IN THE MATTER OF AN ARBITRATION UNDER CHAPTER 11 OF
THE NORTH AMERICAN FREE TRADE AGREEMENT

BETWEEN:

ETHYL CORPORATION

Claimant / Investor

v.

GOVERNMENT OF CANADA

Respondent / Party

STATEMENT OF DEFENCE
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STATEMENT OF DEFENCE

The Government of Canada ("Canada") in answer to the Notice of Arbitration delivered April 14, 1997 (the "Notice of Arbitration") and the Statement of Claim filed in this arbitration by Ethyl Corporation ("Ethyl") on October 2, 1997 says as follows:

1. In this Statement of Defence, Canada states that the Tribunal is without jurisdiction to entertain Ethyl's claim and that, in any event, Canada fully complied with its obligations under Chapter 11 of the North American Free Trade Agreement ("NAFTA").
2. Part I of the Statement of Defence describes the basis of Canada’s contention that the Tribunal is without jurisdiction to entertain Ethyl’s claim.

3. In Part II of the Statement of Defence, Canada addresses the issues raised by Ethyl in its Statement of Claim. Canada says that:

   (a) the *Manganese-based Fuel Additives Act, S.C. 1997, c. 11* (the "Act"), is a law of general application and represents legitimate regulation;

   (b) as set out in paragraphs 77 through 84, Canada has not breached any national treatment obligation;

   (c) as set out in paragraphs 85 through 92, Canada has not imposed or enforced any prohibited performance requirement;

   (d) as set out in paragraphs 93 through 96, Canada has neither expropriated an investment of the Claimant, nor taken a measure tantamount to expropriation of that investment; and,

   (e) as set out in paragraphs 102 and 103, Ethyl is not entitled to compensation or damages.

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1 Ethyl mistakenly refers to the legislation as the "MMT Act". Section 1 of the statute provides the correct short title of the enactment. It is more properly referred to as the "Manganese-based Fuel Additives Act".
Part I - Jurisdiction
The Claimant

4. The Claimant is a corporation incorporated under the laws of the State of Virginia, one of the United States of America. It is a manufacturer and distributor of, among other things, fuel additives tetraethyl lead and methylcyclopentadienyl manganese tricarbonyl ("MMT"). Ethyl holds or controls patents for the process of manufacturing MMT.

5. Ethyl distributes MMT in Canada through a subsidiary, Ethyl Canada Inc. ("Ethyl Canada") under the name brand "Hi-Tech 3000". Ethyl Canada is a corporation incorporated under the laws of Ontario, having its head office in Mississauga, Ontario and blending facilities near Corunna, Ontario. The precise nature of Ethyl's relationship with Ethyl Canada is unknown to Canada.

The Manganese-based Fuel Additives Act

6. The Act, which came into force on June 24, 1997\(^2\), is a law of general application regulating interprovincial trade in and importation for commercial purposes of any manganese-based substance mentioned in the Schedule to the Act and any other substance that contains such a manganese-based substance. For convenience, the Act describes such substances as "controlled substances". The only controlled substance currently listed in the Schedule is MMT.

7. The Act expressly prohibits the importation of and interprovincial trade in controlled substances for use in unleaded gasoline. Otherwise, controlled substances...
substances may, subject to the approval of the Minister of the Environment, be imported or traded interprovincially. Persons importing or moving controlled substances over provincial boundaries for personal use are not regulated.

8. Before it became law, the Act, in its form as proposed legislation, was called Bill C-94 and later Bill C-29. A bill that is introduced in the Canadian Parliament cannot become law unless and until it has been passed by both Houses of Parliament - the House of Commons and the Senate - and has received Royal Assent. Royal Assent is the final stage in the legislative process.

9. Bill C-29, like any other bill, had to pass through various stages of examination and debate in each House. These stages extended over the period from June 1995, when it was first introduced in the House of Commons as Bill C-94, to April 25, 1997, when it was given Royal Assent. During that time, two Parliamentary Committees - the House of Commons Standing Committee on Environment and Sustainable Development and the Senate Standing Committee on Energy, Environment and Natural Resources - examined the Bill. Ethyl participated

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3 Bill C-29 replaced Bill C-94. Like Bill C-29, the earlier Bill contained all the elements of what later became the Act. Debate on Bill C-94 began in June 1995 but the Bill was removed from consideration by Parliament when the 1st Session of the 35th Parliament prorogued (i.e. ended) in January 1996. Bill C-94 was later re-introduced in the House of Commons as Bill C-29.

4 Section 17 of the Constitution Act, 1867, defines Parliament as "... consisting of the Queen, an Upper House styled the Senate, and the House of Commons." Accordingly, the enacting clause of every federal statute reads: "Her Majesty, by and with the consent of the Senate and the House of Commons of Canada, enacts as follows: . . . ."

6 Section 55 of the Constitution Act, 1867, emphasises the importance of royal assent as part of the legislative process. It provides as follows:

"55. Where a Bill passed by the Houses of the Parliament is presented to the Governor General for the Queen's Assent, he shall declare, according to his Discretion, but subject to the Provisions of this Act and to Her Majesty's Instructions, either that he assents thereto in the Queen's Name, or that he withholds the Queen's Assent . . . ."
Statement of Defence

in the legislative process of Bill C-29 by various means, including lobbying and appearing as a witness before the Senate Committee.

10. A bill becomes law\(^6\) when it is assented to by or on behalf of the Governor General. Whether it comes into force at that time depends upon the wording of the Act.\(^7\) Clause 21 of Bill C-29 stipulated that it would come into force 60 days after Royal Assent, i.e., on June 24, 1997.

