

13 January 2013

Quick guide to air pollution and the 'Year of Air' in 2013

1. What is the 'Year of Air' in 2013?

The European Commission has announced that 2013 is the 'Year of Air' with key European air pollution legislation up for review. The review represents a tremendous opportunity to improve public health by tightening air quality standards. Commissioner Potočnik made speeches about the 'Year of Air' on [22 March 2011](#), [24 September 2012](#) and [8 January 2013](#). The Commission has a [webpage](#) with details of the EU Review of Air Policy. So does the [European Environment Agency](#).

Attempts are already being made by the UK authorities to weaken existing air pollution laws during the 'Year of Air'. For example, the UK Government has [stated](#) **'Working in partnership with other Member States, we will also use the European Commission review of air quality legislation, expected in 2013, to seek...amendments to the Air Quality Directive which reduce the infraction risk faced by most Member States, especially in relation to nitrogen dioxide provisions'**. Similarly, the Mayor founded a group of 12 European cities and regions that signed a 'Memorandum of Understanding' on [10 November 2011](#) that emphasised **'The revised [Air Quality] Directive shall include a degree of flexibility that allows the specific characteristics of our Regions to be taken into account'**. Given the Mayor promised Jenny Jones AM on [19 December 2012](#) that he will **'oppose any watering down of the current European limit values for reducing air pollution...'** it seems likely that he hopes to achieve 'flexibility' through: delays to the legal deadlines; and/or **'Partnership implementation agreements negotiated between the Commission and Member States in infringement, where further legal action would be suspended subject to proper implementation of agreed transparent and binding programmes to address air pollution'** (or similar) (which is being considered in the Commission's consultation which closes on 4 March).

Clean Air in London (CAL) believes that key outcomes from the 'Year of Air' must include [continuity and the further tightening of health and legal protections](#). Increasing 'flexibility' in air pollution laws would weaken existing health and legal protections and is therefore unacceptable. CAL is publishing key events planned for the 'Year of Air' on its [Facebook events page](#).

Please respond by 4 March 2013 to Commission's consultation on options for the revision of the EU Thematic Strategy on air pollution and related policies. There is a [briefing page](#) and consultations for four groups: a shorter version for the [public](#); and three longer versions for experts and practitioners: [citizens](#); [organisations](#); and [public authorities](#).

Please write also to your elected representatives in the [European](#) and [UK](#) Parliaments.

2. How bad is air pollution in London?

- London has the [highest levels of nitrogen dioxide](#) (NO₂) pollution of any capital city in Europe. Concentrations of dangerous airborne particles (PM₁₀) also breach legal limits in several parts of the city particularly near waste management sites.
- Government estimates that some [440,439 Londoners](#) were exposed to unlawful levels of NO₂ in 2011 at background locations alone i.e. away from busy roads.
- London's residents are not the only ones affected by poor air quality. Every day hundreds of thousands of people commute into the polluted heart of London. NO₂ concentrations are

[well over twice legal limits and World Health Organisation \(WHO\) guidelines](#) near many London roadside monitoring sites. NO₂ limits are also breached at a larger number of city centre ‘background’ sites away from busy roads.

3. What are the health impacts of air pollution in London?

- Air pollution comprises particles and gases. The particles are categorised by their maximum diameter in microns e.g. PM_{2.5} and PM₁₀. In practice, nitrogen dioxide (NO₂), a toxic gas, is the only molecule within the gas category with relevant WHO guidelines and legal limits.
- Poor air quality has a significant impact on the health of London residents. The Mayor published a study in 2010 estimating 4,267 premature deaths in London in 2008 attributable to long term exposure to fine particles (PM_{2.5}). These occur mostly as heart attacks and strokes. The Department of Health estimates [6.3% to 9.0% of all deaths](#) in London in 2010 were attributable to long-term exposure to **man-made** PM_{2.5} alone.
- Children, the elderly and people with existing respiratory illness suffer disproportionately from the effects of air pollution. Over [1,100 schools in London](#) are within 150 metres of the city’s busiest and most polluted roads (i.e. those that carry over 10,000 vehicles a day). Traffic pollution from such roads may be responsible for 15-30% of all new cases of asthma in children and chronic obstructive pulmonary disease in adults of 65 years of age and older.

