LONDON BOROUGH OF CAMDEN	**WARDS:** All
REPORT Review of Air Quality	
REPORT OF Health Scrutiny Working Group	
FOR SUBMISSION TO Health Scrutiny Committee	**DATE** 1 June 2011

SUMMARY OF REPORT

The attached report outlines a study of air quality in Camden and the proposed recommendations from the Health Scrutiny Working Group.

As this is the report of a scrutiny panel it does not contain an assessment of the proposals from Council officers regarding their implications. This information will be provided in the response to any recommendations that are endorsed by the scrutiny committee.

Local Government Act 1972 – Access to Information

No items that are required to be listed were used in the preparation of this document.

Contact:
Councillor Paul Braithwaite (Chair), of the Health Scrutiny Working Group,
Old Town Hall, Judd Street, London WC1H 9JE; 020 7974 6391

RECOMMENDATIONS

The Health Scrutiny Committee is asked to consider and discuss the report at the meeting. The Working Group asks that the Committee endorse the report and asks the Assistant Director of Environment and Transport and Director of Public Health to prepare a response to each of the recommendations for the next meeting.

1. Background

1.1 The Health Scrutiny Committee Working Group started their scrutiny review on Air Quality (AQ) in October 2010. With the intention of highlighting the work currently taking place in this policy area and to identify the main causes and activities that create air pollution in Camden

1.2 The terms of reference for this review are:

- To identify the main causes and activities that creates air pollution in Camden.
- To understand the possible impact of air pollution on the health of people in Camden, in particular those living in pollution hotspots.
- To consider the effectiveness of current work by different departments and organisations to reduce the effects of air pollution on the health of local residents.
- To make cross-cutting recommendations to the Cabinet, to the NHS and to partners to raise awareness of and reduce the impact of air pollution in the borough.
- These recommendations might also be brought to the attention of relevant wider bodies with responsibility for air pollution reduction such as the Department for Environment, Food and Rural Affairs (Defra), Transport for London (TfL), the Mayor of London and our neighbouring boroughs.

1.3 It is recognised that some of the recommendations, or suggested improvements might be difficult to implement in the current economic climate. However the Working Group takes the view that Camden could be an exemplar borough on aspects of this issue and lead the way on communication to the public surrounding the health impacts of poor air quality and making clear the benefits of improving air quality through behavioural measures.

Health Scrutiny Working Group
Review of Air Quality

Report of the Health Scrutiny Working Group on Air Quality

Cllr Paul Braithwaite (Chair)
Cllr Maya de Souza
Cllr Samata Khatoon

Order of contents:

Chair's Foreword:

First, some statistics:

"Average reduction in life expectancy in the UK (due to Air Quality) is now six months and the annual cost £15 billion, within the range £8 billion to £17 billion." Defra, Air Pollution: Action in a Changing Climate, 2010.

But:

"Air quality is much better than it was in 1990. **It's good across 99% of the country."** Sunday Times letter from Government Minister, 15 Mar 2009

Which means the bad air quality leading to damaged health and premature death is concentrated into the remaining 1% of the UK – so to claim an average life reduction of our 61 million population is just six months is most misleading of Defra.

The Mayor Boris Johnson has published an estimate that there were 4,267 premature deaths in London in 2008 directly attributable to long-term exposure to PM2.5 including over 100 in Camden (March 2010),

To put Air Quality health risks in context:

"There are between 15,000 and 22,000 alcohol-related deaths every year in England…" DoH, June 2008

"Obesity is responsible for 9,000 premature deaths each year in England, and reduces life expectancy by, on average, 9 years." DoH, September 2007

"Smoking is responsible for 87,000 deaths in England each year." DoH, December 2008.

"Men who quit smoking by 30 add 10 years to their life." NHS, July 2010

2,222 people were killed in road accidents in GB in 2009. DfT, 2010

Using the same "language",

" There were 29,000 premature deaths in the UK in 2008 **directly** attributable to long-term exposure to man-made PM2.5 particulates, at an average loss of life of 11.5 years." COMEAP 2010

Road Transport is responsible for 66% of PM_{10} and 38% of London's NOx (GLA 2006)

Illnesses that air pollution makes worse (or causes):
Asthma
COPD (Chronic Obstructive Pulmonary Disease)
Lung cancer
Heart disease (atherosclerosis)
Diabetes

Low birth weight

"Given that much of the impact of air pollution on mortality is linked with cardiovascular deaths, it is reasonable to consider that air pollution may have made some contribution to the earlier deaths of up to 200,000 people in 2008." COMEAP 2010[1]

****

London's Air Quality (AQ) is consistently in breach of EC laws for quality standards, which are there to protect the health of our residents and working population. Camden, along with our neighbouring inner London boroughs, is acutely affected and the lives of many who live alongside our busiest roads are being shortened by up to ten years. Additionally, our quality of life and well-being (morbidity) is being impaired, for pedestrians and cyclists alike.

The smallest particles, PM_{10}, are absorbed into the blood stream, causing incidence of cardio-vascular disease. ALL diesel engines, even the newest and most fuel efficient, emit particulates and are far dirtier than petrol engines.

In Camden we have several hot-spots of pollution and they relate to traffic volumes: Tottenham Court Road, Finchley Road, Theobald's Road, Camden Road, Kentish Town Road, Kilburn High Road for example. The worst case in Camden is the Euston Road. Currently there's a huge billboard poster near the Town Hall that claims *"1,600,000 million people passing this location every two weeks."*

The pollution around Kings Cross is exacerbated every day by the stations at Kings Cross and St Pancras, where thousands of diesel engine taxis emitting particulates queue (and drop off), plus diesel powered trains still arriving at both stations. This is a problem common to all London termini and needs addressing with a London-wide approach.

Very little has been achieved in the last three years by Defra, or by the GLA. There has been a focus on seeking delays and waivers, rather than concentrated effort on bold action to redress our poor AQ. Spraying the worst roads with suppressant glue, the current TfL experiment on the Euston Road is expensive and is not a practical long-term solution.

We need to discourage journeys/traffic and encourage clean-engined vehicles. Whilst Camden can't single-handedly transform central London's AQ, we can encourage and participate in co-operation between neighbouring inner-London boroughs (and the GLA), for example by sharing our expertise in pioneering bio-methane clean fuel.

Mayor Ken Livingstone made big strides by introducing a Low Emissions Zone (LEZ) for heavy goods vehicles inside the M25 in 2008, introduced an inner London congestion zone and added particulate filters to all of London's buses. Since 2008 Mayor Johnson has made more modest strides and indeed he has worsened the problem on a number of important issues, for example:

[1] COMEAP is the Committee on the Medical Effects of Air Pollutants: It is a well-respected Advisory Committee of recognised independent experts that provides advice to government departments and agencies, via the Department of Health's Chief Medical Officer, on all matters concerning the effects of air pollutants on health

- Delaying the start date for introducing cleaner engine requirement for “white vans” and taxis from Oct 2010 until January 2012
- Abolishing the western extension zone (WEZ) in December 2010
- Removing all bendy buses from London’s road by 2012, with consequential increase in the number of buses to replace them
- Reprieved taxi age for acceptable registration to a minimum of 15 years (instead of 10 years originally proposed), from January 2012

Fortunately, there are two key events coming to a head in 2012 which will serve to focus attention on AQ: the London Mayoral election in May and the Olympics, in July and August.

European AQ laws concern two toxic pollutants: particulates (PM_{10} and $PM_{2.5}$) and nitrogen dioxide (NO_2). The law for smaller $PM_{2.5}$ particulates, those known to be most harmful to health, does not become statutory until 2015.

Unfavourable weather conditions and emissions carried from Europe has led to much elevated air pollution levels in London almost daily since mid-March this year. For example, in Camden there have been 36 AQ alerts in the 54 days to 9 May – that’s two out of every three days - yet how many people were actually aware that the sunny weather and east wind had brought such pollution? This also resulted in a formal Smog incident over the Easter weekend. This is a timely confirmation of just how urgent it is to take more stringent action to improve AQ, thereby protecting public health and Camden could and should show initiative and leadership.

All diesel vehicles emit particulate matter - even the newest and most efficient diesel engines. Diesel cars are however being encouraged by the fiscal policies set by the Department for Transport (DfT), the Vehicle Excise Duty (VED), which rewards low CO_2 emitting vehicles whilst totally ignoring the pollution and health consequences of diesel. These modern cars still release harmful particles. The Working Group therefore encourages Camden to follow the lead of the borough of Kensington and Chelsea and surcharge resident parking permits by at least £15pa for all diesel engine cars.

There are also other highly toxic particulates which should concern us: those from tyres and from brake pads. These can be heavy metals and even small quantities of arsenic. Also from old inefficient gas boilers, biomass boilers and demolition and construction sites such as Kings Cross and north of the British Library – the UKCMRI.

