosphorus compounds have been added and that are suitable for use in spark ignition engines under a wide range of climatic conditions. They shall be essentially hydrocarbons, but may contain aliphatic ethers and alcohols and additives designed and demonstrated to enhance their characteristics and performance.

They must comply with Canadian General Standards Board standard CAN/CGSB-3.5-2011 – Automotive Gasoline.

- **§2.** Oxygenated automotive gasoline containing ethanol (E1-E10)
- **3.** Oxygenated automotive gasolines containing ethanol are motor fuels to which no lead or phosphorus compounds have been added that may contain up to 10% fuel ethanol by volume and that are suitable for use in spark ignition engines under a wide range of climatic conditions.

They must comply with Canadian General Standards Board standard CAN/CGSB-3.511-2011 – Oxygenated Automotive Gasoline Containing Ethanol (E1-E10).

Fuel ethanol means ethyl alcohol having the chemical formula  $C_2H_5OH$  produced in particular from renewable materials and sold either as a product to be blended directly with automotive gasoline or for use as an input in the reformulation of gasolines or the making of ethyl tertiary-butyl ether that may be added to gasoline.

#### *§3. Automotive ethanol fuel (E50-E85)*

**4.** Automotive ethanol fuel is composed, depending on the season, of 50% to 85% by volume of denatured fuel ethanol and 50% to 15% of gasoline. It is for use in flexible fuel vehicles over a wide range of climatic conditions. It is not for use in vehicles designed to operate on automobile gasoline containing not more than 10% by volume of ethanol.

It must comply with Canadian General Standards Board standard CAN/CGSB-3.512-2013 – Automotive Ethanol Fuel (E50-E85).

A flexible fuel vehicle means a vehicle specifically designed by the original manufacturer or the manufacturer of record to operate on a fuel blend consisting nominally of 0% to 85% by volume of denatured alcohol and 100% to 15% by volume of gasoline.

## §4. Denatured fuel ethanol

**5.** Denatured fuel ethanol is commercially manufactured ethanol containing a denaturant, as required by the Denatured and Specially Denatured Alcohol Regulations-DORS/2005-022, which makes ethanol unsuitable for beverage or medicinal use. Denatured fuel ethanol is intended to oxygenate gasolines containing that component and is used only as a component of automotive spark ignition fuels.

It must comply with Canadian General Standards Board standard CAN/CGSB-3.516-2011 – Denatured Fuel Ethanol for Use in Automotive Spark Ignition Fuels.

## §5. Diesel fuel

**6.** Diesel fuels are middle distillates composed of hydrocarbons and naturally occurring, petroleum-derived, non-hydrocarbons that boil in the range of 130°C and 400°C. They are intended for use as motor fuels in high speed compression-ignition diesel engines operating at speeds generally higher than 1,200 r/min. Their ultra low sulphur content limits air emissions.

They must comply with Canadian General Standards Board standard CAN/CGSB-3.517-2013 – Diesel Fuel.

- **7.** Type A diesel fuel is intended for use in selected applications or where ambient temperature requires better low-temperature properties than type B diesel fuel whereas type B diesel fuel is used where the ambient temperature and storage conditions allow it.
- **§6.** Automotive diesel fuel containing low levels of biodiesel (B1-B5)
- **8.** Automotive diesel fuel containing low levels of biodiesel is an ultra-low sulphur diesel fuel containing between 1.0% and 5% by volume of biodiesel.

It must comply with Canadian General Standards Board standard CAN/CGSB-3.520-2011 – Automotive Diesel Fuel Containing Low Levels of Biodiesel (B1-B5).

Biodiesel means a blend of fatty acid monoalkyl esters produced from virgin or degraded or waste fry vegetable oils or animal fats, by transesterification with alcohol.

**9.** Type A automotive diesel fuel containing low levels of biodiesel is intended for use in selected applications, such as urban bus engines, engines used in underground mining or where ambient temperatures require better low-temperature properties than provided by type B diesel fuel.

Type B diesel fuel is used in diesel engines where the ambient temperature and storage conditions allow it.

- *§7. Diesel fuel containing biodiesel (B6-B20)*
- **10.** Diesel fuel containing 6% to 20% by volume of biodiesel is intended for use in high speed diesel engines that require ultra low sulphur diesel fuel to meet emission control regulations. It is also for use in high speed diesel powered equipment that is approved by the manufacturers or suitably converted to be compatible with fuel blends conforming to the fuel standard.

