Ealing
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Pollution Control Team

The Borough Air Quality Bulletin

A Local Agenda 21/Environment Group Initiative

Spring 2003

IN THIS ISSUE

Ealing Borough Air Quality Bulletin

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www.ealing.gov.uk/services/pollution+control/

Turn off when parked!

New powers are to be introduced in Ealing to improve air quality in the borough. Ealing's Cabinet has agreed to the adoption of new powers that will allow authorised Council officers to instruct motorists to switch off their engines whilst parked, and to issue Fixed Penalty Notices to those who refuse to co-operate. Previously, such regulations could only be enforced by the police, but The Road Traffic (Vehicle Emission) Regulations which came into force in July 2002 allows for local authorities to enforce them. Apart from Westminster City Council which was one of eight local authorities around the country that took part in the pilot scheme, Ealing will be the first borough in London to take on these new powers.

The regulations are designed to encourage all motorists to have due regard to the local environment when parking. Anyone found idling unnecessarily at the kerbside, for instance people waiting to pick children up from school, or buses parked up with their engines running at termini etc, will be asked to switch their engines off. Anyone refusing to co-operate may be issued with a fixed penalty notice. The penalty will be £40 dropping to £20 if paid within 28 days.

It is hoped that the new powers will be launched in June, involving advanced publicity and the erection of signs at known 'hot spots', prior to the implementation of the powers.

Winter Highs

The unseasonal weather conditions London has experienced during the first quarter of this year have led to the number of air quality exceedences so far surpassing those measured during the whole of 2002. The pollution episodes were mainly focused around the second half of February and the second half of March (see graph on back page). The National Air Quality Strategy and EU Directives specifies an annual mean objective for particles of 50 $\mu g/m^3$ not to be exceeded more than 35 times per year. During the first 3 months of 2003, Ealing exceeded this standard on 24 days, compared with the whole of 2002 where the standard was exceeded on only 19 days. Other parts of Central London have already measured 44 exceedance days so far.

The two pollution episodes during February and March were caused by periods of sunny weather, which allowed pollution to become trapped over the City and build up, and easterly winds which carried secondary PM_{10} over from the Continent. It represented the longest spell of prolonged air pollution since 1996. Previous winters have been quite favourable for air pollution with warm, wet conditions.

We aim to keep readers informed regarding air quality management in Ealing and to bring you up to date on general air quality issues. If you have any comments on how to improve this bulletin or if there are any topics you would like to see included, then please get in touch with the Editor.

Travel Awareness

A summer programme of travel awareness initiatives has been announced which aims to encourage people to leave their cars at home and find alternative methods of transport. The programme compliments a range of national initiatives, but focuses on local action.

Mon 19 - Fri 23 May
Summer National Walk to School Week
(www.walktoschool.org.uk)

Sat 7 – Sun 15 June
Green Transport Week
(www.eta.co.uk)

Sat 14 – Sun 22 June
Bike Week and Bike2Work Week
(www.bikeweek.org.uk)

Tues 16th – Mon 22 Sept
European Mobility Week
(www.mobilityweek-europe.org)

Mon 22nd September
European Car Free Day
(www.22september.org)

Saturday 14 June
Adults Return to Cycling Confidence Training
Free ability based training for novices and returning cyclists from professional cycle trainers. Includes on-road sessions. Three sessions - 9.30-12, 12.30-3, 3-5.30.
Places **must** be booked in advance. Ring Freephone 0800 0936454

Saturday 14 June
"Dr Bike"
Get your bike checked over and practical advice about keeping and using it. 10,00am -4.00pm Ealing Green

Tuesday 17 June
Free Breakfast for Cyclists
Bike to work and enjoy a free breakfast outside Ealing Town Hall.
8am-10.30am Outside Ealing Town Hall, New Broadway

Wednesday 18 June
Sunset ride to Richmond Park.
7.30pm Depart from outside Ealing Town Hall

Thursday 19 June
Round-the-Borough bike ride; five miles, suitable for all the family.6.00pm Depart from outside Ealing Town Hall

Traffic Reduction for Real (7.30 Tuesday 24 June)
A Lecture by Lynn Sloman (Ealing Friends of the Earth lecture series)
Ever increasing traffic and displacement to residential streets are not inevitable, even with a tram on the Uxbridge Road. Traffic can be reduced and this lecture will show how it can be done, using real examples from the UK and Europe. If you're concerned about traffic and the tram, you can't afford to miss this lecture!
Lynn Sloman runs Transport for Quality of Life, is a visiting Fellow at the University of Westminster and past Assistant Director of Transport 2000.