Currently, several monitoring sites in London, including the Euston Road in Camden, are in breach of European limit values for PM_{10}. Member states are allowed up to 35 days of elevated PM_{10} levels per year. In 2011, in the 106 days to Easter, London already exceeded the annual quota. This is evidence to the European Commission that London is not, despite aspirations, anywhere near compliance despite the waivers granted and aspirational assurances.

It is now the immediate prerogative of the Commission to instigate proceedings in the European Court of Justice to impose a penalty of up to £300m for London’s particulate breaches. Those proceedings would be lengthy and legalistic.

Perhaps more immediately attention-getting is the prospect of the Olympic Development Authority (ODA) withholding 25% of the broadcast revenue from the Olympics, £175m, if London's AQ is in exceedence during the Olympics. This looks to be highly likely, given the proposed dedicated road lane closures for Olympic traffic, which is bound to exacerbate traffic congestion in central London. Despite assurances to the contrary, to avoid that costly penalty, it may be necessary to introduce an alternate odds and evens number-plate ban during the month of the Olympics, as happened in the Bejing Olympics. A viable urgent alternative would be a Central London Low Emission Zone (LEZ) to temporarily ban from within London's congestion zone for the 100-day event ALL diesel vehicles that do not meet Euro 4. This could be enforced by the existing number-plate recognition cameras and it could be the precursor to subsequent retention of this restriction.

The European Commissioner for the Environment has taken a close interest in London's seeming lack of progress and has imposed a requirement that new short-term measures must be in train by 11 June 2011 to remedy London streets' high levels of pollution. Time is now very short, which should at least help to focus London and national politicians' attention. The Environmental Audit Committee (EAC) has just announced it is to immediately review AQ. The committee seeks written evidence submissions by 3 June.

There is also pressing danger on the NHS front: The health service is in hiatus, with the structure changing at every level. Statutory Public Health responsibility is transferring into Camden's control. I urge Councillor colleagues to ensure this vital function is preserved, protected and enhanced.

On behalf of the Working Group, I would like to thank, in particular, my Councillor colleagues Maya de Souza and Samata Khatoon and Camden officers, Katie McDonald and Gloria Esposito, plus Simon Birkett of Clean Air in London (CAL).

While this report cannot bring about any immediate solutions, we hope it will provide focus and begin to increase public understanding of this worrying silent killer that affects our residents in Camden. There follow a number of practical recommendations commended to Camden's Councillors and officers. We encourage Camden's Cabinet to make improving AQ a priority alongside its serious commitment to carbon reduction.

Cllr Paul Braithwaite
Chair of the Health Scrutiny Working Group on Air Quality (May 2011)

1 Scope of the project

1.1. In July 2010, the Health Scrutiny Committee expressed an interest in undertaking a scrutiny review on Air Quality (AQ) to highlight the work currently taking place in this policy area and to identify the main causes and activities that create air pollution in Camden.

1.2. It is a timely opportunity for scrutiny members to pursue this topic. When the Health Scrutiny Working Group started its project the Mayor of London was inviting comment on the draft publication of the new London-wide Air Quality Strategy (later published in December 2010). The House of Commons Environment Audit Committee (EAC) also published a report in June of 2010 confirming deaths attributable in the Capital at between 4,000 and 8,000 pa. Consequently, air quality has been given considerable focus throughout the year in a number of national news stories. This was particularly the case in the spring of 2011 with the warm weather and a smog alert being issued by the government for the Easter weekend in London and other cities on the eastern side of the UK.

2. As a Council, Camden has a statutory obligation to produce its own Air Quality Strategy. The group is keen for this strategy to be given a higher profile in the Council's sustainability agenda and for the agreed action plan to be promoted.

2.1. The terms of reference for this review are:

- To identify the main causes and activities that creates air pollution in Camden.
- To understand the possible impact of air pollution on the health of people in Camden, in particular those living in pollution hotspots.
- To consider the effectiveness of current work by different departments and organisations to reduce the effects of air pollution on the health of local residents.
- To make cross-cutting recommendations to the Cabinet, to the NHS and to partners to raise awareness of and reduce the impact of air pollution in the borough.
- These recommendations might also be brought to the attention of relevant wider bodies with responsibility for air pollution reduction such as the Department for Environment, Food and Rural Affairs (Defra), Transport for London (TfL), the Mayor of London and our neighbouring boroughs.

2.2. It is recognised that some of the recommendations, or suggested improvements might be difficult to implement in the current economic climate. However the Working Group takes the view that Camden could be an exemplar borough on aspects of this issue and lead the way on communication to the public surrounding the health impacts of poor air quality and making clear the benefits of improving air quality through behavioural measures. The coalition government and the GLA do agree that more needs to be done on communication of the health impacts of air pollution. Therefore, it is an opportune time for Camden to work with and have the support of partner agencies to put air quality at the forefront of both the sustainability and health agenda.

3. Recommendations

The recommendations are highlighted throughout the report following on from the relevant evidence.

The recommendations from the Working Group fit into three categories; **Developing public understanding**, **Transport** and **Camden's Air Quality Action Plan and Partnership Working:**

.

Developing public understanding

1. The Working Group recommend that Camden Council hosts an Air Quality Summit in September to invite participation by residents and third sector organisations to hear from Kings College, Defra, TfL, CAL and the NHS about Air Quality health impacts, per Camden's recent Green Summits.

2. We recommend that Camden's Sustainability team looks at implementing targeted air quality campaigns at both polluters and those most vulnerable (for example cyclists and taxi and HGV drivers to the effects of air pollution and produce a strategy and prospective budgets. We suggest seeking funding from the RAC Foundation, European Commission, TfL, Wellcome Trust, Defra etc. to create a series of modular videos for primary schools to raise awareness about the source and health impacts of air pollution in particular road traffic.

3. We recommend a link with Camden North Reach team to utilise the successful Kings College smartphone App and the soon-to-be-revised AirTEXT system with COPD rehabilitation service patients, incorporating these alert systems into the wider COPD service.

4. We recommend that the Council pilot air quality awareness days through the Council and local NHS websites and staff intranets. Further, the Council should encourage local communities to propose local car-free days and cycle to school experiments.

Transport

5. We recommend that the Council work in partnership with neighbouring boroughs, the GLA and TFL to create a Berlin-type central London LEZ inside the congestion zone, banning all diesel engine vehicles that do not meet Euro 4 standards, to be introduced as an emergency measure for the Olympics - with a view to extending subsequently. The Working Group recognises the complexity of this task but notes the likelihood of £175m withholding of broadcast rights revenue unless such a measure is instigated.

6. We suggest a London-wide approach to taxi pollution. We recommend TfL introduce a telephone hotline for Londoners to report both buses and taxis that are emitting soot, as traps are obviously proving ineffective. We encourage working with the Public Carriage Office and Defra towards fast-track introduction of clean fuel taxis through a scrappage scheme and an

urgent focus on an immediate pan-London approach to station termini queuing and loading. Camden should seek to greatly increase the number of simultaneous loading positions at Kings Cross and St Pancras and encourage the use of Marshals.

7. Camden should seek to share its expertise (for example pioneering bio-methane clean fuel) and encourage co-operation between neighbouring boroughs (for example, reciprocal use of charging points) and with the GLA to work on projects to improve AQ, increase transparency and public understanding.

8. We recommend that the Sustainability team considers and reports on how the Council plans to take action against idling vehicles.

Camden's Air Quality Action Plan, communication and partnership working

9. The Working Group recognises that Camden has a comprehensive Air Quality Action Plan. However, we recommend that AQ is elevated up the sustainability agenda within Camden Council, especially in terms of raising public understanding. It should be equal in status to climate change and be integrated into the Council's strategies and those with local partners. For example, our current Climate Change Alliance should be encouraged to follow the City of London's new "City Air" initiative to businesses and add to its current CO_2 focus raising the profile of AQ to businesses

10. We recommend that the Council and NHS include data on AQ in the Joint Strategic Needs Assessment and use this as the springboard for negotiating local strategies and as a platform for raising understanding and awareness of AQ issues.

11. We recommend that Camden's Sustainability team establishes links with the NHS for joint working by implementing a Council/NHS Communications plan on AQ. The current process of absorption of Public Health within the local authority is noted to be a period of considerable risk but it also presents an opportunity to strengthen and integrate. The Sustainability team should appoint an officer to lead on this project and act as a conduit for the key players, potentially with clinicians at RFH and UCLH.

12. We recommend that the Council and NHS seek financial funding and support from DEFRA and the GLA, to commission a study looking at perceptions of AQ sources and health effects in Camden, comparing Somers Town ward with a ward in the north of the borough. This would involve workshops based on GP practices and focus groups to find out what residents understand about air pollution and its sources and actual experience with the objective of guiding the Council's own communication campaigns and changing behaviour.

Councillors Paul Braithwaite,
Maya de Souza and Samata Khatoon

3.1. Methodology

3.2. The Group held evidence sessions with London's Air Quality Network Group at King's College (LAQN), Senior officers from the NHS and the Council, Defra, the GLA and Transport for London (TfL) during the period between December 2010 and May 2011 and heard from a number of sources in order to form their analysis.