It must comply with Canadian General Standards Board standard CAN/CGSB-3.522-2011 – Diesel Fuel Containing Biodiesel (B6-B20).

- §8. Biodiesel for blending in middle distillate fuels
- **11.** Biodiesel for blending in middle distillate fuels is intended for use as a blending component in middle distillate fuels.

It must comply with Canadian General Standards Board standard CAN/CGSB-3.524-2011 – Biodiesel (B100) for Blending in Middle Distillate Fuels.

**12.** Automotive gasoline, oxygenated automotive gasoline containing ethanol and automotive fuel ethanol must comply with the requirements relating to points of compliance and gasoline volatility appearing in Schedule I.

Diesel fuels, automotive diesel fuels containing low levels of biodiesel and diesel fuel containing between 6% and 20% by volume of biodiesel must comply with the requirements relating to specific seasonal and regional weather conditions in Québec appearing in Schedule II.

#### §9. Aviation fuel

**13.** Type 1 aviation fuel (aviation gasoline) is a light petroleum distillate used in internal combustion and spark ignition aircraft engines.

It must comply with ASTM International standard D910 – Standard Specification for Aviation Gasoline.

- **14.** Type 2 aviation fuel (aviation turbine fuel) is composed of conventional hydrocarbons, synthetic hydrocarbons, naturally occurring products other than petroleum hydrocarbons and additives. It includes the following sub-types:
- (1) sub-type 1: kerosene type aviation turbine fuel (grades JET A and JET A-1);
- (2) sub-type 2: wide-cut aviation turbine fuel (grade JET B);
- (3) sub-type 3: aviation turbine fuel (military grades F-34 and F-44).

Synthetic hydrocarbons means fuels including hydrocarbons derived from non-petroleum sources such as biomass, natural gas, coal, fats and oils by processes such as gasification, reforming, Fischer-Tropsch synthesis, hydroprocessing or hydrocracking, used in particular in aviation turbine fuels, diesel fuels and light heating oils.

**15.** Sub-type 1 aviation turbine fuel is a medium distillate with a minimum flash point of 38°C. It is generally used in civil aviation operations. The maximum freezing point of grade JET A is - 40°C and that of grade JET A-1 is - 47°C.

Sub-type 1 aviation turbine fuel must comply with Canadian General Standards Board standard CAN/CGSB-3.23-2012 – Aviation Turbine Fuel (Grades JET A and JET A-1).

**16.** Sub-type 2 aviation turbine fuel is a volatile naphtha and kerosene blend having a low flash point, a wide boiling range and a low freezing point. It is normally used in civil aviation operations that have been approved to use this fuel.

Sub-type 2 aviation turbine fuel must comply with Canadian General Standards Board standard CAN/CGSB-3.22-2012 – Wide-Cut Type Aviation Turbine Fuel (Grade JET B).

17. Sub-type 3 aviation turbine fuel is a kerosene-type aviation turbine fuel. It is normally used in military aviation and naval operations. The minimum flash point of grade F-34 is 38°C and that of aviation turbine fuel grade F-44 is 60°C.

Sub-type 3 aviation turbine fuel must comply with Canadian General Standards Board standard CAN/CGSB-3.24-2012 – Aviation Turbine Fuel (Military Grades F-34 and F-44).

#### **DIVISION II**

HEATING FUEL OIL

- **18.** The types of heating fuel oil are as follows:
- (1) type 0: intended for use in fuel domestic oil burning appliances that have outside storage in regions where ambient temperatures may reach 48°C;
- (2) type 1: intended primarily for use in sleeve-type and wick feed burners and in most vapourizing pot-type and atomizing burners that cannot use type 2 heating fuel oil:
- (3) type 2: primarily for use in domestic atomizingtype burners and is also intended for medium capacity commercial and industrial burners;
- (4) type 4: an industrial type of fuel intended primarily for use in burners equipped with limited preheating devices or without preheating devices;
- (5) type 5: a residual type of heating fuel oil for use in burners equipped with limited preheating facilities requiring a fuel oil of lower viscosity than type 6 heating fuel oil;
- (6) type 6: a high-viscosity residual oil intended for use in burners equipped with preheating facilities.

