

## Air Quality in Lambeth

### Spanish

Si desea esta información en otro idioma, rogamos nos llame al 020 7926 6111

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Se desejar esta informação noutra idioma e favor telefonar para 020 7926 6111

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Si vous souhaitez ces informations dans une autre langue veuillez nous contacter au 020 7926 6111

### Bengali

এই তথ্য অন্য কোনো ভাষায় আপনার পড়ালে  
কেনা করতে কল করুন ০২০ ৭৯২৬ ৬১১১

### Twi

Se wopɔ saa nkacɔɔy yi wo kasa tofom  
mu a fro 020 7926 6111

### Yoruba

Ti o ba fẹ́ ilaráń yí, ní Adá Òmírán, ojú,  
e káń wá fágógó 020 7926 6111

If you would like this information in large print, braille, audio tape or another language please contact 020 7926 6111

This booklet is published annually to provide information regarding Air Quality monitoring, carried out by Lambeth Regulatory Services

# 2001

# Councillor's Statement



Clean air is essential to a good quality of life. Creating a borough with air that is clean and pleasant to breathe is essential for making Lambeth an attractive place to live, work and visit.

The issue of air quality has moved on considerably in the past decade, with both the European Union and the national government making regulations and adopting tough targets aimed at reducing air pollution to safer levels.

The challenge of meeting these targets is the task of local authorities and in Lambeth we have invested in installing continuous air quality monitoring stations throughout the borough to supplement the network of passive pollution monitoring equipment which has been in place since 1993.

The data collected from Lambeth's monitoring stations is used to validate the air quality modelling process which predicts pollution levels in the borough, so that we can see if we are going to meet national air quality targets. It enables us to measure the decreasing trend in pollution levels, which will confirm the long-term effectiveness of our air quality management strategies. Lambeth's monitoring information is also fed into a London wide data base allowing a pollution map of Greater London to be drawn up so that the broader picture can be seen.

In 2001 the Council formally declared areas of the borough, where pollution levels were highest, as Air Quality Management Areas. This was an important step in highlighting and tackling Lambeth's air pollution, but the Council cannot act in isolation. We continue to work in partnership with other London boroughs and the Greater London Authority (Mayor's Office) to develop Action Plans to tackle these pollution hotspots and bring down pollution levels. Everyone with an interest in improving London's air quality needs to work together to take forward an integrated set of strategies to achieve sustainable air quality improvements.

Councillor Clare Whelan

# Introduction

Road traffic is the primary cause of air pollution in London, and in Lambeth it has been estimated that 90% of all pollution is from road vehicles representing over 20,000 tonnes of pollutants released into our atmosphere every year. The vehicle emissions of greatest concern are Nitrogen Dioxide, Fine Particulates (PM10), Carbon Monoxide and Volatile Organic Compounds such as Benzene. High levels of any of these pollutants can affect health, making breathing problems, such as asthma and heart problems, worse.

In order to tackle the problem the Government produced The National Air Quality Strategy (NAQS) which sets out a process of local air quality management for implementation by local authorities prescribed in Government guidelines. The purpose of the strategy is to reduce air pollution so that it no longer presents a risk to human health. It requires all local authorities to review and assess their air quality in a stage by stage process and sets targets for seven pollutants which local authorities must aim to achieve between 2003 and 2005. The Council uses its air quality monitoring data to model predicted pollution levels for future years. Where it is unlikely that these targets will be met the council must declare Air Quality Management Areas (AQMAs) and draw up an Action Plan describing the measures it intends to take to meet these targets.

Lambeth Council completed a full review and assessment of its air quality in December 1999 and following a revision of the NAQS published its findings in March 2001 in a report The Third Stage Review and Assessment of Air Quality in Lambeth. The study showed that, despite improvements in air quality in Lambeth over the next 4 to 5 years, two pollutants, nitrogen dioxide and fine particulates, are likely to fail government targets. As a result the council declared Air Quality Management Areas in the areas of highest pollution on the 1st May 2001.

Lambeth has been monitoring air pollution throughout the borough since 1993 and publishes the results annually. Currently nitrogen dioxide, sulphur dioxide and benzene are monitored using diffusion tubes at 15 sites around the borough. Ozone and lead in air are also monitored at some of these sites.

In addition Lambeth operates 4 continuous air quality monitoring stations which monitor for nitrogen dioxide, sulphur dioxide, fine particulates (PM10) and carbon monoxide (at one site only).

The Council contracts independent laboratory consultants to monitor and report the quality of the air in the borough. This leaflet provides a summary of the most recent results and explains the steps the council is taking to combat air pollution.

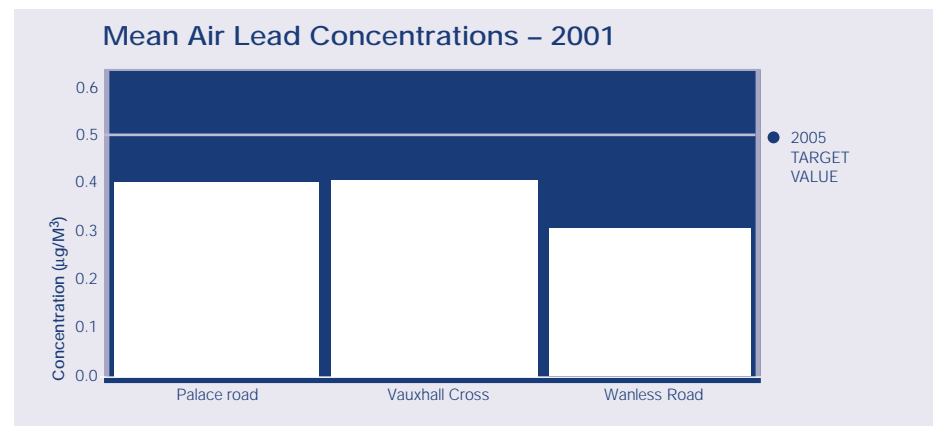
The full report on The Review and Assessment of Air Quality in Lambeth is available from Regulatory Services, 2 Herne Hill Road, London SE24 0AU. The document can also be viewed and downloaded from the Lambeth website [www.lambeth.gov.uk](http://www.lambeth.gov.uk). Regularly updated air quality information is available with health advice on the DEFFRA freephone interactive helpline: **0800 556 677**