3.3. So as to provide Members of the Working Group with a solid understanding early on in the process Council and NHS officers, including Camden's Director of Public Health presented an overview of the statutory framework, as well as data on the Camden context and details on how a partnership approach might work to improving Air Quality in Camden.

3.4. Having taken into account this evidence, the Working Group formally agreed their findings and recommendations in May before prospectively presenting to the Health Scrutiny Committee on 1 June.

3.5. This report contains a summary of the evidence received by the Working Group and outlines the findings. The group's recommendations, for endorsement by the Health Scrutiny Committee are highlighted throughout the report, following on from the relevant evidence.

4. Air Pollution

3.1 Air pollution is a mixture of gases and particles that have been released into the atmosphere by human activities. Generally, air pollution comes from the burning of fossil fuels such as coal, oil, natural gas, petrol or diesel.
The main cause of air pollution in Camden is pollutants from traffic and gas boilers. In total there are seven main pollutants in our air: nitrogen dioxide (NO_2), particulates (PM_{10}), carbon monoxide (CO), sulphur dioxide (SO_2), ozone (O3), benzene and lead. NO_2 and fine particulates (PM_{10} and $PM_{2.5}$) are associated with short term and long term adverse health effects including respiratory and cardio vascular illness**.**

3.2 PM_{10} and $PM_{2.5}$ relate to the diameter of the very small particles of pollution, which are a fraction the size of a human hair. One of the principal sources of PM_{10} is from diesel motor vehicles and also coal burning power stations. Not all PM_{10} is man-made and there is a portion from the natural background that cannot be controlled by policy or human action. Larger particles cause straining of nasal secretions and smaller ones more dangerously can travel deeper into the lungs and blood stream.

3.3 Nitrogen Oxides (NOx – including nitrogen dioxide NO_2 and nitric oxide) are released directly from combustion sources such as vehicle engines and gas boilers. NO_2 can adversely affect some people with asthma and irritate the lining of the bronchial tubes in the lungs. As well as having direct effects these pollutants can combine in the atmosphere to form ozone, a harmful air

pollutant (and potent greenhouse gas) which can be transported great distance by weather systems.

The Council has long recognised that protecting local air quality has a vital role to play in protecting public health and the environment as well as enhancing quality of life

3.4 **Statutory Framework**
The legal framework concentrates on ten pollutants including nitrogen dioxide and fine particles, (PM_{10}). Both are regulated by the pan-European legal Directives. These contain national air quality standards and objectives to be met by the government in order to protect human health.

3.5 The objective of the air quality policies of the EU is to achieve levels of air quality that do not give rise to unacceptable impacts on, and risks to, human health and the environment. To enforce this, the EU sets limits of air pollution for the main pollutants and non-compliance can lead to fines. The Secretary of State for the Environment has the obligation to achieve the EU Directive limit values throughout the UK.

3.6 The whole of London comprehensively fails to meet the annual mean AQ objective and EU Limit Value for nitrogen dioxide (NO_2). A number of heavily trafficked streets over the past three years have started to also fail the stricter hourly NO_2 objective. At present a number of areas in London including parts of Camden, are failing to meet daily mean AQO and EU Limit Values for PM_{10}. As a result of this the UK Government is at risk of being subject to infraction proceedings and, if found to have failed to comply with the Directive, heavily fined by the European Commission - up to £300m. Additionally, the proposed EC Directive on NO_2, due to become UK law in 2015 stands virtually no chance of being achieved for the foreseeable future.

4. Air Quality and the Impact on Health

4.1 In recent years the link between exposure to air pollution and the effects on health has been given a sound scientific basis. Reports from the Committee on the Medical Effects of Air Pollutants (COMEAP) and London's Air Quality Network (LAQN) have stated that air pollution causes serious ill health and premature deaths. It was reported in the 2010 Environment Audit Select Committee (EAC) study that poor air quality reduces the life expectancy of **everyone** in the UK by an average of six to eight months (more so for those with heart and lung conditions) and up to 50,000 people a year may die prematurely because of it.

4.2 The effects vary in severity including mortality (death) and what is known as morbidity (the impairment of quality of life and well-being and the occurrence of illness throughout a lifetime). This figure masks the fact that different areas are not impacted in the same way, and in fact people in some areas suffer a much more severe reduction in the length of their life than those in other areas. Camden is one of the badly affected areas, primarily because of the busy roads that pass through it.

4.3 Emerging research shows the effect on the health of children. The chronic effects of air pollution on lung development were recorded in a German study published in the Lancet in 2007. The research followed 3,677 secondary-aged children from ages 10 to 18. It found that those children living 500 to 1500 metres from main roads were most affected with a 3% reduction in lung growth which cannot be recovered in later life[2]. King's College London has also been conducting a study with school children in east London which indicates primary-aged children are suffering lung under-development of at least 15%[3]. Studies from the United States suggested children's lungs are smaller and do not develop to full capacity if they live on or go to school close to busy roads. Professor Kelly states that air pollution does not kill directly. Instead, it works alongside other entities (such as viruses, bacteria and allergens) to accelerate and exacerbate health problems, which can lead to hospitalisation, and even death in the most severe cases. This has a severe and costly impact on the National Health Service

4.4 The air pollutants nitrogen dioxide (NO_2) and fine particulates (PM_{10} and $PM_{2.5}$) are associated with both short and long term health effects including respiratory and more recently NO_2 has identified cardio vascular illness, one of the most prevalent causes of death in the UK. Long term exposure to pollutants, especially fine particulates, can contribute to the development of chronic diseases and can increase the risk of respiratory illness; research has shown that these particles can be inhaled deep into the respiratory tract as well as aggravating existing respiratory and cardio vascular conditions such as asthma.

4.5 High concentrations of NO_2 can also cause inflammation of the airways. The impact of air pollution is outlined in the World Health Organisation (WHO) diagram below. The Working Group is keen that GPs and Trusts work together in Camden and start to record the possible impacts of air quality so that a clearer picture of the severity of the air pollution can be seen and widely publicised.

[2] Gaudermann et al, **Lancet 2007**

[3] Griffiths C, Queen Mary's University of London ***Evaluation of the impact of the Low Emission Zone on East London schoolchildren (early results)*** **May 2011**

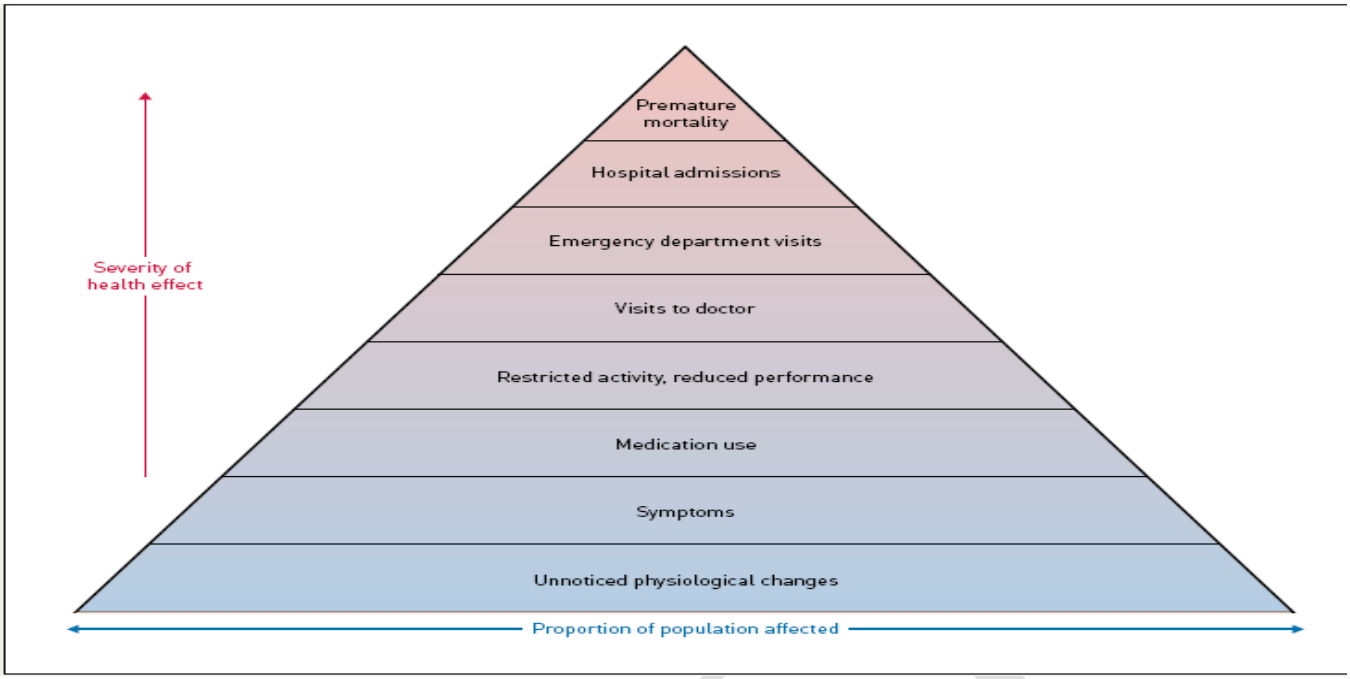


Figure 1: World Health Organisation (2005)

4.6 The EAC Select Committee reported that despite the significant evidence surrounding air quality and its negative impacts on health, it is still not viewed as a priority by the UK government. Professor Frank Kelly from Kings College London cites four reasons not to be complacent about AQ and Health:

- The epidemiologically observed association between premature death and long term residence in areas with high PM concentrations is robust
- The deaths are largely down to cardio-pulmonary causes.
- Associations have been observed with asthma exacerbations and aggravation of other respiratory disease, and in many locations the prevalence of asthma and allergy and PM concentrations.
- Proximity to busy roads with a high density of diesel vehicles increases the risk of negative health effects.