All types of heating fuel oil must comply with Canadian General Standards Board standard CAN/CGSB-3.2-2013 – Heating Fuel Oil (Types 0, 1, 2, 4, 5 and 6).

## CHAPTER III SAMPLES AND ANALYSES

**19.** During an inspection of petroleum product quality, the inspector or the person authorized under section 87 of the Petroleum Products Act (chapter P-30.01) must comply with the sampling methods in the standards applicable to the various classes of petroleum products.

The provisions of this Chapter applicable to inspectors also apply to authorized persons.

**20.** An inspector takes 2 samples of each product inspected and pays the current price for the product.

The inspector immediately seals both samples.

- **21.** After taking a sample, the inspector draws up a report containing
- (1) the name and address of the owner of the petroleum equipment installation that contains the product sampled;
  - (2) the date on which the samples were taken;
- (3) the name and address of the site and identification of the tank from which the samples were taken;
  - (4) identification of the petroleum product;
- (5) the name of the supplier of the petroleum product that made the last 2 deliveries, the name of the carrier, the date of those deliveries and the quantities delivered, where applicable.

The report must be signed by the person who took the samples and by the owner or operator of the petroleum equipment installation containing the product sampled.

A copy of the report is given to the owner of the installation.

- **22.** The inspector forwards the samples taken to the laboratory identified by the Minister.
- **23.** The laboratory analyses a first sample of the petroleum product taken and provides an analysis report to the inspector. The report, signed by a chemist, must indicate the data determined by the Minister and the date of the sample analysis.

The second sample remains sealed and is kept by the laboratory for a period of 3 months. Despite the foregoing, if the first sample is not compliant, it is kept for a period of 12 months, unless notice to the contrary is given by the inspector.

## CHAPTER IV OFFENCES

- **24.** Every person contravening the provisions related to automotive fuels and heating fuel oils commits an offence and is liable to a fine provided for in paragraph 2 of section 106 of the Petroleum Products Act.
- **25.** An inspector or a person authorized under section 87 of the Petroleum Products Act who contravenes the provisions related to sampling and analysis of petroleum products commits an offence and is liable to a fine provided for in paragraph 1 of section 106 of the Petroleum Products Act.

## **CHAPTER V**

FINAL

- **26.** This Regulation replaces the Petroleum Products Regulation (chapter P-30.01, r. 1).
- **27.** This Regulation comes into force on the fifteenth day following the date of its publication in the *Gazette* officielle du Québec.

#### **SCHEDULE I**

(s. 12, 1st par.)

## ADDITIONAL REQUIREMENTS RELATING TO POINTS OF COMPLIANCE AND GASOLINE VOLATILITY

The volatility requirements for gasoline, set out in Canadian General Standards Board standards CAN/CGSB-3.5-2011 – Automotive Gasoline, CAN/CGSB-3.511-2011 – Oxygenated Automotive Gasoline Containing Ethanol (E1-E10) and CAN/CGSB-3.512-2013 – Automotive Ethanol Fuel (E50-E85), apply to the refinery for products intended for sale, to points of importation and to points of blending (to the blended product). A point of importation is defined as a permanent or temporary tank, a cargo tank or a gasoline container from outside Québec.

In June, July and August, delivering a product with volatility characteristics other than those in Table 3D of CAN/CGSB-3.5-2011 – Automotive Gasoline, CAN/CGSB-3.511-2011 – Oxygenated Automotive Gasoline Containing Ethanol (E1-E10) or in Table 7.6 of CAN/CGSB-3.512-2013 – Automotive Ethanol Fuel (E50-E85) in the municipalities in the Outaouais-Montréal corridor, listed below, is prohibited.

## LIST OF MUNICIPALITIES IN THE OUTAOUAIS-MONTRÉAL CORRIDOR

(by RCM or, if outside an RCM, by administrative region or metropolitan community; the numbers indicated for each municipality, RCM, administrative region or metropolitan community correspond to the codes assigned to them in the Répertoire des municipalités published by the Ministère des Affaires municipales, des Régions et de l'Occupation du territoire.)