## Passive monitoring

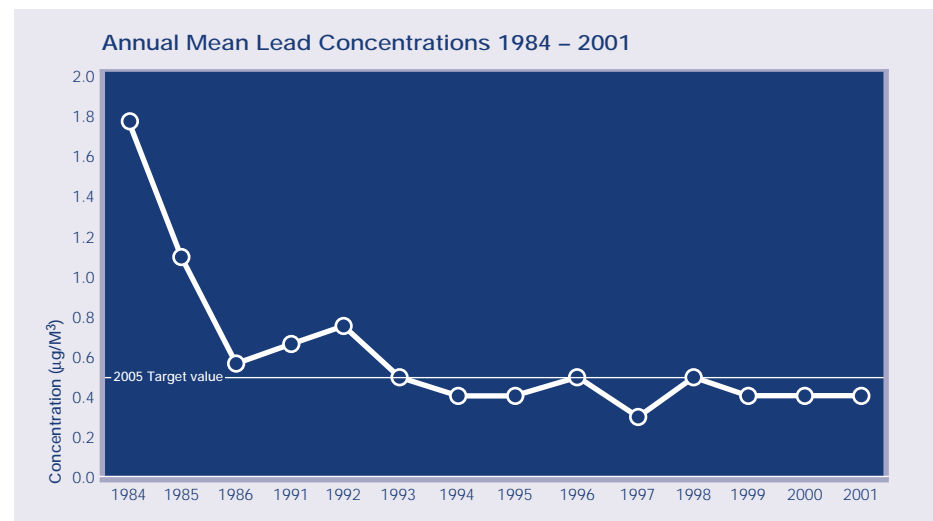


## Airborne Lead

Airborne lead was monitored on a routine basis at the three sites used for continuous air quality monitoring.



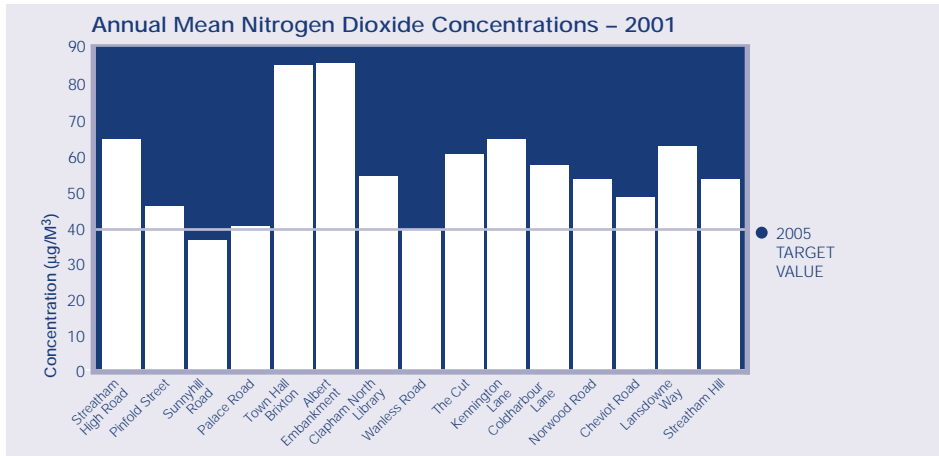
Airborne levels were below the government's target for the year 2005 at all three sites in 2001



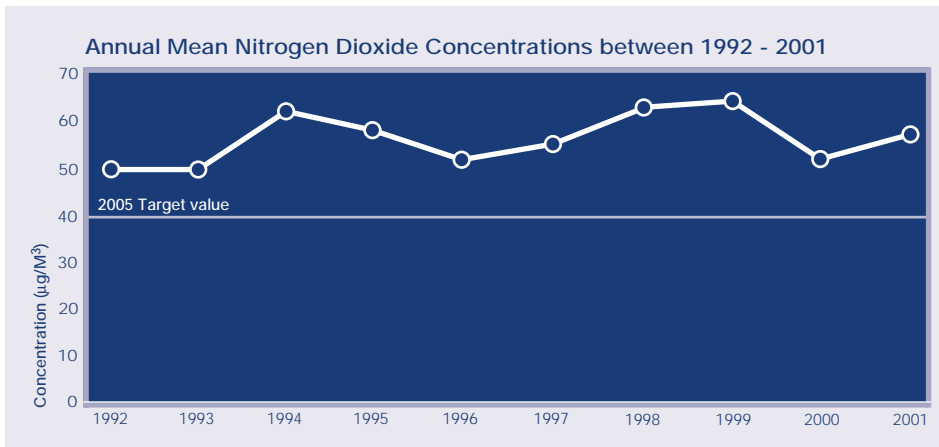
Airborne lead levels have fallen since 1985 due to a reduction in the amount of lead allowed in 4 star petrol and following the introduction of unleaded petrol.

# Nitrogen Dioxide

Nitrogen Dioxide is monitored on a monthly basis. Fifteen sites were monitored during January - December 2001. These sites covered areas of high and low traffic flow.



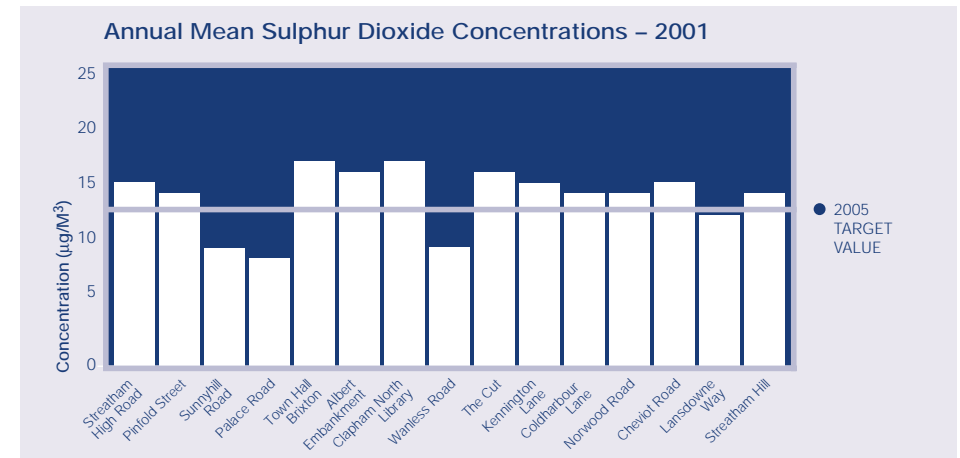
In 2001, the 2005 target was exceeded at 13 sites. This compares with 12 sites exceeding the 2005 target in 2000.