4.7 The Working Group notes these points and takes the view that there is far too much complacency about these risks. The effects on health and the working group's recommendations are considered later in this report.

5. London Context.

5.1 London suffers from poor air quality and we know that parts of London are amongst the worst in the UK and Europe for PM_{10} and NO_2. Concentrations of air pollution are measured on a regular basis at over a hundred sites across London and the measurements are taken by a complex array of monitors overseen by King's College London with hourly and daily results published on the London Air Quality Network website. Camden operates four sites within the London Air Quality Network – Bloomsbury, Swiss Cottage, Shaftesbury Avenue and Euston Road.

5.2 **The Mayor's London Air Quality Strategy (MAQS)**

The Mayor of London has a statutory duty to reduce the levels of seven locally managed pollutants to achieve the Government's air quality targets. The Mayor's London Air Quality Strategy was published in December 2010 and aims to achieve significant reductions in emissions for air pollutants in Greater London in particular from road transport. The most significant include the introduction of Low Emission Zone phase 3 for LGV operators, and a taxi age policy is proposed in order to reduce emissions in future years.

As well as transport the strategy sets out a framework for improving London's AQ and measures aimed at reducing emissions from homes, offices and new developments, along with raising awareness of air quality issues:

These will be delivered through the following initiatives:

- A 15-year age limits for black cabs from 2012
- Promoting low-emission vehicles (such as electric cars)
- New standards for the Low Emission Zone
- Refitting older buses
- Targeted measures for areas where air quality is poor.
- Using the planning system to reduce emissions from new developments
- Retrofitting homes and offices to make them more energy efficient.

5.3 The Working Group shares the view with many others in the Air Quality community that the Mayor's strategy does not go far enough. Especially when it is considered that Londoner's live with the worst air quality in Britain. It is worrying that some targets aimed at improving air quality have been scrapped or delayed in the new policy. These include plans to charge £25 per day for heavy polluting vehicles, and the abolition of the western extension congestion charge (WEZ). Professor Frank Kelly commented that instead of tightening up policies they were being dismantled.

5.4 Camden's own response (which the Working Group endorses) to the MAQS suggested that the Mayor should trial biomethane taxis as part of the work that will be carried out to investigate biofuels. Biomethane taxis would be extremely useful in areas of particularly poor air quality, given their reduced NOx and particulate emissions. Camden operates a biomethane refuelling station at its depot in Kings Cross, which is an ideal location for drivers to refuel trial vehicles in central London. By avoiding the escape of this gas into the atmosphere, we would also avoid unnecessary carbon emissions.

5.5 Camden's response also recommended that the Mayor considers a Green Taxi initiative that would require taxi drivers of Euro 4 vehicles and those powered by alternative technology and clean fuels (such as hydrogen fuel cell, electric, LPG) to have a badge on their windscreen, and possibly advertised on and in the taxi itself, identifying their 'green' status. Camden would welcome the Mayor to work with the Public Carriage Office to establish 'green taxi zones' in air quality hot spots around London such as Kings Cross and Euston Stations. Green taxi zones would only permit the cleanest taxis (i.e. those allocated with Green Taxi status) to operate in these areas.

5.6 With regard to improving emissions from London's bus fleet, Camden encouraged TfL to consider the use of biomethane gas. This would significantly reduce air pollutant emissions when compared to a diesel fleet – PM_{10} by 90% and NOx by 60%, and added benefits in terms fuel savings would also be achieved. A short term improvement for NOx could be achieved by retro-filtting London's oldest buses with selective catalytic reduction exhaust equipment and TfL are about to start evaluation by experimentation.

5.7 Overall, Camden responded that it was broadly satisfied with the measures proposed in the MAQS to improve air quality in London. The only transport measure Camden challenged that could have been more challenging was the proposal in Policy 4 relating to reducing taxi emissions –

'*The Mayor will accelerate the uptake of cleaner, newer vehicles into the taxi fleet by introducing age-based limits for taxis. From 1 January 2012, no licences will be issued for taxis over 15 years old.'* [4]

Camden is not alone in its view that this element of the strategy is too weak. London should be leading the way on cleaning up its existing 23,000 vehicle black cab fleet. Emission reductions could be achieved much faster if a 10-year age cap was introduced for licensing new taxis. However, taxi drivers are adverse to this proposal and raise concerns about the financial implications of reducing the life expectancy of their vehicle by a further five years (which could be mollified by a scrappage scheme).

6. Camden Context

The whole of the borough of Camden was declared an Air Quality Management Area in 2000 for failing to meet the government's AQ standards for particulate matter (PM_{10}) and nitrogen dioxide (NO_2). The Council introduced an Air Quality Action Plan in 2002, this was revised in 2009. The Council has a statutory duty to continuously monitor and assess air pollution, against the Government's AQS.

6.1 The revised and updated AQAP for Camden brings together a variety of measures to help reduce particulate matter and nitrogen oxides emissions from the four main emission sources – **road transport, gas boilers, new developments and small industrial processes**. The maps on the following pages show the hotspots for PM_{10} and NO_2 in Camden.

One of the key challenges of Camden's AQ Action Plan (AQAP) is to reduce road traffic emissions and Camden's Green Transport Strategy and Local Implementation Plan (LIP) has an important role to support this. The roads with the highest traffic volumes such as Euston Road, Tottenham Court Road Finchley Road and Camden Road experience the worst air pollution levels in the borough. The action plan brings together a variety of measures to help reduce particulate matter and nitrogen oxides emissions. There are, however, a number of complexities and challenges when trying to use monitoring data to determine the efficacy of these measures. For example, differentiating the effects of weather from Council intervention and emissions from neighbouring boroughs or from continental Europe as well as measures undertaken at a

[4] The Mayor's Air Quality Strategy, *Clearing the Air* December 2010

regional and national level. There is also very limited impact that the Council has on the governance of the main TfL administered roads in the Capital and national policy. As a local authority Camden is responsible for reducing the volume of motor traffic and increasing the use of public transport, walking and cycling. Camden has had success with several projects over the last ten years but the impact would be greater if there was more joint working with TfL.

