MAYOR OF LONDON

LOCAL AUTHORITIES AND AIR QUALITY

A summary of action taken by London boroughs to improve air quality

February 2017



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EXECUTIVE SUMMARY

This report summarises the air quality information from 32 London boroughs and the City of London. It is based on information provided in the authorities' statutory Annual Status Reports for 2015 (which were submitted in summer/autumn 2016). One of the main purposes of the report is to highlight examples of good practice from individual authorities in tackling air quality, and to identify areas of effective partnership working between boroughs and with other key stakeholders. The report also aims to highlight any gaps in borough action, and areas where more focus should be placed.

The report provides an overview of current Air Quality Action Plan (AQAP) measures delivered by boroughs across London, in order to more effectively share information between local authorities.

London boroughs have a key role to play in reducing emissions locally. They have responsibility for a number of key levers such as parking, planning, and local roads, and they also have a wealth of knowledge about the communities they serve. However, they cannot solve the problem of air pollution alone, there are many actions that are the responsibility of regional, central and European governments.

The Mayor of London is committed to tacking air pollution and has announced a bold package of measures to address this urgent health issue. We need the Government to play their part by addressing issues such as the incentivisation of diesel at the national level. Now more than ever, air pollution is an issue that needs concerted action across all levels of Government (local, regional, national and European).

Monitoring data for 2015 indicates that pollution trends across London continue to show marginal improvement (based on trends for the past seven years data) but all boroughs continue to measure exceedances of the UK annual mean air quality objective for NO₂, and 22 boroughs also measured concentrations in excess of the hourly air quality objective.

Monitoring data for PM_{10} is relatively limited in terms of spatial coverage and monitoring sites do not always represent 'worst-case' locations. Two boroughs in the central region measured exceedances of the UK annual mean Air Quality Objective with a further borough in the north region recording an exceedance of the daily mean objective in 2015. However, all boroughs have retained the Air Quality Management Area (AQMA) designation for PM_{10} on the basis of dispersion modelling assessments. There are a number of boroughs that have introduced $PM_{2.5}$ monitoring to support the integration of air quality and public health objectives.

There is a significant variation in monitoring provision between boroughs and results are not readily comparable. AQMA's are generally declared as whole borough AQMA's, and there is often a lack of monitoring in air pollution 'hotspots' or focus areas.

A recommendation of this report is that monitoring strategies are reviewed (in line with the London Local Air Quality Management Technical Guidance (LLAQM:TG16)) to ensure effective monitoring around the air quality focus areas and at other key locations, where exceedances are likely. This will help boroughs prepare for the planned re-assessment of AQMA boundaries in 2020. This could simply involve additional diffusion tubes as opposed to expensive automatic monitoring stations.

Central London is the only sub-region where all boroughs have produced new/revised AQAPs within the past 5 years. In the other sub-regions a significant proportion of boroughs are in the process of revising their AQAPs. This report reinforces the requirement from the GLA that AQAPs should:

- Include specific measures designed to address air quality focus areas and local 'hotspots'.
- Have clear timescales for implementation/completion and be assigned relevant key performance indicators, in order that their effectiveness can be properly assessed.

The Mayor's Air Quality Fund (MAQF) currently supports a significant number of active projects and has encouraged more partnership working across boroughs. Other non-MAQF measures have centred on improvements to council vehicle fleets and updated procurement standards; the provision of 'green corridors' and improvements to public spaces to encourage modal shift to walking/cycling; and the introduction of 20mph speed limits on some non-TfL roads.

There are some examples of collaboration between boroughs and TfL to identify and implement traffic management improvements at key road junctions and a number of boroughs have integrated AQAP measures into local transport plans and Local Implementation Plans.

Travel awareness, 'walk to school', and cycling promotion are all widely supported throughout the boroughs, often in conjunction with wider public awareness campaigns linking transport, air quality and health. There are also examples of boroughs expanding their public electric vehicle charging infrastructure beyond the 'Source London' network and there has been an increase in the number of low emission car clubs.

There is limited information overall on local actions to improve emissions from the servicing and freight sector. There are some regional MAQF freight consolidation projects but not all boroughs have engaged with these initiatives. The TfL LoCITY programme provides an opportunity for the operators, infrastructure providers and other stakeholders, including boroughs, to coordinate efforts in improving air quality and carbon emissions from the freight and fleet sector.

In terms of emissions from developments and buildings, all boroughs have indicated their commitment to achieving the Mayor's air quality neutral standard and Combined Heat and Power (CHP) policies. Some boroughs have, in addition, incorporated air quality measures into local planning policy, which has enabled them to achieve a higher standard of air quality mitigation at scheme design phase and/or provided additional funding for community sustainable transport schemes through S106 agreements. It is recommended that all boroughs formally incorporate air quality requirements within their local planning documents.

Some highlights of action delivered by boroughs include:

• School Streets in Hackney - An experiment to close school related roads in two to three locations to address air quality, congestion and safety issues associated with the School Run. The first school street should be introduced in April 2017. Hackney has also expanded their diffusion tube monitoring network to include focus areas, which is strongly supported.

- Section 106 settlements A number of boroughs (including Newham, Lewisham and Waltham Forest) are obtaining funds from s106 to support air quality initiatives.
- Anti-idling enforcement in Hillingdon Anti-idling enforced through a local Public Spaces Protection Order around Heathrow, 112 fixed penalty notices have been issued.
- Diesel ban on council fleets in Camden and the City of London Officers have not been able to purchase or lease diesel vehicles unless there is an absolute operational necessity.
- Low Emissions Logistics project led by Lambeth A project to reduce vehicle trips and deliveries to council buildings across south London.
- Emissions-based parking permit charges A number of boroughs (such as Islington, Camden and Kensington and Chelsea) have introduced emissions based parking charges and a number of other boroughs (including Merton and Westminster) are planning to introduce these in the near future.
- Urban realm improvements to reduce exposure A number of boroughs have undertaken
 improvements to the urban realm to encourage active travel and facilitate walking on cleaner
 routes. The City of London, for example, has undertaken a significant number of these,
 including a new staircase onto London Bridge to encourage walking along the Thames Path as
 opposed to the polluted Upper Thames Street.

As part of the LLAQM the GLA has produced an Action Matrix which lists a range of projects boroughs should consider implementing locally. Borough action against the Action Matrix categories is listed in more detail in the body of this report, but, in summary, assessment of borough reports against the Matrix suggests that in general boroughs are doing especially well in terms of:

- Obtaining public health team's engagement on air quality.
- Engaging with residents and businesses.
- Engaging with schools.
- Raising awareness about idling and in some cases enforcing against idling vehicles.

An increasing number of boroughs are doing more on:

- Reducing emissions from their own fleet (this is particularly true for the central sub-region).
- Using parking permits and charges to disincentivise diesel.
- Using the planning process to reduce emissions.

Key areas of focus for boroughs to deliver more on:

- Working closely with transport and highways colleagues to ensure that all relevant transport and public realm projects consider air quality from the early stages.
- The use of parking charges and restrictions to limit car use and disincentivise fossil fuels (especially diesel).
- Reducing freight journeys/vehicle movements from their own procurements and using their sphere of influence to encourage local Business Improvement Districts (BIDs) and businesses to reduce deliveries and freight.
- Implementing measures to reduce pollution in air quality focus areas.

As part of the new LLAQM the GLA has also introduced a new Cleaner Air Borough (CAB) accreditation. This provides boroughs with a logo which can be used on digital communications. This accreditation is assessed annually based on the information provided in borough's Annual Status Reports. The first criteria for award of the status is that reports are submitted by the deadline, the second is that they show evidence of working towards the outlined Cleaner Air Borough criteria, which fall under the following headings: political leadership, taking action, leading by example, using the planning system, integrating air quality into public health and informing the public.

Approximately two thirds of boroughs received the accreditation in its first year. A number of boroughs did not submit their reports by the (extended) deadline and this is, in most cases, why they did not obtain Cleaner Air Borough accreditation for that year.

In order to obtain/retain Cleaner Air Borough status for 2017/18 boroughs will need to submit their Annual Status Reports by April 2017 and they will need to provide clear evidence (with specific details and dates) of work that they have delivered in the past year to meet the Cleaner Air Borough criteria.

INTRODUCTION

The purpose of this report is to provide a summary of the latest information on local air pollutants (specifically NO_2 and fine particulates) and the key actions being taken to address these issues across the 32 London boroughs and the City of London. The data has primarily been derived from the 2015 Annual Status Reports submitted by each borough, with some additional information obtained via direct contact with the relevant local authority officer where necessary. The report is divided by geographical sub-regions.

Each borough received a copy of the summary relevant to their borough and was given the opportunity to amend and/or update any of the measures highlighted for inclusion in the annual report.

The 2015 monitoring results for each London borough are summarised in data tables for each sub-region. However, it should be noted that monitoring data is not readily comparable as there is varying coverage in the level of monitoring provided from one borough to another. The tables therefore have to be interpreted as providing a relatively subjective picture of current monitoring across London.

This report identifies best practice examples of actions, and highlights any opportunities for shared working as well as lessons learnt. It will be regularly updated using information provided by boroughs in their statutory London Local Air Quality Management (LLAQM) Annual Status Reports.

BACKGROUND

Responsibility for Local Air Quality Management under Part IV of The Environment Act 1995 has been devolved to the Mayor of London in recognition of the specific challenges facing the 32 London boroughs and the City of London. In May 2016 the Mayor introduced a new framework for London: London Local Air Quality Management (LLAQM).

Whilst the basic statutory framework of Part IV of The Environment Act 1995 and the national Air Quality Regulations remain in place, the local air quality management policy and technical guidance is specifically designed for London in the LLAQM:Policy Guidance 2016 and the accompanying LLAQM: Technical Guidance 2016. These are the primary documents to which the London boroughs and City of London must have regard.

There are a number of key LLAQM requirements for all the boroughs, these include:

- To continue to monitor and assess air quality in their areas and notify GLA of any changes to monitoring networks.
- To submit an Annual Status Report (ASR) and public facing Annual Status Summary Report (ASSR) by 30th April each year (this was postponed to August in 2016 to allow sufficient notice within the new LLAQM system).
- To ensure that an Air Quality Management Area (AQMA) has been declared for any areas exceeding the UK Air Quality Objectives or EU limit values.
- To ensure that a current and relevant Air Quality Action Plan (AQAP) is in place for each AQMA.
 AQAP's should be updated at least every five years and progress against AQAP measures reported in the ASR.
- Following reassessment of the GLA Air Quality 'Focus Areas', boroughs are to incorporate focus areas into their AQAPs.
- To consider the revision of AQMAs to reflect any significant changes in pollution levels. This consideration is required for the first time in 2020 and then every four years thereafter.

Through the new LLAQM the GLA provides boroughs with a package of support including:

- Workshops and seminars
- Enhanced central co-ordination
- A range of tools and templates such as bespoke borough-by-borough modelled pollution maps and source apportionment charts.

As part of the new LLAQM the GLA has also introduced a new Cleaner Air Borough (CAB) accreditation. This provides boroughs with a logo which can be used on digital communications. This accreditation is assessed annually based on the information provided in borough's Annual Status Reports. The first criteria for award of the status is that reports are submitted by the deadline, the second is that they show evidence of working towards the outlined Cleaner Air Borough criteria, which fall under the following headings: political leadership, taking action, leading by example, using the planning system, integrating air quality into public health and informing the public.

This year a number of boroughs did not submit their reports by the (extended) deadline and this is, in most cases, why they did not obtain Cleaner Air Borough accreditation this year.

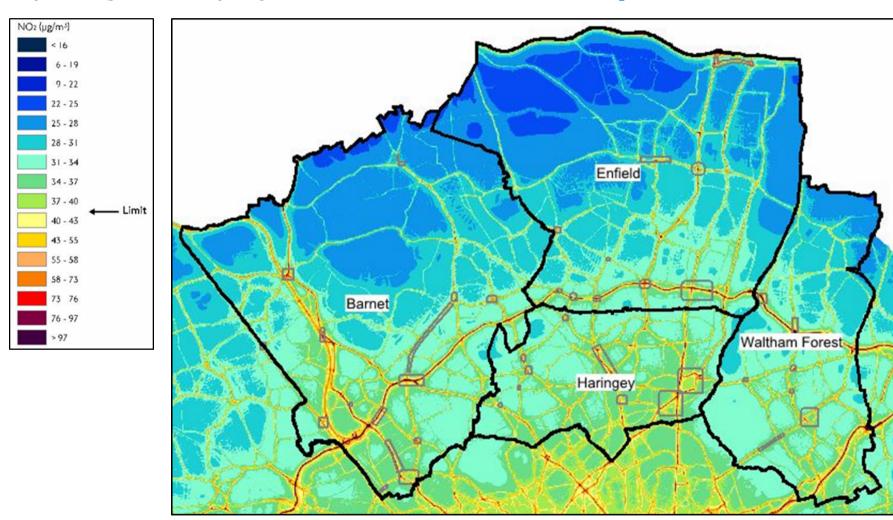
In order to obtain/retain Cleaner Air Borough status next year boroughs will need to submit their Annual Status Reports by April 2017 and they will need to provide clear evidence (with specific details and dates) of work that they have delivered in the past year to meet the Cleaner Air Borough criteria.

