

London Borough of Haringey
Air Quality Annual Status Report for 2018
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This report provides a detailed overview of air quality in the London Borough of Haringey during 2018. It has been produced to meet the requirements of the London Local Air Quality Management statutory process¹.

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¹ LLAQM Policy and Technical Guidance 2016 (LLAQM.TG (16)). <https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-boroughs>

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Abbreviations

AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQO	Air Quality Objective
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
CAZ	Central Activity Zone
EV	Electric Vehicle
GLA	Greater London Authority
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LLAQM	London Local Air Quality Management
NRMM	Non-Road Mobile Machinery
PM ₁₀	Particulate matter less than 10 micron in diameter
PM _{2.5}	Particulate matter less than 2.5 micron in diameter
TEB	Transport Emissions Benchmark
TfL	Transport for London

Table A. Summary of National Air Quality Standards and Objectives

Pollutant	Objective (UK)	Averaging Period	Date¹
Nitrogen dioxide - NO ₂	200 µg m ⁻³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
	40 µg m ⁻³	Annual mean	31 Dec 2005
Particles - PM ₁₀	50 µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles - PM _{2.5}	25 µg m ⁻³	Annual mean	2020
	Target of 15% reduction in concentration at urban background locations	3 year mean	Between 2010 and 2020
Sulphur Dioxide (SO ₂)	266 µg m ⁻³ not to be exceeded more than 35 times a year	15 minute mean	31 Dec 2005
	350 µg m ⁻³ not to be exceeded more than 24 times a year	1 hour mean	31 Dec 2004
	125 µg m ⁻³ not to be exceeded more than 3 times a year	24 hour mean	31 Dec 2004

Note: ¹ by which to be achieved by and maintained thereafter

1. Air Quality Monitoring

Haringey operates two automatic monitoring stations (Table B), which are both representative of public exposure.

For Haringey roadside, the nearest relevant exposure are residential properties located less than 4m from the kerb; the sample inlet is in line with the building façades, demonstrating relevant exposure. This site is located on High Road, Tottenham and is classified as a Roadside site. Monitoring at this location has been undertaken for some 20 years.

The Haringey South site is located in a local park and is classified as an urban background site. Whilst this location is not defined as a sensitive receptor, it is representative of relevant exposure, being a background site within the Greater London area. In 2013, the monitoring equipment was relocated to its current location within the park from another area within the park for safety reasons.

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2018

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Monitoring technique
UK-AIR ID: UKA00260 EU Site ID: GB0637A	Haringey Roadside	533894	190707	Roadside	Yes	3m – residential	4m	4m	NO ₂ ,	Chemiluminescent; TEOM FDMS
UK-AIR ID: UKA0056 8 EU Site ID: GB1024A	Haringey South	529987	188917	Urban Background	Yes	None	N/A	3.5m	NO ₂ , Ozone	Chemiluminescent

The Council has been monitoring for nitrogen dioxide by diffusion tube throughout the borough since 2004. Towards the end of 2010, six of the existing monitoring location sites were closed and nine new locations were opened. These nine new locations were chosen as a result of the latest air quality modelling that was carried out in 2009 by Bureau Veritas on behalf of the North London Cluster Group. The modelling identified hotspot locations where the hourly NO₂ objective may be at risk of being exceeded and where there is relevant exposure.

Table C below gives individual site details, locations for the 2016 and 2018 monitoring round. There were thirteen diffusion tube monitoring locations throughout the borough in 2018. All diffusion tube sites are indicative of relevant exposure from roadside and background sites. The diffusion tubes are located at building facades of residential properties and schools in or adjacent to hotspot locations where possible.

Three of the diffusion tube sites have been at their location long-term (>10 years); these are a mixture of roadside and background sites and thus provide good long-term trends. Diffusion tube HR14 is co-located with Haringey Roadside automatic monitoring site and the data is fed into the National Diffusion Tube Co-location study.

