

**Reply to Comments  
on**

**Submissions Received on  
the Proposed Amendments to  
the *Sulphur in Gasoline Regulations*  
and  
the *Benzene in Gasoline Regulations*  
Published on February 1, 2003  
in Part I of *Canada Gazette***

**Fuels Division  
Environment Canada**

*September 2003*

# **Reply to Comments**

## ***Amendments to the Sulphur in Gasoline and Benzene in Gasoline regulations***

### **INTRODUCTION**

This document responds to the comments that Environment Canada received on the proposed amendments to the *Sulphur in Gasoline Regulations* and the *Benzene in Gasoline Regulations* published in the *Canada Gazette, Part I* on February 1, 2003.

### **PARTIES PROVIDING SUBMISSIONS**

Submissions on the proposed regulations were received from the following parties (and are provided in the Appendix):

- Canadian Petroleum Products Institute (CPPI)
- Imperial Oil <sup>1</sup>
- Petro-Canada <sup>1</sup>
- Suncor Energy Products Inc. <sup>1</sup>
- Consumers' Co-operative Refineries Limited

On April 17, 2003, Environment Canada's Fuel Division staff met with representatives of CPPI, Imperial Oil, Shell, Suncor, Petro-Canada and Ultramar to discuss CPPI's comments. The outcomes from that meeting are reflected in this document.

### **COMMENTS AND REPLY**

#### **Gasoline-like Blendstock**

- CPPI suggested changes so that the proposed provisions for record-keeping and administrative requirements in respect of gasoline-like blendstock would not apply in respect of exported volumes.

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<sup>1</sup> Indicated support for the comments of CPPI

Reply: At a meeting with CPPI on April 17, 2003 to address their comments, it was pointed out that gasoline for export was not subject to the gasoline-like blendstock provisions. CPPI agreed at that meeting that there was not a need to make the changes it had suggested in this regard.

- The proposed amendments to paragraph 6(1)(f) of the *Sulphur in Gasoline Regulations* would require a record of the volume of a batch of gasoline-like blendstock be made prior to its import, dispatch or sale. CPPI pointed out that volumes may not be finalized until after the transfer change of ownership takes place and recommended changes to address this.

Reply: The paragraph has been modified to require a record of "the volume of the batch that is scheduled to be dispatched or imported." A consequent modification has also been made to subsection 6(3) to clarify that the actual volume of the batch is to be reported through the annual report. Similar changes have also been made to section 13 of the *Benzene in Gasoline Regulations*. The changes were discussed with CPPI on April 17, 2003 at a meeting held to discuss their comments. CPPI agreed at that meeting that the changes address their concern.

- The proposed amendments to subsection 6(1) the *Sulphur in Gasoline Regulations* would require that a record be made for each batch of gasoline-like blendstock identifying the fuel as "*gasoline-like blendstock that is intended to be further refined or blended to produce low-sulphur gasoline*". CPPI indicated that this is problematic as it is unlikely that a supplier can make a statement how gasoline-like blendstock would be handled if sold to a third party.

Reply: The requirement is only to identify the fuel as gasoline-like blendstock. This is important so that a person purchasing or receiving gasoline-like blendstock is informed about the fuel. This was discussed with CPPI on April 17, 2003 at a meeting held to discuss their comments. CPPI agreed at that meeting that no changes were required in this regard.

- The proposed amendments to subsection 6(2) the *Sulphur in Gasoline Regulations* would require that a copy of the record made for a batch of gasoline-like blendstock be provided to the person receiving the batch before the transfer of possession or ownership of the batch. CPPI felt that some flexibility was needed on the timing, in regards to off-hours, weekends, etc.

Reply: Gasoline-like blendstock is not required to meet the limits for sulphur, benzene, or the benzene emissions number. It therefore is very important that batches of gasoline-like blendstock be fully

documented and that anyone receiving a batch of gasoline-like blendstock be sent a copy of the documentation before taking ownership. This was discussed with CPPI on April 17, 2003 at a meeting held to discuss their comments. CPPI agreed at that meeting that no changes were required in respect of this requirement.

### **Change in Test Method for Measuring Sulphur Levels**

- CPPI supported changing the test method to ASTM D-5453, but offered some comments on implications of changing the test method. Specifically, CPPI noted that the amendments should not result in companies having to resubmit notices of election to use a pool average, and that it should be made clear that arithmetic conversion of units for the concentration of sulphur in gasoline is acceptable. CPPI also requested confirmation that values measured by the test method in use by a primary supplier can be used for calculating its pool average.

