



THE LITTLE GUIDE TO

Better Air Quality

To get involved in improving Victoria's air quality and learn more about how small changes can make big air quality impacts contact:

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MAYOR OF LONDON





“Air quality is about wellbeing and better and more sustainable business environments. We look forward to working with our BID members as future Air Quality Champions to make the new Victoria a healthy place in which to do business, live and visit now and for future generations.” **Ruth Duston, Chief Executive, Victoria BID**

Air Quality in Victoria

INTRODUCTION

Like most parts of central London, Westminster suffers from poor air quality, and consequently Victoria does too. Improving local air quality is vital to ensuring our area is a healthy and vibrant place to live, work, visit and do business in.

The Victoria Business Improvement District (Victoria BID) has done a great deal to raise the profile of local air quality within the area.

Working in partnership with the City of Westminster, an engagement project undertaken by Victoria BID has already resulted in 14 organisations committing to becoming Air Quality Champions.

Although air quality is an issue that is increasingly in the news it is still obvious that, although awareness is increasing, an appreciation of the scale and nature of the problem is still low.

The information in this booklet is a basic introduction to the topic and demonstrates how easy it is to build improving air quality into your everyday business activities.

As more BID members join the project, local air quality will be improved even further.

AIR QUALITY CHAMPIONS

Fourteen organisations and theatres have already signed Air Quality Pledge Certificates.

- Apollo Victoria Theatre, one of The Ambassador Theatre Group’s theatres
- The Association of the British Pharmaceutical Industry
- Caffè Nero
- Capita
- China-Britain Business Council
- DP World
- Grayling Communications Limited
- Guoman – The Grosvenor Hotel
- Land Securities
- Taj Hotels Resorts and Palaces
- The Telegraph Media Group
- The Passage
- The Rubens at the Palace Hotel
- The Victoria Palace Theatre

Companies choose their sector focus and where they can help from a pick list that includes: Communications – raising the profile of air quality; Transportation – promoting walking and cycling to staff and visitors; The Built Environment – reducing gas consumption and installing low emission technologies; Supply Chain – reducing the number of deliveries to offices.

Vehicle-borne pollution has a negative impact on air quality, but the simple actions outlined in this booklet can help address this.

“Our message is that simple, small changes to business behaviours can improve local air quality and reduce health risks to people whilst making businesses more efficient.” **David Beamont, Operations Manager, Victoria BID**

SITUATION

Poor air quality in Victoria is mostly as a result of human activity, specifically local combustion - mainly diesel vehicles and gas boilers. The issue is complex but the sources are broadly:

- Transport (cars, taxis, buses and coaches)
- Buildings (gas from boilers)
- Supply chain (light and rigid heavy goods vehicles)

The pollutants of most concern are particulate matter (often referred to as ‘PM’) and Nitrogen Dioxide (NO₂). These have a significant impact on human health.

PARTICULATE MATTER (PM₁₀ AND PM_{2.5})¹

Particulate matter (PM) is a complex assemblage of non-gaseous material of varied chemical composition. It is categorised by the size of the particle, for example PM₁₀ describes particles with a diameter of less than 10 microns (µm). Most PM emissions in London are caused by road traffic, with engine emission and tyre and brake wear being the main sources.

NITROGEN DIOXIDE (NO₂)¹

All combustion processes produce oxides of nitrogen (NOx). In London, road transport and heating systems are the main sources of these NOx emissions. NOx is primarily made up of two pollutants - Nitric Oxide (NO) and Nitrogen Dioxide (NO₂). NO is of most concern due to its impact on health. However NO easily converts to NO₂ in the air - so to reduce concentrations of NO₂ it is essential to control emissions of NOx.

HEALTH IMPACT

Air pollution is a major environmental risk to health. Elevated levels or long term exposure to air pollution or both can lead to serious conditions affecting human health. This mainly affects the respiratory and cardiovascular systems, and can also lead to more serious conditions such as cancer and aggravate others. People with lung or heart conditions may be more susceptible to the effects of air pollution.

- Over 4,000 deaths in 2008 in London were estimated to be attributable to poor air quality²
- Air quality in Victoria does not meet health-based targets for NO₂³
- The health cost impact of poor air quality in the UK has been estimated to be around £15 billion⁴



Exposure to poor air quality can negatively affect our health and wellbeing.

“Any action to mitigate poor air quality has an almost immediate impact. If there is one good thing about poor air quality, it is that it is reversible.” **Keith Cotton, Managing Director, CrispAir**

LOCAL IMPACT

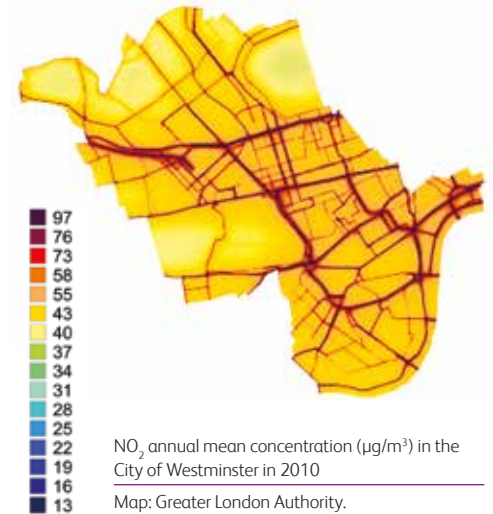
Poor air quality is a local issue with each area having its own specific influencers such as the presence of transport hubs, congested road infrastructure and their own unique mix of residential, office and retail space.