Boroughs are grouped into five sub-regions for statutory monitoring and sub-regional coordination purposes. This report is produced in line with the sub-regional boundaries but recognises that there are examples and opportunities for developing effective cross boundary air quality initiatives.

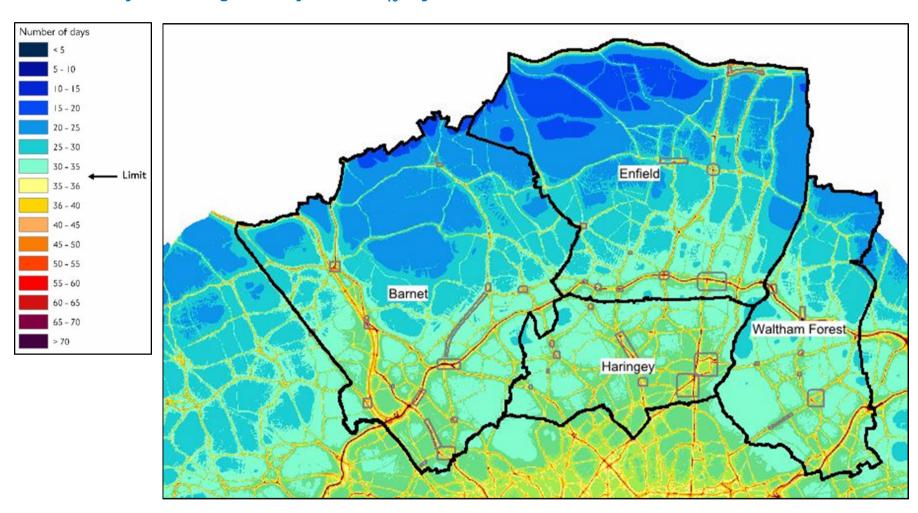
SUB-REGIONAL AIR QUALITY SUMMARIES

North London

Map showing current air quality focus areas and modelled annual mean NO₂ concentrations (2013)



Number of days exceeding the daily mean PM_{10} objective (2013)



Source: London Atmospheric Emissions Inventory (LAEI) – 2013

Air Quality Summary – North London

AQAP Borough <5 years		САВ	2013 population	AQMA		No. Focus Areas	No. autor sites	natic	No. diffusion tube sites	Measured exceedances in 2015 Trends in la 7 years NO2 NO2 PM10 PM10 PM2.5 Annual Hourly Annual Daily Annual NO2 PM						
old	status	>40μg/m³ NO ₂	Whole borough Y/N	Pollutants declared		NO ₂	PM ₁₀							NO ₂	PM ₁₀	
Enfield	Y 2015 plan	Υ	7,841 (2.5%)	Y	NO ₂ (annual), PM ₁₀ (24h)	7	4	2	9					-		
Barnet	Consultin g on 2016 plan	Υ	22,185 (6.1%)	Y	NO ₂ (annual), PM ₁₀ (24h)	14	2	2	14		#			-		
Haringey	Y 2011 plan	Υ	26,726 (10%)	Y	NO ₂ (annual), PM ₁₀ (24h)	16	2	1	13			-	-	Υ		-
Waltham Forest	Consultin g on draft plan	Υ	17,248 (6.6%)	Y	NO ₂ (annual), PM ₁₀ (24h)	7	3	3	4		dr.			-		

¹ Based on 2013 London Datastore https://data.london.gov.uk/

^{*} NO2 daily mean objective exceeded on basis of diffusion tube data > $60\mu g/m3$

Key

AQAP status	Exceedance status (by pollutant)	Trends
New AQAP <5yrs old	Below objective	Good progress-all monitoring below objectives
AQAP under review		Limited improvement - some results above objectives
AQAP >5yrs old	Above objective	No progress – monitoring results above objectives

Key actions

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
Enfield	Procurement code to clean up council vehicles. - Council drivers have been trained on eco-driving practices and complete online courses.	Planting programme in place including a green wall project at Bowes primary school close to A406 (a key focus area). They are monitoring the impact of this wall on pollution concentrations		Replaced the boiler system in Civic Centre to reduce emissions. They consult on all planning applications with an environmental impact and ensure they meet Mayor's requirements relating to AQ neutral. Construction work must meet Non-Road Mobile Machinery (NRMM)	They have conducted a number of anti-idling initiatives, including campaign days, providing information, and specific work around level crossings. Dedicated parking spaces for car club vehicles Cycle Enfield strategy aims to achieve 5% reduction in cars on key	Member of London AirText Consortium to provide free air quality alerts to the public. - Workplace Travel Plan Officer shared with Haringey and Waltham Forest. 5 travel plans implemented in 2015.

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
				requirements.	routes. There are a range of activities to support this including cycle training, cycle rides, safer driving skills, bike workshops, increasing cycle network and signage.	
Barnet	Signed up to Fleet Operator Recognition scheme (FORs) - aiming for Bronze in 2016 then Silver in March 2018 for Council fleet.	Installation of 40m ivy screen in a school playground close to A41 and planting of 221 trees to reduce NO ₂ in focus areas (MAQF) - Currently exploring the option of extending the Ultra-Low Emission Zone (currently proposed to stop at the A406) to cover whole of London Borough of Barnet	Planning to join North London Freight Consolidation project as a means to reduce emissions from deliveries to council buildings (MAQF)	Smoke control leaflets given to shops selling wood burning stoves and restaurants with charcoal drills/pizza ovens. - Supplementary Planning Guidance (SPG) on Sustainable Design and Construction has been revised and updated in line with the GLA's SPG to control dust emissions from construction sites.	E-Car Club in place to promote electric cars to private and business users Differential parking charges set based on CO ₂ emissions for residential permits - Working with TfL to deliver a series of Quietway routes (network of radial and orbital routes) to encourage cycling.	The North Finchley Clean Air Project has delivered a number of projects in schools (walking and cycling initiatives) and engagement on smarter travel (MAQF) - Winter Well partnership to publicise airTEXT and related information to older and vulnerable people - AQ Champion project in

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
				Recruiting an Enforcement Officer to be shared between the other North London boroughs to visit construction sites to enforce the Mayor's NRMM guidance. Barnet are leading on the project and are joined by the other North London boroughs. (MAQF)		schools including anti- idling initiatives, Clean Air Routes, Go Your Own Way campaign. This found that 92% of secondary pupils committed to improving AQ and 87% would make more of an effort to walk and cycle (MAQF)
Haringey	Recent purchase of 2 electric and 1 hybrid vehicles in the Council owned fleet	Installation of green screens in schools as part of school projects including 37.5m2 in Holy Trinity School, 200m2 in Bounds Green School and 10m2 in Highgate School (MAQF)		AQ is a requirement for consideration on all major planning applications. New developments must meet AQ neutral requirements. - Promotion of car free housing developments	Borough wide 20mph speed limit on councilmaintained roads. Part of the North London Transport Partnership to increase accessibility on the rail network, and deliver cycling and walking	Smarter Travel promotion to encourage modal shift including personal travel planning and promotional events including Harry Bear to encourage walking to school - Ongoing AQ apprentice

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
				(32 applications in 2015) - All planning applications are conditioned with respect to NRMM requirements	infrastructure. - Drive Now car share partnership set up with authorities including Enfield and Waltham Forest. This includes a target for 20% of the fleet to be electric and plans for expansion.	scheme to raise awareness of air quality and health in schools (MAQF) - Delivered an air quality project with Camden, Islington and Haringey which included creating a walking zone map around schools.
Waltham Forest	Signed up to FORs and aiming for Gold standard in next 5 years for council and contractor fleet	Traffic management measures to improve air quality delivered in Selbourne Road including cycle lanes, a rain garden and a living wall. (MAQF)	Setting up a Green Courier project to offer a zero emissions delivery service in Walthamstow Village (MAQF)	SPD includes a specific formula for S106 AQ contributions. Over £100K raised so far. - Air quality incorporated into sustainable procurement policy in terms of building design. - The council fully implement all the	Through planning, ensure that one in five parking spaces provides electric charging points in new developments. - Significant infrastructure improvements as part of Mini Holland work to influence modal shift to cycling and walking	Participated in the Barts NHS Trust Cleaner Air project to provide materials, engage with health providers and raise awareness (MAQF) - School and youth engagement projects including Clean Air For Schools tailored lessons with Haringey.

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
				Mayor's policies relating	Adopting anti-idling	
				to AQ neutral and CHP	legislation including awareness days around schools.	

Actions in **blue** are Mayor's Air Quality Funded (MAQF) projects. More information at https://www.london.gov.uk/sites/default/files/mayors_air_quality_fund_report_2016.pdf

Summary – North London

AQ monitoring

All boroughs have declared whole borough AQMAs and they currently monitor for NO_2 and PM; Haringey no longer monitors for PM_{10} , just $PM_{2.5}$. Although measured NO_2 concentrations have been declining in North London, there are still exceedances of the annual mean objective at roadside locations in all boroughs and potential exceedances of the hourly NO_2 objective in Barnet and Waltham Forest. For PM_{10} , the 2015 monitoring data suggests that both the long and short term objectives for PM_{10} are being met in Enfield and Barnet. There were measured exceedances of the 24-hourly objective in Waltham Forest in 2015. All boroughs have confirmed their intention to maintain their AQMA status in respect of PM_{10} . Overall, the monitoring campaigns have been maintained over the years and are primarily at roadside locations. All boroughs could consider reviewing their locations to determine whether they are in line with the GLA focus areas.

Fleet improvements

The boroughs have outlined their commitment to clean up their council fleet and Enfield has put in place a procurement code to improve emissions. Both Barnet and Waltham Forest have signed up to the Fleet Operator Scheme and are working towards improving the standard of their fleet in the next few years.

Local measures

Local projects conducted in North London primarily focus on installing "green walls" as a means to reduce pollution at specific hotspots. For example, Enfield, Barnet and Haringey have all installed green screens and planting trees at local schools and are monitoring the impacts.

Local Authorities and Air Quality

Waltham Forest have delivered local measures at hotspots, such as Selbourne Road, including a green wall, a rain garden and infrastructure improvements.

Emissions for development and buildings

All boroughs have indicated that new approved planning applications are required to meet the Mayor's AQ neutral, CHP, and Non-Road Mobile Machinery (NRMM) requirements. Barnet is leading on a project to recruit an Enforcement Officer to be shared between the other North London boroughs to visit construction sites to enforce the Mayor's NRMM guidance.

Cleaner transport

There is a focus on increasing cycling rates in North London, particularly for short journeys through a number of local actions including the TfL funded Mini Holland programme in Waltham Forest, Cycle Enfield scheme and progressing 'Quietways' in Barnet.

Public health & awareness raising

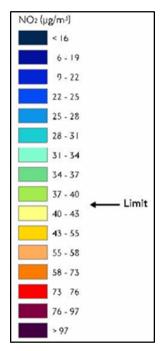
All boroughs are promoting the London AirTEXT service and have been involved in a number of joint projects to improve emissions and air quality as part of the MAQF programme. Progress has been reported on engagement work with schools and businesses. This includes air quality apprentice schemes and individual area-based schemes such as the North Finchley Clean Air Project which has delivered a number of projects in schools, smarter travel awareness raising in Barnet, and the Barts NHS Trust Cleaner Air Project to engage with health providers in Waltham Forest.

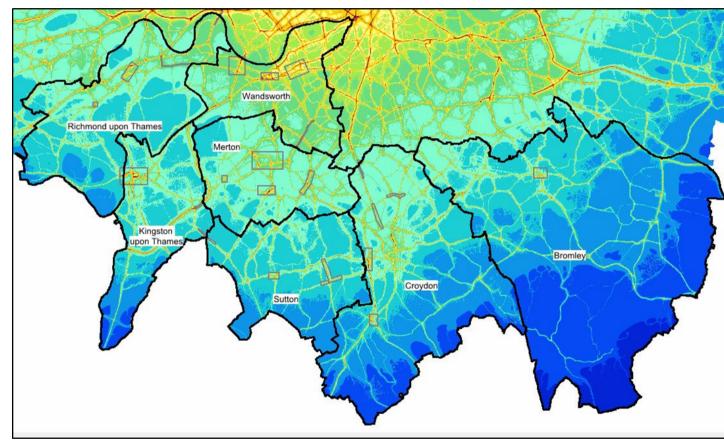
Delivery servicing and freight

There is limited information provided on local actions dealing with delivery servicing and freight in North London. There are references to the GLA funded North London Freight Consolidation project which Barnet is aiming to join up with. This provides a potential mechanism to reduce emissions from deliveries and from council buildings. Waltham Forest is in the process of setting up a Green Courier project that offers a zero emissions delivery service from shops in Walthamstow Village.