History of These Proceedings

11. Ethyl commenced these proceedings before Parliament had completed the legislative process and before the Act had come into force. Until the Act came into force, it remained lawful to import MMT into Canada for commercial purposes and to sell it interprovincially. No Minister of the Crown or other government functionary had authority to restrict or prevent the movement of MMT into and within Canada. Nor had they exercised or purported to exercise such authority.

12. On September 10, 1996, the Claimant delivered a Notice of Intent to Submit a Claim to Arbitration under Section B of Chapter 11 of the NAFTA (the "Notice of Intent"). In that document, Ethyl alleged that by placing what was then Bill C-29 before the House of Commons and lending ministerial support to its passage\(^8\),

\(^6\) "When a statute is enacted, it becomes part of the body of rules recognized as law; it becomes part of the official statute book of the jurisdiction. However, it is only when a statute commences or comes into force that it begins to operate and produce effects. At this point it becomes binding on those to whom it applies. There are thus two senses in which statutes "become law": (a) they are recognized as stating valid legal rules upon enactment and (b) they become binding and capable of producing legal effects upon commencement" (Sullivan, in Driedger on the Construction of Statutes, Third Edition, 1994, at p. 485).


\(^8\) Notice of Intent at paras. 10, 16, 17, 20 and 21.
Canada had breached its obligations under Articles 1110 (expropriation and compensation), 1106 (performance requirements), and 1102 (national treatment) of the NAFTA. When Ethyl delivered its Notice of Intent, debate on Bill C-29 had not occurred and the Bill had not passed. In fact, debate on the Bill began in the House of Commons on September 25, 1996 and continued until December 2, 1996 when it was passed by the House of Commons and sent to the Senate for consideration.

13. On April 14, 1997, four days after Bill C-29 received third reading in the Senate, the Claimant purportedly delivered a Notice of Arbitration (the "Notice of Arbitration") to Canada pursuant to Articles 1116 and 1120 of the NAFTA and Article 3 of the UNCITRAL Rules. No waiver or consent of the kind required by Article 1121 of the NAFTA accompanied the Notice of Arbitration.

14. In the Notice of Arbitration, Ethyl alleged that for the reasons set out in that Notice, Canada had ". . . breached, and continues to breach, its obligations under Chapter 11 of the NAFTA". It therefore requested the establishment of a Tribunal under Article 1120 of the NAFTA and the UNCITRAL Rules.

15. Both the Notice of Intent and the Notice of Arbitration referred to a series of statements upon which Ethyl based its claim. These comprised: a statement made in December 1994 by the Minister of the Environment announcing her intention to advance legislation removing MMT from trade in Canada\(^9\); a statement made by the Minister of the Environment on April 18, 1996 before Bill C-29\(^11\) (formerly Bill

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\(^9\) Notice of Arbitration, page 2, Introduction to Part E.

\(^10\) Notice of Arbitration, page 6, para. 8.

C-94) was introduced in the House of Commons; a written response of the Minister of the Environment to a Task Force Report recommending a moratorium on the use of MMT and a shift toward gasoline additives consisting of renewable resources (ethanol); a statement made in the House of Commons on October 10, 1996 by the Parliamentary Secretary to the Minister of the Environment in the House of Commons purportedly expressing Canada's desire to use an MMT ban to foster domestic growth; and other unspecified statements. Ethyl contended that these statements created distrust of Ethyl, Ethyl Canada and the product MMT within environmental groups and the media thereby damaging Ethyl's goodwill around the world.

16. On September 2, 1997, the Tribunal was constituted pursuant to Section B of Chapter 11 of the NAFTA and the UNCITRAL Rules.

17. At the first meeting between the Tribunal and the parties on October 2, 1997, Ethyl received leave from the Tribunal to submit a Statement of Claim. That same day, Ethyl delivered its Statement of Claim including, among other things, consent and waivers purportedly delivered pursuant to Article 1121 of the NAFTA and signed on July 8, 1997 by representatives of the investor and of the investment. The purported consent and waivers were not provided to Canada before Ethyl delivered its Statement of Claim.

12 Notice of Intent at paras. 29 and 30.
13 Notice of Arbitration, page 13, para. 44
14 Notice of Arbitration, page 16, para. 57
15 Notice of Intent at paras. 10, 16, 17, 20 and 21.
Notice of Arbitration, page 17, at paras. 59 and 60
18. In its Statement of Claim, Ethyl asserts a new basis for making a claim against Canada. Ethyl no longer relies on bills in the House of Commons or the Senate of Canada, to bring forth its claim. Instead, Ethyl alleges that, upon passing the Act, Canada breached three of its obligations under Section A of Chapter 11 of the NAFTA: expropriation, national treatment and performance requirements.

19. As part of its claim for compensation pursuant to Article 1110 Ethyl claims that certain unspecified (and allegedly defamatory) statements made by Ministers or government officials harmed its worldwide goodwill. Ethyl contends that Article 1110 entitles it to compensation for alleged defamation and the alleged expropriation of property outside Canada.

Position on Jurisdictional Issues

20. The dispute resolution process laid down by the Parties in Chapter 11 contemplates a series of steps that must be taken before a claim is properly before a Tribunal. They include:

(a) a Party must adopt or maintain a measure that breaches an obligation described in Article 1116(1) of the NAFTA and the claimant must have "... incurred loss or damage by reason of, or arising out of, that breach";

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16 For clarity, the term "claim" refers to the claim submitted under the NAFTA. The term "Statement of Claim" refers to the document filed by Ethyl on October 2, 1997 in which it makes certain allegations about its claim.
(b) the claimant must wait for six months after the events giving rise to the claim before submitting the claim to arbitration under Article 1120 of the NAFTA;

(c) before submitting its claim to arbitration the claimant must submit written notice of its intention to submit the claim for arbitration. That notice must describe the provisions of the NAFTA "alleged to have been breached" by the Party (Article 1119); and,

(d) a disputing investor may submit a claim "only if" it delivers the consent and waivers described in Article 1121 "in the submission of [the] claim to arbitration", that is, when the Notice of Arbitration is received by the disputing Party (Article 1137(1)(c)).