The map on this page shows the emission profile for Westminster in 2010 for Nitrogen Dioxide (NO₂). The World Health Organisation and European Union health-based targets are for annual concentrations of NO₂ to be below 40 µg/m³.

From the map it is clear that in 2010 most of the City of Westminster was in breach of health limit values. Future projections suggest that the picture will remain broadly similar: “annual average NO₂ concentrations are predicted to exceed the air quality objective of 40µg/m³ over large areas of the City in 2015.”⁵

The Victoria BID will address some of the bigger picture issues such as greening the area, promoting walking and cycling and minimising the impact of traffic and vehicles.

WE NEED YOUR HELP TO COMPLETE THE PICTURE AND THERE ARE SIMPLE ACTIONS THAT EVERY BUSINESS CAN TAKE NOW TO IMPROVE AIR QUALITY.



MONITORING AIR QUALITY

The Victoria Palace Theatre set up an air quality monitor on the outside of their building in partnership with Victoria BID, the City of Westminster and with part-funding from Land Securities.

The sensor will measure air quality at the Victoria Street/Bressenden Place/Vauxhall Bridge Road junction over several years and the data is publicly available via the London Air Quality Network - www.londonair.org.uk

1. Air Quality for Public Health Professionals - City of Westminster. Greater London Authority. November 2012
 2. Report on estimation of mortality impacts of particulate air pollution. Institute of Occupational Medicine. June 2010
 3. Air Quality for Public Health Professionals - City of Westminster. Greater London Authority. November 2012

4. Air Pollution: Action in a Changing Climate. Defra. 2010
 5. Air Quality Action Plan 2013-2018. City of Westminster. 2013.

Air Quality Solutions: What You Can Do Today

COMMUNICATIONS

Raising the profile of air quality through policy implementation and campaign support:

- Embed air quality into your corporate responsibility and environment policies
- Launch campaigns internally to promote walking and cycling using air quality as a core driver for change
- Join the Victoria BID Air Quality project and become an Air Quality Champion – 14 organisations and theatres have already signed Air Quality Pledge Certificates that focus on communications, transportation, the built environment and the supply chain

THE TELEGRAPH MEDIA GROUP

The Telegraph Media Group's 'Bike Library' holds several Brompton fold-up bikes that staff can sign out. They can also purchase bikes through a benefits exchange scheme.

Over eighty bike parking spaces are available on site and showers are readily available. Staff also benefit from an on-site bike check service for their own bikes that helps to ensure they are in tip-top condition. Collectively these activities boost the appeal of and encourage cycling.



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2



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Air Quality Champions receive their Pledge Certificates from Councillor Heather Acton, Cabinet Member for Sustainability and Parking at the Celebrating Improving Air Quality event.

1. Victoria Page, Grayling Communications Limited. 2. Neil Pennell, Land Securities. 3. Roger Clark, The Passage.

Photos: Victoria BID/Mickey Lee.

AIR QUALITY TOP TIP: In shared buildings, combine orders for business basics like stationary with your neighbours to reduce the number of delivery vehicles in Victoria.

TRANSPORTATION

Promoting walking and cycling for a healthier workforce:

- Promote walking and cycling – safely and using low emission routes
- Utilise the 'cycle to work' scheme, and online apps such as CityAir
- Get Transport for London 'Legible London' maps bespoke to your office to familiarise employees and clients with local walking routes
- Explore private hire vehicle contracts with hybrid and electric variants
- Launch campaigns to support environmental initiatives that improve air quality



Legible London fold out maps like this one that are centred on a business's premises help visitors and staff become familiar with the streets and spaces in Victoria and encourage walking and cycling over vehicle use.

Photo: Victoria BID/Mickey Lee.

THE ASSOCIATION OF THE BRITISH PHARMACEUTICAL INDUSTRY

By commissioning and sharing Legible London maps centred on their premises, ABPI helps visitors understand how close Victoria is to several mainline transport nodes and encourages walking and cycling. The map also enables new staff to become familiar with and explore Victoria, and even existing staff can discover new routes to local shops, cafes and restaurants.

ABPI have also hosted meetings with other building tenants to explore sharing suppliers for business basics like stationary.