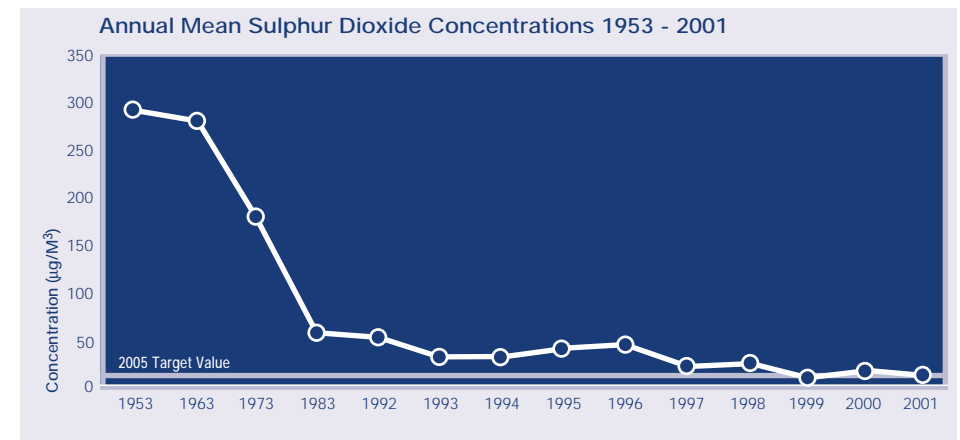
In 2001 the NO2 concentration averaged over the whole borough showed an increase of 5µg/m3 from the previous years annual mean value.

# Sulphur Dioxide

Like Nitrogen Dioxide, Sulphur Dioxide is also monitored on a monthly basis. Fifteen sites were monitored during January - December 2001. These sites covered areas of high and low traffic flow.



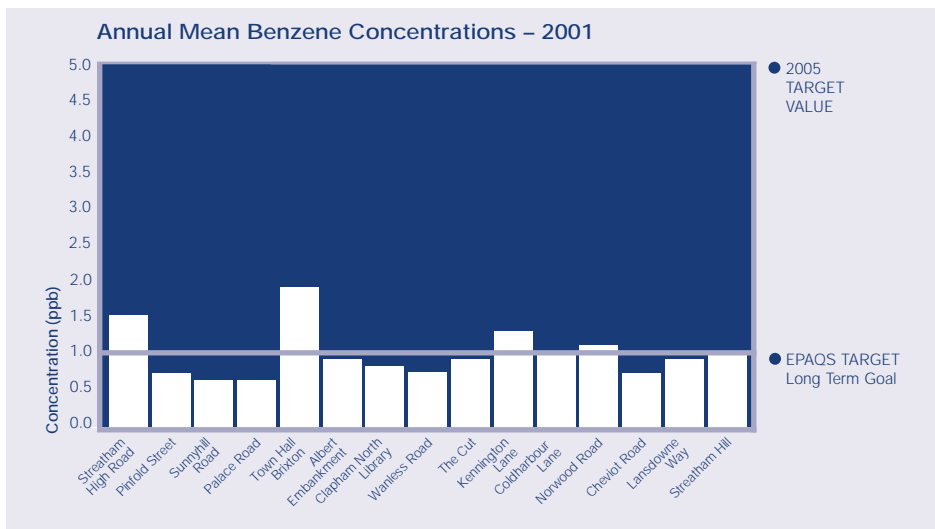
The 2005 target value was exceeded at 11 of the sites averaged over the year 2001. This compares with exceedence of the target at all 15 of the sites in 2000.



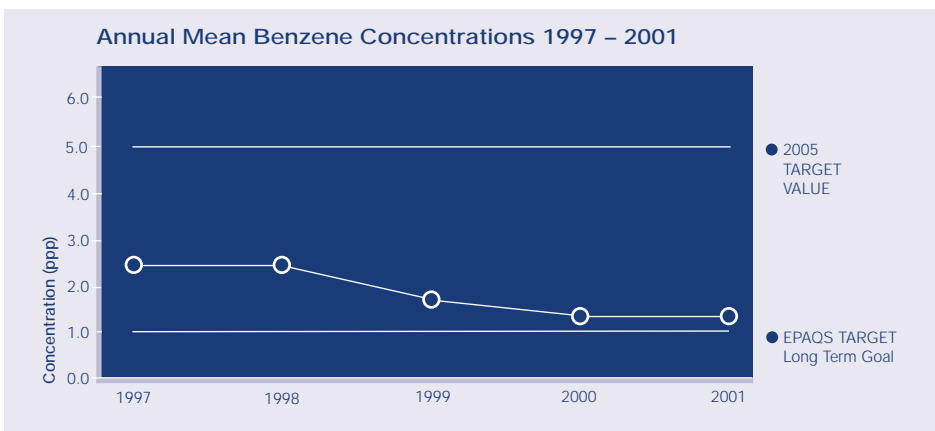
The level of 13.37µg/m3 for passive diffusion tube monitoring is equivalent to the 2005 Target value for continuous monitors. Exceedence of the 266 µg/m3 2005 Standard is likely if the annual mean concentration exceeds 13.37µg/m3.

# Benzene

Benzene is monitored on a monthly basis. The fifteen sites that were monitored for Nitrogen Dioxide and Sulphur Dioxide were also monitored for Benzene during January - December 2001. These sites covered areas of high and low traffic flow.