Reply: Prior to the amendments, the limits for sulphur set out in the regulations were specified in percent by weight, as measured using the specified reference test method (CAN/CGSB-3.0 No. 16.1-98). The amended regulations now specify the limits in units of mg/kg, as measured using the new specified reference test method (ASTM D-5453). Environment Canada does not consider that the change of the reference test method specified in the regulations would require companies to resubmit notices of election to use a pool average. Results in percent by weight obtained from using the CAN/CGSB-3.0 No. 16.1-98 method can be converted arithmetically by multiplying them by 10,000 and reporting the result in mg/kg, with at least two significant digits.

- Consumers' Co-op requested that CAN/CGSB-3.0 No. 16.1-98 be retained as an alternate test method.

Reply: CAN/CGSB-3.0 No. 16.1-98 has not been explicitly specified in the regulations as an alternate test method, as its equivalency to the reference test method ASTM D-5453 has not been demonstrated for low sulphur levels. However, there are provisions in the regulations for companies to use alternate test methods, provided that equivalency to test method ASTM D-5453 is demonstrated. A regulatee would have to apply to Environment Canada under the relevant provisions.

### **Ethanol Blended Gasoline**

- CPPI noted that plans for expanded ethanol use in Canadian gasoline will significantly change the production and distribution of gasoline in Canada. In this regard, CPPI suggested additional amendments to those proposed in Part I of the *Canada Gazette*. Specifically, CPPI pointed out that the *Sulphur in Gasoline Regulations* and the *Benzene in Gasoline Regulations* do not enable refiners blending ethanol at a common terminal (i.e., used by several companies) with co-mingled gasoline to adjust their refinery pool averages to reflect the addition of the ethanol. CPPI recommended that paragraphs 10(4)(b) and 10(5)(b) of the *Sulphur in Gasoline Regulations* be deleted, along with paragraphs 18(4)(b) and 18(5)(b) of the *Benzene in Gasoline Regulations*. Petro-Canada expressed similar views.

Reply: These comments are outside the scope of the proposed amendments. Nevertheless, they are responded to below:

The regulations include the option for refiners to elect to meet limits on the basis of a refinery pool average. Since a pool average includes all batches of complying or low-sulphur gasoline produced by the refinery, it is critical to know the composition of each batch of gasoline produced at the refinery. Under some limited circumstances explicitly set out in the regulations, a refinery pool average may reflect the addition of oxygenates (e.g., ethanol) or butane at a downstream facility. The circumstances do not include the addition of ethanol or butane at a facility where gasoline from more than one refinery is co-mingled – under those circumstances, it would not be possible to determine that the ethanol or butane was added to the gasoline from a specific refinery and hence a refinery-specific pool average could not be determined with certainty. The suggested changes by CPPI in this regard have not been made.

- CPPI expressed concern that the *Sulphur in Gasoline Regulations* and the *Benzene in Gasoline Regulations* might require sampling, analyzing and reporting of every truckload of gasoline to which ethanol was added at a refinery terminal, in order for the ethanol content to be reflected in the refinery pool average. Petro-Canada and Consumers' Co-op had the same concern. Consumers' Co-op indicated a preference for changes to the amending regulations that would facilitate oxygenate addition at its refinery loading racks.

Reply: These comments are outside the scope of the proposed amendments. Nevertheless, they are responded to below:

The regulations include the option for refiners to elect to meet limits on the basis of a refinery pool average. Since a pool average includes all batches of complying or low-sulphur gasoline produced by the refinery, it is critical to know the composition of each batch of gasoline produced at the refinery. The existing regulations include provisions (subsection 19(2) of the *Benzene in Gasoline Regulations*) that under certain circumstances,

a person receiving gasoline for cargo tankers or railway cars from a storage facility may sample the batch from the storage facility, instead of taking samples from each tanker or railway car. This provision can be used where ethanol is added at a refinery storage facility. Note that the refiner must still keep records of composition for each batch dispatched from its refinery and must describe in its compliance plan how it will demonstrate that the sample represents the gasoline in the cargo tankers or railway cars.

## Miscellaneous Issues

- CPPI submitted that the amendments should come into force on a specific date, rather than on the day they are registered. CPPI considered that changes affecting administrative and record-keeping requirements might require three months in order to modify computer systems and software.

Reply: After discussions with CPPI, several amendments to record-keeping requirements in the *Sulphur in Gasoline Regulations* now come into force on January 1, 2004.

- The proposed amendments to subsection 2(4) of the *Sulphur in Gasoline Regulations* specified that the limits for sulphur would not apply to gasoline in transit or for export, provided that there is written evidence establishing that the gasoline is in transit or for export (proposed new paragraphs (g) and (h)). CPPI noted that the requirement for written evidence was new and confusing and recommended that it be dropped.