21. Canada asserts that because it had not adopted or maintained a measure within the meaning of Articles 201 and 1101 of the NAFTA when Ethyl submitted its claim to arbitration, and because Ethyl failed to comply with Articles 1119 through 1121 and 1137 of Chapter 11 of the NAFTA, the claim set out in the Statement of Claim is null and void and this Tribunal is utterly without jurisdiction to entertain it.

22. Without restricting the generality of the foregoing:

(a) Canada pleads and relies upon Articles 1121 and 1137 of the NAFTA and says that Ethyl failed to deliver the required consent and waivers with the Notice of Arbitration and is therefore barred from proceeding to arbitration;
(b) Canada pleads and relies upon Articles 201 (definition of the word "measure"), 1101(1), 1116(1), 1137 and 2004 (which deals with the right of a Party to challenge "an actual or proposed (emphasis added) measure") of the NAFTA and says that:

(i) to the extent the claim is based on statements made in support of proposed legislation, those statements are neither "measures" nor "measures relating to" "investors" or "an investment" and cannot, therefore, be the subject of proceedings under Chapter 11 of the NAFTA;

(ii) to the extent the claim is based on the passage of a bill through the House of Commons and the Senate of Canada, passage of a bill that has not yet come into force is neither a measure, nor is it a measure relating to an investment or an investor and cannot, therefore, be the subject of proceedings under Chapter 11 of the NAFTA;

(iii) Ethyl's submission to arbitration is void in that the legislation complained of in the Statement of Claim had not been enacted or come into force at the time the claim was submitted. There was therefore no measure nor was there any measure relating to an investment or an investor in effect upon which Ethyl could found an alleged breach of any obligation under Chapter 11;

(c) Canada pleads and relies upon Articles 201 (definition of the word "measure"), 1101(1), 1116(1), 1120(1) and 1137 of the NAFTA and says that Ethyl failed to comply with conditions precedent for advancing the
claim set out in the Statement of Claim and is therefore barred from proceeding with this arbitration. Ethyl failed to wait six months from the date of an event giving rise to a breach before submitting the claim to arbitration and changed the basis of its claim from an attack on proposed legislation (a Bill) in its Notice of Arbitration to actual legislation (the "Act") in its Statement of Claim;

(d) Canada pleads and relies upon Article 1110(1) and 1101(1) and says that Ethyl's claim in respect of expropriation of its intellectual property, reputation, and goodwill throughout the world is not within the scope of the NAFTA;

(e) further, Canada pleads that the claim is not within the scope of Chapter 11 because the proposed legislation complained of does not constitute a measure relating to an investment or an investor within the meaning of Article 1101(1). If it is a measure, which is denied, it relates to trade in goods within the meaning of Chapter 3 of the NAFTA; and,

(f) in the event that the proposed legislation relates to both trade in goods under Chapter 3 and to investment under Chapter 11, Canada pleads and relies on Article 1112(1) of the NAFTA and says that there is an inconsistency between the two Chapters that must be resolved in favour of Chapter 3.

23. Paragraphs 25 and 26 of the Statement of Claim refer to alleged defamatory statements without describing the statements at issue. Assuming that the statements referred to in those paragraphs are the statements described in paragraphs 10, 16, 17, 20 and 21 of the Notice of Intent and paragraph 57 of the
Notice of Arbitration, those statements are not "measures adopted or maintained by [Canada]" within the meaning of Articles 201 and 1101 of the NAFTA, nor could they, or their alleged effects, constitute expropriation or a measure "tantamount to expropriation" "of an investor of another Party in [Canada's] territory" or of an investment "in [Canada's] territory" within Article 1110 of the NAFTA. Consequently, these claims are not the proper subject matter of a claim under Chapter 11 of NAFTA. In any event, defamation is properly the subject matter of domestic law and is not protected by international law or the NAFTA.

Part II - The Statement of Claim

24. Assuming, without conceding, that the arbitrators are properly seized of the claim, the following addresses the allegations raised in the Statement of Claim.

25. Except as expressly admitted in this Statement of Defence, Canada denies all allegations made in the Statement of Claim and requires the Claimant to prove each and every allegation.

26. Canada admits the allegations of fact made in the first sentence of paragraph 1, the first and last sentences of paragraph 2, paragraph 6, the first two sentences of paragraph 7, the first sentence of paragraph 14, and paragraph 15 of the Statement of Claim.

27. Canada has no knowledge of the allegations in paragraphs 8, 9, 10 and 12 of the Statement of Claim, does not admit them to be true and puts Ethyl to the strict proof of those allegations.
The Claimant

28. With reference to paragraph 1 of the Statement of Claim, Canada repeats and relies upon the allegations set out in paragraphs 2 and 3 of this Statement of Defence. Canada has no knowledge of Ethyl’s shareholdings in Ethyl Canada and denies that the documents attached at Tab “1” of the Statement of Claim constitute the consent to arbitration and waivers required by Article 1121 of the NAFTA or that they were annexed to the Statement of Claim pursuant to Article 18 of the UNCITRAL Rules.

MMT

29. Methylcyclopentadienyl manganese tricarbonyl ("MMT") is a highly toxic organo-metallic compound used primarily to increase the octane levels of unleaded gasoline.