In 2018, monitoring at locations HR20 and HR28 stopped and monitoring at locations HR36 and HR37 began as detailed in the following table:

Location	Number (see Table C)	Description/Comments
• Schools	5	All school diffusion tube monitoring sites are located within 150m of a main road carrying >10,000 vehicles per day. Existing: <u>Diffusion tubes added:</u> 2017: HR34 (Coleridge Primary school) and HR35 (Chesnuds Primary School) 2018: HR36 (Holy Trinity CE School, Tottenham) <u>Diffusion tube stopped:</u> 2018: HR20 (Highgate Primary School) and HR28 (Bounds Green Primary School, N11).
• Main road	5	<u>Diffusion tube added:</u> 2018: Monitor HR37 (Weston Park/Broadway, Crouch End).
• GP Surgeries	2	These are located outside GP surgeries (i.e. HR24 Westbury Medical Centre, Westbury Ave, N22 and HR27 (name) Surgery, Green Lanes, N8).

Location	Number (see Table C)	Description/Comments
• Urban background	1	HR08 was classified as an urban background site, however the adjacent site has been undergoing redevelopment to mixed use, residential and commercial. Therefore, consideration is still being given to relocation.

Appendix C shows a map of the locations of all monitoring sites, automatic and non-automatic, in the borough as at December 2018.

Table C. Details of Non-Automatic Monitoring Sites for 2018

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
HR06	Archway Road	528945	187682	Roadside	Y	<0.5m	1.5m	2.5m	NO ₂	N
HR08	Former Mortuary	523440	189446	Urban Background	Y	2m	0m	2.5m	NO ₂	N
HR14	639 High Road, N17	533890	190710	Roadside	Y	3m	4m	3.5m	NO ₂	Y
HR19 ^a	Jewsons Staff Car Park, N2	527897	188558	Roadside	Y	<0.5m	2.5m	2.5m	NO ₂	N
HR20 ^c	Highgate Primary School	527974	188329	Roadside	Y	<0.5m	4m	1.5m	NO ₂	N
HR21 ^a	Lordship Lane Primary School	532010	190549	Roadside	Y	0m - located in school playground	N/A	1.5m	NO ₂	N
HR23 ^a	Holy Trinity Church, N15	533720	189471	Roadside	Y	10m	20m	0.5m	NO ₂	N
HR24	Westbury Medical Centre	532155	190517	Roadside	Y	0m – located on building facade	9m	2.0m	NO ₂	N
HR25	Rowland Hill Nursery, White Hart Lane	532554	191383	Roadside	Y	0m – located in school playground	7m	1.5m	NO ₂	N
HR27	The Old Surgery, Green Lanes, N8	531758	188872	Roadside	Y	0m – located on building facade	4.5m	2.5m	NO ₂	N

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co-located with an automatic monitor. (Y/N)
HR28 ^c	Bounds Green Primary School, N11	530063	191324	Roadside	Y	7.5m	2m	2.5m	NO ₂	N
HR29 ^a	Stamford Hill Primary School, N17	532881	188049	Urban Background	Y	0m – located in school playground	22m	3m	NO ₂	N
HR30	Earlsmead Primary School, N17	533899	189023	Roadside	Y	0m – located within school site.	<0.5m	2.5m	NO ₂	N
HR31	Wood Green High Road, N22	531245	189935	Roadside	Y	3m	<0.5m	2 m	NO ₂	N
HR32	Archway Road / Southwood Road N10	528612	188072	Roadside	Y	<1m	<0.5m	2m	NO ₂	N
HR33 ^a	St Aidens School, N4			Urban Background	Y	0m – located next to playground	2m	2 m	NO ₂	N
HR34 ^b	Coleridge Primary school	531079	187926	Roadside	Y	0m – located within school site.	<0.5m	2.5m	NO ₂	N
HR35 ^b	Chesnuds primary school	532324	188766	Roadside	Y	0m – located within school site.	<0.5m	2.5m	NO ₂	N
HR36 ^d	Holy Trinity CE School, Tottenham	533842	533842	Roadside	Y	0m- On Large Gate Outside Playground Area Somerset Rd, London N17 9EJ	2m	2 m	NO ₂	N
HR37 ^d	Weston Park/Broadway, Crouch End.	530123	188420	Roadside	Y	0m-Outside Gail's Bakery 48 The Broadway, London N8 9TP	2m	2 m	NO ₂	N

^a monitoring ended in 2016, ^b monitoring started in 2017, ^c stopped in 2018 and ^d added in 2018

1.2 Comparison of Monitoring Results with AQOs

Table D1 represents the Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results for the Automatic monitoring sites and Table D2 the annual Mean NO₂ Diffusion Tube Bias-adjusted Monitoring Results.

