

Gatineau, Quebec
K1A 0H3

To: Interested Parties
(See Distribution List)

Re: Guidance Document on the *Sulphur in Diesel Fuel Regulations*

Please find attached the guidance document on the *Sulphur in Diesel Fuel Regulations*. This document follows the same questions-and-answers format as the guidance document for the *Sulphur in Gasoline Regulations*. A copy of Guidance Document on the *Sulphur in Diesel Fuel Regulations* can be found in the Fuels Section of the Oil, Gas and Energy web-site located at:

http://www.ec.gc.ca/energ/fuels/fuel_home_e.htm

If you have further questions on the regulations, please mail or fax your questions to:

Sulphur in Diesel Fuel Regulations
Oil, Gas & Energy Branch
Environment Canada
Gatineau, Quebec K1A 0H3

Fax: 819-953-8903

Yours truly,

Bruce McEwen
Chief, Fuels Division

enclosed

**Environment Canada
Guidance Document**

QUESTIONS AND ANSWERS

ON THE FEDERAL

SULPHUR IN DIESEL FUEL REGULATIONS

under the Canadian Environmental Protection Act, 1999 (CEPA 1999)

**Fuels Division
Environment Canada**

October 2002

NOTICE

Any comments or inquiries concerning the content of this document should be directed to:

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351 St. Joseph Boulevard
Gatineau, Quebec K1A 0H3

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DISCLAIMER

This document is not part of, does not in anyway supersede or modify the *Sulphur in Diesel Fuel Regulations*, or offer any legal interpretation of those regulations. Persons subject to the regulations must refer directly to the regulations to determine the scope of their obligations and responsibilities.

PREFACE

This document has been produced by Environment Canada as a reference tool to provide the reader with information about the requirements of the *Sulphur in Diesel Fuel Regulations*. There is a short outline of the regulations provided at the beginning of the document, followed by questions and answers about the regulations in general and their various sections.

Guidance Document -- *Sulphur in Diesel Fuel Regulations* (October 2002)

SULPHUR IN DIESEL FUEL REGULATIONS

Guidance Document

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Outline of the federal *Sulphur in Diesel Fuel Regulations*

Section 1: INTERPRETATION

This section provides the definitions that are used in the regulations.

Section 2: APPLICATION

The regulations set limits for sulphur in diesel fuel for use in on road vehicles. Section 2 outlines circumstances where the requirements of the regulations do not apply.

Section 3: MAXIMUM CONCENTRATION OF SULPHUR

This section specifies the maximum level of sulphur in diesel fuel for use in on-road vehicles. The limits apply to diesel fuel produced, imported or sold for use in on-road vehicles.

Section 4: ANALYSIS

This section specifies the methods for analysis that will be used by Environment Canada and the courts to determine compliance with the compositional requirements of the regulations.

Section 5: REPORTS

This section specifies that every person who produces or imports diesel fuel (low-sulphur or regular) shall submit a quarterly report on diesel fuel.

This section also specifies the analysis methods that may be used for reporting the concentration of sulphur in diesel fuel and provides for use of methods that are demonstrated to be equivalent.

The section also requires the submission of the information set out in Schedules 1 and 2 of the regulations.

Section 6: RECORDS

This section requires importers and producers to keep records on diesel fuel (low-sulphur or regular). These records have to be maintained for a period of five years at the production facility or place of business in Canada of an importer.

Section 7: REPEAL

The *Diesel Fuel Regulations* (limiting sulphur in diesel fuel for use in on-road vehicles to 500 mg/kg) in effect since January 1, 1998 are repealed on the coming into force of the *Sulphur in Diesel Fuel Regulations*.

Section 8: COMING INTO FORCE

The regulations come into force on January 1, 2003.

Questions and Answers on the federal *Sulphur in Diesel Fuel Regulations* under *CEPA 1999*

GENERAL QUESTIONS

G.1 *What are the penalties if I do not comply with the Sulphur in Diesel Fuel Regulations?*

Compliance with regulations is mandatory. Environment Canada's Compliance and Enforcement Policy for CEPA 1999 sets out the criteria for responses by Environment Canada enforcement officers to alleged violations. Under subsections 272 and 273 of the *Canadian Environmental Protection Act, 1999* (CEPA 1999), every person who is found guilty of contravening or failing to comply with the Act or its regulations is subject to fines, imprisonment or other court orders.

A copy of Environment Canada's Enforcement and Compliance Policy is available on request from the address listed below:

Director
Enforcement Branch
Environment Canada
351 St. Joseph Boulevard
Gatineau, Quebec K1A 0H3

You may also obtain a copy of the policy at:

www.ec.gc.ca/CEPARRegistry¹

In addition to financial and administrative penalties, if there is a contravention of the regulation, the Minister may require a producer, processor, importer, retailer or distributor to take any or all of the following measures:

- provide notification of the relevant characteristics of the fuel and of any danger to the environment or to human life or health that might be posed by the fuel;
- replace the fuel with fuel that meets the applicable requirement;
- accept return of the fuel from the purchaser and refund the purchase price;
- take other measures to mitigate the effect of the contravention on the environment or on human life or health; and
- report on the steps taken.

G.2 *Why is sulphur in diesel fuel being regulated?*

Sulphur occurs naturally in crude oil and so is found in diesel fuel. It is directly emitted from vehicles as sulphur dioxide and sulphate particles. Emissions caused by high sulphur levels affects the health of Canadians. Reduction of sulphur to 15 mg/kg in on-road diesel fuel is required to enable the efficient operation of advanced exhaust emission control technologies needed to comply with the requirements of the new heavy-duty diesel vehicle emission regulations that are expected to come into effect for the 2007 model year.

Sulphur in diesel is currently regulated in other jurisdictions. Many countries currently regulate a maximum sulphur level of 500 mg/kg for on-road diesel fuel. In December 2000, the U.S. Environmental Protection Agency adopted regulations that reduce sulphur to 15 mg/kg² throughout the U.S. starting June 2006. In May 2001, the European Union proposed to introduce “zero” sulphur (defined as less than 10 mg/kg sulphur) on-road diesel fuel commencing January 1, 2005.

In February 2001, Canada's federal Minister of the Environment published a *Notice of Intent on Cleaner Vehicles, Engines and Fuels* (NOI) that set out planned federal initiatives to control emissions from these sources. With respect to on-road

¹ From the CEPA Registry introductory page, click on the heading “Policies” found at the left-hand side of the screen and then click on the title of the CEPA 1999 Compliance and Enforcement Policy.

² 100 mg/kg = 100 parts per million (ppm) = 0.0100% by weight.

