

21 April 2011

‘Bad Air Day (B.A.D.) 2011 for particles’ as PM₁₀ daily limit value for a whole year is breached in London in less than four months – more than two months earlier than last year

Government issues national ‘High pollution episode warning: First “summer-smog” of 2011’

UK has now breached for 2011 the legal standard for PM₁₀; it provides further evidence UK mislead European Commission in its time extension applications; it jeopardises UK’s time extension for PM₁₀ which is still subject to a temporary and conditional exemption; and it makes likely a reference to European Court of Justice and fines of £300m per annum in due course

Backward steps by Mayor Johnson, such as the delay by 15 months of Mayor Livingstone’s Phase 3 of the low emission zone, have aggravated London’s air pollution problems

London needs an inner low emission zone for the 2012 Olympic Games that will ban the driving of pre-Euro 4 diesel vehicles within the area bounded by the north and south circular roads

The excellent London Air Quality Network has reported today that concentrations of dangerous airborne particles (PM₁₀) in London, as measured at its Marylebone Road FDMS (i.e. Filter Dynamics Measurement System) monitor, exceeded a 24 hour mean of 50 micrograms per cubic metre (µg/m³) for the 36th time on 20 April 2011. See:

http://www.londonair.org.uk/london/asp/publicstats.asp?region=0&site=MY7&Maptype=Google&mapview=all&statyear=2011&la_id=&zoom=9&lat=51.431751825946115&lon=-0.17578125&laEdge=

This means the PM₁₀ daily limit value for a whole year has been breached in London in less than four months. This is more than two months earlier than last year.

The Department for Environment Food and Rural Affairs issued today a national ‘High pollution episode warning: First “summer-smog” of 2011’. The alert includes links to reports about the health impact of summer smog episodes in August 2003 and June/July 2006. See:

<http://www.defra.gov.uk/news/2011/04/21/summer-smog/>

Quotes:

Simon Birkett, Founder and Director of Clean Air in London, said:

“It is shocking that the legal standard, which is itself twice the World Health Organisation (WHO) guideline for human exposure, has been breached for the whole of 2011 before the end of April. This is more than two months earlier than last year.

“Mayor Johnson’s backward steps have aggravated London’s air pollution problems. These have included deferring Phase 3 of the low emission zone from 4 October 2010 to 3 January 2012 and rejecting advice from his own consultants on the actions needed to tackle PM₁₀ exceedances at hotspots.

“The Mayor has backed himself into a corner where the only way to avoid £300m fines per year

looks likely to be a prolonged odd and even number plate ban. Such a ban is looking inevitable also to keep London moving during the Olympics as the Mayor continues to refuse to introduce an inner low emission zone.

“The Mayor should be giving Londoners advice about protecting themselves (adaptation) and reducing air pollution for themselves and others (mitigation). People should be walking down side streets not busy roads and walking or cycling or using public transport rather than driving particularly older diesel vehicles. Who has warned people that bonfires over Easter will make air pollution worse still in London?”

“We need Mayor Johnson and the Government to tackle an invisible public health crisis with as many premature deaths attributable to air pollution in London in 2008 as we thought occurred during the Great Smog of 1952.

“Last but not least, let’s remember that the hourly limit value for nitrogen dioxide (NO₂) was breached for the year in early January and annual concentrations for NO₂ exceed twice the guideline level set by the WHO as with PM₁₀.”

Analysis

World Health Organisation (WHO) guidelines are designed to offer guidance in reducing the health impact of air pollution. The latest World Health Organisation guideline (2008) for PM₁₀ is that an annual mean of 20 µg/m³ and a daily mean of 50 µg/m³ should not be exceeded [i.e. at all]. The WHO says that “as research has not identified a level below which adverse effects do not occur, it must be stressed that the guideline values provided here cannot protect fully human health”. See:

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

http://whqlibdoc.who.int/hq/2006/WHO_SDE_PHE_OEH_06.02_eng.pdf

PM₁₀ limit values were put in legislation in 1999 and have been required to be met since 1 January 2005. Under European Union (EU) and UK air quality laws, daily mean concentrations of PM₁₀ in ambient air may not exceed 50 µg/m³ on more than 35 days in a calendar year and annual mean concentrations may not exceed 40 µg/m³.