Reply: Under the *Canadian Environmental Act 1999*, a person does not contravene the prescribed requirements set out in a regulation made under section 140 of the Act, if

“(a) the fuel is in transit . . . and there is written evidence establishing that the fuel is in transit;” or

“(b) the fuel is produced or sold for export and there is written evidence establishing that the fuel will be exported;”

These provisions already apply in respect of the *Sulphur in Gasoline Regulations*, and since the provisions are set out in *CEPA 1999*, their effect cannot be changed through wording of a regulation made under that Act. Nevertheless, it is recognized that the proposed wording was seen to be confusing, and therefore the final amendments have been clarified in a new section of the regulations (namely, section 1.1). This new section was modelled after similar clauses in section 2 of the *Sulphur in Diesel Fuel Regulations*.

It should be noted that the exceptions set out in section 139 of CEPA 1999 (as discussed in the first paragraph of this Reply section) still apply in respect of the *Sulphur in Gasoline Regulations* and all other regulation made under Part 7, Division 4 (Fuels) of CEPA 1999.

- CPPI submitted that the new provisions for record retention in the *Sulphur in Gasoline Regulations* should be aligned with the corresponding provisions of the proposed amendments to the *Benzene in Gasoline Regulations*.

Reply: After discussions with CPPI, it was determined that the provisions for record keeping in the two regulations are effectively aligned because of the different coming into force provisions of the original regulations. No changes were made in this regard.

- CPPI suggested that paragraph 3(1)(b) of the *Sulphur in Gasoline Regulations* be updated to change the reference to the standard CAN/CGSB-3.5-94 to CAN/CGSB-3.5-99.

Reply: The suggested change has not been made. Subsection 1(2) of the regulations already provides for incorporation of amended standards and methods. It should be noted that while the amendments have updated clauses referencing various ASTM test methods, the changes to the clauses were made to the correctly reference the American Society of Testing and Materials.

- CPPI noted that in subsection 2(5) of the proposed amendments to the *Sulphur in Gasoline Regulations*, “paragraph (c) should read paragraph (d)”.

Reply: Amending regulations (published in Part II of the *Canada Gazette* on March 23, 2000) repealed paragraph (d) of the *Sulphur in Gasoline Regulations*. The final version of the amendments therefore has not been changed from what was proposed.

- CPPI noted that in subsection 10(i) of the proposed amendments to the *Benzene in Gasoline Regulations*, “subsectin 9(1)” should read “subsection 9(1)”.

Reply: The typographic error has been corrected in the final amending regulations.

- Imperial Oil pointed out that it was increasingly integrating the operation of its Ontario refineries and that changes to the regulations to allow it to combine the refinery pool averages would significantly reduce the administrative burden. It therefore requested that the limit of 12,000 m<sup>3</sup> per year specified in paragraph 18(6)(a) of the *Benzene in Gasoline Regulations* and in paragraphs 9(1)(a) and (b) of the *Sulphur in Gasoline Regulations* be eliminated.

Reply: These comments are outside the scope of the proposed amendments. Nevertheless, they are responded to below:

A fundamental aspect of the design of the regulations is that they include the option for refiners to elect to meet limits on the basis of individual refinery pool averages – the regulations intentionally do not allow for companies to elect to meet limits on the basis of gasoline supplied from multiple refineries.

When the regulations were passed, it was recognized that the 12,000 m<sup>3</sup> limit would not encompass the combination of refinery pools. The provisions allowing the combination of one or more pool averages were included in the regulations to address the situation of persons importing / producing less than 12,000 m<sup>3</sup> per year. Persons importing / producing less than this amount of gasoline would normally be small companies – allowing them to combine pools to the 12,000 m<sup>3</sup> limit was intended to lessen the administrative burden on small companies that may occasionally produce / import small volumes of gasoline.

Environment Canada believes that it is important to retain the fundamental approach of the regulations in controlling gasoline quality on the basis of individual facilities. The changes requested by Imperial Oil have therefore not been made.



## **APPENDIX**

Submissions from the following parties were received by Environment Canada:

- Canadian Petroleum Products Institute (CPPI)
- Imperial Oil
- Petro-Canada
- Suncor Energy Products Inc.
- Consumers' Co-operative Refineries Limited

Submissions are not available electronically. If you wish a copy of the submissions, please contact the Fuels Division at [ogeb@ec.gc.ca](mailto:ogeb@ec.gc.ca).