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diesel fuel, the NOI indicated that Environment Canada intended to align with the U.S. level and timing for sulphur in on-road diesel fuel (i.e. 15 mg/kg sulphur limit starting June 1, 2006). The Canadian *Sulphur in Diesel Fuel Regulations* were passed on July 31, 2002. The regulations align Canadian requirements for the allowable level of sulphur in on-road diesel fuel with those of the U.S..

G.3 *Why is only sulphur in diesel fuel for use in on-road vehicles being reduced?*

Reduction of sulphur to 15 mg/kg in on-road diesel fuel is required to enable the efficient operation of advanced exhaust emission control technologies needed to comply with the requirements of the new heavy-duty diesel vehicle emission regulations that are expected to come into effect for the 2007 model year. Environment Canada also plans to recommend a regulatory limit for sulphur in off-road diesel. The limit would be established in the same time frame that the U.S. EPA plans for developing limits for sulphur in U.S. off-road diesel. Note, off-road diesel reports and records are required.

G.4 *To whom do the regulations apply?*

The regulations apply to every person who produces, imports or sells diesel fuel.

G.5 *Is there any diesel fuel that is not subject to the regulations?*

Diesel fuel that meets the following criteria is exempt from the regulations, provided that it is accompanied by written evidence establishing that it meets the defined criteria:

- Diesel fuel that is in transit through Canada, from a place outside of Canada to another place outside of Canada;
- Diesel fuel that is produced in Canada or sold for export;
- Imported diesel fuel that exceeds sulphur concentrations and that will be further processed to meet the sulphur limit .

Persons seeking to avail themselves of these exemptions have to ensure that the diesel fuel is accompanied by written evidence establishing that it meets the defined criteria.

Diesel fuel that is being imported in a fuel tank that supplies the engine of conveyance is also not subject to the regulations.

G.6 *What are the sulphur limits and associated timing under the regulations*

For production and imports of diesel fuel for on-road use:

- up to and including May 31, 2006, not greater than 500 mg/kg of sulphur - limit applies throughout Canada;
- as of June 1, 2006, not greater than 15 mg/kg sulphur - limit applies throughout Canada.

For sales of and offers to sell diesel fuel for on-road use in all of Canada except in the northern supply area:

- up to and including August 31, 2006, sulphur content no greater than 500 mg/kg;
- as of September 1, 2006, sulphur content no greater than 15 mg/kg.

For sales of and offers to sell diesel fuel for on-road use in the northern supply area:

- up to and including August 31, 2007, sulphur content no greater than 500 mg/kg ;
- as of September 1, 2007, sulphur content no greater than 15 mg/kg.

G.7 *I only import or produce diesel fuel that is not for use in on-road vehicles. Do the regulations apply to me?*

Yes, while the sulphur limits apply only to diesel fuel for use in on-road vehicles. , you are required to submit schedule 2 (Identification Information) and to report quarterly as per Section 5. There are also records requirements as per Section 6.

G.8 *If I only buy diesel fuel, but do not refine or import myself, what requirements do the regulations require me to meet?*

If you buy diesel fuel from others and do not produce or import it, then the regulations only apply to you if you sell the diesel fuel. Up to and including August 31, 2006, you can only sell diesel fuel for use in on-road vehicles that has a sulphur level no greater than 500 mg/kg, except in the northern supply area. The limit as of September 1, 2006 is 15 mg/kg, except in the northern supply area (subsection 3(2)).

Within the northern supply area, you can sell diesel fuel for use in on-road vehicles with a sulphur level no greater than 500 mg/kg until August 31, 2007. The limit as of September 1, 2007 is 15 mg/kg.

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G.9 *How do these regulations relate to the federal Fuels Information Regulations No. 1.*

The federal *Fuels Information Regulations, No. 1* require that refiners and importers of fuels report annually on the average levels of sulphur in all liquid fuels, including diesel fuel, for each quarter of the year. They also require one-time notification of any changes in the use of additives in liquid fuels. The *Fuels Information Regulations No. 1* do not limit the sulphur concentration in fuels. Those regulations are separate from the *Sulphur in Diesel Fuel Regulations*, which have both reporting requirements and limits on sulphur concentration in diesel fuel for use in on-road vehicles. Both regulations must be complied with.

G.10 *How do these regulations relate to the federal Diesel Fuels Regulations?*

The federal *Sulphur in Diesel Fuel Regulations* replace the federal *Diesel Fuel Regulations* effective January 1, 2003.

G.11 *How do these regulations relate to provincial diesel fuel regulations?*

Some provinces require that the Canadian General Standards Board's (CGSB) standard for automotive low-sulphur diesel fuel (on-road diesel) be met. Both provincial and federal regulations must be complied with.

G.12 *How do these regulations relate to the proposed On-Road Vehicle and Engine Emission Regulations?*

The properties of a fuel can have a direct impact on the resulting vehicle emissions. In some cases, the performance of the vehicle emission control systems can be impaired without the right type of fuel. Therefore, the development of effective regulations, policies and programs to reduce vehicle emissions must consider the fuels and vehicle/engine as an integrated system. Low sulphur diesel fuel is required to enable the introduction and effective performance of advanced emission control systems for on-road diesel engines. The *Sulphur in Diesel Fuel Regulations* which reduce the allowable level of sulphur in on-road diesel fuel to 15 mg/kg are therefore essential to accompany the new vehicle emission standards under the proposed regulations that are expected to be in place in the 2007 model year.

G.13 *Do the regulations include labelling requirements at the pump for diesel fuel that is sold?*

No.

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G.14 The “Minister” is referred to throughout the Regulation. Who is the “Minister”?

The “Minister” is the federal Minister of Environment. Note that where the regulations require information to be submitted to the Minister, it should be sent to the Regional Director of the applicable regional office of Environment Canada, who acts on behalf of the Minister in this regard. The addresses of these offices are provided in Appendix A.

G.15 What are the important dates in the regulations?