The EU directive on ambient air quality and cleaner air for Europe 2008/50/EC (Air Quality Directive) gave Member States the opportunity to apply for a time extension until 11 June 2011 to comply with these limit values. The UK’s first application was rejected by the European Commission (Commission) in December 2009 and the second was granted a ‘temporary and conditional exemption’ on 11 March

2011. The main condition is that the UK must amend the London air quality plan by 11 June 2011 and submit it to the European Commission by 30 November 2011. Until the UK satisfies fully the terms of the exemption it does not have a time extension. If the UK obtains a time extension, the European Commission would close infraction proceedings against the UK for historic breaches of PM₁₀ limit values.

The breach is very significant, *inter alia*, since:

- i. **The UK has now breached for 2011 EU and UK air quality laws for PM₁₀**

With no time extension obtained yet by the UK for PM₁₀, this represents the seventh successive year of such breaches of health based air quality laws since they entered into force on 1 January 2005. See paragraph 21 on page 5 of the Commission's decision referred to below.

ii. **It is further evidence the UK misled the European Commission over its time extension reapplication**

Article 22 of the Air Quality Directive requires that Member States applying for a time extension 'shall demonstrate how conformity will be achieved with the limit values before the new deadline'.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:EN:PDF>

In its reapplication, the UK predicted 43 exceedances of the PM₁₀ daily limit value at Marylebone Road in 2011 or 32 after deducting 'sea salt'. See page 12 of its submission to the European Commission:

<http://archive.defra.gov.uk/environment/quality/air/airquality/eu-int/eu-directives/airqual-directives/notification.htm>

This seemed an overly optimistic projection at the time and has now been shown to be so.

iii. **It jeopardises the UK's time extension to avoid infraction action for PM₁₀ historic breaches**

The Commission granted a temporary and conditional exemption in the Greater London Urban Area from the EU's air quality standards for PM₁₀.

In doing so the Commission considered there may be a risk of the PM₁₀ daily limit value being exceeded after the exemption period ending on 11 June 2011. The time extension reapplication to comply with the PM₁₀ daily limit value in London was therefore granted on the condition that short-term measures are introduced to control, or, where necessary, suspend activities which contribute to the risk of the limit values being exceeded.

The Commission's media release and formal decision can be seen at:

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/285&format=HTML&aged=0&language=EN&guiLanguage=en>

See paragraph 21 on page 5 which sets out the conditions required to obtain a time extension.

http://ec.europa.eu/environment/air/quality/legislation/pdf/uk2_en.pdf

It is clear now that short-term measures to control exceedances of the PM₁₀ daily limit value, such as dust suppressants, are not working effectively in London. This is not surprising given that the Mayor of London has rejected the recommendations of his own consultants to introduce more meaningful measures.

It seems likely the Commission will judge the condition not met unless the UK stops further exceedances of the PM₁₀ daily limit value.

iv. European Commission is likely to refer the UK quickly to the European Court of Justice

When granting the 'temporary and conditional exemption' the Commission froze rather than closed infraction action against the UK for breaches of the PM₁₀ daily limit value since January 2005. This means the Commission does not need to send the UK first and second/final written warnings again before referring the UK to the ECJ. The Commission is in an ideal position therefore to refer the UK to the ECJ and seek a judgement against it. If the UK did not comply with such a judgment, the Commission could send the UK further first and second/final written warnings after which it could ask the ECJ to impose unlimited lump sum and daily fines on the UK. These have been estimated by the Mayor at £300m per year per pollutant.

v. UK is set to breach the new deadline even if it obtains a time extension for PM₁₀ to 2011

Under Commission guidance on its interpretation of the Air Quality Directive, the UK must ensure the PM₁₀ legal standards are achieved in 2011. Further details can be seen at:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0403:FIN:EN:PDF>

vi. It brings closer the prospect of fines being passed to Londoners under a Localism Act

One of the first acts of the Government once the Localism Bill receives Royal Assent may be to write to Mayor Johnson putting him on formal notice that London will be responsible for any fines arising over breaches of the PM₁₀ limit values in London.

vii. It makes more essential the need to avoid a repetition in 2012 before the Olympics

Any breaches of the PM₁₀ limit value after 2011 would be unlawful. Worse, assuming there is an ECJ judgement against the UK for historic non-compliance with these standards, the UK could found in contempt of Court and therefore face the imminent prospect of unlimited lump sum and daily fines.

