

City of London Corporation

Air Quality Annual Status Summary Report for 2016

Introduction

This report provides a brief overview of air quality in the City of London during 2016.

The City of London Corporation is required by the Government and the Mayor of London to monitor air pollution in the City and take action to reduce it. The Government and the Mayor of London also have a range of responsibilities for taking action to reduce pollution.

The EU sets limits for a number of known air pollutants, that member states must meet. The City of London is exceeding EU limits for the gas Nitrogen Dioxide (NO₂) in parts of the Square Mile and the 24-hour average particulate matter (PM₁₀) EU limit value is exceeded on Upper Thames Street. The main areas of concern are along busy roads.

We are currently meeting the limits that are set by the EU for all other air pollutants, although we remain focused on Particulate Matter (PM₁₀ and PM_{2.5}) because and these pollutants have detrimental impacts on health at any level.

The main source of pollution in the City is road transport.

NO₂

We monitor NO₂ across the City through a combination of highly accurate continuous (or automatic) monitoring stations and indicative low-cost diffusion tubes. The number of diffusion tubes increased considerably in 2016 and there are now at over 50 locations. In 2016, at background locations, levels of NO₂ were higher or stayed the same as in 2015. Due to the impact of traffic on pollution levels, levels on busy roads are more variable and remain above the annual EU limit.

PM₁₀

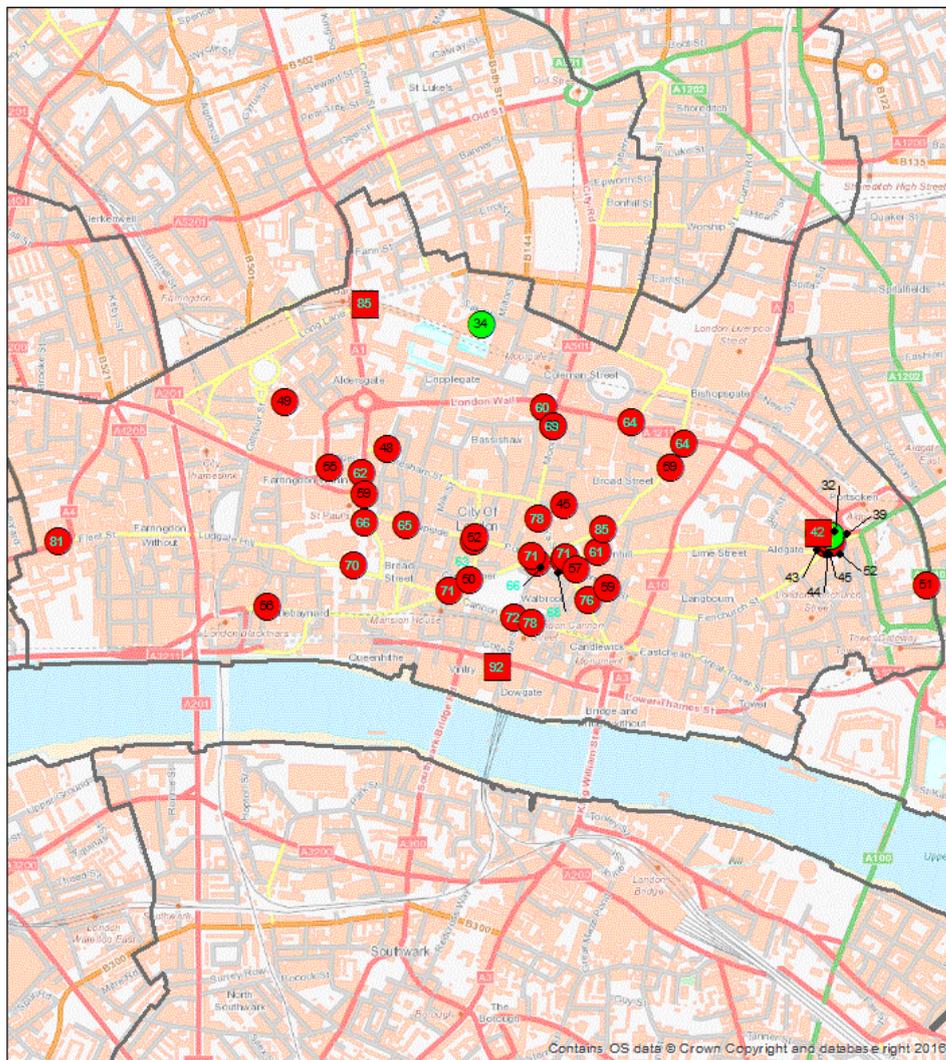
We monitor PM₁₀ at three continuous (automatic) monitoring stations. Annual PM₁₀ levels are variable across all sites. In 2016, overall, levels of PM₁₀ showed no significant change compared to 2015. All sites were below the annual EU limit value. Levels of PM₁₀ in Upper Thames Street exceeded the 24-hr EU limit value in 2016, as with previous years.

