"The cross-party campaign to achieve urgently and sustainably at least World Health Organisation recommended standards of air quality throughout London"

Website www.cleanairinlondon.org

Commissioner Janez Potočnik Commissioner for the Environment European Commission B-1049 Brussels Belgium

### By email:

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30 September 2011

Dear Commissioner Potočnik

'Year of Air' in 2013 must deliver continuity and the further tightening of health and legal protections

European Commission urged to 'throw the rule book' at the UK for having the worst nitrogen dioxide (NO<sub>2</sub>) levels in Europe after 12 years of inaction. First written warning should be issued by December 2011 with a final written warning to follow before the London 2012 Olympics

698,543 people in London near 1,481 km of roads in an area of 91 km<sup>2</sup> were exposed to unlawful levels of NO<sub>2</sub> in 2010. Nationally: 925,095 people; 3,634 km; and 242 km<sup>2</sup>

 $NO_2$  is not just a molecule: it is readily measured; concentrations are often strongly correlated with those of other toxic pollutants including ultrafines; and it may be a better indicator of social and racial inequalities caused by traffic-related air pollution than dangerous airborne particles  $(PM_{10})$ 

 $\frac{\text{London has already reached the 43 'Bad Air Days' forecast by Defra for a whole year in its}{\text{time extension request for $PM_{10}$. A recent report by the World Health Organisation estimated there}{\text{were more outdoor air pollution attributable deaths in the UK in 2008 than in any other}}\\ \underline{\text{Member State in Europe}}$ 

Clean Air in London (CAL) welcomes the opportunity offered by the European Commission (the Commission) to respond to the public consultation on European Union (EU) air quality legislation.

CAL notes the deadline for online responses to the questionnaire is 15 October and 30 September for other responses. Key elements of this response and perhaps further points, in particular relating to the detailed

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questions in the questionnaire, will also be submitted online by 15 October. Thank you for aligning the deadline for public responses with that for other respondents.

CAL understands that the objective of the consultation is to gather views and additional information on the effectiveness, strengths and weaknesses of EU air quality legislation, in particular as regards Directive 2008/50/EC on ambient air quality and cleaner air for Europe and Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel and polyaromatic hydrocarbons in ambient air. This consultation marks the beginning of a broad consultation on the review of EU air policy (i.e. including the National Emissions Ceilings Directive 2001/81/EC) foreseen to end in 2013 at the latest (the 'Year of Air' in 2013). See:

### http://ec.europa.eu/environment/air/review\_air\_policy.htm

CAL is a not for profit organisation with a mission that includes campaigning to achieve urgently and sustainably at least World Health Organisation Standards (WHO) guidelines for air quality throughout London. Further details about CAL including its supporters and Gold Sponsor, Camfil Farr, can be seen on its website at: <a href="http://www.cleanairinlondon.org/">http://www.cleanairinlondon.org/</a>.

CAL is independent of any government funding, has cross-party support and many supporters, both individuals in London and organisations. CAL provides a channel for both public concern and expert opinion on air pollution in London. This document provides both general and expert comments in response to the consultation.

#### **Summary**

Clean Air in London (CAL) welcomes the opportunity offered by the European Commission (the Commission) to respond to the public consultation on European Union (EU) air quality legislation.

The UK and London in particular have some of the worst air pollution in Europe. The World Health Organisation (WHO) this week estimated more deaths in the UK were attributable to long-term exposure to particles in 2008 than any other country in the EU 27. The UK has a higher percentage of zones exceeding the NO<sub>2</sub> annual limit value plus margin of tolerance than any other country in the EU 27 (i.e. 40/43). The Government has admitted that 698,543 people in London near 1,481 km of roads in an area of 91 km<sup>2</sup> were exposed to unlawful levels of NO<sub>2</sub> in London in 2010. Nationally, the numbers are: 925,095 people; 3,634 km; and 242 km<sup>2</sup>.

The Mayor of London and the Government have failed to respond adequately to this invisible public health crisis. In Plans and Programmes submitted to the Commission this week, the UK has admitted it does not expect to comply with  $NO_2$  limit values in 23 zones until 2015, 16 until 2020 and in London until 2025. This is totally unacceptable.