30. Manganese is a key ingredient of MMT. The combustion of MMT produces manganese residues inside engines, emission control and monitoring systems and releases airborne respirable manganese and unburned MMT into the atmosphere. At high doses, airborne respirable manganese associated with manganese processing and industrial processes (like steel making) causes disabling neurological impairments in movement and speech with symptoms similar to Parkinson’s disease. The public health and environmental impacts of long-term, lower dose exposure to airborne respirable manganese and unburned MMT are unknown.
Statement of Defence

The MMT Market

31. Between 1977 and June 24, 1997, Canadian gas refiners added MMT\textsuperscript{17} to unleaded gasoline and transported the resulting product within and beyond provincial boundaries. While Canada accepts that MMT was the principal octane enhancer\textsuperscript{18} used by refiners in Canada during that period, it has no knowledge of the percentage of the Canadian MMT market controlled by Ethyl or Ethyl Canada and does not admit that either company held the market share described in paragraph 3 of the Statement of Claim. However, Ethyl Canada has claimed in other proceedings that when Parliament passed the Act, approximately one third (1/3) of Ethyl Canada's overall sales involved the distribution and sale of MMT\textsuperscript{19}.

32. Canada has no knowledge of the product "Greenburn" described in paragraphs 10 through 12 of the Statement of Claim, inclusive, and says that - in any event - the intention to introduce the product into the Canadian marketplace if

\textsuperscript{17} The standard established by the Canadian General Standards Board (the "CGSB") for use of MMT in Canada was twice as high as that used in the United States - up to 18 milligrams of manganese per litre of gasoline in Canada compared to 8.26 milligrams of manganese per litre of gasoline in the United States. The standard fixed by the CGSB was voluntary in most of Canada but refineries are required to adhere to that standard in Ontario and Quebec.

\textsuperscript{18} To the extent it suggests that certain fuel additives are used in Canada, paragraph 3 of the Statement of Claim is inaccurate. Other octane enhancers occasionally used in Canada during this period included ethanol, methanol and MTBE. The chemical composition and characteristics of these products differ substantially.

Lead is banned from use in Canada due to its proved toxicity at levels associated with ordinary use. It also adversely affects the performance of catalytic converters.

Benzene is not a fuel additive but a component of gasoline resulting from the refining process. Furthermore, benzene has been found to be toxic under the Canadian Environmental Protection Act and proposed regulations limiting the levels of benzene in gasoline resulting from the refining process have been published in the Canada Gazette, Part II as of November 26, 1997.

\textsuperscript{19} Affidavit of David Wilson, President of Ethyl Canada filed in the Ontario Court General Division between Ethyl Canada and the Attorney General of Canada sworn on May 28, 1997 at paragraph 9.
it existed (which is denied) is irrelevant because: the Act does not prohibit the importation of MMT for use in fuels other than unleaded gasoline provided the importer applies for and receives authorization from the Minister of the Environment; Ethyl never sought the authority of the Minister of the Environment to import the product into Canada or introduce it into interprovincial trade; the product was never introduced into commerce in Canada; and, in any event, the decision to withhold Greenburn from the Canadian marketplace was made for business reasons unconnected with the ban on the importation of MMT for use in unleaded gasoline, which reasons are exclusively within the knowledge of Ethyl and not within the knowledge of Canada.

33. MMT may legally be added to unleaded gasoline sold in parts of the U.S. However, roughly one-third of the U.S. gasoline market is inaccessible to the product either because the Clean Air Act requires refiners to produce reformulated gasoline for use in those areas\(^{20}\) or state law prohibits its use. In fact, MMT is not permitted for use in the worst ozone areas of the United States where U.S. federal law requires reformulated gasoline. These areas include Connecticut, Illinois, Maryland, New Jersey, New York, Pennsylvania, Wisconsin and California.

34. American refiners have not flocked to use MMT as an alternative to those octane enhancers already in place. U.S. refiners supplying eighty-five percent (85%) of the U.S. market claim that they do not use the product at all and surveys undertaken on behalf of the U.S. automotive industry show that no MMT is present in gasoline sold in any major U.S. city. Furthermore, American automotive manufacturers actively discourage the use of MMT in new-model cars.

\(^{20}\) MMT is not approved for use in reformulated gasoline.
35. European refiners use MMT exclusively in diesel fuel. In other parts of the world, lead is the primary octane enhancer.

The Problem: Conservation of Clean Air

36. Clean air is an exhaustible natural resource. The vast majority of Canadians live in a relatively narrow band of territory in close proximity to the American border. More than half the population, in excess of thirteen million people, live in areas featuring significant periodic or sustained air quality problems with observed harmful effects on human health and the environment. Automobiles and trucks are leading sources of these problems, contributing more than 60% of the Nitrogen Oxides (NOx), more than 30% of the human-produced volatile organic compounds (VOCs) and approximately 60% of the carbon monoxide (CO) introduced into the atmosphere. They also emit respirable airborne particulates and greenhouse gases such as CO₂ and methane.

38. NOx causes lung irritation and immune system suppression in humans. VOCs include toxic or cancer-causing compounds such as benzene. CO reduces the ability of blood to carry oxygen, particularly in smokers and persons with heart disease or anemia. Airborne particulate matter, even at low ambient concentrations, contributes to hospitalization and premature death.

40. NOx and VOCs also interact with sunlight to produce ground-level ozone. Ground-level ozone decreases lung function, increases respiratory symptoms such as cough and pain in deep breathing, and contributes to chronic lung disease and to death. It also has been shown to damage forests and other vegetation and significantly reduce crop yields.
41. The foregoing effects on human health reduce quality of life, increase hospital admissions, treatment and cause premature death. Direct societal costs include lost productivity and wages and increased health care costs.

The International Context

42. Canada has recognised that solutions to many environmental problems lie outside its borders. Over the past twenty years, Canada has committed itself in various international fora to stabilise or reduce emissions of NOx, VOCs and other airborne pollutants. These fora include the United Nations Economic Commission for Europe\textsuperscript{21}, through which Protocols on VOCs\textsuperscript{22} and NOx\textsuperscript{23} have been signed, and Canada-U.S. discussions\textsuperscript{24} concerning NOx and other transboundary pollutants.