## 530 PIERRE-DE SAUREL 53085 Saint-Gérard-Majella, P

## 550 ROUVILLE

55023 Saint-Césaire, V

55030 Sainte-Angèle-de-Monnoir, M

55037 Rougement, M

55048 Marieville, V

55057 Richelieu, V

55065 Saint-Mathias-sur-Richelieu, M

#### 560 LE HAUT-RICHELIEU

56083 Saint-Jean-sur-Richelieu, V 56097 Mont-Saint-Grégoire, M 56105 Sainte-Brigide-d'Iberville, M

## 570 LA VALLÉE-DU-RICHELIEU

57005 Chambly, V

57010 Carignan, V

57020 Saint-Basile-le-Grand, V

57025 McMasterville, M

57030 Otterburn Park, V

57033 Saint-Jean-Baptiste, M

57035 Mont-Saint-Hilaire, V

57040 Beloeil, V

57045 Saint-Mathieu-de-Beloeil, M

57050 Saint-Marc-sur-Richelieu, M

57057 Saint-Charles-sur-Richelieu, M

57068 Saint-Denis-sur-Richelieu, M

57075 Saint-Antoine-sur-Richelieu, M

## 590 MARGUERITE D'YOUVILLE

59010 Sainte-Julie, V

59015 Saint-Amable, M

59020 Varennes, V

59025 Verchères, M

59030 Calixa-Lavallée, P

59035 Contrecoeur, V

#### 600 L'ASSOMPTION

60005 Charlemagne, V

60013 Repentigny, V

60020 Saint-Sulpice, P

60028 L'Assomption, V

60035 L'Épiphanie, V

60040 L'Épiphanie, P

#### 630 MONTCALM

63005 Sainte-Marie-Salomé, P

63013 Saint-Jacques, M

63023 Saint-Alexis, M

63030 Saint-Esprit, M

63035 Saint-Roch-de-l'Achigan, M

63040 Saint-Roch-Ouest, M

63048 Saint-Lin-Laurentides, V

63055 Saint-Calixte, M

63060 Sainte-Julienne, M

63065 Saint-Liguori, P

#### 640 LES MOULINS

64008 Terrebonne, V

64015 Mascouche, V

## 13 OUTSIDE AN RCM / LAVAL

65005 Laval, V

## 663 OUTSIDE AN RCM / COMMUNAUTÉ MÉTROPOLITAINE DE MONTRÉAL

58007 Brossard, V

58012 Saint-Lambert, V

58033 Boucherville, V

58037 Saint-Bruno-de-Montarville, V

58227 Longueuil, V

66007 Montréal-Est, V

66023 Montréal, V

66032 Westmount, V

66047 Montréal-Ouest, V

66058 Côte-Saint-Luc, V

66062 Hampstead, V

66072 Mont-Royal, V

66087 Dorval, V

66092 L'Île-Dorval, V

66097 Pointe-Claire, V

66102 Kirkland, V

66107 Beaconsfield, V

66112 Baie D'Urfé, V

66117 Sainte-Anne-de-Bellevue, V

66127 Senneville, VL

66142 Dollard-Des Ormeaux, V

# 16 OUTSIDE AN RCM / MONTÉRÉGIE

67802 Kahnawake, R.I.

69802 Akwesasne, R.I.

#### 670 ROUSSILLON

67005 Saint-Mathieu, M

67010 Saint-Philippe, M

67015 La Prairie, V

67020 Candiac, V

67025 Delson, V

67030 Sainte-Catherine, V

67035 Saint-Constant, V

67040 Saint-Isidore, P 67045 Mercier, V 67050 Châteauguay, V 67055 Léry, V

#### 680 LES JARDINS-DE-NAPIERVILLE

68020 Sainte-Clotilde, M

68025 Saint-Patrice-de-Sherrington, M

68040 Saint-Jacques-le-Mineur, M

68045 Saint-Édouard, M 68050 Saint-Michel, M 68055 Saint-Rémi, V

#### 690 LE HAUT-SAINT-LAURENT

69010 Franklin, M

69017 Saint-Chrysostome, M

69025 Howick, M

69030 Très-Saint-Sacrement, P

69037 Ormstown, M

69045 Hinchinbrooke, M

69050 Elgin, M

69055 Huntingdon, V