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NO<sub>2</sub> is <u>not</u> just a molecule as the UK Government would like us to think. The 'Update of WHO air quality guidelines' (AQG) published in 2008 stated:

"Nitrogen dioxide  $(NO_2)$ , for example, is a product of combustion processes and is generally found in the atmosphere in close association with other primary pollutants, including ultrafine particles. It is itself toxic and is also a precursor of ozone, with which it coexists along with a number of other photochemically generated oxidants. Concentrations of  $NO_2$  are often strongly correlated with those of other toxic pollutants. Its concentration is readily measured but needs interpretation as a potential surrogate for a set of sources and the resulting mixture. Achieving guideline concentrations for individual pollutants, such as  $NO_2$ , may therefore bring public health benefits that exceed those anticipated on the basis of estimates of a single pollutant's toxicity."

As well as obvious health benefits, the financial benefits of complying with existing legislation are enormous. Defra published an analysis titled 'Air Pollution: Action in a Changing Climate' in March 2010 which estimated that optimising climate policy decisions to account for air pollution could yield additional benefits of £24 billion by 2050. See:

http://www.defra.gov.uk/publications/2011/04/13/pb13378-air-pollution/

CAL urges the Commission to send a first written warning on  $NO_2$  to the UK by December 2011 and a second and final written warning before the London 2012 Olympics. Infraction action on  $PM_{10}$  should be pursued immediately if any limit values are breached.  $PM_{2.5}$  baselines, monitoring and plans should be assessed rigorously.

The 'Year of Air' must deliver continuity and the further tightening of health and legal protections in 2013 and beyond. CAL notes that the current EU legal standards for  $PM_{10}$  are around twice WHO AQG like those for  $PM_{2.5}$  in 2020. In contrast, current EU legal standards for  $NO_2$  are aligned with WHO AQG. With air pollution near our busiest roads broadly in line with  $PM_{10}$  legal standards and twice those for  $NO_2$ , it is clear that air pollution near such roads needs to be halved urgently. This is the real opportunity for the 'Year of Air'.

In CAL's view, key lessons for the 'Year of Air' to be learned from the revision of ambient air quality legislation between 2005 and 2008 include:

1. the Commission must pursue in parallel: infraction action against Member States responsible for the worst breaches of NO<sub>2</sub> (e.g. the UK in respect of London) at a steady pace that maintains legal pressure on Member States and the prospect of unlimited fines; and any consideration of a new legal regime;

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- 2. the Commission must ensure for Member States that the baselines, monitoring and plans and programmes for PM<sub>2.5</sub> are robust or it will be having an another 'Year of Air' in 2020 e.g. 2005 'becomes' 2011 for PM<sub>10</sub>, 2010 'becomes' 2015 for NO<sub>2</sub>; and 2015 'becomes' 2020 for PM<sub>2.5</sub>.
- 3. the final outcome for any new legislation should be the highest common denominator not lowest for public health proposed by each of the Commission, the European Parliament and the Council of Ministers e.g. where they differ in terms of new limit values, deadlines and legal protections;
- 4. enforcing fully the current legislation, backed by the imposition of unlimited lump sum and daily fines, is the base case and totally acceptable as it would lead to enormous health, equality and financial benefits. If Member States act now they can still avoid fines. Any proposals for new legislation must therefore deliver continuity and the further tightening of health and legal protections in 2013 and beyond; and
- 5. by ensuring full compliance with existing ambient air quality laws and tightening them, Europe can show the world how to address wider air pollution and sustainability issues everywhere through a mixture of political will, technology and behavioural change.

Please remember throughout your discussions with the UK that it is one of the least compliant countries and worst 'free-riders' in the whole of Europe when it comes to complying with air pollution legislation.