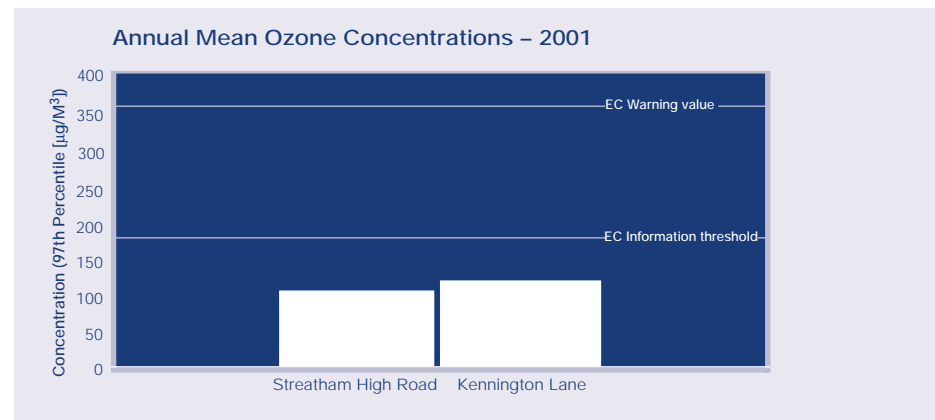
During 2001 none of the sites monitored exceeded the 2005 target value when averaged over the year. 4 sites exceeded the EPAQS long term goal. This is an improvement from 2000 when 9 sites exceeded the EPAQS target.



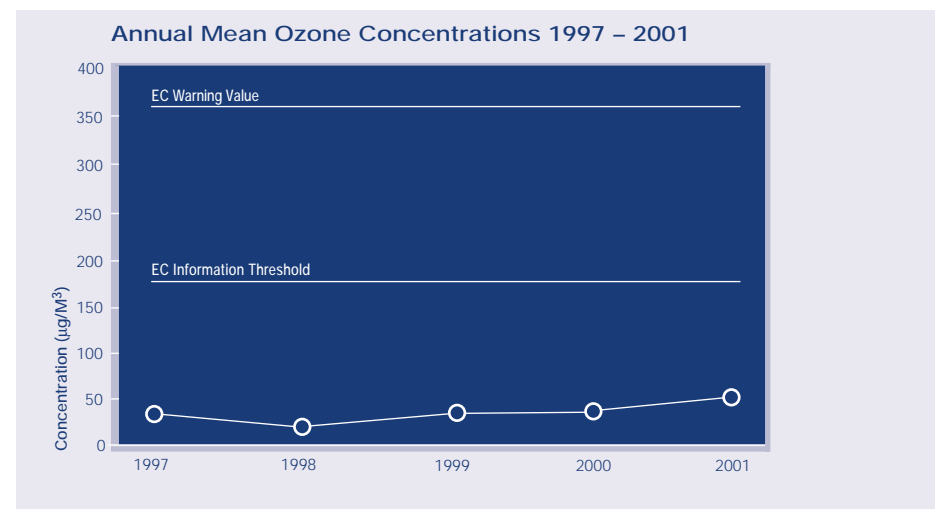
The Annual Mean concentration averaged over the whole borough was the same as in 2000.

# Ozone

Ozone was monitored on a monthly basis at two sites in the borough during January - December 2001. These sites covered areas of high traffic flow.



None of the sites monitored exceeded the EC threshold levels.



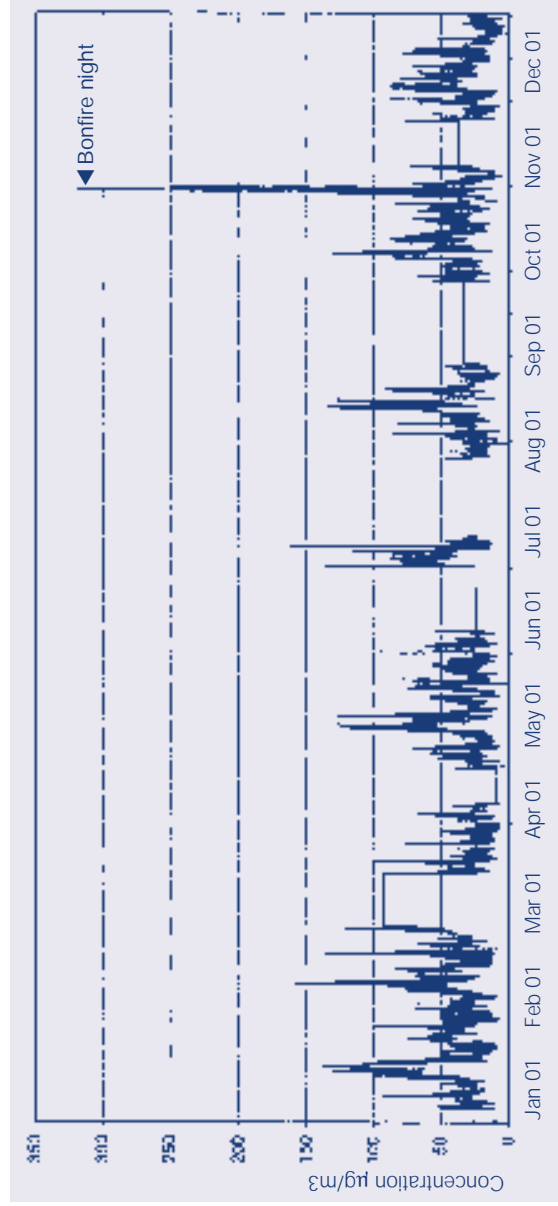
## National air quality strategy standards

Pollutant	Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m <sup>3</sup> (5ppb)	running annual mean	31.12.2003
1,3 Butadiene	2.25 µg/m <sup>3</sup> (1ppb)	running annual mean	31.12.2003
Carbon monoxide	11.6 µg/m <sup>3</sup> (10ppm)	running 8 hour mean	31.12.2003
Lead	0.5 µg/m <sup>3</sup>	annual mean	31.12.2004
	0.25 µg/m <sup>3</sup>	annual mean	
Nitrogen dioxide	200 µg/m <sup>3</sup> (105ppb)	1 hour mean not to be exceeded more than 18 times a year	31.12.2005
	40 µg/m <sup>3</sup> (21ppb)	annual meanannual mean	31.12.2005
Particles (PM10)	50 µg/m <sup>3</sup>	24 hour mean not to be exceeded more than 35 times a year	31.12.2004
	40 µg/m <sup>3</sup>	annual mean	31.12.2004
Sulphur dioxide	350 µg/m <sup>3</sup> (132ppb)	1 hour mean not to be exceeded more than 24 times a year	31.12.2004
	125 µg/m <sup>3</sup> (47ppb)	24 hour mean not to be exceeded more than 3 times a year	31.12.2004
	266 µg/m <sup>3</sup> (100ppb)	15 mins mean not to be exceeded more than 35 times a year	31.12.2005

The above table provides a summary of the National Air Quality Strategy objectives.