Notes:

1. London Air Quality Network (year up to and including 20 April)

Results for Marylebone Road FDMS in 2011

http://www.londonair.org.uk/london/asp/publicstats.asp?region=0&site=MY7&Mapttype=Google&mapview=all&statyear=2011&la_id=&zoom=9&lat=51.431751825946115&lon=-0.17578125&laEdge=

Results for Marylebone Road FDMS in 2010

The FDMS monitor recorded 25 exceedances of the daily standard in whole of 2010

http://www.londonair.org.uk/london/asp/publicstats.asp?mapview=all&statyear=2010&MapType=Google®ion=0&site=MY7&postcode=&la_id=&objective=All

The FDMS monitor recorded 13 exceedances of the daily standard from 1 January 2010 to 20 April

2010. See:

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY7&site2=&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2010&enddate=21-04-2010&submit=View&period=dailymean&species=PM10>

2. Number of exceedances in earlier years at older Marylebone Road monitoring site up to 21 April 2000: 45

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2000&enddate=21-04-2000&submit=View&period=dailymean&species=PM10>

2001: 31

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2001&enddate=21-04-2001&submit=View&period=dailymean&species=PM10>

2002: 28

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2002&enddate=21-04-2002&submit=View&period=dailymean&species=PM10>

2003: 50

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2003&enddate=21-04-2003&submit=View&period=dailymean&species=PM10>

2004 23 and 12 at the FDMS site

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2004&enddate=21-04-2004&submit=View&period=dailymean&species=PM10>

2005: 25 and 15 at the FDMS site

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2005&enddate=21-04-2005&submit=View&period=dailymean&species=PM10>

2006: 19 and 8 at the FDMS site

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2006&enddate=21-04-2006&submit=View&period=dailymean&species=PM10>

2007: 21

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2007&enddate=21-04-2007&submit=View&period=dailymean&species=PM10>

2008: 29 and 17 at the FDMS site

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2008&enddate=21-04-2008&submit=View&period=dailymean&species=PM10>

2009: 24 and 21 at the FDMS site

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2009&enddate=21-04-2009&submit=View&period=dailymean&species=PM10>

2010: 12 and 13 at the FDMS site

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2010&enddate=21-04-2010&submit=View&period=dailymean&species=PM10>

2011: 37 and 36 at the FDMS site

<http://www.londonair.org.uk/london/asp/advstatsvariousresults.asp?site1=MY1&site2=MY7&site3=&site4=&statype=xcreadings&xvalue=50&zunits=none&startdate=01-01-2011&enddate=21-04-2011&submit=View&period=dailymean&species=PM10>

3. Mayor of London's statement at Mayor's Question Time (9 June 2010)

"...I am very confident that we will meet our limit values for PM₁₀s by 2011." Attached as a separate file.

4. Comments on the impact of transboundary air pollution in London

By the Mayor on 14 April 2011

"During February and March, some three quarters of London's PM₁₀ limit value exceedances were due to pollution blown in from continental Europe."

http://www.london.gov.uk/media/press_releases_mayoral/mayor-asks-eu-vice-president-play-part-improving-capital%E2%80%99s-air-quality

Joe Hennon, European Commission Spokesman for the Environment

“These arguments explain why transport of air pollutants from the continent would not influence local air quality significantly.”

<http://www.mayorwatch.co.uk/european-commission-continent-not-responsible-for-londons-air-pollution/201114558>

Clean Air in London to TIME.com on 1 April 2011

“It is laughable for the Mayor to suggest others are to blame for London’s air pollution problems.”

5. Two week weather forecast as at 21 April 2011

Not available

6. Consultant’s report on Local Measures for PM₁₀ Hotspots in London

Link no longer available

Pages 77 and 78 summarise the measures proposed by the Mayor’s consultants. These measures included:

- Public information
 - road traffic signage (e.g. variable message signs)
 - Messages discouraging travel
 - Real-time information on traffic conditions
 - Information on parking
 - Controlling vehicle access
 - vehicle bans
 - road pricing
 - altering traffic signals and changing signal priorities
 - Enhancement of public transport
 - incentives for people to avoid using cars, such as free use of public transport
 - changes to the operation of public transport (e.g. increased numbers of buses or trains)
7. Details of ‘Bad Air Day 2010 for particles’ See CAL update.

<http://cleanairinlondon.org/solutions/clean-air-in-london-rejects-mayors-sole-proposal-i-e-delay-phase-3-of-lez-to-january-2012/>

8. Examples of good practice on action to take during smog episodes

Clean Air New York recommendations for Air Quality Action Days

<http://www.cleanairny.org/cleanairny/DoYourPart/WhatCanIDo.aspx> US Government

<http://www.airnow.gov/index.cfm?action=resources.whatyoucando> US Environmental Protection

Agency <http://www.epa.gov/air/caa/peg/reduce.html>