A list of important dates in the regulations is presented below:

IMPORTANT DATES IN THE SULPHUR IN DIESEL FUEL REGULATIONS

January 1, 2003	<p><i>Sulphur in Diesel Fuel Regulations</i> come into force and the <i>Diesel Fuel Regulations</i> are repealed.</p> <p>Limit for sulphur in diesel fuel for use in on-road vehicles does <u>not</u> change.</p> <p>Some changes in administrative provisions (eg. reporting, record keeping).</p>	
March 2, 2003	Every person who produces or imports diesel fuel must submit registration information as set out in Schedule 2 of the regulations.	
May 15, 2003	Every person who produces or imports diesel fuel must submit first quarterly report under the new regulations providing the information prescribed by subsection 5(1). Future reports are due no later than 45 days after the end of each quarter.	
January 1, 2004	Reference method for measuring the concentration of sulphur in diesel changes from CAN/CGSB-3.0 No. 16.0-95 to ASTM D 5453-00.	Method for reporting concentration of sulphur in diesel are ASTM D 5453-00 or an equivalent method if the conditions of 5(2)(f) are met
June 1, 2006	15 mg/kg limit for concentration of sulphur in diesel fuel for use in on-road vehicles comes into effect for <u>production and imports</u> of diesel fuel.	
September 1, 2006	15 mg/kg limit for concentration of sulphur in diesel fuel for use in on-road vehicles comes into effect for <u>sales and offers to sell</u> of diesel fuel (except in northern supply area).	
September 1, 2007	15 mg/kg limit for concentration of sulphur in diesel fuel for use in on-road vehicles comes into effect for <u>sales and offers to sell</u> of diesel fuel in the northern supply area.	

QUESTIONS ON SECTIONS OF THE REGULATIONS

Section 1: INTERPRETATION

- 1.1 *Is equipment such as farm and construction equipment such as earth movers and backhoes considered to be an on-road vehicle under the regulations? Is there a list or a process to determine which vehicles are considered on-road, for the purpose of this regulations?*

“On-road vehicle” is defined by the regulations as “a self-propelled vehicle designed for transporting persons, property, material or permanently or temporarily affixed apparatus on a common or public road, street, avenue, parkway or highway”.

There is no list or process to determine if equipment meets the definition of “on-road vehicle” under the regulations. If interpretation of the term were an issue in a prosecution under the regulations, it would be determined by the court.

- 1.2 *Why do the regulations include a definition of “northern supply area”?*

Generally, it is difficult to supply these northern locations, especially in the winter. Fuel shipments to these areas take place from mid-May to September. Refuelling facilities in these areas are generally slow to turnover their diesel fuel stock. For these reasons, the regulations include a later implementation date with respect to the sulphur concentration on sales of and offers to sell diesel fuel in these areas.

- 1.3 *What is the “northern supply area”?*

The regulations use the term “northern supply area” to denote some remote northern locations of Canada that have a later implementation date for the 15 mg/kg limit that applies to sales and offers to sell. Appendix B of this Guidance Document includes a map showing the northern supply area. The area includes, the Northwest Territories, Nunavut, most of Yukon, northeast Manitoba, northern Quebec, Labrador, and coastal areas around James Bay and Hudson Bay. The area excludes primary roads in the North.

- 1.4 *How was the region of the “northern supply area” arrived at?*

The northern supply area includes remote northern regions of Canada that are supplied with fuel by barge. In defining this area, Environment Canada consulted with stakeholders including the Canadian General Standards Board (CGSB),

Natural Resources Canada (NRCan), Industry Canada, Canadian Transportation Agency, Canadian Petroleum Products Institute (CPPI), Engine Manufacturers Association, Northern Transportation Company Limited, Sunoco, Imperial Oil, Shell, Friends of the Earth, the governments of Yukon, Northwest Territories, Nunavut, Quebec and Newfoundland, and the Cree Regional Authority.

1.5 *Why is the definition of “diesel fuel” in the Sulphur in Diesel Regulations different from the CGSB definition?*

CGSB defines diesel as having a lower end boiling range of 150 °C. The *Sulphur in Diesel Fuel Regulations* have modified the definition of diesel fuel to change the lower end boiling range to 130 °C in order to encompass a broader range of distillate. The definition in the regulation was recommended by CPPI.

Section 2: APPLICATION

2.1 *Do the regulations apply to all diesel fuel?*

The limits in the regulations apply to diesel fuel for use in on-road vehicles. Diesel fuel that is not for use in on-road vehicles is not required to meet the compositional requirements of the regulations but is subject to reporting and record keeping.

The regulations do not apply to:

Diesel Fuel in Transit: The fuel is in transit through Canada, from a place outside Canada to another place outside Canada, and is accompanied by written evidence establishing that the fuel is in transit;

Diesel Fuel for Export: The fuel is produced or sold for export and is accompanied by written evidence establishing that the fuel will be exported;

Diesel Fuel to be further processed: The fuel being imported is for use in on-road vehicles, its concentration exceeds the sulphur limit and the fuel is accompanied by written evidence establishing that it will meet the requirements of the regulations before the fuel is used or sold;

Persons seeking to avail themselves of these exemptions have to ensure that the diesel fuel is accompanied by written evidence establishing that it meets the defined criteria.

The regulations also do not apply to:

Diesel fuel in tank of vehicle: Diesel fuel in a fuel tank that is connected to the engine of a conveyance that is used for transportation by water, land or air.

- 2.2 *For the purposes of paragraphs 2 (a), (b) and (c) of the regulations, what is meant by "written evidence"?*

Paragraphs 2 (a), (b) and (c) set out circumstances under which the regulations do not apply. These provisions are copied from subsection 139(2) of CEPA 1999. Persons seeking to avail themselves of these exemptions have to ensure that the diesel fuel is accompanied by written evidence establishing that it meets the defined criteria. CEPA 1999 does not further define the requirements for written evidence. If there was an issue around the sufficiency of written evidence during a prosecution under the regulations, it would be decided by the court.

- 2.3 *What requirements apply to diesel fuel in transit between refineries in Canada and intended to be further processed, prior to being sold or transferred?*

The regulations do not differentiate diesel fuel in transit between refineries from other diesel fuel. Such fuel is therefore subject to all of the requirements of the regulations.

Section 3: MAXIMUM CONCENTRATION OF SULPHUR

- 3.1 *What are the limits for sulphur?*

For production and imports of diesel fuel for on-road use:

- up to and including May 31, 2006, not greater than 500 mg/kg of sulphur - limit applies throughout Canada;
- as of June 1, 2006, not greater than 15 mg/kg sulphur - limit applies throughout Canada.

For sales of and offers to sell diesel fuel for on-road use in all of Canada except the northern supply area:

- up to and including August 31, 2006, sulphur content no greater than 500 mg/kg;
- as of September 1, 2006, sulphur content no greater than 15 mg/kg.

For sales of and offers to sell diesel fuel for on-road use in the northern supply area:

- up to and including August 31, 2007, sulphur content no greater than 500 mg/kg ;
- as of September 1, 2007, sulphur content no greater than 15 mg/kg.

3.2 *What diesel fuel is not required to meet the compositional requirements of the regulations?*

Diesel fuel that is not for use in on-road vehicles is not required to meet the compositional requirements of the regulations.