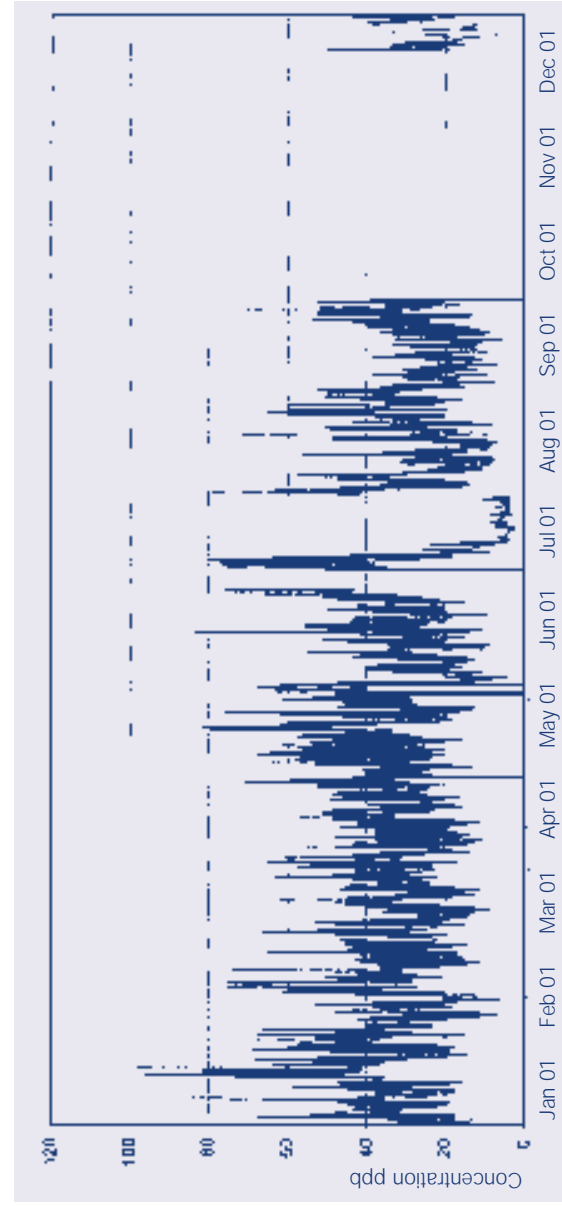
## Continuous monitoring

# Fine Particles (PM10) 2001



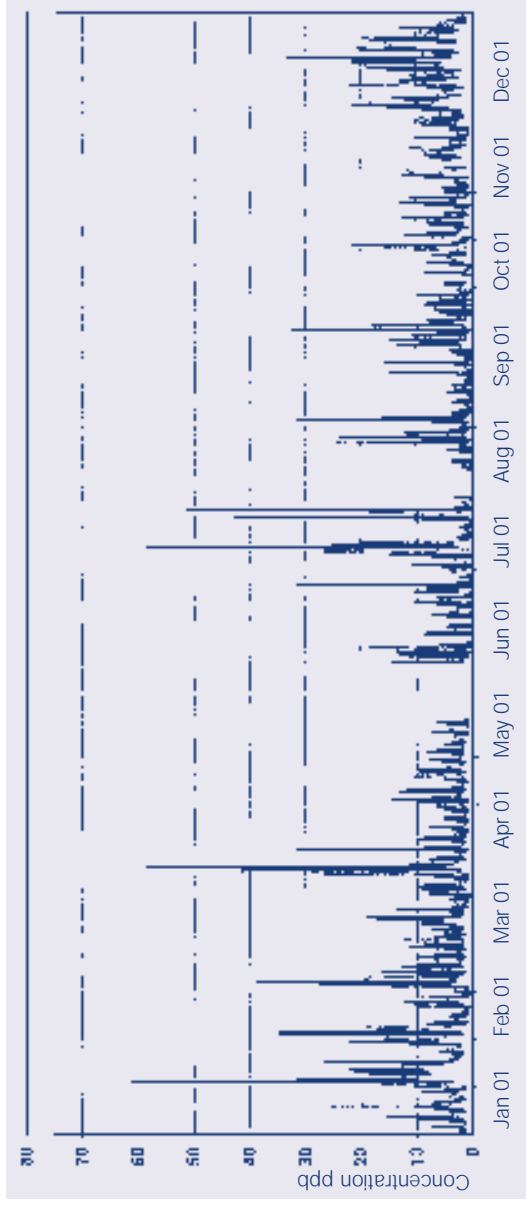
The annual mean 2005 Target is 40 µg/m<sup>3</sup>. The annual mean for 2001 was 38µg/m<sup>3</sup>.  
The 24 Hour Mean 2005 Target of 50 µg/m<sup>3</sup> should not be exceeded more than 35 times a year.  
There were 71 exceedences at this site during 2001.