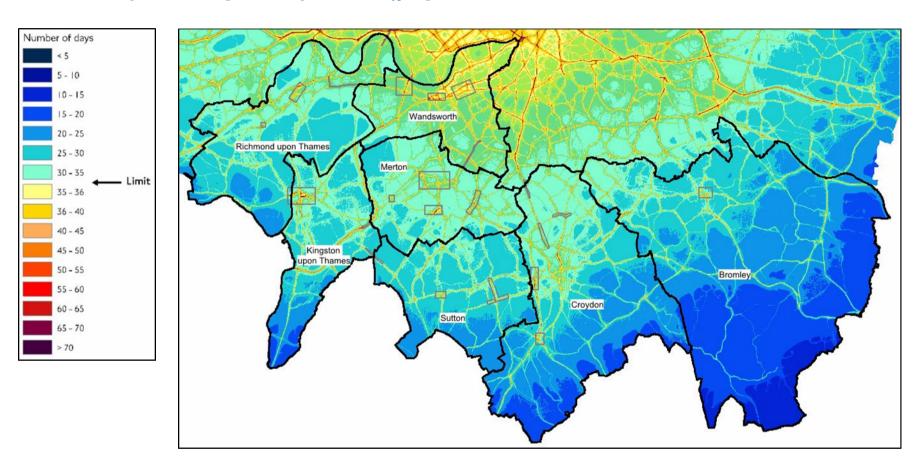
South London

Current air quality focus areas and modelled annual mean NO₂ concentrations (2013)





Number of days exceeding the daily mean PM_{10} objective 2013



Source: London Atmospheric Emission Inventory 2013

Air quality summary – South London

	2013			AQMA		No. Focus Areas	No. autor	natic	No. diffusion tube sites	Measured exceedances in 2015					Trends in last 7 years	
Borough S		CAB status	population1 >40µg/m3 NO2	Whole borough Y/N	Pollutants declared		NO ₂	PM ₁₀		NO ₂ Annual	NO ₂ Hourly	PM ₁₀ Annual	PM ₁₀ Daily	PM _{2.5} Annual	NO ₂	PM ₁₀
Bromley	Update due 2016/17	Not applyin g in 2016	18,186 (5.8%)	N	NO ₂ (annual)	2	1	1	10		*			-		
Croydon – no data available as ASR not submitted	2012	Not submitt ed	14,111 (3.8%)	Y	NO ₂ (annual)	5										
Kingston	2006	Late submiss ion	12,145 (7.5%)	Υ	NO ₂ (annual) PM ₁₀ (annual/24 h)	2	2	2	40		¥			-		No long term result
Merton	Update due 2016/17	Late submiss ion	1,123 (0.6%)	Y	NO ₂ (annual) PM ₁₀ (24h)	4	1	1	20		*			-		

Local Authorities and Air Quality

Richmond	Update planned 2017	Late submiss ion	24,694 (13%)	Y	NO ₂ (annual) PM ₁₀ (annual/24 h)	4	3	2	66	*		-	
Sutton	2005 AQAP Consultatio n 2017	Late submiss ion	7,260 (3.8%)	Y	NO ₂ (annual/1h r) PM ₁₀ (annual/24 h	3	5	4	24				
Wandswort h	2015	Υ	63,001 (20%)	Y	NO2 (annual) PM10 (annual/24 h)	4	6	4	34			-	

¹ Based on 2013 London Datastore https://data.london.gov.uk/

Key

AQAP status	CAB status	Exceedance status (by pollutant)	Trends
New AQAP <5yrs old	CAB Status awarded 2016	Below objective	Good progress-all monitoring below objectives
AQAP under review			Limited improvement - some results above objectives
AQAP >5yrs old	CAB Status not awarded 2016	Above objective	No progress – monitoring results above objectives

^{*} NO2 daily mean objective exceeded on basis of diffusion tube data > $60\mu g/m3$

Key actions

Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
New council drivers will be trained in fuel efficient driving.	Bromley Council staff work place travel plans	They play an active role in development of South London Freight Quality Partnership.	Energy efficiency & sustainability on new buildings through planning.		Planned work with school travel plan co-ordinator, targeting schools in proximity to congested junctions.
ASR not submitted - no details available					
General policy of using alternatively fuelled vehicles.	Cycling and walking strategies and green travel plans.				
AQ and sustainability is a key factor in the council's procurement policy. Commitment to improving vehicle fleet over next few years.	Considering implementation of an emission-based parking permit levy to encourage the uptake of low emission vehicles. - Cleanerair4schools project (MAQF) - Improved traffic signal timings and junction	Trial with businesses to identify opportunities to re-time deliveries to outside peak periods in two of the council's district and local centres.	All approved planning applications meet Mayor's AQ neutral requirement. - Planning conditions imposed on all major sites for construction and demolition phases. - Opportunity for collecting S106	Borough cycling programme	Health & Wellbeing Strategy includes AQ as a key theme. - AirTEXT is promoted on the council's website & local events. - Lovecleanair website developed across the South London Cluster http://lovecleanair.org/
	ASR not submitted - no details available General policy of using alternatively fuelled vehicles. AQ and sustainability is a key factor in the council's procurement policy. Commitment to improving vehicle fleet	New council drivers will be trained in fuel efficient driving. ASR not submitted - no details available General policy of using alternatively fuelled vehicles. AQ and sustainability is a key factor in the council's procurement policy. Commitment to improving vehicle fleet over next few years. Cycling and walking strategies and green travel plans. Considering implementation of an emission-based parking permit levy to encourage the uptake of low emission vehicles. Cleanerair4schools project (MAQF) Improved traffic signal	New council drivers will be trained in fuel efficient driving. ASR not submitted - no details available General policy of using alternatively fuelled vehicles. AQ and sustainability is a key factor in the council's procurement policy. Commitment to improving vehicle fleet over next few years. Cycling and walking strategies and green travel plans. Cycling and walking strategies and green travel plans. Considering implementation of an emission-based parking permit levy to encourage the uptake of low emission vehicles. Cleanerair4schools project (MAQF) Improved traffic signal timings and junction	Delivery servicing and freight Solutions Delivery servicing and freight Solutions Delivery servicing and freight Solutions Solutions Delivery servicing and freight Solutions Solu	New council drivers will be trained in fuel efficient driving.

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		at key junction in South Wimbledon. Project secured in conjunction with TfL.		the Local Plan is being considered.		
Richmond	Commitment to improving vehicle fleet & buildings through procurement	Working with TfL on traffic smoothing at key junctions Ongoing promotion of cycling as an alternative to driving for business commuting Work with franchise bidders for the rail franchise to increase reliability and capacity Work with schools, through cleanair4schools project to promote walking/cycling to school	Trial with several businesses to establish quiet re-timed deliveries outside peak periods - Use of the planning system to agree service management plan at planning application stage for quiet deliveries outside peak hours for new supermarkets. - Ongoing work with TfL to produce new guidance for quiet retimed deliveries outside peak hours.	Strict planning conditions imposed on all major sites for construction and demolition phases. - Lead Officer on new NRMM project to check engine emissions compliance on site	Installation of new EV charge points at 80 locations around borough by 2025/26 Exploring options for residential, car club and taxi EV charging Borough cycling programme Cycle Training for all state primary schools	Air TEXT is promoted on the council's website & local events. Joint working with public health professionals to jointly promote air quality and active life styles. AQ is a key theme in Health & Wellbeing Strategy Lovecleanair website developed across the south London cluster http://lovecleanair.org/
Sutton	Participant in Eco-Stars scheme for council's fleet.	AQ objective included within LIP Council & Workplace &	Eco Stars scheme- with businesses in Beddington area.	Planning condition for Low NOx boilers in place for larger developments.	Revised their sustainable transport strategy in 2015.	Air quality improvement project in Beddington Lane /Purley Way Area, including a schools educational project

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		Schools Travel Plans. - Hackbridge Regeneration project.	Delivery & Service Plans for Council's activities.		Promote EV infrastructure.	and community engagement.
Wandsworth	Promote EV and low emissions vehicles through their fleet register which provides emissions information. - Increasing proportion of low emission vehicles in council fleet - Investigating the potential of biodiesel and compressed natural gas (CNG) fuels for council fleet. - Driver training & education, using in-cab telematics for council vehicles.	Adoption of maximum parking levels for developments. Controlled parking zones (CPZs) in more than 76.4% of the borough. - All schools invited to develop travel plans. - Work with TfL, the bus operators and adjoining boroughs to identify and promote additional or enhanced bus services.	Delivery restrictions in Putney High St. - Member of London Sustainable Distribution Partnership with South London Freight Quality Partnership.	Joint project with other Boroughs on the London Low Emission Construction Partnership (MAQF). - Carbon Management Plan in place - UDP supplementary planning guidance on air quality.	Enhancement and provision of public off-street EV charging infrastructure. Commercial Liquid Petroleum Gas refuelling site publicised on council webpages as part of cleaner fuel refuelling sites within the borough. LIP includes policies and actions to promote walking and cycling and a target to increase the proportion of trips made on foot/by bicycle in the	South London Boroughs AQ awareness in schools campaign (MAQF). - Car-free clean air action day. - Events: Bike week, Walk to School week - Environmental Theatre Company in schools - Member of the Cleaner Air Better Business (CAAB) programme raising awareness of AQ and how business can help. (MAQF).

Local Authorities and Air Quality

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
					borough.	

Actions in blue are Mayor's Air Quality Funded (MAQF) projects. More information at https://www.london.gov.uk/sites/default/files/mayors_air_quality_fund_report_2016.pdf

Summary – South London

AQ monitoring

Apart from Bromley, where the AQMA is declared just in the North West sector all the remaining boroughs in South London have declared borough-wide AQMA's. Most of the borough AQMA declarations were made between 2001 and 2003, apart from Bromley who declared in 2007. Since these original declarations, only the borough of Sutton has reviewed their AQMA to reflect the status of their air quality monitoring and assessment. Sutton's AQMA was amended in 2013 to incorporate exceedances of the 1 hour mean objective for NO₂, and the annual mean objective for PM₁₀. It is noted that all the remaining boroughs in South London are exhibiting results above the 1 hour mean objective for NO₂, but do not have their AQMA's declared for this objective, suggesting that all boroughs should indeed review their AQMAs in 2020.

For NO_2 the most widespread exceedances are reported in Kingston where there is little evidence of air quality improvements, and Wandsworth, which - despite high pollution levels - is showing evidence of improvements in air quality.

For PM_{10} , no borough is showing measured evidence of exceedance of either the 24-hour or annual mean objectives, where Kingston, Merton, Richmond, and Wandsworth all have AQMA declarations for PM_{10} , because of modelling and/or the evidence that this pollutant is harmful even at legal levels.

Few of the boroughs have Air Quality Action Plans that are less than 5 years old. We note that most boroughs have already made a commitment to renew action plans within the next year, which will provide an opportunity to review programmes in line with the new LAQM Policy and Technical Guidance issued in 2016. The new guidance continues to prioritise measures that can be targeted to address air quality exceedances in pollution focus or hotspot locations. All boroughs could consider reviewing their monitoring locations to determine whether they are in line with the GLA focus areas.

Fleet improvements

There are a range of measures applied by south London boroughs for promoting fleet improvements, from air quality and sustainability being a factor for consideration in procurement policy in Merton, to a procurement code in Richmond or a policy in Kingston promoting alternatively fuelled vehicles. Wandsworth maintain a fleet register documenting the emissions of their vehicles. Bromley, similar to many other boroughs, maintain a training programme for fuel efficient driving for new council drivers.

Local measures

Local Authorities and Air Quality

There are a wide range of local measures in place that boroughs implement, ranging from travel plans, strategies to promote alternatives to use of private or motorised transport. Merton are pursuing an emission based parking levy for parking permits, and a trial scheme involving retiming deliveries out of peak periods at two district centres. Richmond is working with TfL on traffic smoothing at key congested hotspot locations. Sutton championed a scheme to improve air quality in a vulnerable residential area where high exposures were evident, and to improve traffic flows and improve local accessibility in the heart of a regeneration project. Wandsworth have implemented a pilot scheme for delivery restrictions in Putney High Street in an attempt to reduce congestion, improve traffic flow and improve air quality. Wandsworth Borough are also working with other London Boroughs (e.g. City of London, Camden, Lambeth, Westminster, Hammersmith and Fulham, Islington, Southwark, Kensington & Chelsea) through the Cross River Partnership on activities to mitigate pollution emanating from the taxi and freight industry in the sub-region.