#### 'Year of Air' in 2013

In CAL's view, key lessons for the 'Year of Air' to be learned from the revision of ambient air quality legislation between 2005 and 2008 include:

- 1. the Commission must pursue in parallel: infraction action against Member States responsible for the worst breaches of NO<sub>2</sub> (e.g. the UK in respect of London) at a steady pace that maintains legal pressure on Member States and the prospect of unlimited fines; and any consideration of a new legal regime;
- 2. the Commission must ensure for Member States that the baselines, monitoring and plans and programmes for PM<sub>2.5</sub> are robust or it will be having an another 'Year of Air' in 2020 e.g. 2005 'becomes' 2011 for PM<sub>10</sub>, 2010 'becomes' 2015 for NO<sub>2</sub>; and 2015 'becomes' 2020 for PM<sub>2.5</sub>.
- 3. the final outcome for any new legislation should be the highest common denominator not lowest for public health proposed by each of the Commission, the European Parliament and the Council of Ministers e.g. where they differ in terms of new limit values, deadlines and legal protections;
- 4. enforcing fully the current legislation, backed by the imposition of unlimited lump sum and daily fines, is the base case and totally acceptable as it would lead to enormous health, equality and

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financial benefits. If Member States act now they can still avoid fines. Any proposals for new legislation must therefore deliver continuity and the further tightening of health and legal protections in 2013 and beyond; and

5. by ensuring full compliance with existing ambient air quality laws and tightening them, Europe can show the world how to address wider air pollution and sustainability issues everywhere through a mixture of political will, technology and behavioural change.

CAL notes the deadline for online responses to the questionnaire is 15 October and 30 September for other responses. Key elements of this response and perhaps further points, in particular relating to the detailed questions in the questionnaire, will also be submitted online by 15 October. Thank you for aligning the deadlines for public responses with that for other respondents. CAL notes the specific topics in the Commission's online questionnaire and expects to add further comments online by the deadline of 15 October. These are:

- 1. Respondent
- 2. The Thematic Strategy on Air Pollution
- 3. The approach of the air quality directives
- 4. Standards
- 5. Assessment
- 6. Air quality management in Member States
- 7. Public information and dissemination
- 8. Governance
- 9. Scientific and technical innovation
- 10. The most important issues for review
- 11. Your involvement in the review process

Please remember throughout your discussions with the UK that it is one of the least compliant countries and worst 'free-riders' in the whole of Europe when it comes to complying with air pollution legislation.

#### The UK and London in particular have the worst NO<sub>2</sub> air pollution in Europe

The United Kingdom and London in particular have the worst  $NO_2$  air pollution in Europe. A WHO report published this week estimated that long-term exposure to dangerous airborne particles was responsible for more outdoor air pollution attributable deaths in the UK in 2008 than in any other European country (i.e. 13,604 using methodology specific to this study). The WHO estimated the population weighted concentration of  $PM_{2.5}$  in London in 2008 was 13.5  $\mu g/m^3$ . See:

http://www.who.int/phe/health\_topics/outdoorair/databases/en/index.html

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In London we have today reported the  $43^{rd}$  "Bad Air Day" (i.e. exceedance of the  $PM_{10}$  daily limit value) which is the number the Government estimated in its time extension request would be the total for the whole of calendar 2011. See:

http://www.londonair.org.uk/london/asp/advstatsaqobjresults.asp?site1=MY7&site2=&site3=&site4=&sday =1&smonth=jan&syear=2011&Submit=View

Page 12 of the attached report shows Defra had forecast 43 'Bad Air Days' in London for the whole of 2011 when seeking its time extension for  $PM_{10}$ . See:

http://circa.europa.eu/Public/irc/env/ambient/library?l=/application\_extensions/uk/official\_notifications/renotification/official\_notification/ EN 1.0 &a=d