# Nitrogen Dioxide 2001



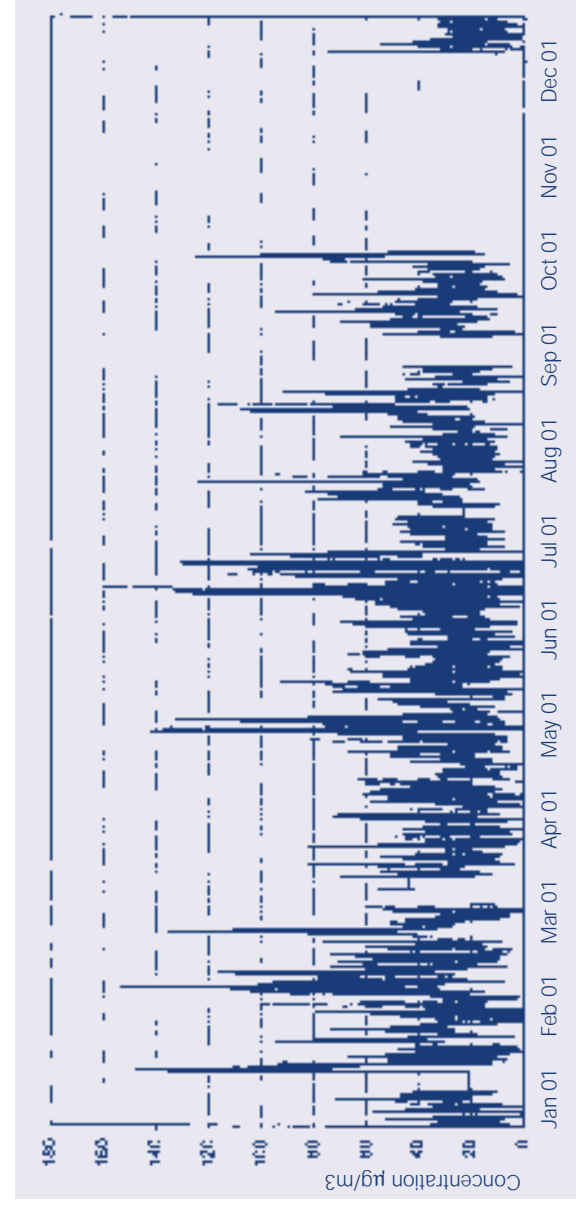
The annual mean 2005 target is 21 ppb. The annual mean for 2001 was 30ppb.  
There were no exceedences of the hourly mean 2005 Target value of 105 ppb.  
This target should not be exceeded more than 18 times a year.

# Sulphur Dioxide 2001



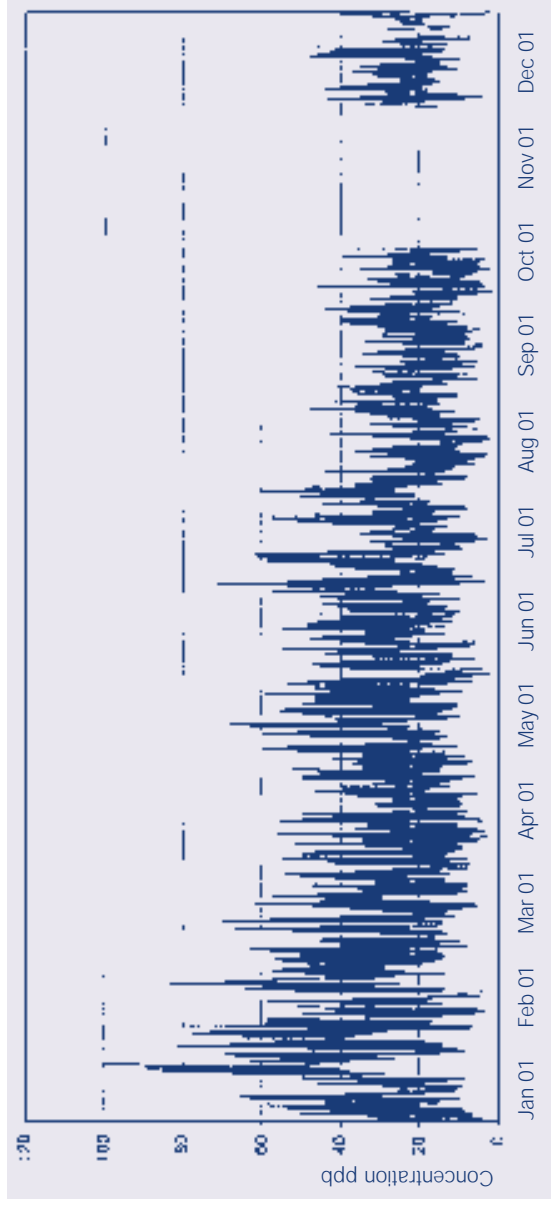
The annual mean for 2001 was 4 ppb  
The 15 minute Mean 2005 Target of 100 ppb should not be exceeded more than 35 times a year.  
There were no exceedences of this target at this site.

# Fine Particles (PM10) 2001



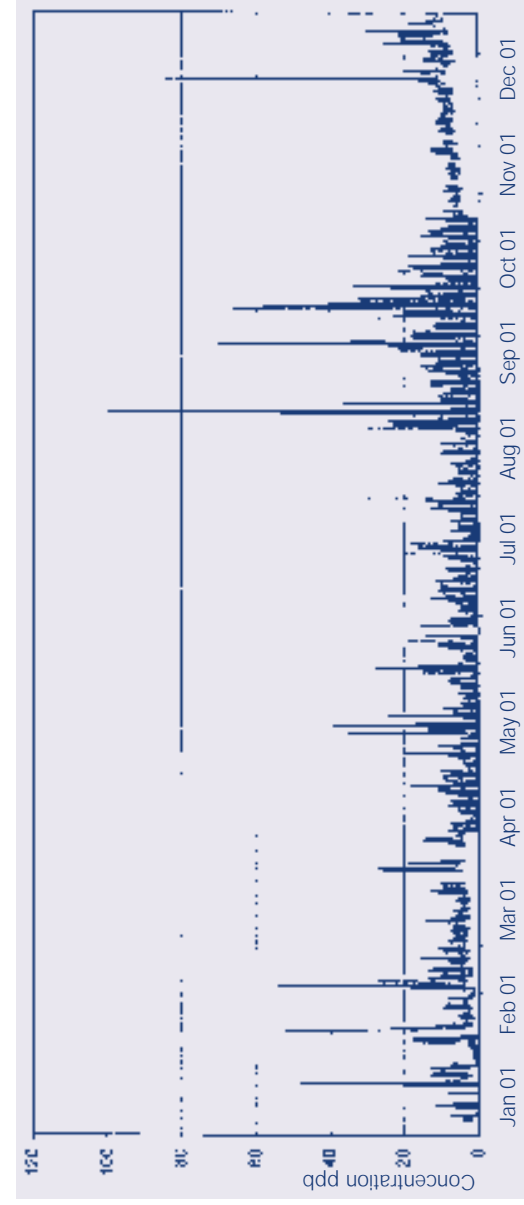
The annual mean 2005 Target is 40 µg/m3. The annual mean for 2001 was 33 µg/m3.  
The 24 Hour Mean 2005 Target of 50 µg/m3 should not be exceeded more than 35 times a year.  
There were 34 exceedences at this site during 2001.