Please contact the council's Local Agenda 21 about these and other initiatives. Tel 020 8825 6621 or email:la21@ealing.gov.uk

Air Quality on the Internet

Here is a selection of air quality sites on the Internet:-

Ealing Council's Pollution Control Team
www.ealing.gov.uk/services/pollution+control/

Department for Environment, Food and Rural Areas
http://www.defra.gov.uk/environment/index.htm

National Society of Clean Air and Environmental Protection http://www.nsca.org.uk

The Air Quality Management Site
http://www.air-quality-management.co.uk/

Atmospheric Research & Information Centre (at Manchester Metropolitan University)
http://www.docm.mmu.ac.uk/aric/eae/

Friends of the Earth
www.foe.co.uk

Local Agenda 21 Pollution and Public Health Project Group
www.LA21.org

OMNI - Ealing Council's interactive website.
www.seiph.umds.ac.uk/o2/ealing/index.htm

Environmental Research Group - Kings College London. London Air Quality Network.
http://www.erg.kcl.ac.uk/london/asp/home.asp

Research Latest

Despite improvements, over 65s still suffer…

Research carried out by the University of Bristol claims to identify a clear relationship between daily pollutant levels and death rates in the Bristol area. The study focused on the period 1996 to 1999, during which time the government's air quality index showed that pollution levels in the Bristol area were either low or moderate, but never high or very high.

The researchers looked at whether deaths due to respiratory and cardiovascular disease could be associated with any or all of three things: Ozone levels; very fine particles; and Volatile Organic Compounds (VOCs) which is a complex mix of chemicals in the air.

They found that cardiovascular deaths in the over-65s were mainly linked to an increase in particulates, with increased ozone levels having a slightly lesser effect, whilst deaths in this age group from respiratory illnesses were associated with increased levels of VOCs.

The Researchers noted that: 'Levels of pollutants in the Bristol area are not generally considered to be dangerous to human health, but these findings, which are in keeping with studies from other cities, suggest that further research into the short and long-term effects of low-level pollution is warranted.' The average number of deaths per day in the Bristol area is 23, with about 45% from cardiovascular disease and 15% from respiratory illnesses.

Anon. 2003. Pollution linked to poor health. BBC News Online. http://news.bbc.co.uk/1/hi/england/2909917.stm April, 2003
Anon. 2003. Poor air quality in Bristol linked to deaths in over 65s. University of Bristol, http://www.bris.ac.uk/news/2003/147 April, 2003

Health effects reversible??

Two new studies seem to show that health effects from air pollution can be reversible. German researchers looked at air pollution and health before and after the reunification of Germany, which lead to huge decreases in the levels of industrial air pollutants in the former East Germany and increases in traffic derived pollutants. The researchers found a strong link between reductions in total suspended particles and sulphur dioxide, and reductions in bronchitis symptoms. Similarly, Austrian researchers carried out lung function tests on 3,400 primary school children and then tested them again when they were 18 years old. Those children living where NO_2 levels dropped by at least 30 µg/m3 over the period were found to have improved lung function. The researchers commented that 'this provides evidence that improvement in outdoor air quality is correlated with health benefits and that adverse effects on lung function related to ambient air pollution are reversible before adulthood.'

Air Quality Management. January 2003. Issue number 85.

Weather overwhelms AQ improvements

Any improvements in air quality can be easily undermined by the effects of weather, according to recent research from Edinburgh. Weather patterns between 1981 and 1996 were investigated to see what influence they had on particle concentrations. Long-term weather patterns were found to increase PM_{10} levels by as much as 11 µg/m3 in some years. Researchers point out that as a result of this effect, PM_{10} concentrations (and associated health outcomes) are likely to be significantly influenced by such weather patterns independent of local air quality management areas. Furthermore, changes in long-term trends in the distributions of certain weather patterns indicate that future climate change may influence exposure to PM_{10}.

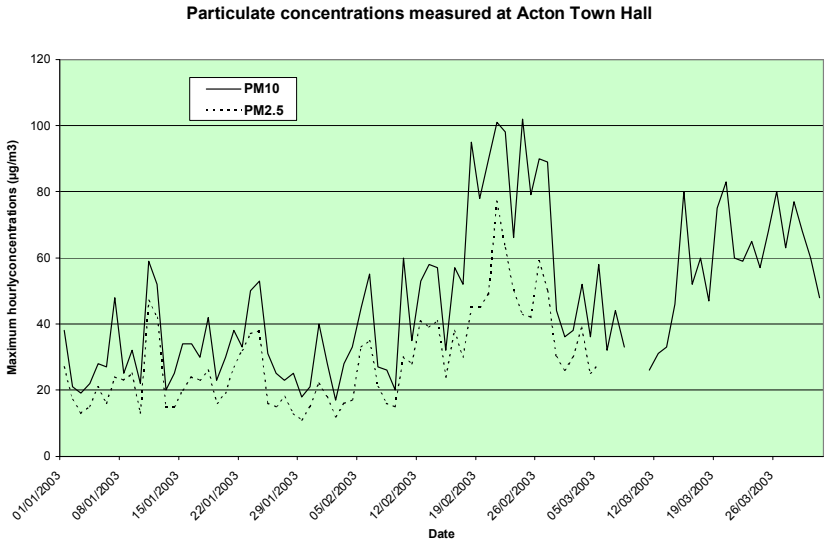
Air Quality Management. January 2003. Issue number 85.
Buchanan, C. et al. 2002. The influence of weather-type and long-range transport on airborne particle concentrations in Edinburgh, UK. Atmospheric Environment. Vol 36, Issue 34. 5343-5354.