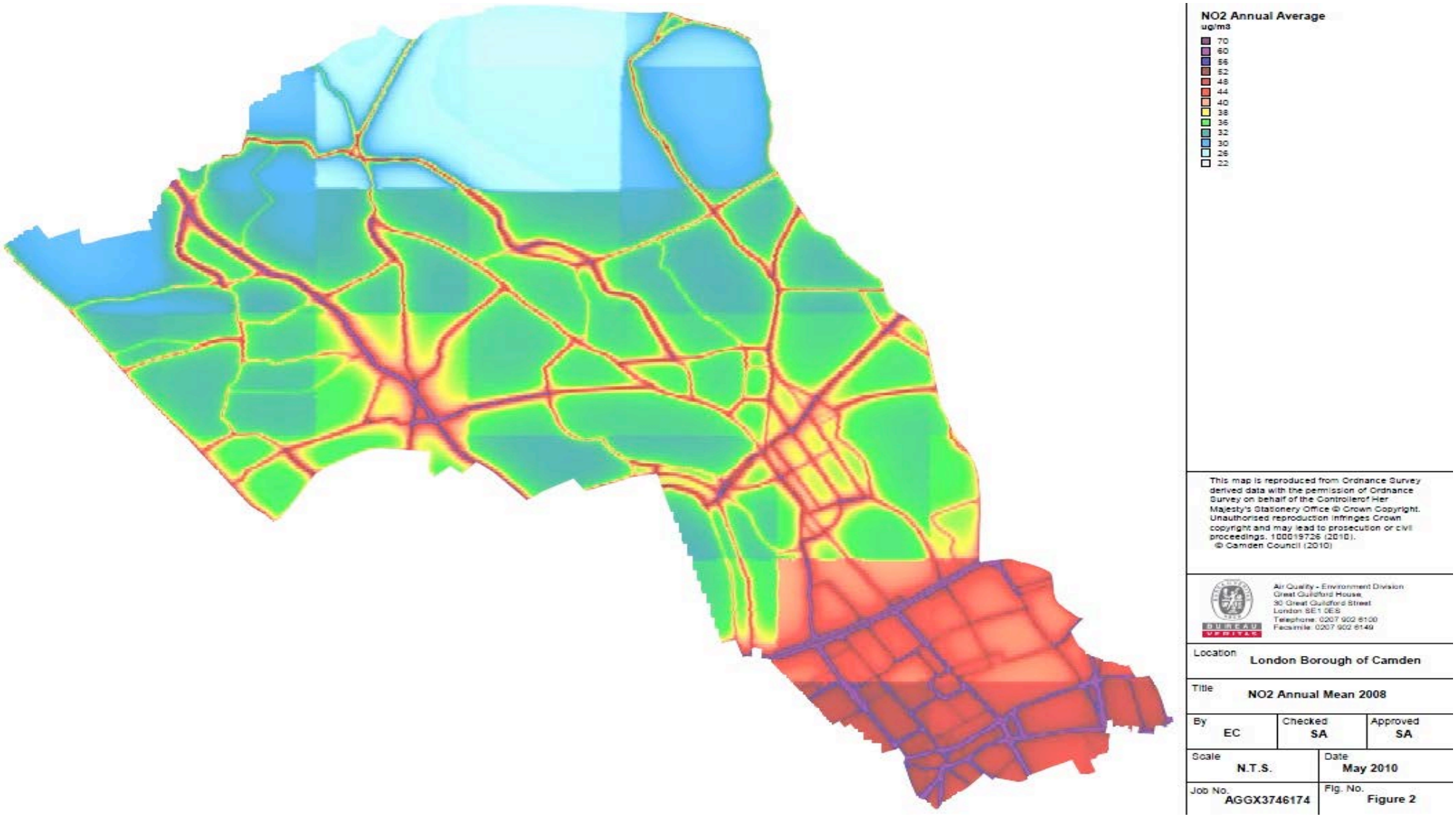
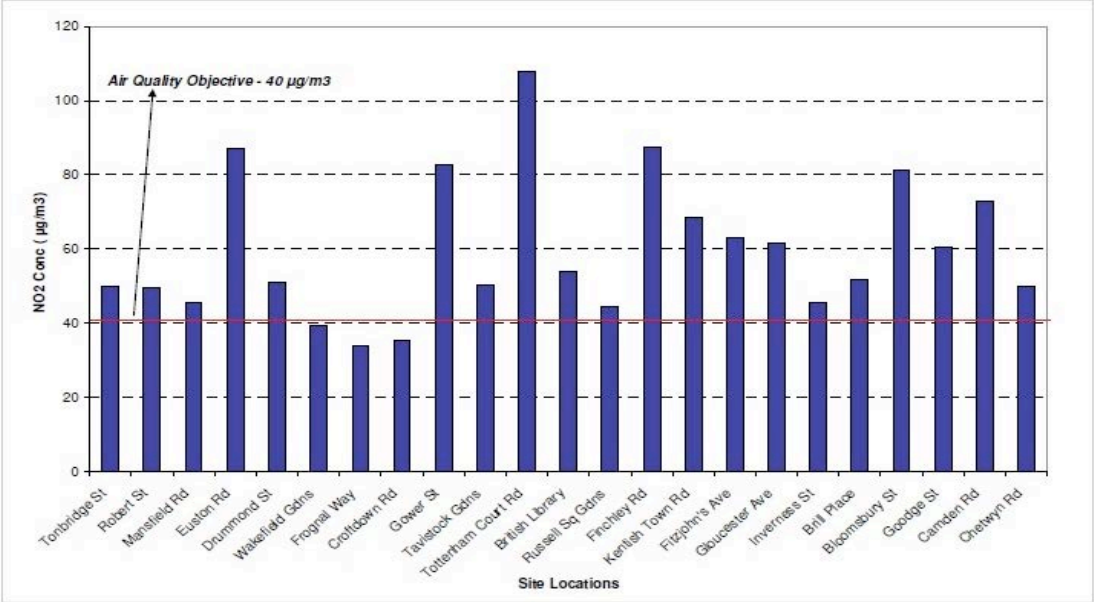


Figure 2 Spatial variation in annual mean NO2 concentration (µg/m3) across Camden

Figure 3 Spatial variation in annual mean PM10 concentration (µg/m3) across Camden



Source: LB Camden Air Quality Modelling Report, Bureau Veritas, 2010

Figure 4

6.3 Air pollution concentrations are highest along Camden's most congested streets: Euston Road, Finchley Road (particularly around Swiss Cottage), Tottenham Court Road, Upper Woburn Place and Tavistock Square. The south of the borough experiences particularly poor air quality due to the high levels of traffic in this area and the large proportion of taxis, vans and lorries. Tall and densely positioned buildings along Camden's busiest streets create a 'street canyon effect' which reduces the dispersion and dilution of traffic emissions, exacerbating air pollution levels in these parts of the borough.

Camden like many other boroughs across London has consistently failed the Government's air quality objectives for NO_2 and PM_{10}. Camden exceeds the annual NO_2 objective along most of Camden's busy roads as can be seen in figure 4 above. The sites measuring over 60µg/m^3 annual mean NO_2 also exceed the short term hourly NO2 objective.

6.4 Emission Sources

Figure 5. PM_{10} sources in Camden

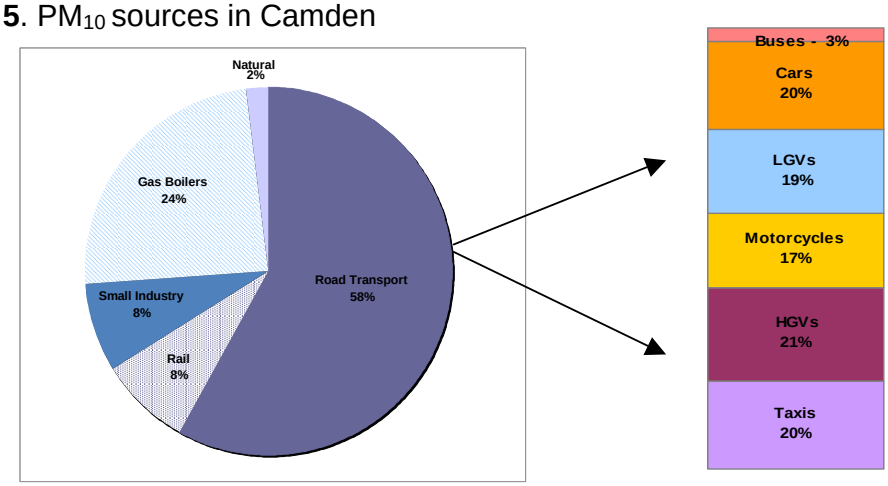
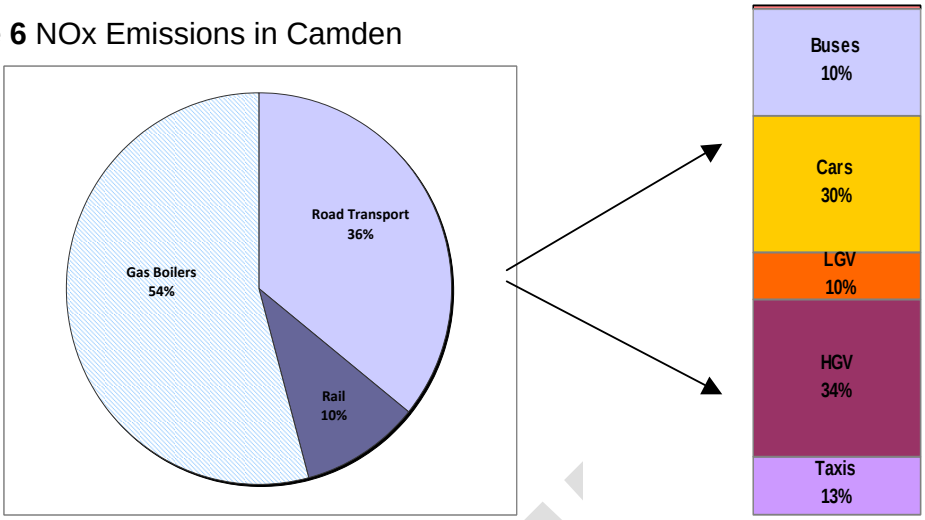


Figure 6 NOx Emissions in Camden



6.5 The key aims of Camden's AQAP are to:

- Lead by example and reduce NOx and PM_{10} emissions associated with Camden's own buildings and transport services.
- Encourage reductions in fossil fuel use, the adoption of clean fuels and technology and promote energy efficiency.
- Raise awareness about air quality in Camden, making links with protecting public health and promoting lifestyle changes which can help reduce air pollution
- Work in partnership with public and private organisations to foster improvements in air quality.
- Ensure measures which serve to reduce NOx and PM10 emissions
- compliment actions to mitigate CO2 emissions and vice versa

6.6 The Working Group recognises the thoroughness of Camden's AQAP but would like to see its objectives and measures promoted much more widely in the borough. Particularly in regard to Objectives (1) provision of air quality information (2) strengthen promotional work relating to air pollution and health and (3) working with the Community on the Action Plan. The Council has a number of sustainability communication campaigns, for example **'Small Steps, Big Difference'** which involves awareness raising initiatives linking to climate change, with measures to promote better health, sustainable transport, use of clean vehicles and energy efficiency. The Working Group is concerned that air quality is not being given anything like equal status to climate change in sustainability communication campaigns and we strongly recommend that they be viewed on a par in future. The group believe that Councillors in Camden should seek to get the message across in their own wards. To this end, the Health Scrutiny Sub Committee is recommending a half-day event at Camden Town Hall as part of an on-going campaign to encourage resident involvement.