PM_{2.5}

We have been monitoring PM_{2.5} at one continuous (automatic) monitoring station on a busy road (Farringdon Street) since 2011. We installed a new PM_{2.5} monitor at Sir John Cass school in Aldgate at the end of 2015. Both sites were below the annual average EU limit value in 2016.

NO2 Monitoring

Figure 1: NO₂ monitoring sites in the City of London, showing annual mean results from 2016



Legend

- Automatic monitoring >60 µg/m³
- Automatic monitoring 40-60 µg/m³
- Diffusion tubes >60 µg/m³
- Diffusion tubes 40-60 µg/m³
- Diffusion tubes <40 µg/m³
- Borough Boundary

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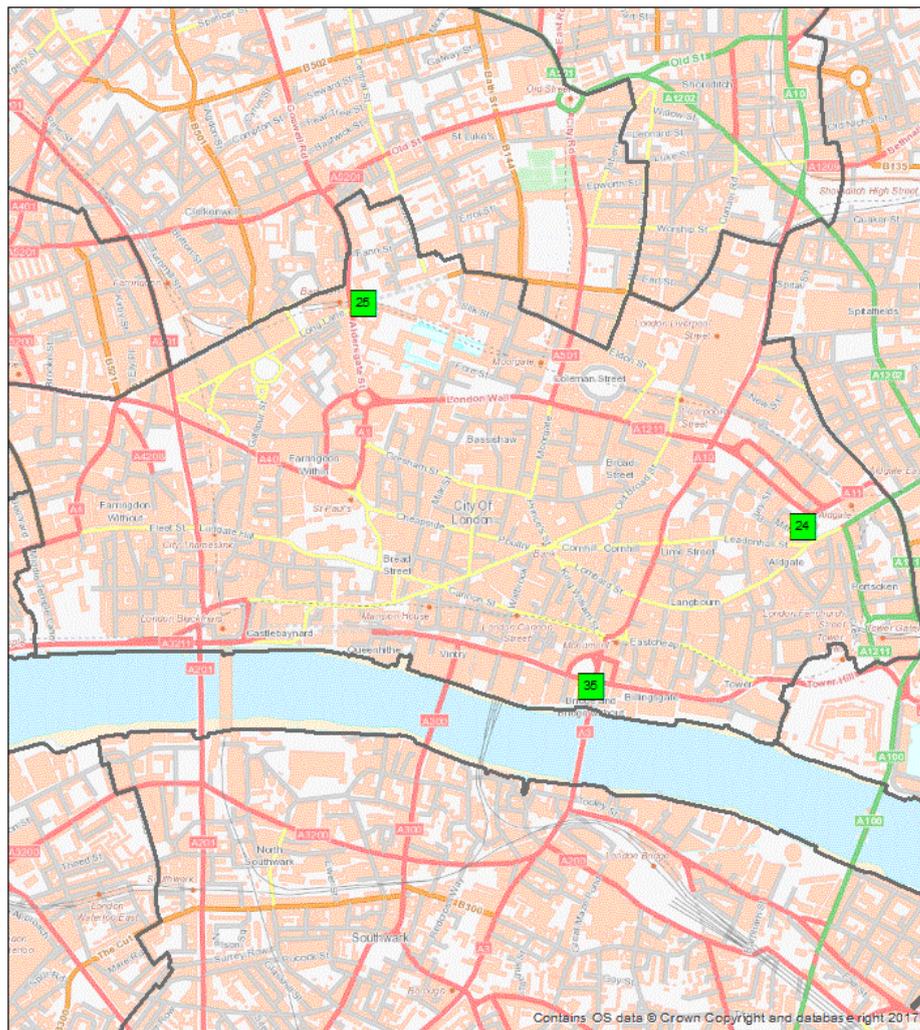
Legend

On this map, the circles represent NO₂ diffusion tubes, and the squares represent continuous NO₂ monitors. The EU limit value for annual mean NO₂ is 40µg m⁻³. All monitoring sites that recorded NO₂ concentrations above this level are coloured in red and all that are below this level are coloured in green. The numbers in each square or circle are the annual mean NO₂ concentration for 2016.

Prior to 2016, annual background NO₂ levels were general decreasing. However, there has been an increase in 2016 at some background locations and roadside sites have been more variable. This variability is linked to changes in traffic; for example, in 2016, a reduction in NO₂ was seen on Upper Thames Street as there was a 25% reduction in traffic due to the new Cycle Super Highway. We have seen a consistent decline in NO₂ at all sites around the Sir John Cass School over the past three years.