The results presented are after adjustments for “annualisation” as described in Appendix A.

Table D1. Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results (µg m⁻³)

Site ID	Site type	Valid data capture for monitoring period % ^a	Valid data capture 2018% ^b	Annual Mean Concentration (µg m ⁻³)							
				2011 ^c	2012 ^c	2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c
UK-AIR ID: UKA00260 EU Site ID: GB0637A	Automatic	100	100	38	42	43	48	40	43	40	39
UK-AIR ID: UKA00568 EU Site ID: GB1024A	Automatic	99	99	-	-	26	24	24	26	24	23

Notes: Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold**.

NO₂ annual means in excess of 60 µg m⁻³, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in bold and underlined.

^a data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

The concentration of NO₂ monitored along the Haringey Roadside was still higher than that recorded on London Haringey Priory Park South.

No exceedances of the annual objective of 40µg/m³ NO₂ were identified at either of the two Haringey locations, therefore the annual objective has been achieved.

At the Haringey South location, the NO₂ trend remains steady and low.

The hourly NO₂ objective was achieved at both monitoring locations.

NO₂ concentration has decreased since 2011 as shown on the graphs appended to this report (which graph? remove).

Table D2. Annual Mean NO₂ Diffusion Tube Bias-adjusted Monitoring Results (µg m⁻³)

Site ID	Diffusion Tube type	Valid data capture for monitoring period % ^a	Valid data capture 2018 % ^b	Annual Mean Concentration (µg m ⁻³)							
				2011 ^c	2012 ^c	2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c
HR06	Roadside	100	100	<u>62</u>	<u>69</u>	56	42	51	44	41	35
HR08	Urban Background	68	68	37	32	30	25	31	28	27	19
HR14	Roadside	99	99	44	46	39	37	39	33	34	33
HR20	Roadside	93	93	39	37	32	29	33	31	30	-
HR24	Roadside	98	98	45	42	41	33	43	37	33	33
HR25	Roadside	88	88	36	37	34	34	33	30	29	35
HR27	Roadside	99	99	42	44	40	33	43	36	33	31
HR28	Roadside	97	97	-	-	40	30	35	33	34	-
HR30	Roadside	82	82	-	-	-	-	50	43	40	44
HR31	Roadside	91	91	-	-	-	-	-	59	52	<u>65</u>
HR32	Roadside	99	99	-	-	-	-	-	<u>69</u>	55	<u>66</u>
HR 34	Coleridge Primary school	98	98	-	-	-	-	-	-	31	31
HR 35	Chesnuds primary school	86	86	-	-	-	-	-	-	22	31

Site ID	Diffusion Tube type	Valid data capture for monitoring period % ^a	Valid data capture 2018 % ^b	Annual Mean Concentration ($\mu\text{g m}^{-3}$)							
				2011 ^c	2012 ^c	2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c
HR36	Holy Trinity CE School, Tottenham	98	98	-	-	-	-	-	-	-	30
HR37	Weston Park/Broadway, Crouch End.	86	86	-	-	-	-	-	-	-	36

Notes: Exceedance of the NO₂ annual mean AQO of 40 $\mu\text{g m}^{-3}$ are shown in **bold**.

NO₂ annual means in excess of 60 $\mu\text{g m}^{-3}$, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in bold and underlined.

^a data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

All the diffusion tube results have been appropriately bias adjusted, using the analytical laboratory adjustment factors. Exceedances of the annual objective of 40 $\mu\text{g}/\text{m}^3$ are highlighted in bold. Similarly, to the 2017 data, HR30 (Earlsmead primary), HR31(Wood Green High Road) and HR32 (Archway Road/Southwood) exceed the air quality objective. The results are in accordance with the fact that the diffusion tubes are located in or adjacent to hotspot locations, as identified by the Bureau Veritas AQ modelling.

The concentration recorded at HR06(Archway) has decreased and results show the concentration of NO₂ below the air quality objective of 40 $\mu\text{g}/\text{m}^3$ as opposed to the 2017 data which was above the objective.

The data presented represents monitoring results for a 12-month period (January – December) and tubes are exposed in accordance with the UK Defra guidance LAQM.TG (16).