4. Are there air pollution standards that London should be meeting?

- Legally binding, health based limit values have been set for several air pollutants by the European Union since 1999. London is failing to meet these for PM₁₀ and NO₂.
- For PM₁₀ London was required to meet limit values by 2005 but [obtained unlawfully](#) a time extension in 2011 to comply that year. That time extension has now expired but London has continued to exceed PM₁₀ limits known as ‘Bad Air Days’ particularly near waste management sites e.g. Neasden Lane in Brent.
- NO₂ limits were required to be met by 2010. The Government has admitted they are not expected to be met in [London before 2025](#) and has been caught seeking to weaken NO₂ laws.
- The Commission is expected to commence infraction action against the UK early in 2013.

5. What are the authorities doing to reduce air pollution in London?

The Mayor of London’s [Air Quality Strategy](#) is not ‘fit for purpose’. The Mayor has also used [Pollution Suppressor](#) vehicles to reduce air pollution near air quality monitoring stations most-used to report legal breaches and warn the public of smog episodes. The Mayor has also been [caught lobbying](#) to weaken international air pollution laws.

Diesel engine exhaust, recently classified by the World Health Organisation as [carcinogenic to humans](#), is a particular problem in London which has: some 8,500 diesel buses; over 20,000 diesel taxis; and a low emission zone that is two steps and two years behind the equivalent in Berlin. A ground breaking study by [Policy Exchange](#) found that diesel vehicles are responsible for 95% of NO₂ and 91% of PM_{2.5} exhaust emissions respectively from road transport in London.

The Government has not published a press release warning of smog since April 2011 when it made headline news. The Mayor also refuses to issue public warnings of smog even though Murad Qureshi AM discovered that [hundreds of additional people in London](#) have been admitted to hospital during smog episodes in the last five years alone.

6. Supporting guides, links and contacts

Guides

Health: [‘Invisible’ air pollution: the biggest public health failing or ‘cover-up’ for decades](#)
 Legal: [UK is cheating on air quality laws and misleading the European Commission](#)
 Sources: [London has the highest levels of NO₂ of any capital city in Europe](#)
 Solutions: [Manifesto for the Mayoral and London Assembly elections in 2012](#)
 Indoor: [Indoor air quality can be worse than outdoor](#)

Pollutant	Legal standard		World Health Organisation guideline	
	Short term	Annual mean	Short term	Annual mean
Fine particulate matter (PM_{2.5})	1. 25 µg/m ³ annual mean to become limit value in 2015 2. 20 µg/m ³ exposure concentration obligation based on a 3-year average by 2015 3. Exposure reduction target in percentage by 2020		25 µg/m ³ 24-hour mean	10 µg/m ³
Particulate matter (PM₁₀)	35 days over 50 µg/m ³ since 2011	40 µg/m ³ since 2011	50 µg/m ³ 24-hour mean	20 µg/m ³
Ozone (O₃)	25 days over 120 µg/m ³ maximum daily 8-hour mean target value averaged over 3 year since 2010		100 µg/m ³ 8-hour mean	
Nitrogen dioxide (NO₂)	18 hours over 200 µg/m ³ since 2010	40 µg/m ³ since 2010	200 µg/m ³	40 µg/m ³

Note: µg/m³ is micrograms per cubic metre

Examples of legal breaches in 2012

London Air Quality Network: [Marylebone Road](#)
[Neasden Lane](#)
[Putney High Street](#)

Smog episodes

London Air Quality Network: [Latest hourly bulletin](#)
 London Air Quality Network: [Health advice](#)
 London Air Quality Network: [Reports on smog episodes](#)
 Defra website: [UK-Air: Air Information Resource](#) (selective monitoring)

[Article from The Independent newspaper](#) on the effects of air pollution on athletes, quoting air pollution and health expert Professor Frank Kelly (Kings College, London)

[Contact Clean Air in London](#)