Emissions from development and buildings

Most boroughs have indicated that new approved planning applications are required to meet the Mayor's AQ neutral standard, and obtain S106 agreements towards mitigation measures where air quality assessments highlight developments may give rise to air pollution. Wandsworth are considering the need for the issue of Supplementary Planning Guidance to provide advice to developers of large sites on air quality and planning. Many boroughs are providing additional enforcement of demolition and construction sites funded by the MAQF, in order to uphold good practices.

Cleaner transport

Most boroughs are promoting EV charge points, and have procurement policies that favour the uptake of low emission vehicles in council fleets. Some boroughs have begun to adopt the EcoStars scheme for council fleets, whilst Sutton has registered in the EcoStars scheme, promoting fleet optimisation through improved fleet management.

Public health & awareness raising

Travel awareness, walk to school, and cycling promotion are all widely promoted throughout the boroughs, often in conjunction with wider public awareness campaigns linking transport air quality and health by making use of websites including local air quality monitoring data. AirTEXT is widely promoted and more boroughs are developing health & wellbeing strategies that include air quality. Themed event weeks are regularly promoted across the boroughs, such as bike week, walk to school weeks and EU mobility week. There has been a MAQF funded programme throughout South London Boroughs to deliver Air Quality awareness in schools.

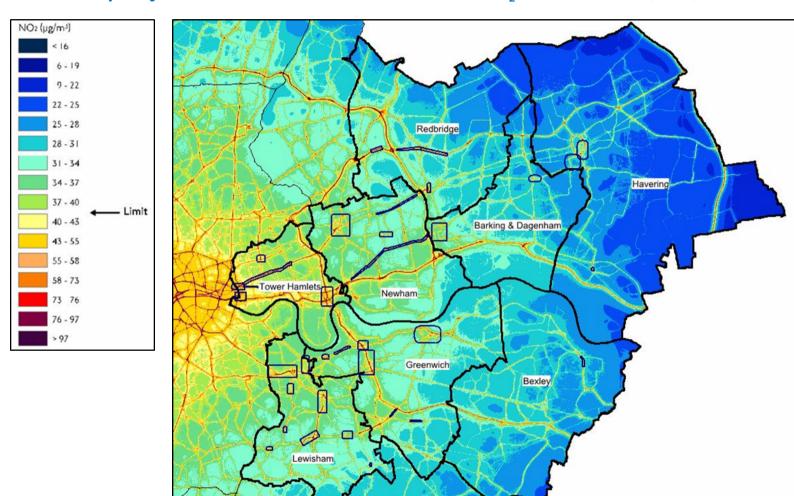
Delivery servicing and freight

Local Authorities and Air Quality

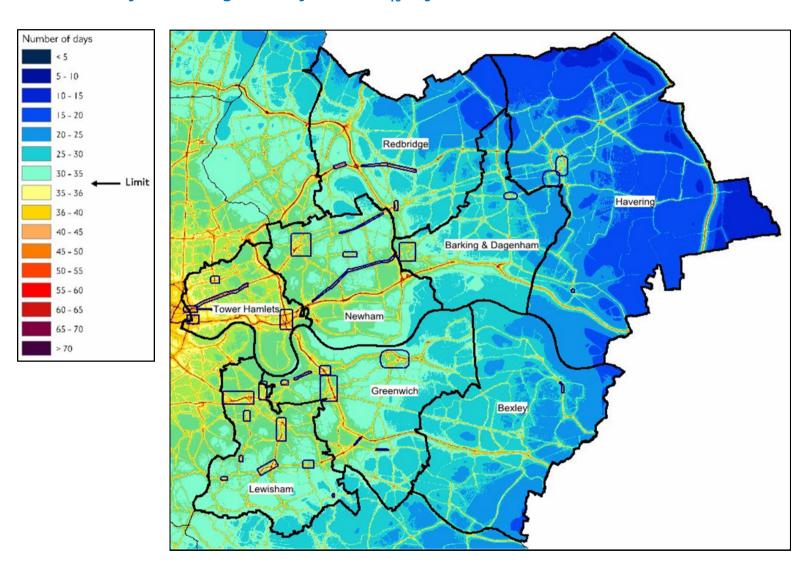
Work has been carried out by the South London Freight Quality Partnership covering the boroughs of Croydon, Merton, Bromley, Sutton, Lewisham and Wandsworth. A report was published in 2011 on the impact of freight in Putney High Street. This study identified London buses as a major contributor to emissions of NO_2 on Putney High Street. This work continues through the South London Partnership http://www.southlondonpartnership.co.uk/. The South London Freight Quality Partnership continues to promote sustainable freight distribution in South London.

East London

Current air quality focus areas and modelled annual mean NO₂ concentrations (2013)



Number of days exceeding the daily mean PM_{10} objective (2013)



Source: London Atmospheric Emissions Inventory 2013

Air quality summary – East London

	AQAP		2013	AQMA		No. Focus Areas	No. autor		No. diffusion tube	Measured exceedances in 2015				Trends in last 7 years		
Borough	<5 years old	CAB status	population1 >40μg/m3 NO2	Whole Borough? Y/N	Pollutants Declared		NO ₂	PM ₁₀	sites	NO ₂ Annual	NO ₂ Hourly	PM ₁₀ Annual	PM ₁₀	PM _{2.5} Annual	NO ₂	PM ₁₀
Barking & Dagenham	Updated 2013	Yes	2,373 (1.2%)	Υ	NO ₂ (annual/h) PM ₁₀ (24 h)	3	2	1	5					-		
Bexley	Update due 2016/17		3,674 (1.6%)	Y	NO ₂ (annual) PM ₁₀ (annual/24h)	1	4	4	0							
Greenwich	Update due 2016/17	Yes	11,036 (4.2%)	Y	NO ₂ (annual) PM ₁₀ (24h)	8	10	10	42		*					
Havering	Update due 2016/17	Yes	1,081 (0.5%)	Y	NO ₂ (annual) PM ₁₀ (24h)	3	2	2	38		*					
Lewisham	Update due 2016/17	Yes	28,329 (10%)	N	NO ₂ (annual) PM ₁₀ (24h)	9	3	3	32							
Newham	Update	Late	38,949	N	NO ₂ (annual)	6	2	2	16					-		

	due 2016/17	submisison	(12%)		PM ₁₀ (24h)								
Redbridge	Update due 2016/17	Late submisison	13,306 (4.7%)	Y	NO ₂ (annual) PM ₁₀ (24h)	4	2	2	23	*		-	
Tower Hamlets	Update due 2016/17	Yes	107,602 (41%)	Y	NO ₂ (annual) PM ₁₀ (24h)	6	4	3	90	×			

¹ Based on 2013 London Datastore https://data.london.gov.uk/

Key

AQAP Status	CAB Status	Exceedance Status (by pollutant)	Trends
New AQAP <5yrs old	CAB Status awarded 2016	Below objective	Good progress-all monitoring below objectives
AQAP under review			Limited improvement - some results above objectives
AQAP >5yrs old	CAB Status not awarded 2016	Above objective	No progress – monitoring results above objectives

Key actions

^{*} NO2 daily mean objective exceeded on basis of diffusion tube data $> 60\mu g/m3$

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
Barking &	Refuse fleet lease	Lobbying TfL for	Have put in place	Local planning policy	Host Public Transport	AirTEXT promoted
Dagenham	agreement requires	improvements to	planning conditions to	requires developers to	Liaison Group (PTLG)	through website.
	Euro VI standard	specific roads within	encourage use of river	comply with London Plan	meetings to improve	
	vehicles on contract	borough identified as	Thames as freight	Policy.	local bus service	
	renewal.	suffering traffic	corridor.		provision on key	
		congestion and poor air			routes to improve	
		quality.			connectivity across	
		_			borough and sub-	
		Working in partnership			region.	
		with neighbouring			-	
		authorities & TfL to			'Living Streets'	
		develop East London			campaign initiatives to	
		Sub Regional Transport			promote travel	
		Plan (ELSRTP) on range			awareness e.g.	
		of transport initiatives.			walking audits, walk	
		_			to work/school	
		Green Walls Project in			weeks.	
		partnership with			_	
		Middlesex University.			Provision of	
		Installed a green wall			continuous cycle	
		outside a school and			routes via 'Quietways'	
		analysed its			programme/Mayor's	
		effectiveness for			Borough Cycling	
		attenuating pollutants.			Programme.	
		(MAQF).				

Bexley	Their Street Services fleet contractor has a carbon reduction target achieved through a programme of fleet improvement measures.	Implemented 'Better Streets' urban realm improvements including street tree planting at a number of locations including Bexleyheath Town Centre, Sidcup Town and Yarnton Way.		Aim for AQ Neutral developments. No specific AQ policies in Local Plans but emission reduction improvements incorporated into schemes where possible. - EV charging infrastructure to be included in council's detailed policies and Local Plan.	Planned actions include using 'Quietways Programme' to link Cycle Superhighway Route 4 (Woolwich to London Bridge) Public cycle parking funded through TfL's Borough Cycling Programme and public realm/ regeneration schemes.	
Greenwich	Fleet improvements - 30 out of 40 refuse vehicles Euro VI compliant, biodiesel content in fuel increased & additive (Additone) to improve fuel efficiency Installation of EV charge points at Birchmere Depot for	75% of borough's residential road network designated 20mph zones. - Pedestrianisation/ crossing upgrades introduced in Woolwich & Eltham. - 'Greenways' scheme has provided safe traffic	Participation in GLA funded Low Emissions Logistics project with other London Boroughs. (MAQF). - Joined the ECO Stars Fleet Recognition Scheme in partnership with other business fleets operating in the borough. The ECO	All approved plans required to meet AQ Neutral standard. - S106/CIL contributions required from major developments. - Member of the Deptford Green HOME Zone partnership project with LB Lewisham	Four new public rapid EV charge points installed in 2015 in addition to 12 existing fast charge points across borough (Source London network). - Cycling Strategy (2014) has increased cycle mode share from 0.9% to 2.3% and	Air Quality is a key focus of Environment chapter in JSNA for publication 2016. - Promotion of AirText.

	1		1			
	Light Duty Vehicles in	free corridors for	Stars scheme encourages	incorporating 20mph	provided new off-road	
	council's fleet (S106	schools.	and supports operators of	speed limits and traffic	paths, upgrades and	
	funded).	_	HGVs, vans, buses and	restraint 'collars'. Linked	improvements to	
	_	Low Emissions	coaches to run their fleets	to Safer Routes to	highway corridors.	
	Contract for	Neighbourhood scheme	more efficiently.	Schools programme.	-	
	Highways contractor	in Greenwich Town		-	Bus priority	
	requires FORS	Centre		Travel plans required for	programme with new	
	compliance.	(MAQF).		all significant new	bus lanes installed in	
	_	_		developments via	3 locations.	
	Fleet assessed as 3	0 500/ 5.1		planning process.	_	
	stars under the	Over 50% of the		_	Expansion of Car	
	EcoStars scheme.	borough's schools are		Significant energy	Clubs in the Borough,	
	Additional driver	members of STARS		efficiency works to RBG	with each Car Club	
	training identified via	scheme.		housing stock including:	expected to take a	
	EcoStars roadmap.			insulation programmes,	minimum of 5	
	Driver behaviour			heating upgrades, voltage	privately owned	
	monitored via			optimisation and window	vehicles off the road.	
	Mercedes Fleetboard			replacement. Whole	There is also a	
	telematics system.			estate approach (the	commitment for at	
	Policy allows drivers			Greenwich Standard) e.g.	least one electric	
	to go 'straight to the			Barnfield Estate.		
	job' to optimise route			Dallilleiù Estate.	vehicle as part of the on street car club	
	and fuel					
					contract.	
	consumption.					
Havering	210 fleet vehicles	Introduction of trees	Sustainable Travel	Air Quality promoted	Cycle improvement	Conducted 6 month
	powered by a 7% bio	and other vegetation at	Business Pack produced	through use of Planning	scheme providing free	AirTEXT campaign to
	mix + Euro VI	AQ 'hotspots' to	in partnership with LB	Conditions, S106	cycle training and	promote service across
	compliance for new	improve street scene	Hackney to provide	agreements and the	maintenance courses.	the borough.
	1	<u> </u>	I.	I.	<u> </u>	

	vehicles. Parks	and encourage	advice to businesses on	community infrastructure	Cycle parking	-
	Department using 5	sustainable travel in and	sustainable travel options,	levy.	provided at main train	Air Education
	Electric Utility	around Romford and at	ULEVs, TfL 'Cycling	_	stations and local	Programme – pilot
	Vehicles.	London Riverside	Workplaces'	Promote principle of GLA	amenities.	project run in 4 schools
	-	Business Improvement		SPG principles	-	to improve knowledge
	20 Drivers undertook	District.		o principles	TfL STARS	of AQ and sustainable
	Eco-Driving and	(MAQF).			Programme delivered.	travel in partnership
	Urban Driving	-			Havering has 55	with London
	courses.	Development of 'pocket			accredited schools	Sustainability Exchange
	_	parks' providing 'green'			including two schools	(LSx).
	Havering hold FORS	corridors and screens at			with Beacon Awards.	(MAQF).
	Bronze Certificate.	Tadworth Parade in Elm			Schools in Havering	
	2101120 001011104001	Park, and linking			have reduced car use	
		Ludwigshafen			on school journeys by	
		Roundabout to the			double the London	
		Mercury Gardens			average and reduced	
		subway (MAQF).			single car occupancy	
					journeys from 39% to	
					22%.	
Lewisham	Fleet improvements -	Road layout changes	Procurement policy	Enforcement of AQ	Installation of	78.5% of schools have
	49 trucks changing to	along Crofton Park area	requires suppliers to hold	Neutral policies via Core	residential EV charge	STARS accreditation.
	Euro VI by April 2017.	of Brockley corridor.	silver FORS accreditation.	Strategy Policy.	points required in new	_
			-	_	developments via	Public Health
			Development of a zonal	Minimum Energy	planning conditions.	engagement via JSNA
			Construction Logistics	Performance Certificate		engagement via 33147
			Framework for the Evelyn	rating requirement for		
			Street Corridor (MAQF).	privately rented		
				properties.		