3.3 *What is fuel for use in “on-road vehicles”?*

Diesel fuel “for use in on-road vehicles” is any diesel fuel that may be used in an on-road vehicle. Under the regulations, an on-road vehicle is defined as a self-propelled vehicle designed for transporting persons, property, material or permanently or temporarily affixed apparatus on a common or public road, street, avenue, parkway or highway.

3.4 *Why is there a 500 mg/kg limit in place until 2006?*

The 500 mg/kg limit has been in place since 1998. It was introduced largely because engines for model-year 1997 and later diesel-fueled vehicles at that time could not operate properly with higher-sulphur diesel fuel

3.5 *How was the 15 mg/kg sulphur limit arrived at?*

Reduction of sulphur to 15 mg/kg in on-road diesel fuel is required primarily to enable the effective operation of advanced exhaust emission control technologies needed to comply with the requirements of the new heavy-duty diesel vehicle emission regulations that are expected to come into effect for the 2007 model year.

The regulations align Canadian requirements for the allowable level of sulphur in on-road diesel fuel with those of the United States,. They will also bring Canada in line with existing requirements or future initiatives in Europe, Japan and other progressive jurisdictions.

3.6 *Why does the 15 mg/kg limit for sales come into effect after the limit for production and imports?*

It takes time for the “cleaner diesel fuel” to flow through the distribution system. The 15 mg/kg cap concentration of sulphur in diesel comes into force three months after the cap on production and importation. This is to allow diesel fuel produced or imported in accordance with previous regulatory requirements, to work its way through the distribution system to the consumer. Since the “northern

supply area” tends to have only one shipment of diesel fuel per year, the 15 mg/kg sales cap comes into effect one year later in that region than in the rest of Canada.

- 3.7 *Why is there a one-year delay before the 15 mg/kg is required in the northern supply area?*

Generally, it is difficult to supply remote northern locations, especially in the winter. Fuel shipments to these areas take place from mid-May to September. Refueling facilities in these areas are generally slow to turnover their diesel fuel stock. For these reasons, the regulations include a later implementation date with respect to the sulphur concentration on sales of diesel in these areas.

- 3.8 *Why are the limits maxima, rather than averages like under the Benzene in Gasoline and Sulphur in Gasoline Regulations?*

The goal of the regulations is to ensure that the level of sulphur in diesel fuel used in on-road vehicles in Canada will not impede the effective operation of advanced emission control technologies planned to be introduced on 2007 and later model-year vehicles (i.e., in mid-2006) in order for those vehicles to comply with stringent new exhaust emission regulations. This is accomplished by reducing the maximum allowable limit for sulphur in on-road diesel fuel to 15 mg/kg of fuel. Sulphur concentrations above this limit can have an adverse effects on the performance of advance emission control technology.

Average limits would also increase the complexity of a regulation, requiring compliance plans and annual audits.

- 3.9 *I am a producer or importer of diesel fuel. How do I know if the fuel I produce or import is “for use in on-road vehicles” ?*

You may not know the intended use of the diesel fuel. However, if the diesel fuel exceeds the concentration referred to in paragraph (1)(a) or (b) of the regulations, then you must identify the batch of diesel fuel as “not suitable for use in on-road vehicles” prior to the dispatch of that diesel fuel from your production facility or prior to importation of that diesel fuel.

- 3.10 *I am a seller of diesel fuel. How do I know if the fuel I sell identified as “diesel not suitable for use in on-road vehicles” is not used in on-road vehicles ?*

You may not know the intended use of the diesel fuel. However, if the diesel fuel exceeds the concentration referred to in Section 3, paragraphs (2)(a), (2)(b), (3)(a) and (3)(b) of the regulations, then it cannot be sold for use in on-road vehicles.

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- 3.11 *Because of contamination or mixing during distribution, diesel fuel that was produced or imported with a sulphur concentration less than 15 mg/kg may end up having a sulphur concentration greater than 15 mg/kg. What do I do with this diesel fuel? Can I sell it?*

If the diesel fuel does not meet the regulatory requirement of 15 mg/kg sulphur maximum, then it cannot be sold for use in on-road vehicles after September 1, 2006 in most of Canada (i.e. except in the northern supply area) and in all of Canada after September 1, 2007. It can be sold for other uses.

- 3.12 *What units are used for compliance purposes?*

The units for the limits for the maximum concentration of sulphur are milligrams of sulphur per kilogram of diesel fuel, or mg/kg.

- 3.13 *Why have the units for the limits been changed from 0.05% by mass in the Diesel Fuel Regulations to 500 mg/kg in the new regulations?*

These are the units used in the test method ATSM D5453-00 which is specified in the new regulations. These units are also the standard for other fuels regulations and are metric.

- 3.14 *In the USA, there is a "compliance margin" that takes into consideration the variability of test procedures, when assessing compliance with the fuel. What is the acceptable compliance margin under the regulations for the 500 mg/kg limit and the 15 mg/kg limit?*

There is no compliance margin included in the *Sulphur in Diesel Fuel Regulations*.

Section 4: ANALYSIS

- 4.1 *Why are specific test methods stipulated in the Sulphur in Diesel Fuel Regulations?*

Test methods are specified in order to provide certainty and consistency in the enforcement of the regulations.

- 4.2 *What happens if a test method is amended?*

Any amendment to a test method is automatically incorporated into the regulations (refer to subsection 1(2)).

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- 4.3 *Why is the test method changed from CAN/CGSB-3.0 No. 16.0-95 to ASTM D 5453-00 after December 31, 2003?*

ASTM D 5453-00 has increased accuracy for lower sulphur levels. This was recommended to Environment Canada by the CGSB.

- 4.4 *In 2003, CAN/CGSB 3.0 No. 16.0-95 is the test method identified for compliance purposes. CAN/CGSB 3.0 No. 16.0-95 yields results in percent by weight. The limits in Section 3 of the regulations are specified in mg/kg. How does one convert from percent by weight from CAN/CGSB 3.0 No. 16.0-95 to mg/kg?*

Results obtained from CAN/CGSB - 3.0 number 16.0 - 95 method can be converted arithmetically by multiplying them by 10,000 and reporting the result in mg/kg, with 2 significant digits.

- 4.5 *How do I get copies of the test methods?*

The methods can be purchased from the Canadian General Standards Board (CGSB):

CGSB Sales Centre
Ottawa, Canada
K1A 1G6

www.pwgsc.gc.ca/cgsb

or from the American Society for Testing and Materials (ASTM):

ASTM International
100 Barr Harbor Drive
PO Box C700
West Conshohocken, Pennsylvania
USA
19428-2959

www.astm.org

Section 5: REPORTS

Identification Information (subsections 5(4) and 5(5))

5.1 *Who is required to submit information under subsection 5(4)?*

Every person who produces or imports diesel fuel (low-sulphur or regular).