# Nitrogen Dioxide 2001



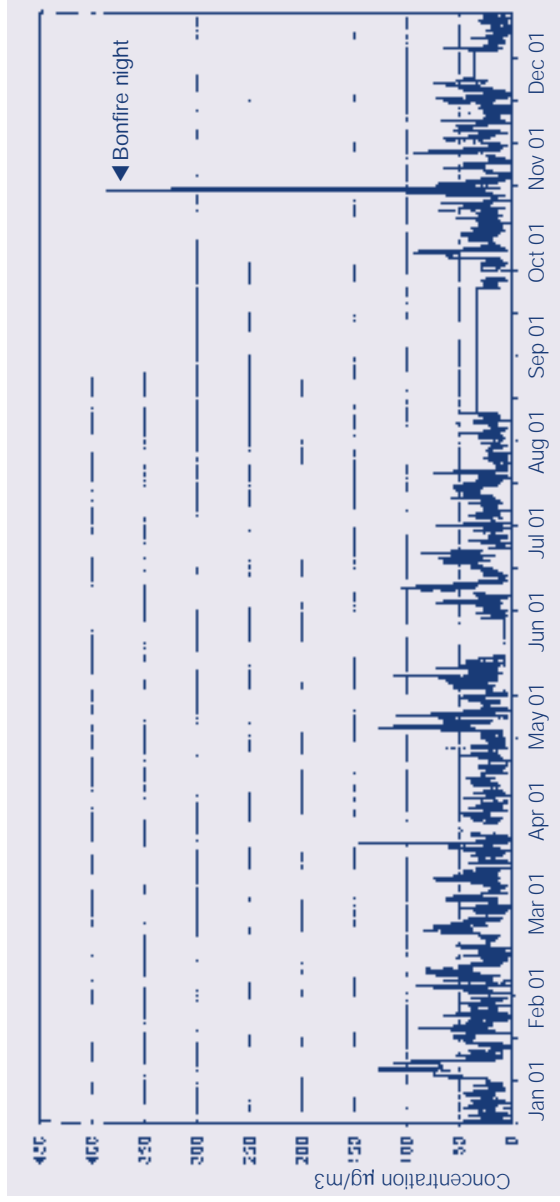
The annual mean 2005 target is 21 ppb. The annual mean for 2001 was 27 ppb. There was no exceedence of the hourly mean 2005 Target Value of 105 ppb during 2001. This target should not be exceeded more than 18 times a year.

# Sulphur Dioxide 2001



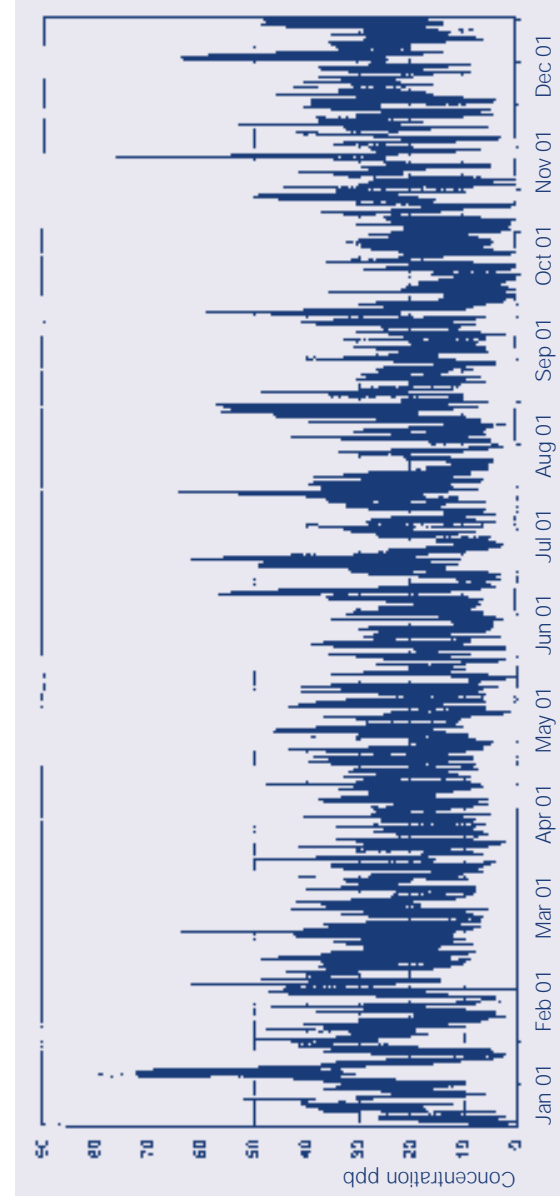
The annual mean for 2001 was 6 ppb. The 15 minute Mean Target of 100 ppb should not be exceeded more than 35 times a year. There was no exceedence of this target at this site during 2001.