Newham	Fleet emissions managed through	Road improvement works at Crossrail	All approved planning applications required to	Council operates Safer Routes to School	Promote London AirText.
	fleet modernisation including: use of hybrid pool cars, LPG/petrol fleet trials, CRT retrofit for large diesel vehicles, free cycle hire scheme for council operations.	stations to improve pedestrian access and divert traffic from areas of residential exposure. - ZeEUS project – project investigating the effectiveness of geofencing on 3 inductively-charged diesel-electric hybrid buses on route 69 between Waltham Forest & Newham. (EU funded).	meet Mayor's AQ neutra standard. - S106 agreements negotiated for developments generating increased vehicle movements.	Facilitate implementation and maintenance of	Global Action Plan (GAP) project – Barts Health Cleaner Air for East London project. In partnership with City of London, Tower Hamlets & Waltham Forest. (MAQF)
Redbridge	Greener fleet procurement code adopted. 19 out of the 50 refuse trucks Euro VI. Entire fleet (335 vehicles) to be Euro VI compliant by 2018. - Smarter driver training for all council	Joint Redbridge/Newham LEN (2016 -2019) focussed on reducing vehicle emissions at Ilford Garden junction through infrastructure improvements to increase sustainable transport modes. (MAQF).	London Mayor RE:FIT programme in partnership with 6 Redbridge schools to install solar panels. Programme will be extended to council buildings identified in the Redbridge Environmenta Action Plan. - All approved planning	completed. Round 2 initiated for 2016 – 2019 involving 16 schools to encourage modal shift around	AQ included in JSNA and will be a key theme in the revised Health and Wellbeing Strategy 2016. - AirTEXT promoted to schools, care homes and local community organisations.

	drivers and fleet vehicles fitted with speed limiters.			applications are required to meet Mayor's AQ neutral standard. Planning conditions imposed to minimise emissions including cycle parking provision and EV charging infrastructure.	benefits of switching to sustainable transport modes. (MAQF)	
Tower Hamlets	Existing Carbon Management Plan but no specific NOx or PM ₁₀ emissions reduction policies. This will be reviewed as part of AQAP update Council Travel Plan in place.	Borough wide 20mph speed limit on all non- TfL roads - Zero Emissions Project (ZEN) AQ business liaison project. Shared project covering Hackney, Islington, and Tower Hamlets. 256 businesses registered in LBTH. 107 emission reduction measures implemented across the borough. (MAQF) - Global Action Plan (GAP) project – Barts Health Cleaner Air for	Transport Strategy encourages use of River Thames as a freight corridor connecting Tower Hamlets to the centre of London. Supported through planning process.	All approved planning applications required to meet Mayor's AQ neutral standard and Council's Code of Construction Practice (CoCP). - Current AQAP incorporated into Local Implementation Plan. - S106 contributions secured for AQ measures where appropriate. E.g. secured funding in respect of Goodman's Field development to provide EV charging infrastructure for residents and AQ	Council supported TfL with upgrading Cycle Super Highway which runs through the borough. - Bike-It programme run in 40 schools in 2015. - Ongoing implementation of walking strategy for borough through 'Walking Connections 2011-2012'. - Citizen Science Project - school project run in	AQ incorporated into Health & Wellbeing Strategy. - Promotion of AirTEXT service. - Global Action Plan (GAP) project – Barts Health Cleaner Air for East London project. (MAQF).

Actions in **blue** are Mayor's Air Quality Funded (MAQF) projects. More information at https://www.london.gov.uk/sites/default/files/mayors_air_quality_fund_report_2016.pdf

Summary – East London

AQ monitoring

The 2015 monitoring data for the east London sub-region suggests a continued but gradual improvement in pollutant concentrations with the annual mean NO_2 objective still being exceeded in all boroughs. Non-automatic monitoring indicates that the hourly objective may also be exceeded in 5 of the 9 boroughs based on diffusion tube data where concentrations have been measured in excess of $60\mu g/m^3$.

For PM_{10} the 2015 monitoring data suggests that both the long and short term objectives for PM_{10} are being met in all boroughs but is based upon a very limited number of monitoring sites which are not always representative of 'worst-case' locations. All boroughs have confirmed their intention to maintain their AQMA status in respect of PM_{10} .

The majority of the boroughs have maintained their monitoring networks during 2015; however there is a significant variation in the monitoring strategies adopted by individual boroughs which makes a detailed comparison very difficult. Barking & Dagenham scaled all non-automatic monitoring back in 2014 due to lack of funding but have re-introduced 3 diffusion tube sites as part of a specific project. Bexley operate 4 automatic monitoring sites but have no diffusion tube sites in the borough. Greenwich, Havering, Lewisham and Tower Hamlets have all maintained their monitoring networks.

Fleet improvements

There are a number of programmes delivering improvements in fleet emissions including use of alternative fuelled/hybrid vehicles, cycle hire schemes, eco-driving training, and the adoption of emissions standards/green fleet procurement codes.

Local measures

This category covers a variety of action plan measures which are important for addressing local pollution 'hotspots'. Projects which have been implemented in this respect mainly relate to the provision of 'green' corridors to encourage walking/cycling; road improvement works at Crossrail stations; and the adoption by a number of boroughs of a 20mph speed limit on their roads.

Emissions for development and buildings

All boroughs have indicated that new approved planning applications are required to meet the Mayor's AQ neutral standard. However, some boroughs have achieved additional AQ mitigation through integration of AQ policy into Local Development Plans and/or secured developer contributions for relevant AQ improvements. For example, Tower Hamlets have negotiated s106 contributions to provide EV charging infrastructure in new developments and have mapped the borough's AQ focus areas and AQ data on to the planning GIS to allow them to prioritise areas for planning control.

Cleaner transport

There are a significant number of active and successful projects promoting sustainable transport, many of which are joint MAQF projects. Outside of these schemes there are a number of other initiatives covering a range of modes. These include improvements to local bus services and the introduction and expansion of Car Clubs. Tower Hamlets ran a Citizen Science Project at two schools engaging with the pupils and parents on air pollution, cleaner routes to school and sustainable travel. (Defra funded)

Projects developed with boroughs in other sub-regions include ZeEUS, an EU funded project, which is evaluating the effectiveness of geofencing on inductively charged diesel-electric hybrid buses on a route which runs between Newham and Waltham Forest; and the tri-borough 'Neighbourhood of the Future' project which seeks to deliver 6 electric streets in Hackney, Islington and Tower Hamlets.

Public health & awareness raising

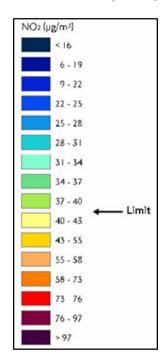
All boroughs are promoting the London AirTEXT service to varying degrees and many have, or are committed to, incorporating AQ into their Health & Wellbeing Strategies/ Joint Strategic Needs Assessments. Six out of the nine East London boroughs have incorporated $PM_{2.5}$ into their monitoring strategy which will provide useful baseline data for future AQ assessment and Public Health policy development.

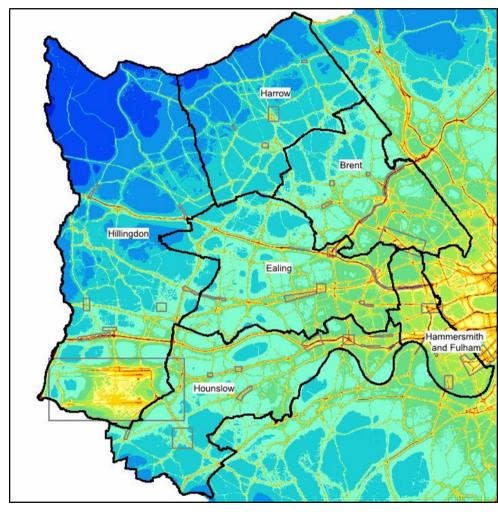
Delivery servicing and freight

This appears to be an area where there is limited information on local actions which is surprising given that the sector is significant in terms of AQ emissions. Aside from the MAQF funded Zero Emissions business liaison project (ZEN) and the Zonal Construction Logistics Framework for the Evelyn Street Corridor (MAQF R2) managed by Lewisham, there appears to be no significant initiatives. Barking & Dagenham and Tower Hamlets encourage use of the River Thames as a freight corridor via their Transport Strategy and/or planning process but there is no evidence of a strategic plan for the sub-region. Greenwich is participating in the South London Freight Consolidation project and a similar or combined project would provide a useful basis to develop a strategic plan for the East sub-region.

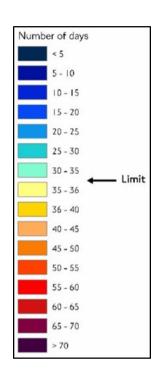
West London

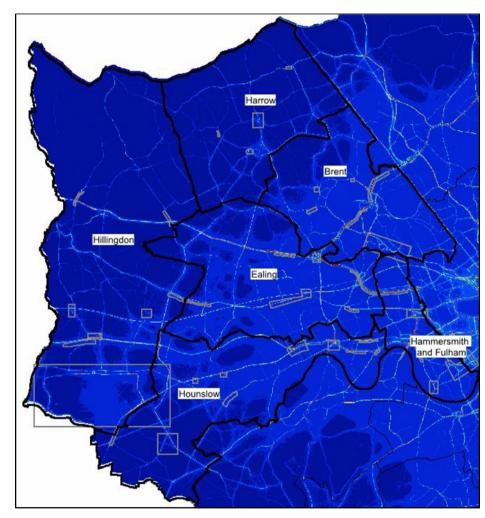
Current air quality focus areas and modelled annual mean NO₂ concentrations (2013)





Number of days exceeding the daily mean PM_{10} objective (2013)





Source: London Atmospheric Emissions Inventory 2013

Air quality summary – West London

	AQAP		2013	AQMA		No. Focus Areas	No. autor		No. diffusion tube	Measured exceedances in 2015					Trend last 7 years	,
Borough	<5 years old	CAB status	population1 >40μg/m3 NO2	Whole Borough? Y/N	Pollutants Declared		NO ₂	PM ₁₀	sites	NO ₂ Annual	NO ₂ Hourly	PM ₁₀ Annual	PM ₁₀	PM _{2.5} Annual	NO ₂	PM ₁₀
Brent	Updated 2015	Late submission	14,335 (4.5%)	N	NO ₂ (annual) PM ₁₀ (24h)	6	3	3	25		*					
Ealing	Update due 2016/17	Yes	4,137 (1.2%)	Y	NO ₂ (annual) PM ₁₀ (24h)	5	4	4	90							
Hammersmith & Fulham	2005 plan	Yes	71,782 (39%)	Y	NO ₂ (annual) PM ₁₀ (24h)	5	1	1	15							
Harrow	Update due 2017	Late submission	6,398 (2.6%)	Υ	NO ₂ (annual) PM ₁₀ (24h)	5	2	2	8							
Hillingdon	Update due 2016- 2017	Yes	16,887 (6%)	N	NO ₂ (annual)	12	11	9	36							

Hounslow	Update due 2016- 2017	Late submisison	14385 (5.6%)	Y	NO ₂ (annual)	6	6	6	60		*					
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¹ Based on 2013 London Datastore https://data.london.gov.uk/

Key

AQAP Status	Exceedance Status (by pollutant)	Trends
New AQAP <5yrs old	Below objective	Good progress-all monitoring below objectives
AQAP under review		Limited improvement - some results above objectives
AQAP >5yrs old	Above objective	No progress – monitoring results above objectives

Key actions

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
Brent	Car club is run from the		Joint partnership with	Reviewed 577	Participated in a joint West	Promotes the
	council building which		WestTrans to develop a	planning applications	London project to reduce local	use of apps e.g.
	allows staff to access		freight strategy to	for AQ impacts in	car use through live bus	AirTEXT, and
	low emission vehicles.		reduce overall levels of	2015 and require that	information, cycling training,	journey
			freight traffic and	all new developments	cycle parking (MAQF).	planning.