Recommendation
The Working Group recognises that Camden has a comprehensive Air Quality Action Plan. However, we recommend that AQ is elevated up the sustainability agenda within Camden Council, especially in terms of raising public understanding. It should be equal in status to climate change and be integrated into the Council's strategies and those with local partners. For example, our current Climate Change Alliance should be encouraged to follow the City of London's new ground-breaking "City Air" initiative to businesses and add to its current CO_2 focus, raising the profile of AQ to

7 Transport

7.1 Taxis

The Working Group has grave concerns about the number of dirty engined older taxis in London (pre Euro 3). It is said that just 23,000 taxis are responsible for 12 per cent of the oxides of nitrogen (NOx) and 24 per cent of the particulate matter (PM_{10}) of road transport emissions in central London[5]. The GLA is proposing the introduction of marshals at Kings Cross, St Pancras and Euston but there are some doubts whether this will succeed in persuading taxis not to keep their engines idling. The Working Group wishes to further explore a by-law to preclude taxis from picking up from Camden stations unless they have a Euro 4 engine. But this is a City-wide issue and would best be addressed by the Central London Transport Partnership.

Recommendation
We suggest a London-wide approach to Taxi pollution. We recommend TfL introduce a telephone hotline for Londoners to report both buses and taxis that are emitting soot, as filter traps are obviously proving ineffective. We encourage working with the Public Carriage Office (now part of TfL) and Defra towards fast-track introduction of clean fuel taxis through a scrappage scheme and an urgent focus on an immediate pan-London approach to station termini queuing and loading. Camden should seek to greatly increase the number of simultaneous loading positions at Kings Cross and St Pancras and encourage the use of Marshals.

7.2 Buses

The Working Group is concerned about the effects of buses passing through Camden and the emissions they produce. During the session with officers from the sustainability team, Members were keen to understand what the Council could do to encourage TfL to get rid of older buses. The Working Group is keen that Camden encourages TFL to retrofit SCR to London's older buses - because the particulate traps currently used have the unfortunate side-effect of boosting direct NO_2. With the recent news that the Transport

[5] http://www.energysavingtrust.org.uk/business/Business/Transport-advice/Other-services/City-schemes/Taxi-programmes

Secretary is providing the London mayor £5 million to improve air quality in London, it is hoped that this fund will be used in such a way. The DfT has said that the funding will be used for a programme of localised measures to tackle hotspots, including trials of dust suppressant technology and redeployment of the cleanest buses on routes through these areas and measures to reduce vehicle idling.

7.3 **HGV's**

A high proportion of NOx and PM_{10} emissions from road transport arise from heavy good vehicles (HGVs). The Working Group suggests that there is a need to analyse the reasons for these movements and consideration of ways of reducing these emissions. This could include a freight consolidation and deconsolidation centre at the edge of the borough. Camden has been carrying out this work for a number of years through feasibility studies funded through the LIP.

7.4 Motor cycles

The Working Group believes that the effect of the congestion zone being free to motorbikes has been detrimental. This is because it has hugely boosted sales of scooters and motorbikes for commuters. Contrary to public perception, motorbikes, particularly two stroke engines which burn oil as well as petrol, are very far from clean. Most motorbikes on the road only match the unsatisfactory Euro 3 emissions levels. Hence, motorcycle commuters are materially contributing to central London's pollution whilst enjoying a free ride (and doing nothing for their rider's or our health). This is why Westminster has proposed to start charging for motorcycle parking. This is an option not endorsed in Camden, since it would mean creating more bays and give the riders a right to expect provision. The Mayor's experiment of allowing motorbikes alongside bicycles in bus lanes has been ill-received by cyclists and has done nothing to decrease motorbike accident rates. Camden does, however, already have in hand an emissions-based ownership permit scheme to partly redress the free ride motorcycle commuters have enjoyed to date. The Working Group is keen to understand this initiative and its impact further.

7.5 **Encouraging healthy travel**

There is established research and evidence demonstrating the links between health and transport. Active travel modes such as walking and cycling benefit the environment through reduced emissions, reduced congestion and road danger on the road network. Camden's transport strategy states that there is significant potential for increase in walking. Around 350,000 trips that are currently undertaken daily in Central London by mechanised transport could be walked (5 per cent of all trips in the region). Fulfilling some of this potential growth is already a challenge for Camden and the Working Group would like to see the "www.walkit.com" website (which provides walking routes around different parts of the UK in order to assist the public avoid exposure to poor air quality) promoted more widely throughout the borough. The Central London Air Quality Cluster Group has worked in partnership with "www.walkit.com" to develop 'air pollution aware walking routes.' Camden should continue its involvement in this project.

7.6 The Working Group has concerns about the effect that air pollution has on those taking strenuous physical exercise outdoors on or close to main roads in the borough. Cycling has increased greatly in London in recent years and Camden has led the way with cycling doubling since 2001. This is expected to increase significantly with the introduction of the Barclays cycle hire scheme. The scheme has given cycling an enormous boost and introduced thousands of newcomers to the benefits of cycling, many becoming cycling commuters. This has been encouraged further by the Mayor of London's introduction of new radial "Cycling Highways". However, these radial highways tend to be superimposed on or around already overloaded main arterial roads, such as the A23 through Clapham. One is planned for Camden's Kilburn High Road, which is brought to a regular standstill in rush hour, with seemingly every third vehicle an idling bus. The super-highways are likely to be toxic canyons and the Mayor does cyclists a disservice encouraging riding through such pollution. Cyclists in cities inhale tens of millions of toxic nanoparticles with every breath at least five times more as the sedentary driver or pedestrian[6]. Thus, small particulates are far more likely to penetrate cyclist's blood stream with potentially detrimental effects. Whilst it may actually be tempting for the commuter to ride along the bus lane on Euston Road, which is comparatively fast and protected, this is not the healthy option. We need to educate cyclists (and pedestrians) to use parallel side roads wherever possible and understand how bad our clogged roads are for health.

.

Recommendation
We recommend that Camden's Sustainability team looks at implementing targeted air quality campaigns at both polluters and those most vulnerable (for example children, cyclists and taxi and HGV drivers) to the effects of air pollution and produce a strategy and prospective budgets. We suggest seeking funding from the RAC Foundation, European Commission, TfL, Wellcome Trust, Defra etc. to create a series of modular videos for primary schools to raise awareness about the source and health impacts of air pollution in particular road traffic.

7.7 **Car Clubs**
Although the average car journey is 8.5 miles, car owners want the facility of being able to drive the occasional trip to see relatives elsewhere (or to the seaside). In practical terms the rapid expansion of car clubs in London is probably making the greatest impact in reducing private car ownership, car usage and taking old cars off the road. The car club project was encouraged by TfL and they have been spreading throughout Camden. There are three main accredited car clubs in Camden and the Council website can help locate the nearest. The cost is usually about £5 per hour, including petrol, insurance, tax and maintenance. The provision of hybrids should be encouraged.

[6] Luc Int Panis, *Transport Research Institute at Hasselt University in Belgium,* May 2010

7.8 **Bio-methane fuel**

Biomethane is a clean and renewable transport biofuel. Compared to diesel vehicles, biomethane produced significantly lower PM10 and NOx emissions. It has attractive financial benefits, being priced at approximately 20% lower than diesel. Lorries and large vans which run on biomethane gas comply with the particulate matter emission standards set by the London Low Emission Zone, hence saving a £200 daily charge.. Gasrec is the Europe's leading commercial producer of liquid biomethane fuel. The fuel is being produced from landfill gas released during the decomposition of organic waste. The landfill gas is then upgraded to liquid bio-methane which can be used in vehicle run on compressed or liquid natural gas.

7.9 Camden, in partnership with liquid biomethane produced Gasrec, has installed Europe's first compressed bio-methane refuelling station at its transport depot in York Way, Kings Cross. The refueling station is open to public and private fleets running compressed biomethane gas vehicles. Currently compressed biomethane gas fleets operated by Waitrose and Laing O'Rourke and will be joined by John Lewis Home Delivery. Camden is proud to be at the forefront of trialling this technology which is being embraced by enlightened companies.