5.2 *When do I submit the information under subsection 5(4)?*

If you produce or import diesel fuel, you are required to submit the information within 60 days after the regulations come into force, (i.e. by March 2nd, 2003). If you commence to produce or import diesel fuel after that date, you are required to submit the information 15 days before you produce or import diesel fuel for the first time.

5.3 *What are the requirements under Section 4(b) if I will be importing diesel fuel from a new location during the first 15 days of January 2003?*

The regulations specify that the information set out in Schedule 2 be submitted the latter of:

- (a) 60 days after the day on which these Regulations come into force, and
- (b) 15 days before the person produces or imports diesel fuel for the first time.

You would therefore be required to submit the information by March 2, 2003.

5.4 *How do I submit the information?*

You submit the information set out in Schedule 2 of the *Sulphur in Diesel Fuel Regulations* to the applicable regional office of Environment Canada. The addresses of these offices are provided in Appendix A of this guidance document. You must provide information on all of your production facilities and all usual points of importation.

5.5 *Will Environment Canada issue me a registration or identification number after I submit the information required in Schedule 2?*

Environment Canada does not plan to issue such numbers under the *Sulphur in Diesel Fuel Regulation*.

5.6 *What am I required to do if there are changes to the information that I submitted?*

You must notify the Minister in writing of any changes in the information that you have provided in Schedule 2, no more than five days after the change. The only exception to that requirement is any change in the information on your typical annual volumes. If typical annual volume changes, no update is required.

Submit changes to the applicable regional office of Environment Canada. The addresses of these offices are provided in Appendix A.

5.7 *Why are producers and importers required to submit identification information?*

The purpose of requiring the submission of identifying information to Environment Canada is to aid in the administration of the regulations. It allows Environment Canada to identify persons who produce or import diesel fuel and provides basic information needed to administer the regulations.

Quarterly Reports

5.8 *I produce or import both on-road and off-road diesel fuel. What information do the regulations require me to report quarterly?*

You are required to submit the information set out in Schedule 1 of *the Sulphur in Diesel Fuel Regulations* along with the total volume of diesel fuel, in cubic metres, with a concentration of sulphur that was less than or equal to 500 mg/kg until May 31, 2006 or that was less than or equal to 15 mg/kg after May 31, 2006 that you sold in each province or territory.

5.9 *What units should be used for reporting requirements?*

Subsection 7(1) of Schedule 1 of the regulations specifies that sulphur concentration is to be reported as mg/kg, or percent by weight if the units are identified.

5.10 *I produce/import only off-road diesel fuel (sulphur concentration greater than 500 mg/kg until May 31, 2006, greater than 15 mg/kg after that date). What do I report?*

You are required to submit the information set out in Schedule 1 of the *Sulphur in Diesel Fuel Regulations*. *If all the diesel fuel you produce has a sulphur concentration greater than 500 mg/kg until May 31, 2006, and greater than 15 mg/kg after that date, then paragraph 5 (1) (a) will not apply to you. (That paragraph requires reporting of the total volume of diesel fuel with a concentration*

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of sulphur that was less than or equal to 500 mg/kg until May 31, 2006 or that was less than or equal to 15 mg/kg after May 31, 2006 that was sold in each province or territory by the producer or importer.)

5.11 *I only sell diesel fuel, what do I report under the regulations?*

If you are not a producer or importer of diesel fuel, and only sell diesel fuel, you are not required to report under the regulations.

5.12 *When must the quarterly reports be submitted?*

Quarterly reports are to be submitted within 45 days after the end of each calendar quarter. The first report under the *Sulphur in Diesel Fuel Regulations* is due by May 15th, 2003. You are not required to submit a quarterly report for last quarter of 2002 under the *Sulphur in Diesel Fuel Regulations*. However, the quarterly report required by the *Diesel Fuel Regulations* for the last quarter of 2002 must be submitted by January 30, 2003.

5.13 *a) The Diesel Fuel Regulations remain in effect until December 31, 2002. Those regulations require producers and importers to report information quarterly. The Sulphur in Diesel Fuel Regulations also require quarterly reporting, but there are some differences in the information that must be reported.*

What information am I required under the Diesel Fuel Regulations to report by January 30, 2003 in respect of diesel fuel that I produced or imported during the last quarter of 2002?

The quarterly report required by the *Diesel Fuel Regulations* for the last quarter of 2002 must be submitted by January 30, 2003.

b) What information am I required under the Sulphur in Diesel Fuel Regulations to report by February 14, 2003 in respect of diesel fuel that I produced or imported during the last quarter of 2002?

You are not required to submit a quarterly report for last quarter of 2002 under the *Sulphur in Diesel Fuel Regulations*. (See (a) above). The first report under the *Sulphur in Diesel Fuel Regulations* is due May 15, 2003.

5.14 *For which facilities do I submit the quarterly report?*

The Quarterly Report of Sulphur Concentration in Diesel Fuel (Schedule 1) must be submitted separately for each facility at which a person produces diesel fuel and for each province or territory into which a person imports diesel fuel.

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- 5.15 *Are reports required for facilities in the distribution network that may occasionally blend diesel and other distillate components?*

Paragraph 5 (1) (b) of the regulations requires you to submit a report for each facility at which you produce diesel fuel.

- 5.16 *I have multiple import points in a province or territory. Do I submit a quarterly report for each import point?*

There is only one report required per province or territory of import.

- 5.17 *To whom do I send the report?*

Reports are to be submitted to the applicable regional office of Environment Canada. The addresses of these offices are provided in Appendix A.

- 5.18 *Who is an authorized official?*

In respect of a corporation, an "authorized official" is an officer of the corporation who is authorized to act on its behalf. In respect to any other person (whether an individual, a commercial entity or a government body) the authorized official is the person authorized to act on behalf of the individual, commercial entity or government body.

- 5.19 *Can an officer of a corporation delegate a senior official of the corporation to act on his/her behalf for the purposes of being an "authorized official"?*

No. If the producer or importer is a corporation, the regulations require that an officer of the corporation sign the relevant forms.

- 5.20 *Why has the quarterly reporting submission deadline been changed to 45 days in this regulation from 30 days in the repealed Diesel Fuel Regulation?*

The date specified for submission of reports has been changed from 30 days after the quarter in the *Diesel Fuel Regulations* to 45 days after the quarter in the *Sulphur in Diesel Fuel Regulations* to make it consistent with reporting requirements of the *Benzene in Gasoline Regulations* and *Sulphur in Gasoline Regulations* under CEPA 1999.