^{*} NO2 daily mean objective exceeded on basis of diffusion tube data $> 60 \mu g/m3$

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
			improve efficiency.	are AQ neutral. - Civic Centre has outstanding BREEAM accreditation and they aim to achieve a target of 15% carbon reduction from Council activities. - Joined the London Low Emission Construction Partnership. (MAQF)	Harlesden town centre regeneration project including traffic management, vehicle access restrictions and cycling and walking improvements. (MAQF) - Review of SPG planned for 2016 to quantify reduction in air pollution achieved through development checklist.	- Delivered Walk and Stride and self-led walk initiatives
Ealing	WestTrans responsible procurement project to improve road safety and reduce emissions.	LES and action plan developed for industrial site at Horn Lane Acton to reduce fine particulates and dust emissions.	Joint partnership with WestTrans to develop a freight strategy to reduce overall levels of freight traffic and improve efficiency.	Provide recommendations regarding AQ neutral, CHP and biomass requirements on planning applications where applicable.	Schools programme to educate and train children to walk and cycle to school.	Ealing Broadway AQ Exemplar study to save vehicle trips (8650 trips/year), promote smarter travel and improve cycling provision.

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
						(MAQF).
Hammersmith & Fulham	All refuse vehicles meet Euro V minimum. - Investigating Fleet Operator Recognition scheme. - Developing a safer Lorries and Vans Strategy for 2016-17, and has been working with Westrans on a Freight Strategy for the Westrans area. - Six most recent vehicles leased use stop/start technology - There are 2 x electric 3.5t cage vehicles . The mechanical Scarab sweeping fleet have all been replaced with Euro 6 engines '15 plate vehicles. 3 x 7.5tonne cage vehicles have been replaced with new Mitsubishi Canter Hybrid vehicles.	20 mph speed limit trial on borough roads and recommend extensions to this limit. - Improvements to traffic flow including countdown at pedestrian crossings. - Dust suppression at waste transfer stations. - The council are working with a residents group to form a Hammersmith Town Centre SPD – which looks to minimise town centre traffic with the potential pedestrianisation of the Hammersmith gyratory. - The Council has started introducing parking controls on housing estates to remove	Construction logistics plans are required on most developments which require details on how delivery hours will be managed to reduce impact and the need for stationary vehicles and potential idling The Council in partnership Kensington and Chelea is working on the concept of a freight consolidation hub in South London (Low Emission Logistics) initially to handle its own deliveries.	All approved planning applications meet AQ neutral and CHP requirements - Development control requires that all new developments providing off street parking provide a minimum of 20% active and 20% passive EV charging points.	Installed 14 new electric charging points in 2016 and minimum standard for charging points set for new developments. In 2015/16, Route 211 running between Hammersmith to Waterloo was added to the list of new Routemasters. The new Cycling Strategy was launched in September 2015 with an overall aim of getting 8% of all trips made by bike New dedicated Quietway in place and improvements to cycle parking and training with the aim of 8% of all trips by residents to be made by bike. The Strategy also highlighted the development of new dedicated and segregated cycle lanes through Hammersmith Gyratory, a new cycle Superhighway (9) from Kensington Olympia to	Public health project to liaise with caregivers providing air quality advice to vulnerable people. AQ officers assisted in air quality teaching sessions at the borough event: 'Children's Parliament on the Environment 2015' Clean Air Better Business (CABB) in Hammersmith. (MAQF) Business Improvement District with businesses to reduce emissions. (MAQF).

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		availability of uncontrolled publically accessible urban parking areas. - LBHF Increased parking controls in several CPZs to discourage nonresident parking and in three CPZs designed to reduce the availability of free parking for weekend visitors. - The council use local transport fund to change traffic management on local residential roads to reduce traffic including a popular cut through associated with A4 traffic - Margravine Gardens - The council are working with TfL on the extension to the East-West Cycle Superhighway which would take a lane off of the elevated section of			Chiswick, a cycle Quietway from east Acton to Kensington along the edge of Wormwood scrubs, and a proposed Superhighway along the A40 Westway. The residential parking scheme has continued with 3 Bikehanger units supplied to Fulham Court. 20 cycle stands were also installed at the request of residents. New cycle lanes have been installed along Uxbridge Road and Goldhawk road. The programme of cycle training and maintenance classes continued along with the award – winning "Exchanging Places" scheme to reduce conflict between cyclists and large goods vehicles. Joint West London project to reduce local car use through live bus information, cycling training, and provision of cycle parking. (MAQF) The council is actively working	232 subscribers to AirTEXT in borough.
		the A40 from White City			with two car club operators,	

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		to Paddington. - In 2015/16 420 new trees have been planted in parks and cemeteries.			Zipcar and City Car Club to expand their existing on-street network.	
Harrow	Continued upgrades to council and contractor fleet.	20 mph zones introduced around a number of schools.	Local freight strategy to control movement of lorries, provide appropriate route network and minimise emissions.	Approved planning applications meet AQ neutral and CHP requirements. If not, compensation required.	Joint West London project to reduce local car use through live bus information, cycling training, and provision of cycle parking. (MAQF) - 16 public electric vehicle charging points installed.	Air Quality Apprentice to engage with schools and business and provide advice on anti-idling outside schools. (MAQF)
Hillingdon	Procurement specifies clean fleet vehicles and they have recently purchased council electric vehicles. - Driver training has been implemented across council vehicle drivers. - Signed up to Fleet Operator Recognition Scheme and aim to achieve silver award.	Schools project including green infrastructure at Botwell School - Anti-idling enforced through a local Public Spaces Protection Order around Heathrow. 112 fixed penalty notices issued. - Inclusion of green infrastructure along road corridors including in Hayes Town Centre.	Cowley Mill Road Freight Study to deter HGV use on local roads.	Local Plan Part 2 consulted on and includes requirements for AQ neutral assessment and application of NRMM conditions.	Student cycling champion funded by WestTrans to increase cycling to Brunel University. - Joint project with Hounslow, GSK and Heathrow airport to target zero emission infrastructure development and integration of workplaces with transport hubs. (MAQF) - Working with Heathrow to reduce environmental impacts	145 subscribers to AirTEXT in borough

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
Hounslow	90% of refuse vehicles will be Euro VI compliant by end 2016.	Road layout improvements and SCOOT installed in Chiswick High Road.	Joint partnership with WestTrans to develop a freight strategy to reduce overall levels of freight traffic and improve efficiency.	Reduction in emissions from corporate buildings and street lighting. - Requirement for all approved planning applications to meet AQ neutral and CHP requirements. -	from the airport. Hounslow road cycle path installed. - Joint project with West London boroughs to reduce local car use. (MAQF) - Joint project with Hillingdon to target zero emission infrastructure as above.	Engaged with local clinic commissioning group (CCG) and Public Health to raise awareness through AirTEXT, meetings etc. - Public Health supporting PM ₂₅
				Considering signup to NRMM group in South West London.	(MAQF)	monitoring and identifying areas of exposure.

Actions in **blue** are Mayor's Air Quality Funded (MAQF) projects. More information at https://www.london.gov.uk/sites/default/files/mayors_air_quality_fund_report_2016.pdf

Summary – West London

AQ monitoring

The level of air quality monitoring conducted in west London varies from borough to borough, but there are exceedances of the annual mean NO_2 objective in all despite some limited improvements in concentrations over the last seven years.

Brent, Ealing, Hammersmith & Fulham and Harrow have declared AQMAs for both NO_2 and PM_{10} but there are no current exceedances of the PM_{10} objectives in the borough recorded from the limited number of monitoring sites. The majority of boroughs in West London are in the process of updating their air quality action plans as these are now out of date, and they should consider whether their current monitoring strategies should be reviewed as part of these updates.

Fleet improvements

The boroughs have outlined their ongoing commitment to reduce emissions from their council and contractor fleet such as refuse vehicles, including putting in place specific programmes such as driver training, introducing staff car clubs and considering signing up to the FORs (Hammersmith and Fulham).

Local measures

Local projects specific to the individual boroughs include traffic and signal improvements and implementation of green infrastructure at hotspot locations such as the Chiswick High Road in Hounslow and Hayes Town Centre in Hillingdon. Boroughs have also looked at enforcing anti-idling legislation, including specifically around Heathrow (Hillingdon) and a number of boroughs have put in place or trialled local 20mph zone schemes on borough roads (Hammersmith and Fulham and Harrow). There are also projects focusing on local sources of dust, including a dust suppression project in Hammersmith and Fulham and joint working to develop an action plan to deal with emissions from Horn Lane industrial site in Ealing.

Emissions for development and buildings

All boroughs have indicated that new developments are required to meet the Mayor's AQ neutral CHP and NRMM requirements. Brent has recently signed up to the MAQF London Low Emission Construction Partnership to raise awareness of the impact of construction on air quality.

Cleaner transport

All six of the West London boroughs worked together in Round 1 of the MAQF to deliver a number of local measures including cycle training to encourage a reduction in local car use by specific groups of people such as faith groups and colleges. Hillingdon and Hounslow have been working together with major employers close to Heathrow airport to target zero emission infrastructure development, integration of workplaces with transport hubs and ultimately a change in travel habits. Brent's Harlesden town centre regeneration project (part funded by the MAQF) included a large number of measures focusing on traffic management, vehicle access restrictions and cycling and walking improvements with the aim to improve pollution, improve accessibility and safety in the town.

Public health & awareness raising

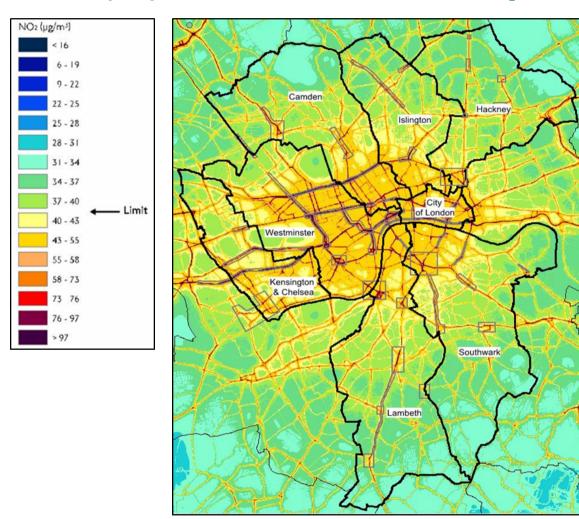
All boroughs are promoting the London AirTEXT service and have been involved in a number of joint projects to improve emissions and air quality as part of the MAQF programme. These include a school's air quality apprentice scheme in Harrow and Clean Air Better Business (CABB) in Hammersmith.

Delivery servicing and freight

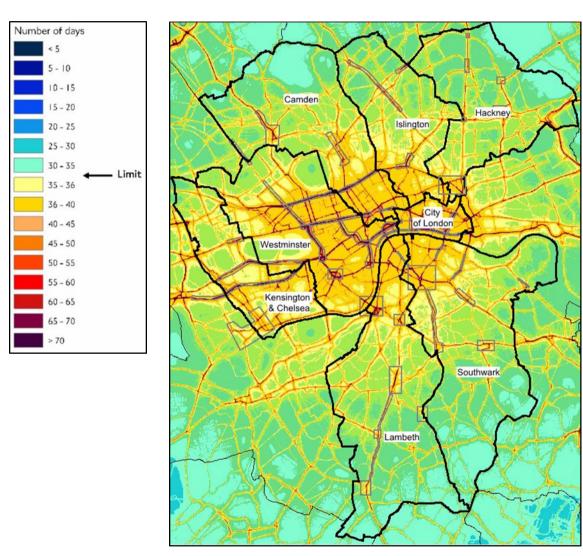
All west London boroughs have been working with WestTrans as part of the West London Alliance to develop a freight strategy to reduce overall levels of freight traffic and improve efficiency. More locally, Hillingdon has conducted a Freight Study in Cowley Mill Road to deter heavy duty vehicles from using on local roads.