In respect of oxides of nitrogen (NOx) a report titled 'National Emissions Ceilings Directive status report 2010' published by the European Environment Agency on 1 June 2011 showed the UK projected (by the UK using a new modelling approach) to emit more tonnes in 2010 than any Member State other than Germany. See:

http://www.eea.europa.eu/publications/nec-directive-status-report-2010

For NO<sub>2</sub>, a report titled 'List of zones in EU Member States in relation to EU air quality thresholds' published by the European Environment Agency and dated 11 August 2011 showed the UK in 2009 having a higher percentage of zones exceeding the limit value plus margin of tolerance than any other Member State (i.e. 40/43 zones). See 2009:

http://ec.europa.eu/environment/air/quality/legislation/public\_info.htm

The UK Government's own submission to the Commission on 28 September 2011 estimated that 698,543 people in London near 1,481 km of roads in an area of 91 km<sup>2</sup> were exposed to unlawful levels of NO<sub>2</sub> in London in 2010. Nationally, the numbers were 925,095 people; 3,634 km; and 242 km<sup>2</sup>. See 2010:

http://cdr.eionet.europa.eu/gb/eu/annualair/envtom4wa

The latest scientific evidence suggests that social and racial inequalities may be worse for NO<sub>2</sub> than PM<sub>10</sub> perhaps because NO<sub>2</sub> concentrations are often strongly correlated with those of other toxic pollutants e.g. from traffic.

### Mayor of London and Government have failed to respond to this invisible public health crisis

The failure by the Mayor of London and the Government to respond adequately to this invisible public health crisis is a scandal.

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The UK submitted its plans and programmes for NO<sub>2</sub> to the Commission on 23 September 2011. These showed that only three of 43 zones complied with the NO<sub>2</sub> limit values by the deadline set in legislation in 1999 of 1 January 2010. The UK has admitted it does not expect to comply with NO<sub>2</sub> limit values in 23 zones until 2015, 16 until 2020 and in London until 2025. The Government has given clear signals that it is lobbying to avoid infraction action and weaken existing air quality legislation.

http://uk-air.defra.gov.uk/library/no2ten/index

http://www.environmental-protection.org.uk/news/detail/?id=2795

In London, the Mayor of London has admitted that he is applying dust suppressants along the nearside lane beside official air quality monitors where reported  $PM_{10}$  exceedances have been highest. See a response from the Mayor to a question from Darren Johnson AM on 14 September 2011:

http://mqt.london.gov.uk/mqt/public/question.do?id=37325

Also an answer to Mike Tuffrey AM on 17 November 2010:

http://mqt.london.gov.uk/mqt/public/question.do?id=33563

And Transport for London's report published on 16 August 2011 on the dust suppressant trial:

http://www.tfl.gov.uk/corporate/projectsandschemes/17246.aspx

The masking of air pollution by official monitors and lack of action is totally unacceptable.

### European Commission urged to reject UK's TENs for NO2 and launch infraction action on all others

CAL wrote to Defra on its draft consultation on NO<sub>2</sub> (attached).

CAL urges the Commission to:

i. Please repeat immediately for NO<sub>2</sub> the action the Commission took against Member States on PM<sub>10</sub> i.e. launch infraction action against the UK for 17 zones, including London, for which it admits it cannot demonstrate compliance with the NO<sub>2</sub> limit values by the last possible deadline allowed under the EU Directive on ambient air and cleaner air for Europe (Air Quality Directive).

CAL urges the Commission to issue a Letter of Formal Notice (ie first written warning) by 31 December 2011 with a Reasoned Opinion to follow two months later. Please move swiftly through

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the infraction process to seek a judgement by the Court of Justice of the European Union against the UK.

ii. Please reject the UK's application for a time extension to comply with the NO<sub>2</sub> limit values in 23 zones for the reasons set out in the attached letter (NO<sub>2</sub> TEN letter dated 4 August 2011) and then progress infraction action in respect of those zones too on the above basis.

CAL hopes the UK Government will learn <u>now</u> from its serious failings to comply with limit values for NO<sub>2</sub> including the current difficulties it faces in applying for a time extension – and propose and implement rapidly plans to comply fully with legal standards for PM<sub>2.5</sub> by 2015.

Please remember throughout your discussions with the UK that it is one of the least compliant countries and worst 'free-riders' in the whole of Europe when it comes to complying with air pollution legislation.

### NO<sub>2</sub> is not just a molecule: health impacts and inequalities

It is important <u>not</u> to consider the health impacts of NO<sub>2</sub> narrowly as one molecule (as the Government seems to be doing).