\textsuperscript{21} UN-ECE Convention on Long-range Transboundary Air Pollution, 1979 (LRTAP).

\textsuperscript{22} Protocol on the Control of Emissions of Volatile Organic Compounds or their Transboundary Fluxes (VOCs Protocol, 1991), which commits the parties to reduce annual emissions of VOCs by at least 30% by the year 1999. Canada is a signatory to the Protocol but has not yet ratified it because further provincial and other measures must be taken. Reduction of VOCs in all forms sufficient to permit compliance is a Canadian objective.

\textsuperscript{23} Protocol Concerning the Control of Emissions of Nitrogen Oxide or their Transboundary Fluxes (NOx Protocol, 1988), which commits the parties to reducing their national annual production of NOx to 1987 levels by 1994. A further protocol is under negotiation.

\textsuperscript{24} Canada/U.S. Agreement on Air Quality (Air Quality Accord, 1991) pursuant to the 1980 U.S.-Canada Memorandum of Intent Concerning Transboundary Air Pollution, which addresses transboundary air pollution leading to acid rain and other problems; and sets specific emission control objectives for NOx produced by automobiles and other sources.
43. A key component of the foregoing international agreements is the requirement for minimum national emission control standards for automobiles based upon the best available vehicle technology or specified emission control levels.\textsuperscript{25}

**Domestic Initiatives Taken Against Airborne Vehicle Pollution**

47. The federal, provincial and territorial governments, in co-operation with industry, have taken steps to reduce air pollution. The Canadian Council of Ministers of the Environment (the "CCME") is the major inter-governmental forum in Canada for discussion and joint action on environmental issues of national, international and global concern. The thirteen member governments (the ten provinces, two territories and the federal government) work as partners in developing nationally consistent environmental standards, practices and legislation.

48. Initiatives taken by the CCME have included developing Smog Management Plans which recommend tighter federal standards for NO\textsubscript{x} and VOC emissions from motor vehicles, and preparing a long-term strategy for reducing acid rain by controlling and reducing SO\textsubscript{2} and NO\textsubscript{x} emissions.

50. Strategies adopted by the Government of Canada to reduce motor-vehicle emissions include not only tighter motor vehicle emission regulations, but also improvements to fuel formulations and measures to encourage Canadians to make wise transportation choices consistent with a cleaner environment. Various

\textsuperscript{25} See VOCs Protocol, Article 2(3)(a)(ii) and Annex III; NO\textsubscript{x} Protocol, Article 2(b) and Technical Annex; Canada-U.S. Air Quality Accord Annex 1, item 2.
federal/provincial initiatives also control fuels and emissions. The control of auto emissions by the Government of Canada is thus part of a broader strategy to control air pollution and protect the health of Canadians and the environment.

51. Since the mid 1980's, Canada has moved toward harmonization of its vehicle emission standards with more stringent U.S. federal requirements in order to meet the foregoing domestic and international commitments for environmental and health protection and reduce air pollution. These standards set limits on the amount of pollutants, such as NOx, CO and hydrocarbons (HC, a sub-set of VOCs), that fossil-fuel powered vehicles are permitted to emit.

52. The automobile industry responded to emission requirements by introducing increasingly complex and effective pollution control technology, including:

(a) Catalytic converters, devices used to transform HC, CO and NOx in engine exhaust to water, carbon dioxide and nitrogen gas;

(b) Oxygen sensors, used to sense the performance of the catalytic converter and engine; and,

(c) On-board diagnostic (OBD) equipment, which monitor the performance of emission control devices and other vehicle performance aspects such as engine misfire. Engine misfire can lead to inefficient use of fuel and increased production of carbon dioxide and particulates.

53. Although emissions of pollutants from the average passenger car have decreased, the total number of vehicles and kilometres driven has increased.
Accordingly, more stringent emission standards are required as the ground gained through technological improvements is lost.

54. To maximize the reduction of vehicle emissions, vehicles and fuels must be compatible and treated as an integrated system. This approach has been accepted in the United States where, for example, in certain areas, the U.S. Clean Air Act and state regulations require the use of gasoline reformulated to offer additional reductions in tailpipe emissions. MMT may not be used in reformulated gasolines in the U.S.

Recent Developments

55. In November 1994, the CCME established the Task Force on Cleaner Vehicles and Fuels to develop options and recommendations for a national approach to new vehicle emissions, fuel efficiency standards and fuel reformulations for Canada. In October 1995, the Task Force recommended stricter controls concerning fuels and emissions.

56. Recognizing the need to continue the advance of vehicle emission control, Canada in May, 1996 tabled proposed amendments to the Motor Vehicle Safety Regulations. Those amendments, which came into force as S.O.R./97-376 on July 28, 1997, harmonize the national emission standards for HC, CO and NOx with those in the United States and require that light duty vehicles and trucks be equipped with OBD systems to monitor engine and emission control equipment.

57. In addition, the Province of British Columbia recently implemented the Air Care program in the Lower Mainland Area surrounding Vancouver. This program requires periodic inspection of the emission performance of each vehicle operating
in the area. An assessment of the program concluded that it had produced significant reductions in NOx, VOC, and CO emissions, and improvements in fuel efficiency in the tested fleet. Ontario is considering a similar scheme. OBD systems hold the promise of similar benefits, as a method of on-going monitoring of engine and emission control system performance.

The Development of a Policy on MMT

58. With the move to tighten Canadian vehicle emissions standards by harmonizing toward those in the United States, concerns about the health effects of manganese and MMT and the impact of MMT on the proper functioning of catalytic converters became increasingly relevant, given that MMT had not been used in U.S. unleaded gasoline. If vehicles designed and built for an MMT-free environment were exposed to MMT in Canada, Canadians risked the inability to control or correct air pollution to the extent that MMT harmed increasingly sophisticated emission control and monitoring devices.