Recommendation

Camden should seek to share its expertise (for example pioneering bio-methane clean fuel) and encourage co-operation between neighbouring boroughs (for example, reciprocal use of charging points) and with the GLA to work on projects to improve AQ, increase transparency and public understanding.

7.10 **Low Emission Zones**

The Working Group is interested in Low Emission Zones (LEZs) and whether it could be viable to implement a LEZ in Camden in partnership with other boroughs through the Central London Air Quality Cluster Group. An LEZ aims to reduce the pollution of diesel–powered vehicles in London by charging vehicles that fail specific emission standards (e.g. Euro 4). Like the congestion charge, an LEZ could be monitored using automatic number plate recognition cameras. It is proposed that different vehicles would be affected over time and tougher emission standards would be implemented progressively.

Recommendation:

We recommend that the Council work in partnership with neighbouring boroughs, the GLA and TFL to create a Berlin-type central London LEZ in the congestion zone, banning all diesel-engine vehicles that do not meet Euro 4 standards (NOx or PM10 or both?), to be introduced as an emergency measure for the Olympics - with a view to extending subsequently. The Working Group recognises the complexity of this task but notes the likelihood of £175m withholding of broadcast rights revenue unless such a measure is instigated.

7.11 The government has put emphasis on Local Authorities taking responsibility for environmental sustainability. During the course of the project, Camden councillors heard from a number of residents in the Somers Town area who were concerned at never-ending major construction projects, idling vehicles and the effect on AQ and their health. Whilst it is recognised that idling vehicles do not make a big contribution to the high levels of particulates PM_{10} and nitrogen dioxide NO_2 in central London, the Working Group recognises that there are preventative issues with regards to helping improve local AQ and quality of life in Camden. The practical problem is enforcement.

7.12 The Mayor of London's report included an example from Wandsworth Council on the preventative measures, including the use of signs to reduce the number of idling vehicles. The Working Group recommends that Camden experiment with implementing similar a measure and use St Pancras and King's Cross as a pilot.

Recommendation
We recommend that the sustainability team considers and reports on how the Council plans to take action against idling vehicles.

8. Air Quality and Public Health in Camden

8.1 It is widely acknowledged that there is a link between exposure to air pollution, both indoor and outdoor, and the effects on human health. These effects can vary in severity including mortality (death) and morbidity (the occurrence of illnesses). A number of studies have found that increased exposure to particulates can impact upon respiratory and cardiovascular conditions, which in turn can lead to increases in treatment management and hospital admissions.

8.2 At a local Camden level it is often very difficult to link areas of air pollution to the health outcomes of the local population because the relationships are complex. For example, one may live in an area of lower pollution but go to work (or school) in an area of high pollution. Or, there could be other lifestyle factors present, which also impact upon respiratory or cardiovascular conditions. These might include, smoking, diet, alcohol or physical inactivity. In addition, any meaningful analysis is also limited by the data available at PCT level.

8.3 While it is important to acknowledge these factors it should not detract from the growing international body of evidence that highlights the health benefits of reducing air pollution.

8.4 Over recent years NHS Camden (the PCT) has commissioned a number of initiatives with a focus on being more sustainable to help towards reducing climate change and in doing so contributing towards improving air quality. Many of these initiatives have focused on behaviour change. These include:

- NHS Camden sustainability strategy (energy generation and use, water and pollution waste and recycling Sustainable design and construction. Sustainable procurement: Business management commissioning for sustainability Partnerships. Public health staff awareness and action etc).
- Hybrid vehicles; Cycle racks for staff; Cycle mileage reward schemes; Low emission ambulances.
- Active environment as a key strand within Pro-active Camden Partnership.
- Introduction of over 50 GP walking maps.
- Re-design of Royal Free Hospital transport maps to increase walking from main transport hubs.
- Outdoor Gyms (88% of people travelling to them have walked/cycled/jogged)
- BTCV Green Gyms

8.5 A number of research papers have also been commissioned, particularly around Chronic Obstructive Pulmonary Disease (COPD) prevalence and asthma trends. It is difficult to attribute the trends to air quality but there is evidence to show that prevalence of asthma within Camden registered patients compared to national prevalence shows a slight increase over time with the national occurrence currently at 5.9% (4.1% in Camden). Numbers have remained relatively constant over time, although the numbers of asthma patients has increased by over 700 since 2006.

Figure 7: Trends in COPD prevalence Camden registered patients 2006/07 to 2009/10.

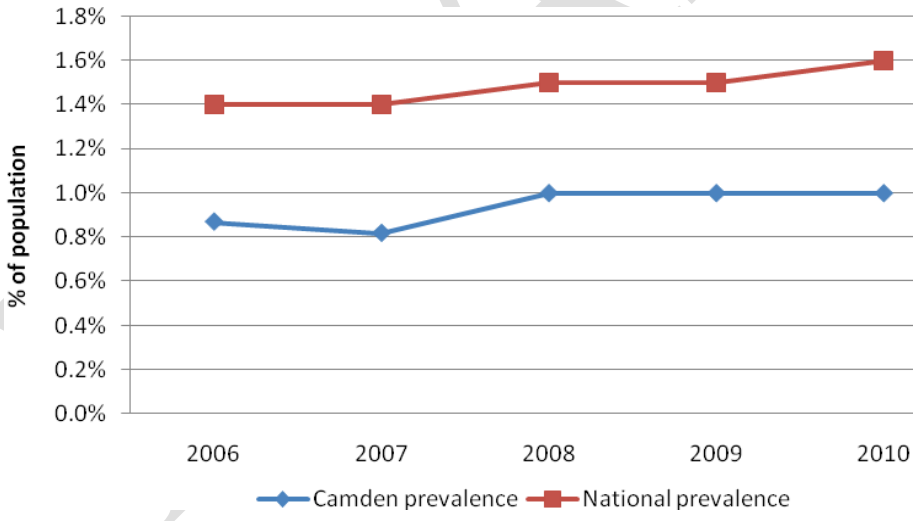
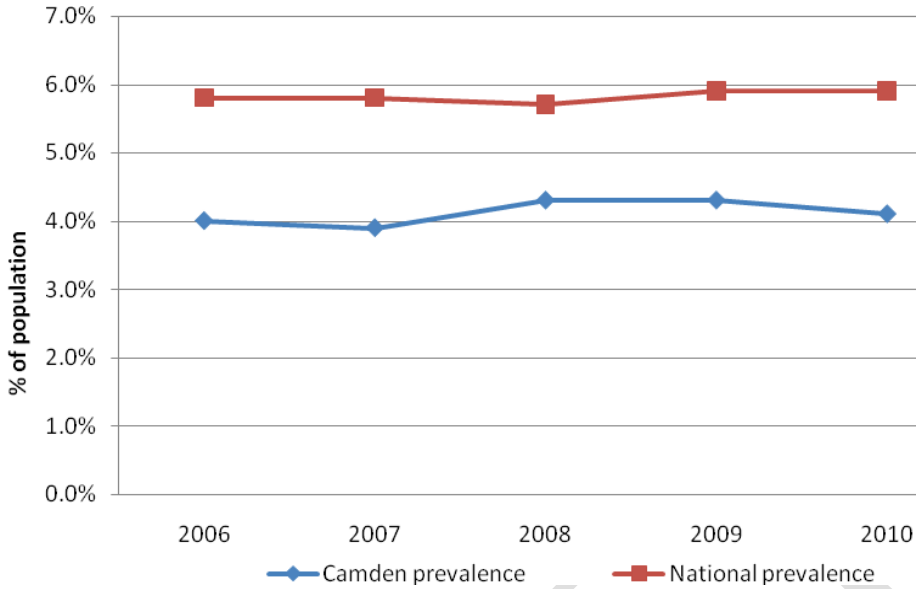


Figure 8. Recent Asthma trends within Camden persons 2006-2010



8.6 The Working Group was extremely surprised to find that very little information is collected from the 39 Camden GP practices (and three leading hospitals) on the health effects of polluted air. One of the only indicators is dispensing of inhalers for asthma. London-wide, it is known that circa 10% of our children asthma and air quality is regarded as one of the primary causes. More detailed information could be collected through GP practices.

8.7 It was apparent from our enquiry is that hard data is not collected on how air pollution is affecting residents' health, even in known risk areas such as Somers Town. In Dr Brian Miller's report to the Mayor's office of June 2010, it was estimated that between 6 and 12 deaths annually per ward In Camden can be attributed to $PM_{2.5}$concentrations. At a meeting with residents in Somers Town in May 2011, the Working Group heard how concerned many residents were about idling vehicle and construction dust from new builds such as the British Library extension and the UKCMRI site. Construction sites generate spikes of small harmful particulate dust etc. Hence, there is a need for vigilant damping down and monitoring. Camden's Construction Management Plans are required to incorporate arduous air quality standards for all major developments. However, unlike Islington, Camden does not have a full-time officer ensuring compliance, which is likely to have encouraged a degree of corner-cutting by less scrupulous developers. Also, arguably, supervision with regard to maintaining AQ should extend to much smaller construction sites, though such a change to Camden's planning framework is beyond this report's remit.

