

The Chief Executive  
Ministry of Economic Development  
PO Box 1473  
Wellington

30 October 2006

**Attention: Philippa Blunden, Fuels & Crown Resources Group**

**Submission on:**

**Discussion Paper: Fuel Specifications – Biofuel Blends Waivers**

From: Auckland Regional Council  
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Thank you for the opportunity to provide comment on the Discussion Document regarding the proposed Fuels Specifications Waivers for Biofuel Blends Waivers.

### **Introduction**

1. The Auckland Regional Council (ARC) supports the intention of the Government in encouraging the uptake of biofuels is to reduce New Zealand's carbon dioxide emissions under the Kyoto Protocol and to assist with security of transport fuel supply.
2. A key goal of the ARC is to improve air quality in the Auckland region. Air quality in the urban area currently breaches acceptable levels required under the Air Quality National Environmental Standards, and the ARC's position is that a range of measures will be required to improve air quality. The combustion of transport fuels is a significant contributor to air pollution in the region. As the country's largest urban area, there are 744,000 motor vehicles registered in the Auckland region, with an annual trend of 5% increase in motor vehicle use. Particulate emissions from motor vehicle fuels constitute 51% of the region's PM<sub>10</sub> emissions<sup>1</sup>. To the extent that the proposed Biofuels Sales Obligation Targets assist in reducing emissions to air from the combustion of motor vehicle fuels, the ARC supports the introduction of biofuels.
3. To achieve improved air quality, the ARC has advocated for many years that fuel specifications be tightened to reduce and remove harmful pollutants. The ARC has been pleased to see improvements in fuel specifications. The ARC welcomed<sup>2</sup> the Associate Minister of Energy's August 2006 announcement that fuel specifications

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<sup>1</sup> PM<sub>10</sub> are particulates less than 10 microns in size, which can cause adverse health impacts by lodging in lungs.

<sup>2</sup> ARC welcomes cleaner fuels, media release 3 August 2006: <http://www.arc.govt.nz/arc/about-arc/media/index.cfm?88F08791-BCD4-1A24-9DE9-E5E959F47B1C&entryID=D1DF188B-BCD4-1A24-954D-B7F424D273B3>

will be improved further<sup>3</sup>, to bring New Zealand in line with best practice overseas. New Zealanders will benefit from improved health due to lower harmful emissions, and the New Zealand motor vehicle industry will benefit because newer vehicles perform best with better fuel quality.

4. The ARC is concerned that in introducing any policy on biofuels, there should not be any relaxation of New Zealand's fuel specifications detrimental to air quality. The ARC is concerned that any relaxing of fuel specifications may have other adverse environmental or health effects due to a greater release of pollutants. Tight fuel specifications are fundamental to sustainable and integrated transport, health, energy and environmental policies.
5. The ARC has reviewed the companion technical report entitled "Investigation of Fuel Specification Waivers for Biofuel Blends" with the following comments.

#### **Fit for Common Purpose**

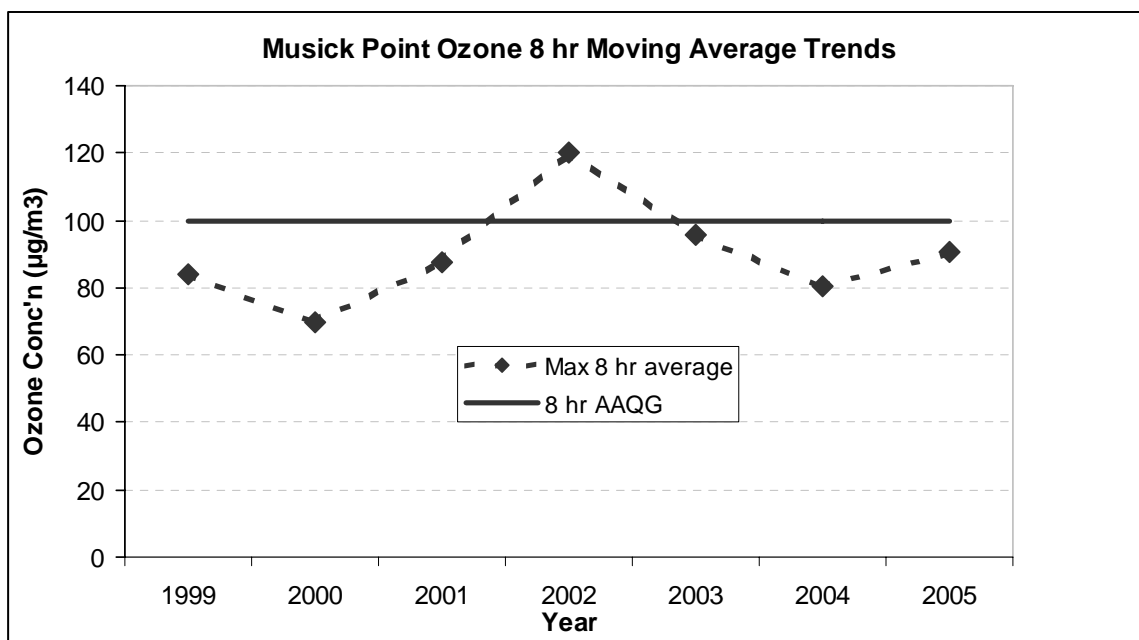
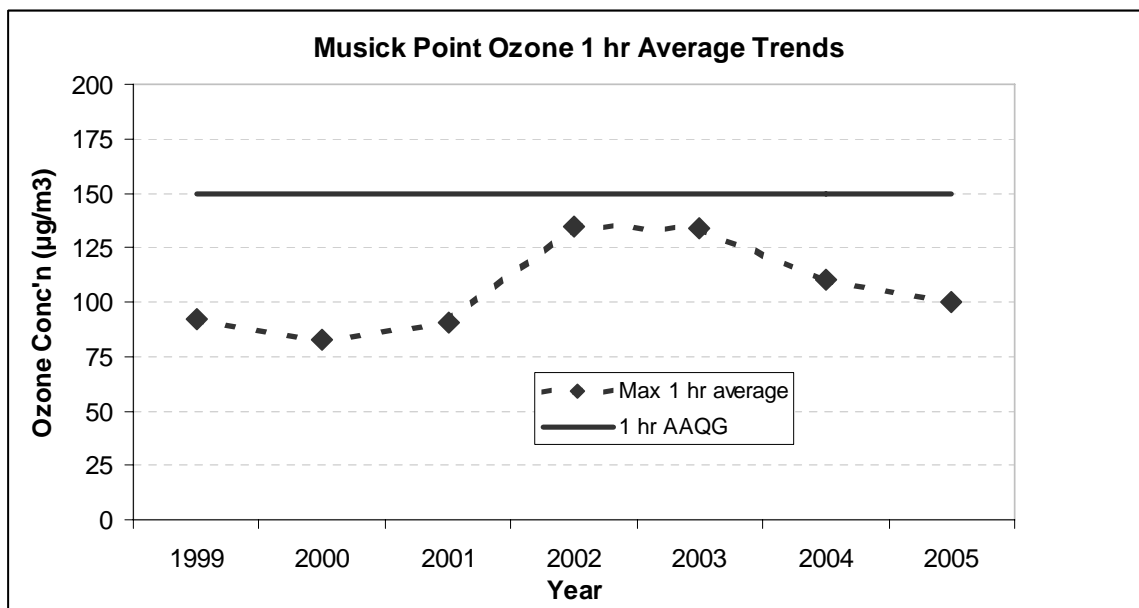
6. The ARC is not supportive of any proposed changes to the fuels specifications that would adversely impact upon consumers. We acknowledge that the technical report is also concerned about meeting "fit for purpose" and specifically states that no waivers are recommended for cold properties for biodiesel and we concur with this.