Diffusion tubes are considered to have limitations. In 2000, the government recommended that tubes should be co-located with an automatic analyser to determine a bias adjustment factor, which is then applied to the raw annual average concentrations for the same year to obtain bias adjusted results. Haringey co-locates a diffusion tube at HR1 (High Road, Tottenham) and submits the data annually.

It is the laboratory average adjustment factor (Lambeth Scientific Services) that is applied to the raw annual average concentrations for the correct year to obtain the bias adjusted results. The bias adjustment factors are on their website:

<http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html>

The raw data from the co-located diffusion tube is submitted annually to the NO₂ diffusion tube network data managers for verification of the diffusion tubes and calculation of the laboratory bias adjustment factor.

The bias adjustment factor used was 1.01 for 7 studies for year 2018.

Table E shows that there have been no exceedances of the hourly NO₂ objective in 2018.

Table E. NO₂ Automatic Monitor Results: Comparison with 1-hour Mean Objective

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2017 % ^b	Number of Hourly Means > 200 µg m ⁻³							
			2011 ^c	2012 ^c	2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c	2018 ^c
UK-AIR ID: UKA00260 EU Site ID: GB0637A	99	100	0	0	1	0	0	6	5	0
UK-AIR ID: UKA00568 EU Site ID: GB1024A	97	99	-	-	-	0	0	0	0	0

Notes: Exceedance of the NO₂ short term AQO of 200 µg m⁻³ over the permitted 18 days per year are shown in **bold**.

^a data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

There have been no exceedances of the hourly NO₂ objective in 2018.

The 2018 annual Mean NO₂ Concentration in the London Borough of Haringey are attached to this report (Appendix C).

PM10 Automatic Monitor:

Monitoring for PM10 ceased in Haringey in 2014. Historical PM10 monitoring data is available at:

www.uk-air.defra.gov.uk

In January 2016; Defra’s AURN London Network managers (Environmental Research Group, Kings College, London) notified the Council of its intention to remove the PM2.5 Defra network monitor from the HGY1 location to another location, outside of the borough:

‘Under the AQ Directive, Defra are required to regularly assess the monitoring requirements in the UK. During the most recent assessment, London was found to have a greater number of PM2.5 instruments than required under the directive but the number in some other zones and agglomerations in the UK were identified as requiring additional PM measurement. Defra therefore needs to move the PM2.5 instrument from your site at Haringey Roadside to another AURN site’

PM2.5 monitoring is no longer carried out in Haringey. Historical PM2.5 monitoring data is available at: www.uk-air.defra.gov.uk

2. Action to Improve Air Quality

2.1 Air Quality Action Plan Progress

Table F below provides a brief summary of Haringey's progress against the Air Quality Action Plan, made this year.

Table F. Delivery of Air Quality Action Plan Measures

Measure	Description
1. The local authority is to Lead by Example and Reduce Emissions from the Council Fleet	<p>All vehicles in council ownership or leased will be compliant with ULEZ requirements.</p> <p>Planning have two electric vehicles managed outside of the council fleet.</p> <p>No vehicle tracking was undertaken in 2018. However, at the time of publishing this report, vehicle tracking was been considered within Parks and Home for Haringey's fleet.</p> <p>Driver assessment is part of our insurance requirements.</p>
2. Electric Vehicle Charging Points	<p>There are currently 44 charge points in 20 locations across the borough.</p> <p>We installed 38 new charge points between June and December 2018, totalling 40 points altogether.</p> <p>https://www.sourcelondon.net/</p> <p>TfL have installed 4 rapid chargers on Transport for London Road Network (TLRN 'red routes') in the borough. They are also working with the council to install 5 more Rapid charging points on borough road/land, one for taxis in Wood Green and 4 in car parks.</p>
3. Car Clubs	<p>There are two types of car clubs operational in Haringey, round trip car clubs operated by Zip-Car and City Car, and One-Way Car club operated by Drive Now. In 2018 the number of car club vehicles operating in Haringey is 80 and includes cars, people carriers and vans. City Car Club provide 3 vehicles. Drive Now vehicles can be used for one-way journeys and can be picked up and parked in any legal parking bay in the borough. Haringey is one of four London boroughs that host a fleet of 300+ Drive Now vehicles.</p>
4. Travel Plans	<p>Haringey continued to encourage and support all schools across the borough to develop and implement school travel plans. The travel plans evidence the initiatives that schools implement to make travel safer and more sustainable for students, parents and staff. They are an important tool to encourage modal shift. Engaged schools have access to additional resources, as well as enabling the Smarter (Active) Travel Team to promote initiatives and messages more effectively.</p> <p>Activities over 2018 include;</p> <ul style="list-style-type: none"> - Monthly newsletter that goes to all STARs accredited schools