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5.21 *Are the reports the same as those I submit under the Fuels Information Regulations, No. 1?*

No. The reports under the *Fuels Information Regulations, No. 1* contain quarterly data on sulphur levels in a number of liquid fuels, including diesel fuel. Those reports are required to be submitted by January 31 of the following year.

5.22 *Under the old Diesel Fuel Regulations, I could use the same forms that I used for submitting information under the Fuels Information Regulations, No. 1. Can I still use these forms under the new Sulphur in Diesel Fuel Regulations?*

The new regulations do not specify what forms can be used. They require that the regulatee submit the information listed in Schedule 1. This information contains items not found in the current form for the quarterly reports under the *Fuels Information Regulations, No. 1*.

5.23 *If I do not produce or import diesel fuel during a reporting period, do I still have to submit a report?*

No. However a courtesy nil report is welcome if this is an unusual occurrence, and will reduce calls from Environment Canada.

5.24 *Are there any further reporting requirements outside of Schedule 1 and Schedule 2?*

Yes. Paragraph 5(1)(a) requires producers and importers to report the total volume of diesel fuel, in cubic metres, with a concentration of sulphur that was less than or equal to 500 mg/kg until May 31, 2006 or that was less than or equal to 15 mg/kg after May 31, 2006 that was sold in each province or territory by the producer or importer.

5.25 *Is there a form for the reporting of sales in each province or territory?*

No.

5.26 *Is report form 45-004-xpb, Refined Petroleum Products, which is provided to Statistics Canada an acceptable means to fulfill the requirements of Section 5(1)(a).*

The regulations specify the information to be provided and do not address the form in which it is to be provided. If the form provides the information specified in Section 5(1)(a), then it is acceptable.

5.27 *Why are quarterly reports required?*

Environment Canada considers that a certain minimum amount of information is required to be reported for monitoring purposes. The regulations retain the requirement for quarterly reporting of diesel sulphur levels that was required under the existing *Diesel Fuel Regulations*.

5.28 *Can I submit electronic copies for reporting purposes?*

A report signed by an authorized official is required.

5.29 *Where and when do I submit the reports to Environment Canada?*

Reports are submitted to the applicable regional office of Environment Canada (addresses are listed in Appendix A).

5.30 *The quarterly reporting requirements contain confidential business information. How will Environment Canada protect this information from disclosure?*

Information that is submitted will be subject to the *Access to Information Act*, and the *Privacy Act*. In addition, section 313 of CEPA 1999 allows any person submitting information to the Minister of Environment to request that information be treated as confidential. The request for confidentiality must be made to the Minister in writing, and section 315 of the Act allows the Minister to over-ride that request in specific circumstances set out in that section of the Act.

5.31 *If the information submitted under the quarterly reporting requirements of the regulations is used in reports or other publications by Environment Canada, will individual company data be aggregated regionally, to maintain data confidentiality?*

Environment Canada considers information on volume of fuels produced or imported by a company to be confidential. Company reported information on fuel quality may be presented in public reports.

5.32 *How will the information that is submitted under the quarterly reporting requirements be used?*

The information will be used by Environment Canada to report on and monitor diesel fuel quality.

Alternative Test Methods

- 5.33 *Subsection 5(3) states "... methods referred to in paragraphs (2)(b), (c), (e) and (f) are to be used for reporting purposes only and shall not be used for the purpose of determining compliance ...". What does this mean?*

The methods referred to in section 5(2) may be used for reporting purposes. The test methods specified in section 4 are used to determine compliance with the regulations. In the case of any conflict in the results obtained from the methods, the reference test methods specified in section 4 will prevail.

- 5.34 *Can I use an alternative test method to determine if diesel fuel that I produce, import or sell meets the sulphur limit?*

No. The regulations specify that an alternative test, that is equivalent to the one stipulated in the regulations, may be used for reporting purposes only.

- 5.35 *Subsection 4(1) specifies method CGSB-3.0 No. 16.0-95 for analysis until December 31, 2003. Subsection 5(2) allows use of other methods for the purposes of reporting. If a refinery implements ASTM D5453 or D-2622 prior to 2004, will it be necessary to run duplicate sulphur measurements until December 31, 2003?*

The regulations do not require companies to run duplicate sulphur measurements. A company may choose to use a method specified in subsection 5(2) for the purposes of reporting. The methods specified in section 4 will be used to determine compliance with the limits set out in section 3.

- 5.36 *How do I apply to use an equivalent test method?*

At least 60 days before the method is to be used, you must send to Environment Canada, by registered mail or courier, (i) a description of the proposed equivalent method, and (ii) evidence demonstrating that the proposed analysis method is "equivalent" to the method specified in Section 4 of the *Sulphur in Diesel Fuel Regulations*. The information should be sent to the applicable regional office of Environment Canada. The addresses of these offices are provided in Appendix A.

- 5.37 *How do I demonstrate that the alternative method is equivalent to the one specified in Section 4 of the Sulphur in Diesel Fuel Regulations?*

Methods must be validated as equivalent in accordance with ASTM D-4855-97 published by the American Society of Testing and Materials.

5.38 *If equivalency of a test method has been demonstrated by another regulatee, may I use it?*

A producer or importer of diesel fuel may use alternative analysis methods to meet reporting requirements, provided that it advises Environment Canada and submits evidence demonstrating equivalency at least 60 days before use of the method. Alternative test methods must be validated as equivalent under subparagraph 5(2)(f)(i).

Producers or importers of diesel fuel intending to use an alternative analysis method approved for use by another regulatee may reference the evidence provided by the other regulatee in demonstrating equivalency. The producer or importer of diesel fuel still must advise Environment Canada if it intends to use an alternative analysis method at least 60 days before use (subparagraph 5 (2)(f)(ii)).

5.39 *Is a test method for measuring sulphur that has been approved for use under a U.S. fuel regulation automatically equivalent under section 5?*

No. An alternative test method must be demonstrated to be equivalent under section 5(2)(f) in order to be used. See question 5.28.

5.40 *Can I use an equivalent method that was approved under the Benzene In Gasoline Regulations?*

You can only use a test method pursuant to paragraph 5(2)(f) of the *Sulphur in Diesel Fuel Regulations*, which requires that test methods be validated as equivalent and that you provide the Minister with the specified information.

5.41 *Why do the regulations allow equivalent methods of analysis for sulphur content for reporting purposes?*

The *Sulphur in Diesel Fuel Regulations* allow test methods that are validated as being equivalent to be used for reporting purposes. The regulations allow such methods to reduce administrative costs to industry associated with the regulations

5.42 *Under what circumstances can Environment Canada reject an alternative method?*

Environment Canada may reject an alternative method for reporting purposes at any time if it is determined that the alternative method does not provide equivalent results to the applicable method. Environment Canada will notify the producer or importer of diesel fuel if a method is rejected.