Recommendation
We recommend that the Council and NHS seek financial funding and support from DEFRA and the GLA to commission a study looking at perceptions of AQ effects in Camden, comparing Somers Town with a ward in the north of the borough. This would involve workshops based on GP practices and focus groups to find out what residents understand about air pollution and its sources and their actual experience with the objective of guiding the Council's own communication campaigns and changing behaviour.

8.8 The group is **very** concerned about economic uncertainties surrounding continued investment in public health and what the reorganisation of the NHS and public health responsibility being transferred to local authorities will mean for AQ. It is feasible that the new single Camden GP Consortium, which already has "Pathway" status, will soon be taking the decisions in regard to public health awareness issues.

Recommendation
We recommend that Camden's Sustainability team establishes links with the NHS for joint working by implementing a Council/NHS Communications plan on AQ. The current process of absorption of Public Health within the local authority is noted to be a period of considerable risk but it also presents an opportunity to strengthen and integrate. The Sustainability team should appoint an officer to lead on this project and act as a conduit for the key players, potentially including clinicians at RFH and UCLH.

8.9 A possible positive impact of the changes to public health and the localism agenda brought in by the coalition government is that it could provide local authorities with an opportunity to engage with newly created health bodies. This may, for example, provide an opportunity to pilot services like the LAQN iPhone App and AirText through the GP consortium. This could make it easier to measure outcomes and influence policy. The Working Group would like to see that information and data on AQ is incorporated into the JSNA to drive partnership working on this issue.

Recommendation
We recommend that the Council and NHS include data on AQ in the Joint Strategic Needs Assessment and use this as the springboard for negotiating local strategies and as a platform for raising understanding and awareness of AQ issues.

9 Developing Public Understanding

9.1 Thus far the view has prevailed that authorities should not be alarmist and risk causing concern in the general public. The group takes the alternative view that it is time to be far more candid, so that AQ does not stay below the radar.

9.2 The Mayor, along with boroughs and other partners, supports an AQ network for measuring pollution concentrations at a range of sites across London. AQ information is available in a number of formats, including real-time information on the internet from LAQN.

9.3 Camden residents can access the airText service which provides AQ alerts via a free text message, voicemail or email when air pollution - but only 92

Camden users are currently registered. Additionally the thresholds used were set in 1998 and do not match current ones recognised by the World Health Authority (WHO). This has been compounded within the asthma/vulnerable community by the AirTEXT alert service's vague phrases such as:

"The forecast is for mostly MODERATE air pollution in Camden, with areas of LOW air pollution. You may notice mild health effects, but these are unlikely to require action."

The Working Group recognises that this is a London-wide scheme but the Council and NHS need to upgrade this service and publicise it. COMEAP is in the process of revising and bringing into line new contemporary thresholds.

9.4 The Working Group was very impressed with King's College Air iPhone App and although it is recognised that this service is not accessible to everyone it was interesting to hear that the most subscribed watched site for users of the App is the Bloomsbury. The remainder of the iPhone App's top 10 also reflect the central London focus, with users definite interest from our residents for information on air quality and, as commented by the ERG, 'the rankings show that different dissemination methods reach different audiences within London and emphasises the importance of providing a variety of ways for the public to access and keep up to date with London's air.

Recommendation
We recommend a link with Camden North Reach team to utilise the successful Kings College smartphone App and the revised AirTEXT system with COPD rehabilitation service patients, incorporating these alert systems into the wider COPD service.

9.5 The Working Group support the view that local, regional and national governments need to take more affirmative action to improve AQ. Camden can do more to make the public aware of how individual's own actions can exacerbate the problem. A key message in Defra's AQ communications in November 2010 stressed that citizens can play a significant role: e.g. making sustainable transport choices such as walking, cycling and using public transport instead of driving, increasing home energy efficiency and considering AQ and not just carbon. The government believes that local authorities are best placed to maintain environmental standards in their areas and this includes raising public awareness.

9.6 During the project it was brought to the attention of the Working Group that residents and Councillors in parts of the borough are concerned about AQ (as exampled in the idling vehicles section). Councillors have a responsibility to their residents on this issue, as well as communicating the work of the Council and its partners to the community. Government legislation continues to support the community leadership role. But to do this effectively there would need to be stronger links with the health sector as well as third sector organisations like the British Heart and Lung Foundations and Asthma UK.

9.7 It was recommended during one of the evidence sessions that Camden should experiment with an AQ day to raise awareness about the health impacts of poor AQ. Further, to inform people of where they can get useful information and how to make changes in their day to day living to reduce exposure to air pollution as well as changing their own behaviour to reduce emissions. The group recommends that the Council looks at the viability of including an AQ bulletin on a regular basis on the Council website and Staff Intranet.

Recommendation
We recommend that the Council pilot air quality awareness days through the Council and local NHS websites and staff intranets. Further, the Council encourage local communities to propose local car-free days and cycle to school experiments.

9.8 The group were disappointed to learn that Camden's Transport Strategy (expected imminently) provides in its draft only £15,000 for three years for AQ awareness raising. The Working Group would recommend that this is revisited. The Council should be looking to commission innovative projects to communicate the health impact and behavioural messages to school children in the borough. The group discussed at several of the evidence sessions the benefits of producing a series of short video segments aimed at educating primary school children. Whilst recognising there is no obvious funding stream, we suggest seeking seed money from Defra, the GLA or the Wellcome Trust.

9.9 Camden will soon have in hand a new exemplar innovation: a real-time visual display to be erected soon on the Euston Road, beside the Town Hall (south side). Given that the Euston Road is one of London's worst hot spots, the Working Group recommend that this sign (funded by Defra) be bold in conveying the poor AQ to raise awareness of risks to health of pedestrians cyclists and drivers. A nearby billboard states that 1,600,000 people pass by every two weeks, so it will be seen by vast numbers of drivers, bus passengers and pedestrians.

9.10 Throughout the process of the review, members of the Working Group have attended seminars and met with key participants in the air quality community. Most recently in May 2011, Simon Birkett, Founder and Director of Clean Air in London (CAL) led a study group of London experts on ***Air pollution in London with an emphasis on communicating health impacts***. It was clear from his session that all involved have a responsibility to take action on air pollution. The Working Group would like to see a stronger partnership across the GLA, Defra, TfL, Department of Health and the London boroughs on the issue of air quality. The following are some simple steps suggested by Simon Birkett to help achieve clean air in Camden and London as a whole.

What can you do now– 10 Practical Steps for Clean Air in London

1. Investigate: find out about air pollution near your home and work or
2. Adapt: protect yourself from the dangers of air pollution
3. Mitigate: reduce air pollution for yourself and others
4. Research: find out more about air pollution
5. Lobby: for full compliance with air quality laws
6. Arrange a group meeting: and invite Clean Air in London to speak
7. Support Clean Air in London (CAL)
8. Spread the word
9. Fight: oppose local developments if they will breach AQ laws
10. Feedback any better ideas to Clean Air in London (CAL)
With relevant weblinks:
http://www.cleanairinlondon.org/blog/_archives/2011/2/23/4756818

9.11 The group, encouraged by support from Kings College, Defra and the GLA are recommending that the Council hosts a community Air Quality Summit, along the lines of Camden's recent Green Summits on a Saturday morning in September.

The Working Group recommend that Camden Council hosts an Air Quality Summit in September to invite participation, inviting residents and third sector organisations to hear from Kings College, Defra, TfL, CAL and the NHS about Air Quality health impacts, per Camden's Green Summits.

10. Conclusion

10.1 To conclude, the Working Group would like to send a clear message to our residents on the extremely serious health impacts caused by air pollution. This report recommends the Council puts AQ at the forefront of its Sustainability agenda, supporting the GLA with their Strategy but also lobbying for the Mayor to go much further and faster to improve the standards of AQ in London as a whole.

10.2 Throughout the evidence sessions it was acknowledged that Camden has built an excellent reputation as an exemplar Council leading best practice on several fronts on air quality, gaining regional and national government support - which has meant agencies have been keen to work with us. It is hoped that this enthusiasm will continue in the future so that Camden continues its status as a beacon authority.

10.4 It should be a priority for Camden's Sustainability team build to bridges of co-operation with our neighbouring boroughs such as the City of London and Westminster, who have shown leadership on different aspects of AQ. As a Council we also need to be seeking development funding to progress the projects discussed in this report. We would particular like to see that our recommendation to produce a series of modular films targeted at primary-aged school children will be fulfilled.

10.5 We hope that the Health Scrutiny Committee will endorse this report so that it can be presented to the Cabinet Members for sustainability, environment and health.