Central London

Current air quality focus areas and modelled annual mean NO₂ concentrations (2013)



Number of days exceeding the daily mean PM_{10} objective (2013)



Source: London Atmospheric Emissions Inventory 2013

Air quality summary – Central London

	AQAP 2013		AQMA		No. Focus Areas	Focus automatic		No. diffusion tube sites	Measure	Measured exceedances in 2015				Trends 7 years	in last	
Borough	<5 years old	CAB status	population ¹ >40μg/m ³ NO ₂	Whole Borough Y/N	Pollutants Declared		NO ₂	PM 10		NO ₂ Annual	NO ₂ Hourly	PM ₁₀	PM ₁₀	PM _{2.5}	NO ₂	PM ₁₀
Southwar k	Υ	Yes	131,683 45%	N	NO2 (annual) PM ₁₀ (24hr)	7	2	2	47							
Kensingt on & Chelsea	Υ	Yes	135,228 85%	Y	NO2 (annual/h) PM10 (annual/24 h)	3	5	3	39							
Islington	Υ	Yes	123,719 59%	Y	NO ₂ (annual/h) PM ₁₀ (24h)	3	2	2	21							
Lambeth	Υ	Yes	105,307 34%	Y	NO2 (annual/h) PM10 (annual/24	9	3	3	0							

					h)								
City of London	Υ	Yes	7,612 100%	Y	NO2 (annual/h) PM ₁₀ (24h)	2	3	3	5				
Camden	Υ	Yes	124,234 56%	Y	NO ₂ (annual) PM ₁₀ (24h)	5	4	4	14				
Westmins ter	Y	Late submiss ion	18,5080 83%	Y	NO ₂ (annual/h) PM10 (annual/24 h)	8	5	1	0				
Hackney	Υ	Yes	52,897 (21%)	Y	NO ₂ (annual/h) PM _{10 (} 24h)	8	1	1	55	*			

Key

AQAP Status	Exceedance Status (by pollutant)	Trends
New AQAP <5yrs old	Below objective	Good progress-all monitoring below objectives
AQAP under review		Limited improvement - some results above objectives
AQAP >5yrs old	Above objective	No progress – monitoring results above objectives

Key actions

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
Southwark	In-house smarter driving training provided to drivers. - Planning to develop an emissions strategy for all new council and contractor vehicles and plant.	Cleaner Air For Schools Project. (MAQF) - Tree management strategy. - Greening the Elephant- green walls trial . (MAQF) - Tower Bridge Anti-idling project with Variable Messaging Signs alerting drivers to a long wait when the bridge lifts. (MAQF)	Waste collection fleet to Euro VI.	Housing refurbishment for energy efficiency & low-C schools programme for reductions in CO ₂ emissions. - Developing proposals for district heating scheme from SE London CHP in Deptford - AQ SPD in place .	Active car club scheme (8000+) to 2014, and planning policies to promote car clubs in new developments. - 5 year cycling strategy (2015) with 4 key routes identified.	Member of London AirText consortium Promotion of AirTEXT, & info on AQ data on website. - Participated in the CABB. project (MAQF)
Kensington & Chelsea	Planned review of council fleet, and contractor's waste collection to promote cleaner vehicles. - Contractor's new waste collection vehicles required to be Euro6.	Joint AQ & Climate Change Strategy 2016- 2021. Produced an energy strategy for Council housing. Green Infrastructure Improvements by developing school participation in green infrastructure and eco-	Support businesses to reduce emissions from their operations. The London Healthy Workplace Charter, involves promoting active travel to major destination venues. The Council in partnership with Hammersmith and Fulham and Lambeth is working on the	In 2014/15 the Council reduced carbon emissions from buildings, operations and contractors by 27 per cent. They use the Planning system to promote low emissions from new developments.	Surcharge for residents parking permits for diesel vehicles. - Reviewing parking charge banding. - Go Ultra Low City to promote electric car clubs. - Increased availability of EV charge points.	Joint project with Public Health on AQ advice for vulnerable hospital patients. - Revisions to Health & Wellbeing Strategy to include AQ. - Participated in the CAAB programme (MAQF) -

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		initiatives, including green screens between Westaway Roads and sports area. (MAQF)	concept of a freight consolidation hub in South London (Low Emission Logistics) initially to handle its own deliveries.			Street enforcement of vehicle engine idling around Knightsbridge.
Islington	Council vehicle and supply procurement code to promote upgrades to all refuse fleet.	City Fringe Zero Emissions Network — with Hackney & Tower Hamlets. (MAQF) — Canal Eco Zone — Electric only for heating and charging of batteries. — Low Emissions Neighbourhood — with Hackney and Tower Hamlets. (MAQF) — Archway Zero Emissions Network. (MAQF) — Schools engagement programme.	Participated in the North London Freight consolidation project. (MAQF) - Business Engagement project. To review transport emissions and building energy use, in AQ focus areas.	Participant in the London Low Emission Construction Partnership. (MAQF) - ISEP—Islington Sustainable energy partnership Construction impacts Monitoring Solid wall insulation programme to reduce boiler usage Joint NRMM programme with other boroughs. (MAQF) - Boiler Replacement	Received funding to deliver Neighbourhoods of the Future electric vehicle project. - Green Taxi Project With Hackney Review of EV charging infrastructure. - Promoting low emission car clubs	Air Aware programme for awareness raising. Joint Health & Wellbeing Strategy with NHS Trust. - Awareness raising with public health to residents, schools and business in Breathe Better Together Project. (MAQF) - Participant in Clean Air Better Business – CABB. (MAQF) - AirText is run by Islington on behalf of London boroughs.
		Islington was London's first 20mph borough in		Programme - £3m to replace F&G rated domestic boilers with Low NOx boilers.		Participant in Anti- Idling Action – Joint project with 11 other boroughs.

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		2013.				(MAQF)
City of London	City Corporation Responsible Procurement Strategy Move away from diesel in own fleet vehicles. From January 2016 officers have not been able to purchase or lease diesel vehicles unless there is an absolute operational necessity.	Host an Annual Sustainable City Award for Air Quality and an Annual Considerate Contractors' Environment Award. - Timed road closures scheme in place in areas of high pedestrian exposure. - Low emission neighbourhood planned for the area around the Barbican and Golden lane residential estates and Barts hospital. (MAQF) - City of London is a 20mph zone.	CityAir Business Engagement project. - Scheme to promote use of bikes for courier services within the square mile. - Investigating options for promoting deliveries by electric vehicles, and consolidation of deliveries. - Interim Freight Strategy introduced from Dec 2015, promoting DSP's, consolidation, monitoring at night. - Establish a City freight forum with developers.	Air Quality Neutral Policy for new developments - Provided additional enforcement of construction and demolition. - When City Corporation Area Strategies are reviewed they will be assessed for public exposure to air pollution. - A new staircase to London Bridge to encourage people to walk along the enhanced Thames path away from the polluted Upper Thames Street. - Redesigned junction at Holborn Circus to ease crossing and enhance the public space with significant greening. - Pedestrianisation of Lime Street and Cullum	Review and extension of taxi rank locations - Promotion of zero emission capable taxis integrated with forthcoming LEN.	Developed the CityAir smart phone App - Developing further work with Bart's NHS Trust on emissions reduction and awareness raising among vulnerable patients. - Supporting Cheapside Business Alliance in monitoring and promoting no engine idling action days. - Business Healthy event. - Developing communications strategy. - Leading on the pan London anti-idling project. (MAQF)

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
Lambeth	Fleet diesel vehicles all meet Euro IV. - Reduce staff mileage and prioritise staff journeys by LEV's. - Promote attainment of FORS Gold accreditation for council fleet (Euro6) - Adopting low emission procurement policy for council vehicles.	Borough wide 20mph limit from April 2016. - Your New Town Hall project, reducing travel by council staff, by reducing number of council buildings. - Policies in Local Plan to promote traffic reduction.	Leading on the Low Emissions Logistics project. (MAQF)	Street. - New public square and significant greening at Barts Close. - Removal of carriageway and creation of new public space around Middlesex Street. Member of LLECP with 12 other boroughs. (MAQF) - Continuation of successful boiler scrappage scheme.	Continued to deliver a range of schemes to promote cycling - Campaign to introduce clean buses in Brixton and Streatham	Promotes AirTEXT locally. - Partner in the Clean Air Better Business project, working with local BID. (MAQF) - Delivering the STARS Schools Travel Programme in conjunction with TfL. - Participating in the pan-borough Antiidling project. (MAQF)
Camden	Camden announced that it will no longer purchase diesel vehicles for its own fleet unless	Delivered (CO2) emissions-based parking permits, with an additional diesel	Have a contractor Green Vehicle Fleet Standard. All hire vehicles sourced now meet Euro V	Camden Climate Change Alliance supporting business emissions reductions.	Work with TfL and Taxi & PHV operators to reduce emissions and support the	Awareness raising with public health to residents, schools and business through the

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
	no other viable alternatives exist. - Maintain Gold Fleet Operator FORS accreditation for Camden's fleet. - They have installed a permanent CNG supply at it's York Way depot.	surcharge. - Hosted a joint AQ conference with Islington - Anti-idling enforcement under way at hotspots	emissions standards. Lead on the London Boroughs Consolidation Centre. (MAQF)	- Negotiating emission standards applying to the HS2 project Lead borough for the London Low Emission Construction Partnership. (MAQF)	introduction of zero emission capable taxis from 2018. - Upgrade of public CNG refuelling station. - Working with TfL to install EV rapid charging units.	Breathe Better Together Project. (MAQF) - Delivered the Cleaner Air for Great Ormond Street Hospital project. (MAQF) - Schools education, encouraging schools to join the TfL STARS accredited travel planning programme. - Developing increased awareness of the impact of travel choices through citizen science projects, and schools educational projects.
Westminster	Introduced a Green Fleet Sustainable Procurement Policy prioritising zero emission vehicles.	Major Schemes programme-reducing through traffic in pollution hotspots such as Oxford St & Marylebone Road. - Delivering a Marylebone Low Emission Neighbourhood. (MAQF) -	Member of Central London Freight Quality Partnership. - Delivery Service Plans to review goods and servicing vehicle movements in Oxford Street West and Westminster City Hall. - Servicing and	Carbon-offset fund to promote air quality neutral developments to meet renewables targets.	10,000 members of 194 car club vehicles in Westminster. - EV Car Club project provided 50 EV cars (MAQF) - Promoting residential EV parking, with over 200 off street parking bays, in addition to 60	Partner in the Clean Air Better Business – project. (MAQF) - Established AQ task group to engage with community on health impacts. - Deliver the TfL's STARS schools scheme.

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		Launched a Smarter Transport app to identify parking spaces. - Greener City Action Plan, policy priorities to make better use of resources.	Management Plans SMP seeks to control size of vehicles and times of servicing. - Promoting EV delivery vehicles and EV assisted cargo bikes.		on-street parking bays.	- Have a joint communications approach with Kensington &Chelsea Hammersmith & Fulham.
Hackney	Fleet Project has already replaced 6 diesel vans & 2 LPG forklifts with electric vehicles. Installed two 7kW charge points. (MAQF) - Upgraded petrol hybrid cars, participated in Mayor's biodiesel programme. Initiated staff pool bike scheme; improved staff travel plan.	Green Action Zone (GAZ) project (MAQF) covering Shoreditch, Islington & Tower Hamlets. (MAQF) - Zero Emissions Project (ZEN) AQ business liaison project. Shared project covering Hackney, Islington, and Tower Hamlets. 933 partners across three boroughs delivering 445 measures including courier electric bike scheme across the area. (MAQF) - Low Emission Neighbourhood (LEN) - tri-borough initiative with Islington, Tower Hamlets and Hackney	See ZEN & LEN project.	All planning applications are required to meet AQ Neutral standard. Require that all domestic boilers in new developments are ultralow NOx. Improved air quality policy incorporated into borough's Local Development Plan Planning conditions used to require EV charge points for new developments in areas of poor air quality. In line with Local Plan. Car-free and car-capped developments	Emissions based parking permit charges to be introduced in 2016/17. - Cycling & walking campaign for businesses and residents, achieved additional 672 on street cycle parking spaces. Cycle Super Highway completed. - Sustainable travel to schools programme (STARS) engaged 57 schools reducing number of children traveling by car from 18.5% (2007/08) to 8.41% (2015) STARS Europe project increased cycling at 33 participating schools by	AQ incorporated into Health & Wellbeing Strategy. - Manor House schools project provided AQ information to >1000 families. (MAQF) - Promote AirTEXT via patient groups.