69060 Godmanchester, CT

69065 Sainte-Barbe, M

69070 Saint-Anicet, M

69075 Dundee, CT

#### 700 BEAUHARNOIS-SALABERRY

70005 Saint-Urbain-Premier, M

70012 Sainte-Martine, M

70022 Beauharnois, V

70030 Saint-Étienne-de-Beauharnois, M

70035 Saint-Louis-de-Gonzague, P

70040 Saint-Stanislas-de-Kostka, M

70052 Salaberry-de-Valleyfield, V

## 710 VAUDREUIL-SOULANGES

71005 Rivière-Beaudette, M

71015 Saint-Télesphore, M

71020 Saint-Polycarpe, M

71025 Saint-Zotique, M

71033 Les Coteaux, M

71040 Coteau-du-Lac, V

71045 Saint-Clet, M

71050 Les Cèdres, M

71055 Pointe-des-Cascades, VL

71060 L'Île-Perrot, V

71065 Notre-Dame-de-L'Île-Perrot, V

71070 Pincourt, V

71075 Terrasse-Vaudreuil, M

71083 Vaudreuil-Dorion, V

71090 Vaudreuil-sur-le-Lac, VL

71095 L'Île-Cadieux, V

71100 Hudson, V

71105 Saint-Lazare, V

71110 Sainte-Marthe, M

71115 Sainte-Justine-de-Newton, M 71125 Très-Saint-Rédempteur, M

71133 Rigaud, M

71140 Pointe-Fortune, VL

#### 720 DEUX-MONTAGNES

72005 Saint-Eustache, V

72010 Deux-Montagnes, V

72015 Sainte-Marthe-sur-le-Lac, V

72020 Pointe-Calumet, M

72025 Saint-Joseph-du-Lac, M

72032 Oka, M

72043 Saint-Placide, M

# 730 THÉRÈSE-DE BLAINVILLE

73005 Boisbriand, V

73010 Sainte-Thérèse, V

73015 Blainville, V

73020 Rosemère, V

73025 Lorraine, V

73030 Bois-des-Filion, V

73035 Sainte-Anne-des-Plaines, V

# 15 OUTSIDE AN RCM / LAURENTIDES

74005 Mirabel, V

#### 750 LA RIVIÈRE-DU-NORD

75005 Saint-Colomban, V

75017 Saint-Jérôme, V

75028 Sainte-Sophie, M

75040 Prévost, V

75045 Saint-Hippolyte, M

#### 760 ARGENTEUIL

76008 Saint-André-d'Argenteuil, M

76020 Lachute, V

76025 Gore, CT

76030 Mille-Isles, M

76035 Wentworth, CT

76043 Brownsburg-Chatham, V

76055 Grenville, VL

76052 Grenville-sur-la-Rouge, M

76065 Harrington, CT

#### 770 LES PAYS-D'EN-HAUT

77022 Sainte-Adèle, V

77030 Piedmont, M

77035 Sainte-Anne-des-Lacs, P

77043 Saint-Sauveur, V

77050 Morin-Heights, M

## 800 PAPINEAU

80005 Fassett, M

80010 Montebello, M

80015 Notre-Dame-de-Bon-Secours, M

80020 Notre-Dame-de-la-Paix, M

80027 Saint-André-Avellin, M

80037 Papineauville, M

80045 Plaisance, M

80050 Thurso, V

80055 Lochaber, CT

80060 Lochaber-Partie-Ouest, CT

80065 Mayo, M

80070 Saint-Sixte, M

80078 Ripon, M

80085 Mulgrave-et-Derry, M

# 07 OUTSIDE AN RCM / OUTAOUAIS 81017 Gatineau, V

#### 820 LES COLLINES-DE-L'OUTAOUAIS

82005 L'Ange-Gardien, M

82010 Notre-Dame-de-la-Salette, M

82015 Val-des-Monts, M

82020 Cantley, M

82025 Chelsea, M

82030 Pontiac, M

82035 La Pêche, M

#### 840 PONTIAC

84005 Bristol, M

84010 Shawville, M

84015 Clarendon, M

84020 Portage-du-Fort, VL

84025 Bryson, M

84030 Campbell's Bay, M

84035 L'Île-du-Grand-Calumet, M

84040 Litchfield, M

84045 Thorne, M

#### **SCHEDULE II**

(s. 12, 2nd par.)