PM₁₀ Monitoring

Figure 2: PM₁₀ monitoring sites in the City of London showing annual mean results from 2016



Legend

- Automatic monitoring <40 µg/m³
- Borough Boundary

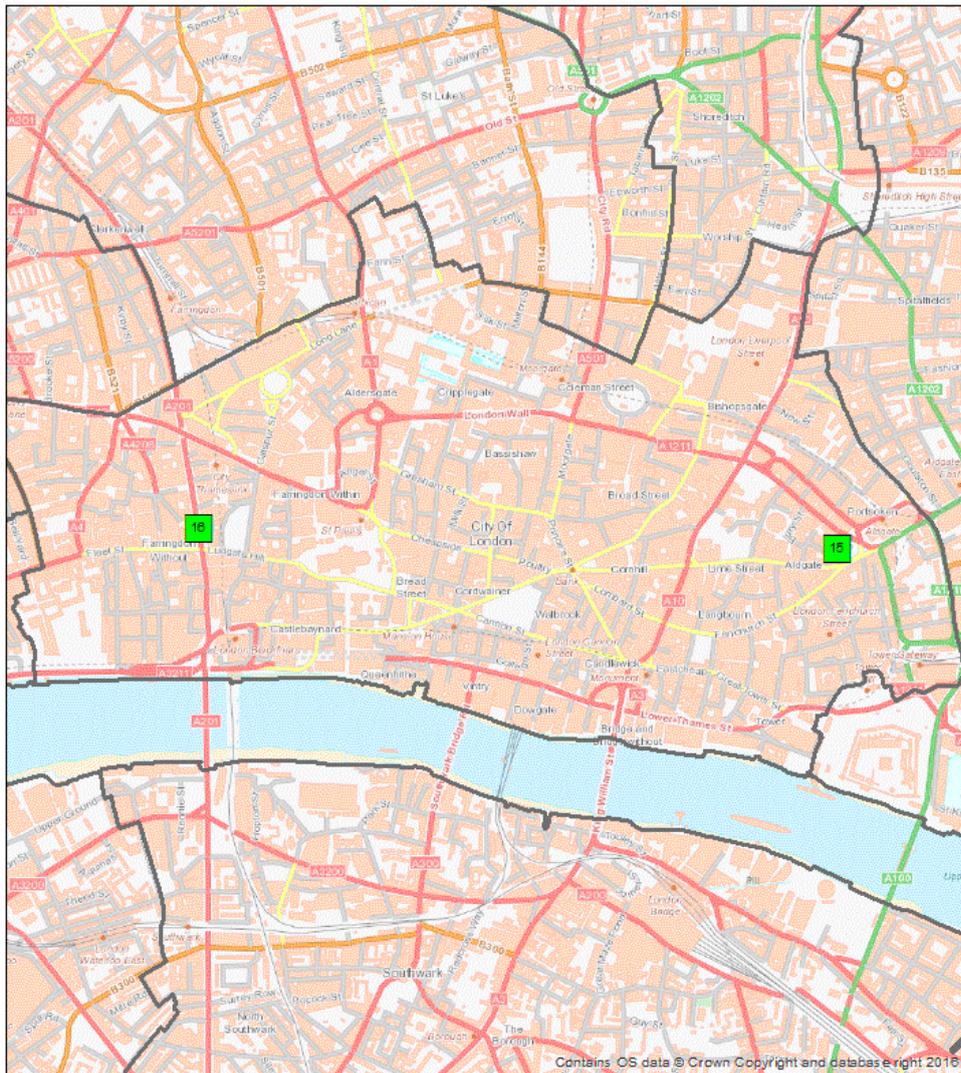
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Legend

The green squares represent continuous PM₁₀ monitors. The EU limit value for annual mean PM₁₀ is 40µg m⁻³. All monitoring sites recorded levels beneath this threshold in 2016, and so are coloured green. The numbers in each square are the recorded annual mean PM₁₀ concentrations for 2016. These results are similar to the previous three years (although the Upper Thames Street Site exceeded the annual limit value in 2015 due to local construction work).

PM_{2.5} Monitoring

Figure 3: PM_{2.5} monitoring sites in the City of London, showing annual mean results from 2016



Legend

- Automatic monitoring <25 µg/m³
- Borough Boundary

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Legend

The green squares represent continuous PM_{2.5} monitors. The EU limit value for annual mean PM₁₀ is 25µg m⁻³. Both monitoring sites recorded levels beneath this threshold, and so are coloured green. The numbers in each square are the recorded annual mean PM_{2.5} concentrations for 2016. It is not possible to compare to previous years as the Farringdon equipment was relocated slightly in 2015.

Actions to Improve Air Quality

The City Corporation has an [Air Quality Strategy](#) which details the actions it is taking to improve air quality. The City Corporations 's two main air quality achievements in 2016 were:

- Implementing and delivering action on the City's Low Emission Neighbourhood. Find out more and how you can get involved by visiting www.cityoflondon.gov.uk/LEN



- Developing and releasing version 2 of the CityAir app which now shows the difference in pollution exposure between suggested routes. Work has also progressed and continues on the CityAir website www.cityairapp.com



The City Corporation's two main priorities to reduce exposure to poor air quality for the year ahead are to:

- To assist developers in creating low emission buildings by publishing the City's first Air Quality Supplementary Planning Document. See the following link for more details: www.cityoflondon.gov.uk/airqualityplanning
- To investigate options for reducing emissions from combustion plant within the Square Mile (boilers, generators and combined heat and power plant).

Further information

For more detailed information on air pollution in the City see: www.cityoflondon.gov.uk/air

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