- 5.43 *Will Environment Canada issue a list of methods that have been demonstrated to be equivalent to the test method for reporting purposes?*

Environment Canada plans to establish and maintain a list of test methods that have been validated as equivalent to the test method for reporting purposes identified in the regulations.

- 5.44 *Why are several alternative test methods allowed only until December 31, 2003 (e.g. ASTM D 6428-99, ASTM D 2622-98, CAN/CGSB-3.0 No. 16.0-95, and ASTM 1266-98)*

The *Diesel Fuel Regulations* specified several methods as acceptable for reporting the sulphur content of diesel fuel. The *Sulphur in Diesel Fuels Regulations* allow continued use of these methods for reporting purposes until December 31, 2003, at which point the reference test method changes to ASTM D5453-00. After December 31, 2003, alternative test methods may be used only if they are validated as equivalent to that method under paragraph 5(2)(f).

Section 6: RECORDS

- 6.1 *How long are records required to be kept under the Sulphur in Diesel Fuel Regulations?*

Under the *Sulphur in Diesel Fuel Regulations*, records must be maintained for five years after they are made.

- 6.2 *How long are records required to be kept under the Diesel Fuel Regulations?*

Under the *Diesel Fuel Regulations*, records must be maintained for five years after they are made. All obligations to maintain records under the *Diesel Fuel Regulations* will continue for a period of five years even after the *Sulphur in Diesel Fuel Regulations* come into force.

- 6.3 *Where must the records be kept?*

Subsection 6(3) requires that records be kept at the production facility in Canada or at the place of business of the importer in Canada as identified in Schedule 2. All records must be kept in Canada, and enforcement officers, as well as analysts designated under section 217 of CEPA 1999, must have ready access to them.

6.4 *How will records be requested by Environment Canada?*

Access to records would normally be requested by Environment Canada enforcement officers and/or CEPA analysts inspecting a facility. During an inspection, the officers or analysts may also request samples of diesel fuel.

6.5 *I produce or import only off-road diesel fuel. What records do the regulations require me to keep?*

Every person who produces or imports diesel fuel shall keep a record of each batch of diesel fuel produced or imported that indicates the volume of the batch and,

- a) until May 31, 2006, whether the concentration of sulphur of the batch exceeded 500 mg/kg; and
- b) after May 31, 2006, whether the concentration of sulphur of the batch exceeded 15 mg/kg.

Every person who produces or imports diesel fuel with a concentration of sulphur exceeding the concentration referred to above (a and b) must, prior to dispatch of that fuel from the production facility or the importation of that fuel, identify in a record any batch to be dispatched or imported as "not suitable for use in on-road vehicles", along with the date of the dispatch or importation of the batch.

6.6 *I only sell diesel fuel. What records do the regulations require me to keep?*

None.

6.7 *Am I required to identify whether diesel fuel is for on-road or off-road use?*

For each batch of diesel fuel that you produce or import, you must keep a record of whether the concentration of sulphur exceeded the 500 mg/kg or 15 mg/kg limits. Prior to dispatch or importation of a batch that exceeds those limits, you must identify the batch in a record as "not suitable for use in on-road vehicles".

6.8 *When do the records need to be made?*

A record identifying the type of diesel fuel (subsection 6(2)) must be made prior to the dispatch or importation of a batch. Other records required by the regulations (Section 5) should be made as soon as possible, so that the record is available to an enforcement officer and/or analyst making an inspection of your facility.

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- 6.9 *Continuous blending and on-line blending may involve a combination of testing and calculations to derive the sulphur concentration and quality of a blend, instead of a single concentration as measured in accordance with Section 4. How do I identify the batch to satisfy the records requirements under Section 6?*

Section 6 requires that a person producing diesel fuel identify in a record any batch that exceeds the prescribed limits as "not suitable for use in on-road vehicles" prior to dispatch from the production facility. Under the regulations, a batch is an identifiable quantity of diesel fuel with a single concentration of sulphur as measured in accordance with Section 4.

- 6.10 *What do I do if I did not identify a batch as "diesel not suitable for use in on-road vehicles" and later I discovered it did not meet the limits in the regulations?*

You would be in violation of the regulations. The batch must be identified properly prior to dispatch.

- 6.11 *Can I identify a batch as "not suitable for use in on-road vehicles, pending completion of analysis" and then re-designate it as on-road diesel fuel, depending on the results of the test?*

No. If you are a producer or importer, you must identify any batch of diesel fuel with a sulphur concentration exceeding 500 mg/kg (up to May 31, 2006) or exceeding 15 mg/kg (after May 31, 2006) as "not suitable for use in on-road vehicles" as per subsection 6(2) prior to dispatch from your facility or prior to importation.

- 6.12 *Are other similar wordings for "diesel not suitable for use in on-road vehicles" for the purposes of Section 6(2) acceptable?*

No.

- 6.13 *What date is deemed the date of dispatch for batches that continue over more than one calendar day?*

The regulations do not specify the date of dispatch for batches that continue over more than one day.

- 6.14 *What are the identification requirements for inter-refinery transfers of diesel fuel?*

The requirements of subsection 6(2) apply to all diesel fuel that a person produces or imports.

Section 7: REPEAL

7.1 Why are the Diesel Fuel Regulations being repealed?

The *Diesel Fuel Regulations* are replaced by the *Sulphur in Diesel Fuel Regulations* when the later regulations come into force.

Section 8: COMING INTO FORCE

8.1 When do the requirements of the regulations come into force?

The regulations come into force on January 1, 2003.

MISCELLANEOUS QUESTIONS

OTHER QUESTIONS

O.1 When will inspections take place?

Inspections by enforcement officers may be scheduled or unscheduled visits.

O.2 Do I have to submit to inspections?

Yes. Under CEPA 1999, enforcement officers are authorized to inspect, in order to verify compliance with the Act and any regulations made under it. The Act also requires that the owner or the person in charge give the enforcement officer reasonable assistance in their duties.

O.3 Do the regulations require me to keep samples?

No.

O.4 Am I required to provide samples?

Yes, upon request by an Environment Canada enforcement officer or a CEPA analyst. Also s.219 of CEPA, 1999 allows the Minister of Environment to make such a request by registered letter or by a demand served personally upon the regulatee.

O.5 *How will the samples be requested by Environment Canada?*

During an inspection, Environment Canada enforcement officers or a CEPA analyst may request samples of diesel fuel. Requests for samples could also arise under other circumstances, such as during the execution of an inspection warrant or a search warrant.