# Fine Particles (PM10) 2001



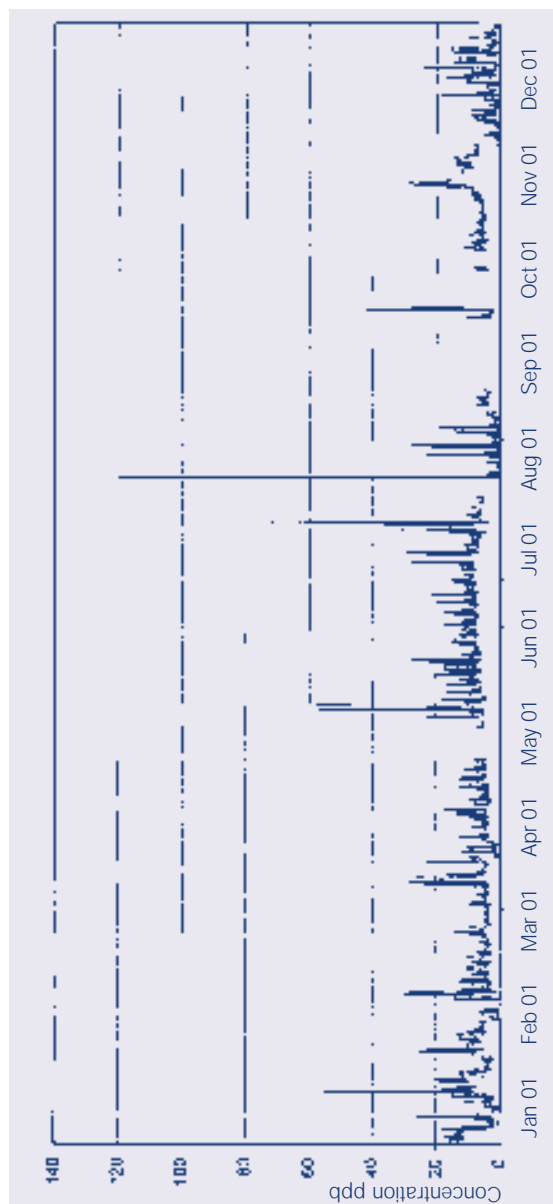
The annual mean 2005 Target is 40  $\mu\text{g}/\text{m}^3$ . The Annual Mean for 2001 was 27  $\mu\text{g}/\text{m}^3$ .  
The 24 hour mean 2005 Target of 50  $\mu\text{g}/\text{m}^3$  should not be exceeded more than 35 times a year.  
There were 21 exceedences at this site during 2001.

# Nitrogen Dioxide 2001



The annual mean 2005 Target is 21 ppb. The annual mean for 2001 was 20 ppb.  
There were no exceedences of the hourly mean 2005 Target Value of 105 ppb during 2001.  
This target should not be exceeded more than 18 times a year.

## Sulphur Dioxide 2001



The Annual Mean for 2001 was 6 ppb.  
 The 15 minute mean 2005 Target of 100 ppb should not be exceeded more than 35 times a year.  
 There was one exceedences of this target at this site during 2001.

## The future

In May 2001 Lambeth formally designated those areas that it predicted would not meet the government objectives as Air Quality Management Areas (AQMA's). However, the AQMA only identifies where there is an air quality problem - we still need to find the solutions to improve it. In Autumn 2001 work started on the fourth Stage Review and Assessment of Air Quality to look more closely at pollution sources and levels within our AQMA's. At the same time the Council began compiling and consulting on proposals to incorporate in a draft Air Quality Action Plan which would set out the measures that need to be taken to reduce pollution levels to within acceptable limits.

**Action Plans**

Action Plans provide us with real opportunities for improving the overall quality of life and the environment through focusing on alleviating the worst air quality problems in the borough. It is expected that the Action Plan will be available for consultation by Spring next year and formally adopted by the Autumn. Once adopted, the next steps will be to develop and evaluate the action plan as part of the process of continually improving and updating the pollution profile of Lambeth to ensure the most accurate targeting of action plan proposals.

**4th Stage Review and Assessment of Air Quality in Lambeth**

The 4th Stage review and assessment of air quality in Lambeth was started in 2001 but was delayed due to the late release of the revised emissions inventory for London and is now expected to be published in late 2002. The results so far indicate that levels of some of the traffic pollutants will not decrease as much by 2004/5 as was expected, resulting in more widespread exceedences of the national air quality objectives across the borough than had previously been predicted. The review and assessment process highlights the importance of air quality monitoring and management as an ongoing process and the need for action plans to be developed and adapted to suit local needs and changing circumstances.

**New Air Quality Monitoring Station for Brixton**

Lambeth has secured Government funding to install a new continuous air quality monitoring station in the centre of Brixton. It is expected to come online in late 2002 which will allow monitoring data from within the Brixton AQMA to be compared directly to the modelled levels produced by the review and assessment process.

**New Air Quality Website**

It is now possible to view Lambeth's air quality in real time by logging on to: [www.erg.kcl.ac.uk/london/asp/home.asp](http://www.erg.kcl.ac.uk/london/asp/home.asp). The website shows the air quality from Lambeth's four monitoring stations as it is updated at 15 minute intervals.

# Let us know your views

All enquiries regarding air quality  
 Gill Narramore  
 Environmental Health Officer  
 London Borough of Lambeth  
 Regulatory Services  
 2 Herne Hill Road  
 London SE24 OAU

Telephone: 020 7926 6111  
 Fax: 020 7926 6150  
 Email: [gnarramore@lambeth.gov.uk](mailto:gnarramore@lambeth.gov.uk)  
 Website: [www.lambeth.gov.uk](http://www.lambeth.gov.uk) (search air quality)

## Monitoring sites



9 The Cut (Near Short Street)

6 Albert Embankment (Outside Fire Brigade HQ)  
 10 Kennington Lane & Kennington Road junction

Vauxhall Cross (Continuous Monitoring Station)

14 Lansdowne Way (Stockwell Bus Garage)

11 Coldharbour Lane (Opposite Lilford Road)

8 Wanless Road (Continuous Monitoring Station)  
 Wanless Road  
 5 Clapham Old Town Bus Stand  
 Town Hall Brixton

Palace Road (Continuous Monitoring Station)  
 12 Norwood Road

4 Palace Road (Opposite Roupell Road)  
 15 Streatham Hill (Brixton Bus Garage)  
 Pinfold Street

1 Sunnyhill Road (Outside Refuge Church)  
 2 Cheviot Road (Opposite Lambeth College)  
 3 Streatham High Road & Prentis Road junction

○ Passive monitoring took place at 15 sites

■ Continuous monitoring took place at 3 sites

Air quality is compared to the targets set by the Government's National Air Quality Strategy to be achieved by the end of 2005