“We got involved in the project to engage with our customers and staff, helping to raise awareness and help to improve air quality, by reducing vehicle emissions associated with deliveries from our supply chain.” **Juliet Hayes, Safety & Environmental Advisor, Ambassador Theatre Group**

SUPPLY CHAIN

Reducing the number of vehicles delivering to site and demanding a lower emission profile of the fleet:

- Incorporate air quality, alongside other environmental targets, into supply chain policies
- Reduce the number of vehicles delivering to your office
- Share services with neighbours and organisations on different floors for business basics like stationery and toiletries
- Demand a lower emission vehicle that delivers your goods and services
- Ask drivers to refrain from idling their vehicle engines when visiting your site
- Explore consolidation services and low emission supply opportunities through Victoria BID

AIR QUALITY TOP TIP: The next time you speak with your supplier, ask them when they are going to go electric or hybrid – the more people that ask, the faster you’ll see electric or hybrid vehicles on the street.



The Apollo Victoria Theatre.
Photo: Ambassador Theatre Group

APOLLO VICTORIA THEATRE

By working with their supply chain partners the Apollo Victoria Theatre has negotiated a new ‘super contract’ to provide all services through a single supplier. Mains filtered water is now also installed reducing bottled water requirements and therefore deliveries.

This consolidation has reduced consumable and water deliveries from 12 to 4 per week.

The Rubens at The Palace Hotel living wall – a big scheme with a big impact, but all greening schemes can help.
Photo: Red Carnation Hotels.

Air Quality in Victoria

THE BUILT ENVIRONMENT

Reducing gas consumption and installing low emission technologies:

- Reduce gas consumption and install ultra-low NOx boilers when fitting new or upgrading equipment
- Assess the energy needs of the building to improve efficiency and reduce gas usage
- Install ultra-low NOx boilers or at least a leaner burner
- Minimise the use of your back-up generator if you have one
- ‘Green’ the building – schemes of all sizes can help

THE RUBENS AT THE PALACE HOTEL

In 2013, one of London’s largest living walls was unveiled on the side of the Rubens at the Palace Hotel in Victoria.

Covering 450m² the wall comprises pollinator-friendly plant species that not only improve biodiversity but have many other benefits.

The wall itself acts as a huge green filter – trapping pollutants that are harmful to human health that are then washed away. The living wall also insulates the hotel and will reduce heating and cooling needs.



What Else is Being Done?

CITY OF WESTMINSTER ACTIONS

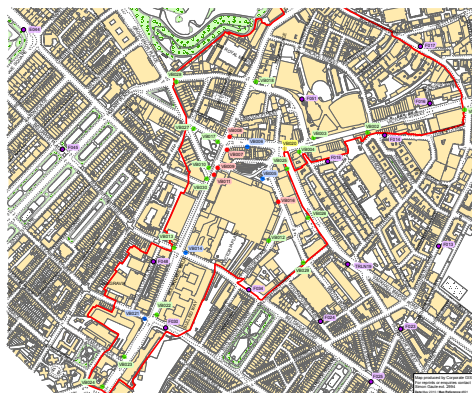
"Improving air quality in Westminster is a complex challenge and requires continued cooperation and collaboration if we are to make the progress we all want to see." Councillor Heather Acton, Cabinet Member for Sustainability and Parking

- The first local authority to declare an Air Quality Management Area in 1999 and the first to produce an Air Quality Strategy and Plan in 2001
- Pioneered the initial concept of a Low Emission Zone
- Environmental Impact Assessments required for large developments
- Air Quality Assessments required for developments which are deemed to be significant in terms of air quality
- The Westminster Code of Construction Practice for major sites, requires developers to control and monitor dust emissions
- Infrastructure and incentivisation for electric and low emission vehicles
- Implemented a hierarchy of preferred fuels for replacement fleet vehicles: electric, electric hybrid, LPG/CNG, petrol and diesel



Several electric vehicle charging points are available within the Victoria BID footprint.

Photo: Victoria BID/Mickey Lee.



Victoria BID, Westminster City Council and Transport for London undertook a Legible London signage placement strategy in 2010 that led to the installation of 26 signs.

Map: Crown copyright/database right 2010.

AIR QUALITY TOP TIP: To trial an electric vehicle or find out more about electric vehicle grants contact Victoria BID's Operations Manager, David Beamont on 020 3056 7437 or email david.beamont@victoriabid.co.uk

GREATER LONDON AUTHORITY AND TRANSPORT FOR LONDON ACTIONS

Clearing the Air, the Mayor of London's air quality strategy "sets out a framework for improving London's air quality and measures aimed at reducing emissions from transport, homes, offices and new developments, as well as raising awareness of air quality issues."⁶

- Promoting low-emission vehicles such as electric vehicles
- Promoting eco-driving
- New standards for the Low Emission Zone and planning for the new Ultra Low Emission Zone
- Age limits for taxis
- Retrofitting older buses including large investment in the new Routemaster II
- Targeted measures for areas where air quality is poor
- Using the planning system to reduce emissions from new developments with Supplementary Planning Guidelines being adopted by boroughs
- Retrofitting homes and offices to make them more energy efficient
- Working with businesses, the Cross River Partnership and BIDs to deliver air quality improvements via the Clean Air Better Business (CABB) programme



Several new Routemaster II buses pass through Victoria. The number 38 route from Victoria to Clapton Pond uses the new Routemaster II along its entire route.

Photo: Victoria BID/Mickey Lee.

6. Greater London Authority online. 2014