59. Faced with tightening auto emissions standards, Canadian vehicle manufacturers and others pressed the Government of Canada to eliminate MMT from unleaded gasoline. The vehicle industry focused on the potential harm to pollution control devices; others raised the potential for direct and indirect health effects from MMT.

60. In 1994, the Department of National Health and Welfare had reviewed the available literature and assessed the direct health risks associated with exposure to airborne respirable manganese, to determine whether exposure by the Canadian public to current levels of emissions from vehicles using MMT-containing gasoline
constituted a risk to their health. Departmental officials concluded that: “... current levels of airborne respirable manganese to which the population in large urban centres are exposed are below the benchmark air level at which no adverse health risks are expected [emphasis added]”.

The report addressed neither the indirect health or environmental effects resulting from deposits of manganese oxides on spark plugs, catalytic converters and OBD systems through increased air pollutants (i.e. VOC’s, NOx, resulting ground level ozone and particulates); nor did it consider their effects on Canada’s ability to reduce air pollution through the use of new technology or stronger emissions standards.

61. The vehicle industry and petroleum refiners were unable to agree on acceptable measures for addressing the problems associated with the use of MMT in gasoline. The Government of Canada encouraged these parties to resolve the issue among them, participating in numerous meetings with them at senior levels. The parties met and made various proposals in early 1995 but were unable to resolve their differences.

62. The vehicle industry presented evidence that MMT: plugged catalytic converters, reduced catalyst life, increased the emission of CO and HC and increased warranty costs; increased spark plug misfire and reduced spark plug life; and caused the malfunctioning of both oxygen sensors and of state-of-the-art OBD systems scheduled for introduction into new vehicles in 1996.

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27 For example, following the quotation to which the Claimant refers in the 1994 Department of Health report, the author observes that city size, traffic density etc, are consistently associated with elevated ambient levels of respirable manganese. On page 65 of the report the author states that 10% of the population may be exposed to respirable manganese greater than 50% of the tolerable daily intake and recommends further monitoring of certain portions of the population.

28 1994 Health Canada Report at page 64.
63. The Claimant denied these claims and countered that MMT in fact reduced NOx and benzene emissions, and reduced the amount of air pollutants produced by the refiners. The auto industry contested these claims.

64. Environment Canada analysed the data presented and claims made by all parties, participated in numerous meetings with various interest groups and consulted experts to obtain an independent assessment of the positions taken.

65. In February 1995, General Motors informed the Minister of the Environment that concerns about the effects of MMT on emission control devices had caused it to disconnect the OBD warning lights on its 1996 model year vehicles. Other manufacturers informed their customers that the use of gasoline containing MMT could void new vehicle warranties.

66. In April 1995, as a result of legal proceedings initiated by Ethyl, the U.S. Court of Appeals ordered the Environmental Protection Agency (the "EPA") to permit the use of MMT as a fuel additive for unleaded gasoline used in parts of the United States despite the EPA's continuing concerns regarding the effects of MMT on health and emission monitoring systems. The EPA continues to assess the effect of MMT on health and emission control systems and has the authority to review and withdraw permission if appropriate.

67. The risks and potential impacts on the public interest associated with the continued use of MMT which the Canadian Parliament had to weigh therefore included:
(a) the adverse effects of MMT on catalytic converters, and the impact this would have on increased HC and CO emissions;

(b) the adverse effects of MMT on OBD systems and the impact this would have on the use and operation of the catalytic converter (and the resulting effects on the production of CO, NOx and HC), as well as the general operation of the vehicle such as the correction for misfires (which reduce fuel efficiency and thus increase the production of greenhouse gases);

(c) the adverse effects of MMT on oxygen sensors and the impact this would have on the use and operation of the catalytic converter (and the resulting effects on the production of CO, NOx and HC);

(d) the adverse effects of MMT on spark plug performance and life and the resulting effect on fuel efficiency and greenhouse gas production;

(e) the cost of repair or replacement of parts associated with the foregoing and the impact this would have on the program to move to more strict emission control requirements;

(f) the effect of malfunctioning OBD systems on: consumer acceptance and use of this important new technology (e.g. potential disconnection by the consumer of malfunctioning equipment); manufacturers' reputations; and continuous (as opposed to sporadic) monitoring of vehicle emissions;

(g) the concerns expressed by non-governmental organizations, including the Learning Disability Association of Canada and environmental groups,
about the potentially toxic effects of airborne manganese from automobile exhaust, and about the lack of data on the direct health impacts of same;

(h) the unfairness and impracticality of insisting on auto industry compliance with new harmonized emissions control standards requiring new technology where such technology is not capable of operating properly with unleaded gasoline containing MMT; and,

(i) Canada's inability to satisfy domestic and international targets and obligations for the reduction of HC, CO, NOx and greenhouse gases if OBD and pollution control systems did not work.

68. Balanced against these considerations, Parliament had to consider factors including the claims made by Ethyl that MMT was environmentally beneficial, and the potential costs to refiners of increasing octane levels in unleaded fuels without using MMT.

69. Parliament weighed the foregoing considerations together with Canada's NAFTA obligations. It concluded that the public interest necessitated regulating the use of managanese-based fuel additives in unleaded gasoline and the method chosen was to regulate the importation for commercial purposes, and interprovincial trade in, those additives. This method of controlling a product to deal with its health and environmental effects is used in other contexts.

70. Given the evident indirect potential effects, as opposed to direct toxic effects, of manganese-based fuel additives on the environment, the Canadian
Environmental Protection Act\textsuperscript{29} was not an appropriate mechanism for addressing the regulation of MMT and other manganese-based fuel additives. However, the absence of pre-existing federal statutory authority to address the indirect hazards and risks associated with MMT use does not signify, as Ethyl infers, the absence of any environmental or health hazard.