The WHO has been clear that NO<sub>2</sub> needs to be considered as more than just a molecule (ie it is a marker for the gas as opposed to particle element of air pollution). Please see the 'Update on Air Quality Guidelines' (AQG) published in 2008 which includes the text copied below:

#### http://www.springerlink.com/content/943153q7637737t0/fulltext.pdf

"The AQG have always addressed exposures and health effects of individual pollutants or indicators (such as PM<sub>10</sub> mass, an indicator of a complex pollution mixture with multiple sources). However, as understanding of the complexity of the air pollution mixture has improved, the limitations of controlling air pollution and its risk through guidelines for single pollutants have become increasingly apparent. Nitrogen dioxide (NO<sub>2</sub>), for example, is a product of combustion processes and is generally found in the atmosphere in close association with other primary pollutants, including ultrafine particles. It is itself toxic and is also a precursor of ozone, with which it coexists along with a number of other photochemically generated oxidants. Concentrations of NO<sub>2</sub> are often strongly correlated with those of other toxic pollutants. Its concentration is readily measured but needs interpretation as a potential surrogate for a set of sources and the resulting mixture. Achieving guideline concentrations for individual pollutants, such as NO<sub>2</sub>, may therefore bring public health benefits that exceed those anticipated on the basis of estimates of a single pollutant's toxicity. Therefore, while the AQG present risk assessments focused on individual pollutants, they also recommend addressing all relevant pollutants in health risk management simultaneously and particularly the four most common, for which guidelines have been reviewed [i.e. particulate matter, ozone, nitrogen dioxide and sulphur dioxide]."

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Please find attached the Racial Equality Impact Assessment done by Defra for its time extension consultation for  $PM_{10}$  (in August 2009). It shows non-white British exposed to 17% more  $PM_{10}$  than white-British and black–British exposed to 30% more  $PM_{10}$  than white-British. CAL is not aware of any social inequality work done for  $PM_{10}$  in 2009.

CAL asked Defra on 2 August 2011 for a similar study to be done for NO<sub>2</sub> as PM<sub>10</sub> to complement its NO<sub>2</sub> time extension consultation. Please find attached a copy of the letter received from Defra dated 31 August 2011 which says:

"We can confirm that an 'integrated' impact assessment and race equality impact assessment have not been carried out and we have no documentation with respect to parts (a) and part (b) of your request."

Social and racial inequalities may be greater for NO<sub>2</sub> than PM<sub>10</sub> because NO<sub>2</sub> is a marker for combustion related pollutants e.g. traffic.

In CAL's view, a one-pollutant legal framework would never be sufficient for controlling ambient air pollution e.g. one focused just on particulate matter.

In closing, CAL would welcome the opportunity to participate in the Commission's consideration for the 'Year of Air'.

With best wishes.

Yours sincerely

Simon Birkett Founder and Director Clean Air in London

Enc.

CAL response to Defra NO<sub>2</sub> consultation dated 4 August 2011 Defra response to CAL re Racial Equality Impact Assessment for NO<sub>2</sub> dated 31 August 2011 CAL letter to Defra on Clean Air Act dated 21 September 2011 CAL application to appeal EIR decision dated 1 March 2011 CAL media release about Court of Appeal hearing dated 2 March 2011

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Cc:

The Rt. Hon. Caroline Spelman, Secretary of State for Environment Food and Rural Affairs Boris Johnson, Mayor of London, Conservative
Jean Lambert MEP, Green
Sarah Ludford MEP, Liberal Democrat
Claude Moraes MEP, Labour
Charles Tannock MEP, Conservative
Keith Taylor MEP, Green
Jenny Jones AM, Green Party candidate for Mayor of London
Ken Livingstone, Labour Party candidate for Mayor of London
Brian Paddick, Liberal Democrat party candidate for Mayor of London
James Cleverly AM, Conservative
Darren Johnson AM, Green, Chair, London Assembly Environment Committee
Murad Qureshi AM, Labour, Deputy Chair, London Assembly Environment Committee
Mike Tuffrey AM, Liberal Democrat
Adrian Young, Environment Agency