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		(lead) to introduce a package of measures focused on reducing emissions and promoting sustainable living more generally. (MAQF) - Neighbourhood of the Future (NoF): A triborough initiative to develop 6 electric streets which will see Innovate EVCP's and a conversion of parking bays to electric only. (OLEV funded – Go Ultra Low City scheme). - Borough wide 20 ph speed limit on residential (non-TfL roads). - Schools Air Quality Monitoring Project: survey/monitor air quality and make recommendations to all schools in areas that fail/are likely to fail National Air Quality objects (end 2018).		planned.	153%. - 170 Car Club bays and approx. 90 car sharing vehicles available via 'Drive Now'.	
		School Streets - an				

Borough	Borough fleet actions	Localised solutions	Delivery servicing and freight	Emissions from developments and buildings	Cleaner transport	Public health and awareness raising
		experiment to close school related roads in 2-3 locations to address air quality congestion and safety issues associated with the school run. The first school street should be introduced in April 2017. - Key AQAP transport related measures incorporated into borough's Transport Strategy 2015-2025. - AQ monitoring network expanded to include AQ Focus areas and at 12 schools as part of AQ Impact Assessment of Schools.				

Actions in **blue** are Mayor's Air Quality Funded (MAQF) projects. More information at https://www.london.gov.uk/sites/default/files/mayors_air_quality_fund_report_2016.pdf

Summary - Central London

AQ monitoring

AQMA's are generally declared as whole Borough AQMA's, all originally declared between 1999 and 2003 for exceedances of the objectives for NO_2 and PM_{10} . All boroughs have declared for both annual and hourly mean exceedances for NO_2 , except Southwark and Camden who have only declared for exceedances of the annual mean objective. However in the case of Camden, exceedances of the hourly mean objective for NO_2 have been recorded so this designation should be reconsidered.

All boroughs have declared for exceedance of the 24-hour mean objective for PM_{10} , with Lambeth, Westminster, City of London, Kensington & Chelsea declaring for exceedance of the annual mean objective, based on modelling and the known health impacts of PM_{10} . Apart from one location in the City of London and one in Lambeth, monitored levels for PM_{10} remain below objective levels.

The monitoring results highlight that there is continuing exposure of populations above annual and hourly mean objective levels, across all boroughs. The monitored levels reported in central London boroughs are amongst some of the highest levels found throughout Greater London, with annual average NO_2 concentrations reaching up to 130ug/m3.

These results suggest that the current status of the AQMA's should be reviewed, and monitoring strategies reviewed accordingly to include air pollution hotspots or focus areas. It is noted that London Borough of Hackney has expanded their monitoring network to include their AQ Focus Areas.

Fleet improvements

There are a wide range of policies adopted for council and contractors vehicle procurement. Westminster has a procurement policy to prioritise zero emission vehicles, and the City of London and Camden have introduced policies that ban the purchasing of diesel vehicles unless no alternative exists. Some procurement codes apply to all council vehicles; others apply to the refuse fleet and contractors vehicles.

Lambeth are aiming for attainment of FORS Gold accreditation for their council fleets, and Camden have achieved this high standard already.

Local measures

There are several boroughs benefiting from the Mayor's Air Quality fund to promote local measures, notably Low Emission Neighbourhoods in Islington and Westminster. A Zero Emission Networks is planned in Islington.

Projects to develop green walls as pollution barriers have been developed in Southwark and in Kensington & Chelsea.

Emissions for development and buildings

Three of the central London boroughs are partners in the London Low Emission Construction Partnership which seeks to encourage the uptake of best practice in pollution reduction measures within the construction industry.

A number of the boroughs are also participating in the MAQF funded project to pay for additional staff to monitor construction sites. Hackney has used planning conditions to install EV charging points in parking spaces in areas of poor AQ.

Cleaner transport

Low emission car clubs are gaining in popularity with the boroughs of Kensington & Chelsea, Westminster and Islington promoting these schemes. Camden and City of London are planning projects to support and promote the introduction of zero emission capable taxis from 2018. In 2016/17 Hackney is introducing emissions based parking permit charges.

Public health & awareness raising

Most central London boroughs have engaged with the Mayor's sponsored Clean Air Better Business programme, initiated via the Cross River Partnership, involving collaboration between Business Improvement Districts (BIDs) and the boroughs. This has delivered projects such as cleaner walking routes away from polluted roads and green infrastructure improvements.

Delivery servicing and freight

The MAQF has funded a wide range of inter borough collaborative projects that are addressing different aspects of freight and delivery movements including:

- Expanding the London Boroughs Consolidation Project to optimise deliveries to council buildings and private sector (Camden, Islington, & Enfield)
- Work with central London BIDs, co-ordinated through Cleaner Air Better Business (Camden, Westminster, Lambeth, City of London Corporation, Islington)
- South London Freight Consolidation Centre (Lambeth, Southwark, in addition to Croydon and Wandsworth)
- Idling engine action days (Camden, Islington, Lambeth, RB K&C, Westminster, City of London, Southwark)

CONCLUSIONS

The main conclusions have been divided into sections to provide an update on the key elements of the annual report.

Annual Status Reports

This is the first year of the new Annual Status Report (ASR)/Annual Status Summary Report (ASSR) regime and this update provides an opportunity to reflect upon how the reporting system has been implemented by the boroughs and how it might be refined for subsequent reporting cycles.

The purpose of the revisions to the annual reporting system was to reduce any unnecessary administrative burden on boroughs. Certainly the report is more concise but where the local authority has not provided an ASSR, the ASR as a stand-alone report does not provide sufficient information for a member of the public to understand the purpose or background of the ASR. It is therefore important that boroughs complete the brief ASSR template provided by the GLA and place it on their websites in order to provide a public-friendly summary of air quality in their area. The GLA also provide easy to understand maps of readings at monitoring stations for inclusion in this report.

Monitoring

The monitoring data presented in this year's ASRs indicates that the majority of boroughs reported a slight improvement in NO_2 concentrations measured during 2015, although concentrations remained in exceedance of the annual mean objective in all boroughs. Two boroughs in the west sub-region showed good progress, with some monitoring sites measuring concentrations below the AQ objectives. In the south and central sub-regions there were 4 boroughs showing no improvement, where pollution levels are above objectives.

 PM_{10} monitoring across the sub-regions mainly showed good progress although this should be regarded with caution as there are significantly fewer particulate analysers (when compared to monitoring for NO_2) and the majority are not sited at 'worst-case' locations.

It is evident in trying to compare monitoring data that monitoring programmes vary significantly between boroughs in all sub-regions. In most cases there is a well-established and extensive network of NO_2 diffusion tube monitoring sites together with at least one automatic monitoring station monitoring both NO_2 and PM_{10} . In a small number of cases monitoring is very limited or has been significantly scaled back. This makes comparison of measured air quality between boroughs and sub-regions more difficult. The necessity of safeguarding automatic monitors in order to understand long term trends is well understood, but diffusion tubes are also a key way for boroughs to assess trends across a widespread area. It is therefore recommended that current diffusion tube networks should be retained, and additional tubes considered for focus areas where possible.

The LLAQM Technical Guidance (LLAQM:TG16) confirms that air quality monitoring is a crucial part of the LLAQM system and local authorities are encouraged to maintain existing networks which provide useful information on long term trends. In accordance with the Technical Guidance any future amendments to local monitoring strategies should be reviewed with the following purposes in mind:

• To determine the extent of the exceedances at relevant locations.

- To ensure that they are monitoring around the air quality focus areas and at other key locations, where exceedances of the objectives are likely.
- To prepare for re-assessment of the AQMA boundary in 2020.

In terms of reporting on air quality monitoring data there was some variation between boroughs with some providing no trend data from which to draw comparisons. This was particularly the case with data from non-automatic monitoring sites. Local authorities are reminded of the requirement to provide 7 years data for subsequent ASRs.

It should also be noted that in some boroughs diffusion tube monitoring data has returned NO_2 concentrations in excess of $60\mu g/m3$. This can be indicative of an exceedance of the hourly mean NO_2 objective. In some of these cases the current AQMA designation is for exceedance of the annual mean objective only. Where this is the case boroughs should consider reviewing their AQMA designation and notify Defra and the GLA accordingly.

The fact that current AQMA designations may not be accurate reinforces the need for the planned review of AQMA boundaries in 2020 and highlights the benefits of maintaining an effective monitoring network. In this respect boroughs should also consider reviewing their current monitoring locations to determine whether they provide sufficient coverage around the GLA air quality focus areas and other key locations where exceedances of the objectives are likely, as recommended in the current Technical Guidance.

Apart from two boroughs in the central London sub-region and one in the north London sub-region, monitored PM₁₀ concentrations are below objective levels. This reflects the fact that there is limited particulate monitoring in terms of spatial coverage and few automatic analysers sited at 'worst-case' locations. In the absence of additional monitoring data, local authorities are recommended to use the concentration maps produced by the GLA as part of the latest London Atmospheric Emissions Inventory (LAEI) modelling package for the AQMA review. The updated London Datastore 'LLAQM bespoke borough by borough air quality modelling and data' package is a valuable resource for all boroughs. https://data.london.gov.uk/dataset/llaqm-bespoke-borough-by-borough-air-quality-modelling-and-data

Action Planning

Central London is the only sub-region where all boroughs have produced new/revised AQAPs within the past 5 years. In the other regions a significant proportion of local authorities have indicated that they are in the process of revising their AQAPs this year. This review is welcomed as many of the current action plans are out of date and do not reflect current thinking on effective air quality improvement initiatives. Many of the current plans also provide very limited evaluation of progress against key indicators and lack timescales for implementation and/or completion of planned measures.

It is important that boroughs engage fully with all appropriate stakeholders throughout the AQAP updating process, including public health, development management, transport planners and Transport for London etc. The AQAP should be incorporated into the borough's LIP, to develop

effective measures in air quality hotspot areas. An integrated approach to developing action plans is recommended so that policies on sustainability, carbon reduction, and climate impacts can be considered together (Paragraphs 2.12 -2.14 LLAQM.TG(16)).

Councils are advised to incorporate measures specific to the air quality focus areas and to provide as much information as possible to enable progress with measures to be quantified, using local and central modelling and assessment tools (including emissions and concentration data). It is important to remember that Action Plans require clear milestones and outcomes that can be reviewed following implementation.

RECOMMENDATIONS

- Monitoring provision across each borough should be reviewed to ensure optimal spatial coverage and to verify the location and extent of air quality focus areas and other local hotspots. This is important in terms of refining the air quality model and for evaluating predicted trends against actual pollution trends.
- New AQAPs and AQAP revisions should include specific measures designed to address air quality focus areas and local hotspots.
- AQAP revisions should ensure that measures can be evaluated effectively using Key Performance Indicators wherever possible, and include defined timescales for implementation/completion.
- This review of borough monitoring supports the LLAQM requirement that boroughs should reassess their AQMA boundaries in 2020 as a means of refining and updating the air quality 'picture' in London boroughs. From a review of the monitoring data some boroughs, such as Camden and Southwark, should – in 2020 - consider whether they declare for an exceedance of the short term NO2 objective.
- Trend data from the past seven years of monitoring should be supplied within all Annual Status Report.

Other formats and languages

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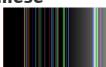
Chinese

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Vietnamese

Nếu bạn muốn có văn bản tài liệu này bằng ngôn ngữ của mình, hãy liên hệ theo số điện thoại hoặc địa chỉ đười đầy.



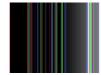
Greek

Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος εγγράφου στη δική σως γλάσσας, παρακαλείστε να επικοινονήσετε τηλεφονικά στον αριθμό αυτό ή τυχηδρομικά στην παρακίτω διεύθννση.



Turkish

Bu belgenin kendi dilinizde hazırlanmış bir nüshasını edinmek için, lütfen aşağıdaki telefon numarasını arayınız veya adrese başvurunuz.



Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ ਕਰੋ:

Hindi

यदि आप इस दस्तावेज की प्रति क्षपनी भाषा में चाहते हैं, तो कृषणा निमालिखत नंबर पर फोन करें अथवा नीचे दिये पये पते पर संपर्ज करें



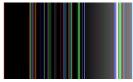
Bengali

আপনি যদি আপনার ভাষার এই দলিলের প্রতিলিপি কিপা চান, তা হলে নীচের ফোন্ নযরে বা ঠিকানার অধ্যহ করে যোগাযোগ করন।



Urdu

اگر آپ اِس دستاویز کی نقل اپنی زبان میں چاہتے ہیں، نو براہ کرم نیچے دئے گئے نمبر پر فین کریں یا دیئے گئے پتے پر رابطہ کریں



Arabic

إذا أرنت نسخة من هذه الوثيَّة بلغتك، يرجى الاتصال يرقم الهاتف أو مراسلة العنوان أن:



Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં જોઇતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાદ્યો.