Also, as indicated above, the Minister of Environment may request samples by registered letter or by a demand served personally upon the regulatee.

O.6 *Will I be told beforehand that a sample will be requested?*

No.

O.7 *How do I obtain a copy of the Sulphur in Diesel Fuel Regulations?*

The regulations were published on July 31, 2002 in the *Canada Gazette, Part II*, pages 1668 - 1703. The regulations can be downloaded from CEPA Environmental Registry web site:

<http://www.ec.gc.ca/ceparegistry/default.cfm>

(When you click on the site, find the heading "Regulations" on the left-hand side of the page. Click on that heading and, if you scroll down the page, you will note there is a choice between current regulations and proposed regulations. Click on current regulations and the titles of current regulations appear before you. Choose "*Sulphur in Diesel Fuel Regulations*" and click on "Go".)

Another helpful web site is the Oil, Gas and Energy Branch web site that publishes fuel quality reports. The web address is:

<http://www.ec.gc.ca/energ/>

NEW QUESTIONS

N.1 How do I ask further questions on the Sulphur in Diesel Fuel Regulations?

Additional questions may be asked by sending your question, by mail or fax, to Environment Canada at the address or fax number listed below:

Chief
Fuels Division
Oil, Gas and Energy Branch
Environment Canada
351 St. Joseph Boulevard
Gatineau, Quebec K1A 0H3

Fax: 819-953-8903

Replies will be provided to the sender, either orally or in writing. You may wish to include your e-mail address. The question and reply may appear in a future versions of this guidance document.

Oil, Gas & Energy Branch
Environment Canada
October 2002

Appendix A

ADDRESSES OF ENVIRONMENT CANADA'S REGIONAL OFFICES

Newfoundland, Nova Scotia, New Brunswick and Prince Edward Island

Director
Environmental Protection -- Atlantic Region
Environment Canada
45 Alderney Drive
15th floor, Queen Square
Dartmouth, Nova Scotia B2Y 2N6

Quebec

Director
Environmental Protection -- Quebec Region
Environment Canada
105 rue McGill, 7th floor
Montreal, Quebec H2Y 2E7

Ontario

Director
Environmental Protection -- Ontario Region
Environment Canada
4905 Dufferin Street
Downsview, Ontario M3H 5T4

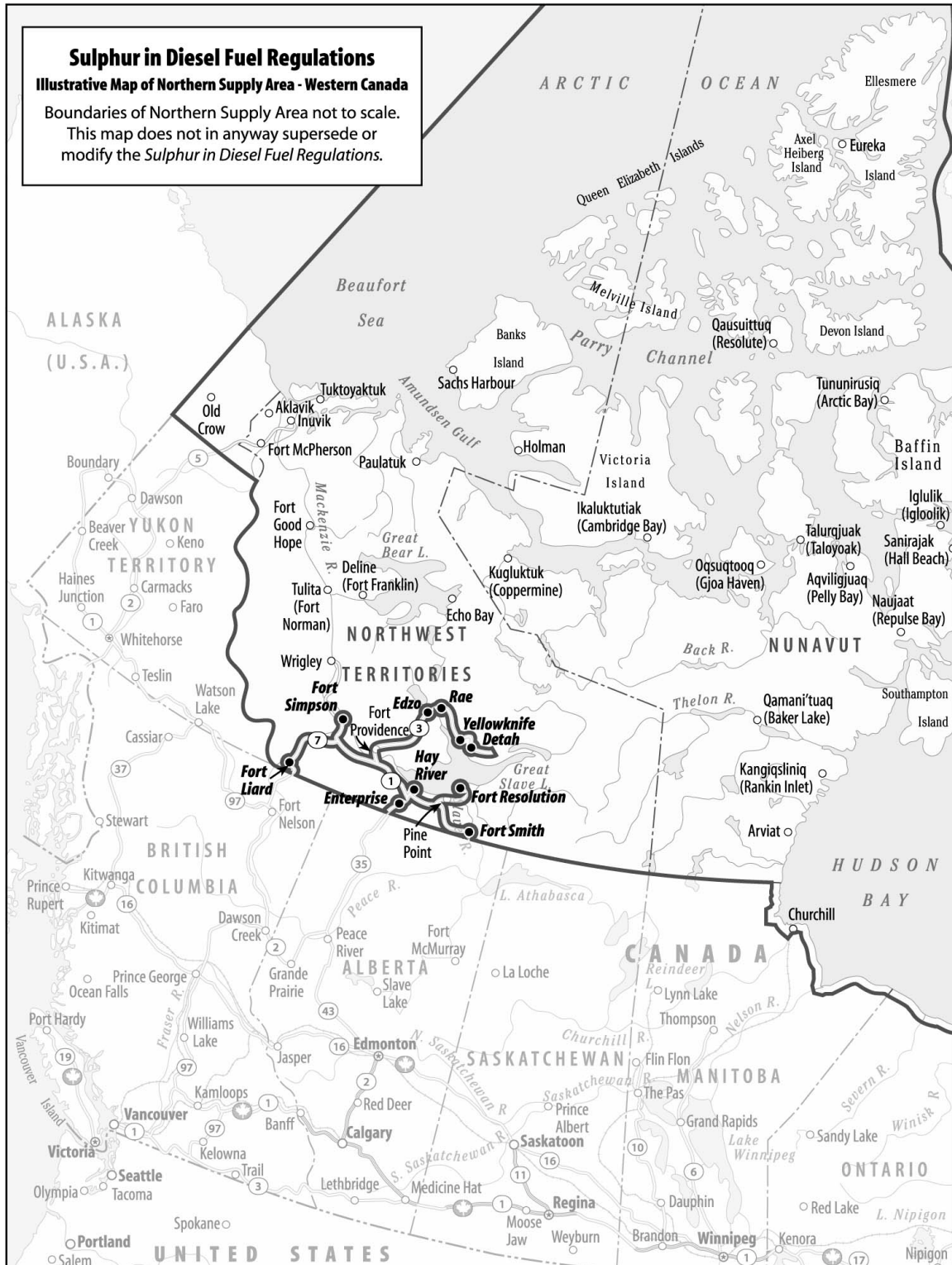
Manitoba, Saskatchewan, Alberta, Nunavut and Northwest Territories

Director
Environmental Protection -- Prairies & Northern Region
Environment Canada
Twin Atria #2, 2nd floor
4999 - 98th Avenue
Edmonton, Alberta T6B 2X3

British Columbia and Yukon

Director
Environmental Protection -- Pacific & Yukon Region
Environment Canada
224 West Esplanade
North Vancouver, British Columbia V7M 3H7

Appendix B MAPS OF NORTHERN SUPPLY AREA



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