#### **Proposed Ethanol Blend Waivers**

7. **ARC support for the proposed waivers for ethanol blend fuels is conditional on confirmation that any adverse effects on local air quality would be no more than minor.** The technical report states that there is likely to be a slight increase in evaporative losses but fails to provide comprehensive mass emissions evidence to substantiate whether this would result in significant air quality impacts.
8. The ARC acknowledges that MED has made significant improvements to the volatility and evaporative properties of petrol since 2002, and welcomes the improvements that have been made as they support better air quality in the Auckland region. We strongly oppose the proposed relaxation to enable bioethanol without due consideration of potential regional air quality effects, in particular the production of photochemical smog (ozone) in Auckland.
9. The following figures present the trends measured at the longest running ozone monitoring site in Auckland (Musick Point). From the graphs, it is evident that exceedances of the ambient air quality 8-hour average guideline have already occurred and that 1 hour and 8 hour average levels are close to exceeding. With traffic growth and regional fuel use increasing at approximately 5% per annum, it is **more than possible** that ozone levels could be exceeded if petrol evaporative and volatility properties were to be relaxed (as proposed with the waiver options).

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<sup>3</sup> Associate Minister of Energy Harry Duynhoven, media release 3 August 2006: Consumers to get cleaner petrol and diesel, <http://www.beehive.govt.nz/ViewDocument.aspx?DocumentID=26665>



10. **The ARC would like to see a comprehensive mass balance undertaken of the evaporative losses resulting from petroleum fuel distribution and use in Auckland.** We acknowledge that significant improvements have been made in carbon canister technology for new vehicles entering New Zealand, and are likely to be prevalent in many of the used imports entering New Zealand. However, we are not confident that this technology will sufficiently offset the possible air quality environmental effects of the proposed waivers.

11. **The ARC proposes another method that may assist in offsetting the proposed waivers.** The ARC would be amenable to the proposed waivers providing they are offset by other measures to achieve the same air quality outcomes. We understand that Wiri Oil Terminal is upgrading its facility to significantly reduce its evaporative emissions. There is a possibility that setting a “best practice” benchmark for all retail

facilities (service stations etc.) might offer an offset to any increased evaporative emissions from bioethanol blends. We propose that this be investigated as an option to include in this policy.

12. **In summary, the ARC would be amenable to the proposed waivers presented in options 2, 3 and 4 of the table on page 3 of the Biofuel Blends Waivers discussion document, provided that we are confident that local air quality in the Auckland region would not be significantly compromised.** We are concerned about the potential effects of the waivers on local ozone levels in particular as ozone levels are very close to environmental limits. The ARC would be amenable to a waiver if an appropriate mechanism to offset the possible local air quality impacts is included in the policy, and we suggest a possibility that may provide an offset mechanism.

### **Proposed Biodiesel Blend Waivers**

13. The ARC is not opposed to the proposed biodiesel waivers, because we have no evidence to suggest they would result in any significant impact on air quality in Auckland.

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Yours sincerely,

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