Application of the NAFTA

71. The preamble to the NAFTA states that the Parties resolved to carry out stated objectives “in a manner consistent with environmental protection and conservation” and to “[s]trengthen the development and enforcement of environmental laws and regulations.” The Environmental Side Agreement\textsuperscript{30} contains similar language in its preamble. It also recognizes in Article 3 the right of each Party “to establish its own levels of domestic environmental protection ... and to adopt or modify accordingly its environmental laws and regulations”, and creates the obligation to “ensure that its laws and regulations provide for high levels of environmental protection” and to “strive to continue to improve those laws and regulations.”

72. The negotiation of the NAFTA included unprecedented consideration of environmental protection. The agreement contains numerous provisions which recognize and preserve the ability of the parties to protect the environment and health of their citizens. Such provisions were negotiated in the light of the objectives and commitments expressed in the general statements cited above.

\textsuperscript{29} R.S.C. 1985 (4th Supplement) c. 16.

\textsuperscript{30} North American Agreement on Environmental Cooperation between the Government of Canada, The Government of the United Mexican States and the United States of America
73. The scheme of the NAFTA also involves Chapters and Parts treating different aspects of trade. Trade in goods and services, intellectual property and investment, for example, are treated in differing Chapters or Parts which contain provisions and disciplines representing differing bargains among the Parties in those areas. In the case of investor-State relief, such as the current claim, the NAFTA limits these claims to, essentially, breach of Part A of Chapter 11, signalling that that Chapter has a discrete scope. That scope differs from other Parts of the NAFTA in that Chapter 11 applies to measures relating to investors and investments, as opposed to flows of goods or services across borders.

74. Chapter 11 of the NAFTA must be interpreted in this context and in accordance with the applicable principles of international law.

**Application of Chapter 11**

75. If the Tribunal finds that it has jurisdiction to assess this claim under Chapter 11, including finding that the claim involves a "measure", Canada says the claim does not raise a measure relating to investments or investors of another Party within the meaning of those terms in Article 1101 of the NAFTA, but one relating to trade in goods within Chapter 3 and the provisions thereof, and that therefore no investor-State claim may be brought in respect of it.

76. In the alternative, even if Chapter 11 applies, which is denied, Canada says that the claim does not raise any breach of the provisions of Chapter 11 of the NAFTA for the reasons set out below.
National Treatment

77. Canada says that the claim does not raise any breach of the national treatment obligations of Article 1102 of the NAFTA.

78. Canada says that no less favorable treatment is accorded by the Act to other Parties’ investors or their investments, in like circumstances. Investors and their investments used in the production and marketing of manganese-based fuel additives are treated equally by the Act, regardless of their origin or nationality. Section 4 of the Act states that “no person shall engage in interprovincial trade in or import for a commercial purpose a controlled substance except under an authorization referred to in section 5.” “Person” is a term which is neutral as to nationality, origin or location. No distinction is drawn between investors or investments of Canadians and those of another Party in this provision or elsewhere in this legislative scheme.

79. The Claimant suggests that there is no plausible explanation for the Act except to give unfair advantages to Canadian businesses and characterizes the Act as discriminatory and arbitrary.\textsuperscript{31} To the contrary, the Act is, in view of its development and the lengthy and detailed private and public debate that surrounded it (in which the Claimant was a participant), the product of a thorough assessment of the public interest. It is an initiative which fits within a framework of other action taken by federal and provincial governments to control air pollution, as well as within a framework of international commitments to which Canada is a party. The restriction of import and interprovincial trade in a product is a method employed by the Canadian federal government, within its sphere of constitutional

\textsuperscript{31} Paragraphs 33 - 36 of the Statement of Claim.
competence, to regulate trade, health and the environment in other contexts, such as through the emission control standards implemented by the Motor Vehicle Safety Regulations. Its use here and in other regulatory schemes is in no way an attempt to target foreign investors or to favour Canadian investors.

80. The Claimant places emphasis on the fact that Ethyl was the sole importer of MMT into Canada prior to the Act.\textsuperscript{32} Canada says that to the extent this is true, this fact alone cannot give rise to a breach of national treatment obligations, as it is merely a reflection of a current industry structure. Otherwise, general measures affecting foreigners who are currently or temporarily sole suppliers in a given market would always have national treatment consequences. The substance of the measure, not solely the relevant industry structure at a given point in time, must be assessed to determine its effect on national treatment obligations.

81. Moreover, to the extent that the Claimant holds patents for the production of MMT (which is within the knowledge of the Claimant), Canadians may not enter and compete in this market in any event, and therefore cannot be favoured.

82. The Claimant suggests that somehow the fact that MMT may be produced and sold wholly within a given province creates a breach of national treatment.\textsuperscript{33} This suggestion is groundless, for all investors and investments within a province or elsewhere, regardless of nationality or origin, are treated equally by the Act, as described above.

\textsuperscript{32} Paragraph 32 of the Statement of Claim.

\textsuperscript{33} Paragraphs 36, and 37-40 of the Statement of Claim.
83. With respect to the question of "like circumstances", the Claimant suggests\textsuperscript{34} that it is in "like circumstances to other producers" of products competitive to MMT, that is, various other octane enhancers. Canada states that even if it were accepted that the "like circumstances" of investors and investments should include consideration of the products produced by such investors and investments, those products have different methods of production and supply/demand characteristics. Moreover, they have differing properties, nature and quality from MMT. Therefore, the investors or investments associated with these products are not in like circumstances to Ethyl and Ethyl Canada.

84. Furthermore, Canada says that these investors and investments are not in "like circumstances" to Ethyl because of the differing nature, character and situation of the respective investments from those of the Claimant.