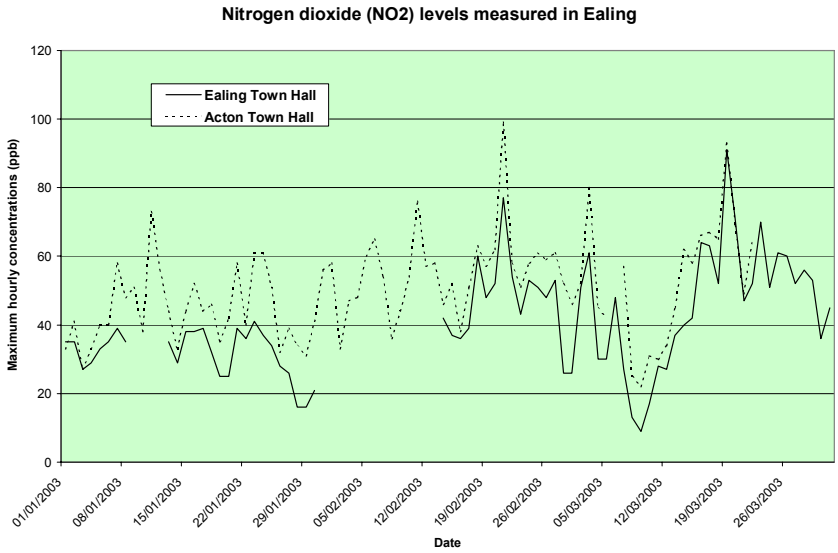
And finally

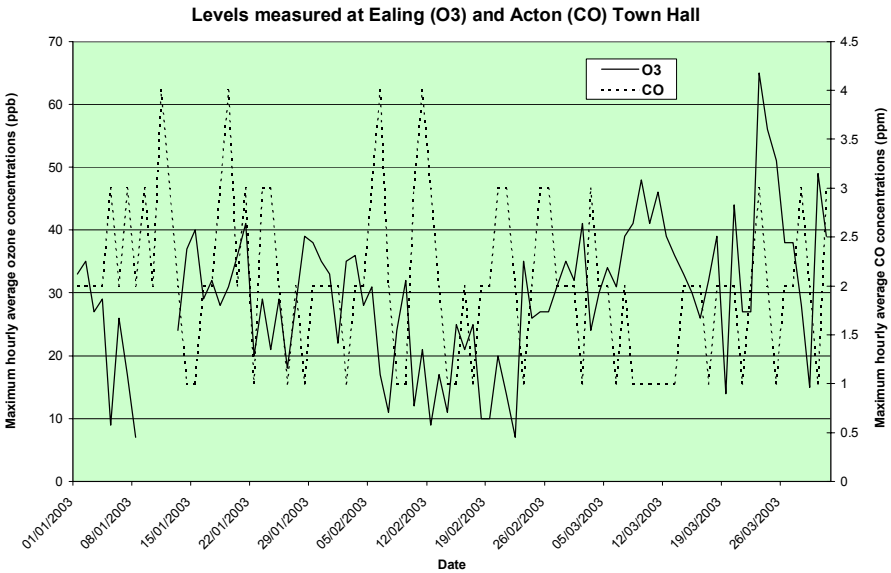
Pollution increases the number of sickies workers take, according to Canadian research. Scientists investigated the influence air pollution had on the number of sick days recorded in Toronto between 1994 and 1999 and found a significant increase in days off with increases in the levels of $PM_{2.5}$ and carbon monoxide.

Stieb D. et al. 2001. Air Pollution and Disability Days in Toronto: Results from the National Population Health Survey. Environmental Research. Vol 89, Issue 3. 210-219.

Air Pollution Results Jan to Mar 2003







As discussed on page one, more exceedances of PM10 were recorded during the first 3 months of this year than were recorded for the whole of last year. Unseasonably warm weather and easterly winds led to a build up of pollutants and a lot of pollution migrating over from Europe. MODERATE and HIGH PM_{10} levels were measured over a period of weeks during Feb and March. MODERATE ozone was also measured around 24th/25th March. Ozone is a spring and summertime pollutant with the most significant episodes generally being measured between May and early August. This episode is the earliest significant photochemical incident in London in 10 years.

Other pollutant levels remained LOW for the three-month period.

Unfortunately, our Acton Town Hall site was vandalised in March and the $PM_{2.5}$ analyser was damaged. We hope to have it repaired as soon as possible.

Daily Forecasts

A daily air pollution forecast is published every day on the Pollution Control website, as well as recent air pollution levels. You will also find details of Ealing's Air Quality Review and Assessment, the results of Ealing's public consultation on air pollution and other related topics, including back issues of the Air Quality Bulletin.

Pollution Bandings

	low	moderate	high	v.high
O_3	<50	50-89	80-179	>180
CO	<10	10-14	15-19	>20
NO_2	<150	150-299	300-399	>400
PM_{10}	<50	50-74	75-99	>100

Measured as:

Ozone	(O_3)	hourly mean
Carbon monoxide	(CO)	running 8 hour mean
Nitrogen dioxide	(NO_2)	hourly mean
Particulates	(PM_{10})	running 24 hour mean