## ADDITIONAL REQUIREMENTS RELATING TO LOW TEMPERATURE FLOW PROPERTIES OF DIESEL FUELS

The cloud points of diesel fuels must comply with the maximum temperatures listed in Table I. According to the Table, the low temperature flow properties of diesel fuels are designed to give satisfactory performance at the temperatures indicated by the 2.5% low-end design temperature for a given period and location of intended use.

The design temperature is the lowest temperature at or below which 2.5% of the hourly outside temperatures were recorded for a given period.

The test method used to determine the operating temperature is that of the cloud point in ASTM International standard ASTM D2500 or ASTM D5773. For diesel fuels in which agents modifying the wax have been added to improve the flow properties, the test method used is the low temperature flow test for diesel fuels in Canadian General Standards Board standard CAN/CGSB-3.0 No. 140.1.

TABLE I

SEASONAL CLOUD POINTS OF DIESEL FUELS CONFORMING TO THE AVERAGE 2.5% LOW-END DESIGN TEMPERATURES FOR THE ZONES ILLUSTRATED IN FIGURE I (TEMPERATURES IN DEGREES CELSIUS)

PERIODS	USE ZONES									
	1	2	3	4	5	6	7	8	9	10
	Montréal	Abitibi, hautes Laurentides Saguenay	Québec & Bas- du-Fleuve	Estrie	Est du Québec & Gaspésie	Côte Nord	Baie-James & Nord du Québec	Nunavik	Laurentidess & Outaouais*	îles-de-la- Madeleine
Jan. 1-15	-25	-35	-27	-30	-27	-30	-36	-39	-29	-16
Jan. 16-31	-26	-35	-28	-29	-28	-30	-37	-39	-30	-19
Feb. 1-14	-25	-33	-27	-27	-28	-30	-37	-39	-28	-20
Feb. 15-28	-22	-31	-25	-24	-25	-27	-36	-37	-26	-17
March 1-15	-18	-27	-20	-23	-22	-25	-34	-36	-24	-15
March 16-										
31	-13	-23	-16	-16	-18	-21	-30	-32	-18	-11
April 1-15	-6	-17	-10	-10	-10	-15	-24	-26	-10	-5
April 16-30	-2	-9	-4	-5	-6	-8	-20	-23	-5	-2
May 1-15	1	-5	-2	-2	-2	-3	-11	-13	-2	0
May 16-31	4	-2	1	1	0	-2	-6	-8	1	3
June 1-15	7	1	4	4	2	1	-2	-3	3	5
June 16-30	10	4	6	7	5	3	0	-1	6	8
July 1-15	12	6	8	8	7	6	2	2	7	10
July 16-31	11	7	9	9	9	7	4	3	8	12
Aug. 1-15	10	6	8	9	8	5	4	4	7	14
Aug. 16-31	8	4	6	6	6	4	2	3	5	12
Sept. 1-15	5	1	4	3	3	2	1	1	2	10
Sept. 16-30	2	-2	1	0	0	-1	-2	-2	-1	7
Oct. 1-15	-1	-4	-2	-3	-3	-3	-6	-6	-3	4
Oct. 16-31	-4	-7	-4	-5	-4	-5	-10	-9	-6	1
Nov. 1-15	-7	-14	-9	-10	-9	-11	-18	-18	-10	-1
Nov. 16-30	-11	-19	-14	-14	-15	-19	-23	-24	-15	-5
Dec. 1-15	-20	-27	-22	-22	-22	-25	-31	-32	-24	-10
Dec. 16-31	-22	-32	-24	-25	-25	-28	-35	-38	-27	-12

<sup>\*</sup> Except within the limits of Ville de Gatineau where the cloud points for use zone No. 1 apply, with the exception of the 16 to 31 January and 1 to 14 February periods for which the maximum cloud points to conform to are respectively -25°C and -22°C.

## Notes:

- Seasonal cloud points conform to low-end design temperatures retained on 27 June 2013 from Environment Canada data for the Canadian General Standards Board. They cover the period from 1981 to 2010.
- 2. Use zones correspond to the zones in Figure I.
- 3. Cloud points differing as to storage and use conditions may be specified in a written agreement between the user and the supplier.

# FIGURE I