Performance Requirements

85. Canada says that the Act does not breach Article 1106 of the NAFTA.

86. The Act neither imposes nor enforces any "requirements", "commitments" or "undertakings", within the meaning of those terms in Article 1106, in relation to investors or investments. Those terms were intended to cover conditions or obligations placed on the presence or operation of a business in the territory of a Party. The Act in question here, and the regulatory scheme that it creates, do not place any requirements on investors or investments.

87. In any case, Canada says the Act requires no "given level or percentage of domestic content" within the meaning of those terms in subparagraph 1106(1)(b)

\textsuperscript{34} Paragraph 31 of the Statement of Claim.
88. Furthermore, Canada says the Act does not require or accord a preference to Canadian goods or services, contrary to subparagraph 1106(1)(c). The Act makes no reference to the origin or nationality of goods and services.

89. With respect to the suggestion that the Act requires the Claimant or others to use MMT made in Canada or local production facilities, there is nothing in the Act that requires the Claimant or any other investor to use MMT produced in Canada or to use local production facilities.

90. In any case, Canada says that the Act was intended to be, and is, an effective way of removing MMT from all gasoline produced in Canada, and therefore no question of future production or distribution for this commercial purpose arises, let alone any question of any preference associated therewith.

91. Acceptance of Ethyl's contention that an import ban is the equivalent of a performance requirement would lead to the absurd result that every border measure (whether an import ban, a quota, tariff rate quota or a tariff) is a "performance requirement". Chapter 11 does not apply to these kinds of measures.

92. In the alternative, Canada says that the Act is within the exception in Article 1106(6) because it was "necessary to protect human, animal or plant life or health" (Article 1106(6)(b)), and "necessary for the conservation of living or non-living exhaustible natural resources"; in this case, clean air (Article 1106(6)(c)).
The Act was necessary to prevent the negative impact on clean air, and on life and health, that would result from the continued use of MMT in gasoline, due to its effects on vehicle air pollution control devices, oxygen sensors, OBD systems and spark plugs.

Expropriation

93. Canada says that Article 1110 deals with the taking of property and not with regulation. Otherwise, Article 1110 would conflict with the numerous forms of regulation permitted by the terms of the NAFTA, including regulation for the protection of health and the environment, of which the Act is an example.

94. Thus, to constitute “expropriation”, or to be “tantamount to expropriation” within Article 1110, there must be a taking. Canada says that there has been no “taking” of any investment of the Claimant. The Act imposes a restriction on trade in manganese-based fuel additives and does not constitute a taking of any of the property of the Claimant.

95. Canada says, furthermore, that the Act does not constitute “expropriation” or a measure “tantamount to expropriation” under Article 1110 of the NAFTA because it involves the exercise of regulatory powers or “police” power recognized by international law. More specifically, Canada says that the Act was enacted for the maintenance of health, for the conservation of clean air and for the protection of the environment.

96. In light of the above, Canada says that no compensation is payable under Article 1110, and Article 1110 is of no application.
97. Canada further submits that for the reasons given above the Act constitutes a health and environmental measure permitted by Article 1114(1) of the NAFTA.

Defamation

98. Paragraphs 25 and 26 of the Statement of Claim refer to alleged defamatory statements without describing the statements at issue. Ethyl claims that those statements expropriated and damaged the goodwill of Ethyl, Ethyl Canada and MMT. Canada says that neither these statements nor their alleged effects constitute a "measure" under Articles 201 or 1101 of the NAFTA, an expropriation or measure tantamount to expropriation under Article 1110, or a breach of any other provision of Chapter 11.

99. Assuming that the statements referred to in those paragraphs are the statements described in paragraphs 10, 16, 17, 20 and 21 of the Notice of Intent and paragraph 57 of the Notice of Arbitration, none of them is defamatory of the Claimant, Ethyl Canada or MMT as alleged in the Statement of Claim, cr at all.

100. If the statements to which Ethyl refers in paragraphs 25 and 26 of the Statement of Claim were defamatory of Ethyl, Ethyl Canada or MMT (which is not admitted but is expressly denied), Canada says that those statements had no adverse impact on the reputation or goodwill of Ethyl, Ethyl Canada or MMT and that Ethyl suffered no resulting damage compensable under Chapter 11 of the NAFTA.
101. To the extent Ethyl relies upon other statements in support of its claim that the reputation of Ethyl, Ethyl Canada or MMT was damaged, Canada says that, by reason of Ethyl's failure to comply with the procedural requirements described in paragraphs 20 through 22 of this Statement of Defence, Ethyl cannot now advance those claims. Alternatively, Canada pleads and relies upon the allegations set out in the foregoing paragraphs.

**Damages**

102. In accordance with paragraph 8 b) of the procedural order dated October 13, 1997, Canada submits the following in respect of the claim for compensation, damages and interest made in paragraph 51 and Section D of the Statement of Claim without prejudice to its right to submit an amended Statement of Defence should that be necessary.

103. Canada submits that:

(a) the Claimant suffered no compensable loss or damage as a consequence of ministerial support for, or the passage and enforcement of, the Act;

(b) if the Claimant suffered loss or damage compensable under Chapter 11 of the NAFTA, some or all of the heads of damage claimed - including lost profits, loss of world-wide sales, the cost of reducing operations in Canada and fees and expenses incurred in participating in the legislative process - are not compensable under articles 1110 and 1135 of the NAFTA; and,
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(c) the compensation, monetary damages and interest claimed in the Statement of Claim are, in any event, unreasonable, grossly exaggerated, excessive and too remote to be recovered.

Relief Claimed

104. Canada requests that the claim submitted to arbitration on April 14, 1997 be dismissed and that the Tribunal order Ethyl to pay all costs, disbursements and expenses incurred by Canada in the defence of this claim including, but not restricted to: legal, consulting and witness fees; travel and administrative expenses.

Submitted this 27th day of November, 1997 at Ottawa, Ontario, Canada.

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