Measure	Description
	<ul style="list-style-type: none"> - Annual STARS celebration awards, where schools are presented with their Awards and attend workshops to develop new initiatives to adopt in their schools as detailed in measure No 7 described below. - Regular meetings - Smarter (Active) Travel team supported the implementation of the School Street at one of the schools and working with colleagues to explore other potential schools' streets - Provide small grants to schools to help cover the cost for implement travel plans initiatives. - Delivery of national campaigns such as; Walk to school week; Car Free Day; Bike Week; Clean Air Day <p>Maintained ≥ 95% schools with travel plans in Haringey.</p> <p>Follow link for more info: http://www.haringey.gov.uk/parking-roads-and-travel/travel/school-journeys</p>
5. 20 mph zones / Community Streets	All streets in Haringey have a 20mph speed limit with the exception of main roads and TfL managed roads.
6. No Idling Zones	There have been no amendments / changes to the legislation; the Fixed Penalty fine for idling vehicles remains at £20 and at this time is not cost effective for the Council to enforce. However, we have been committed to driving behavioural change to reduce idling.
7. Smarter Travel Promotion	<p>The Smarter Travel Team continue to utilise the number of national and local campaigns to encourage take-up of sustainable modes of transport.</p> <p>A range of active travel projects carried out in 2018 include:</p> <ul style="list-style-type: none"> • STARS Accredited schools – 68 (37 have achieved Gold Status, 13 Silver and 18 bronze) • Promotion of Walk to school week, visiting schools and encourage activities such as walking bus. • Borough STARS celebration event – 23 schools attended. • Total of 160 children (2017-18) have been taught the basics of bike maintenance and providing the opportunity to use the tools needed and to put into practice what they had learnt. • Engaged with 6736 people to deliver personal travel plans. • Engaged with 7581 pupils, carrying out 25 AQ focussed lessons and 37 assemblies at 24 primary schools in the borough. • 24 other Smarter Travel activities, using the opportunity to raise awareness and promote air quality issue. Events included the Hari Bear walk, an AQ talk at schools and community centres. Supporting the Haringey Health & Well Being Fair – promoting AQ and associated issues at the Smarter Travel stall. • Trib-borough annual Festival of Cycling and walking, 2000 attendees

Measure	Description
	<ul style="list-style-type: none"> • Encourage council staff engagement with Active Travel through staff health walks, walk to workday, bike week, staff pool bikes, cycle to work scheme. • The Haringey Personal Travel Planning (PTP) & Walk Zone Project involves undertaking Personal Travel Planning and a 10-minute Walk Zone project with 12 primary schools in total. • The project forms part of the Haringey Year of walking campaign so a key focus is to deliver a modal shift to walking by using proven PTP methodologies to overcome car use with other sustainable modes as secondary options. The project is jointly funded by the Haringey Smarter Travel Programme and the Mayor’s Air Quality Fund. With that in mind, much of the work focusses on providing air quality information and advice to Haringey residents <p>Walk Zones - 10-minute Walk Zone projects are delivered with 12 schools per year:</p> <p>Workshop 1 – Introduction to the project and then outdoors walking with stop watches to plot a realistic 10-minute Walk Zone for the school.</p> <p>Workshops 2 & 3 – Developing, planning and rehearsing methods to promote the map to the school community. These methods usually take the general form of an assembly and an on-street launch event.</p> <p>Pupil led assembly - to promote park and stride, the map and any associated messages to fellow pupils.</p> <p>On-street/playground campaign - to promote the map, its purpose and key messages to parents and carers.</p> <p>For more information on Smarter Travel Team activities;</p> <p>http://www.haringey.gov.uk/index/environment_and_transport/travel/smartertravel.htm</p>
8. Cycle Routes and Cycle Parking	<p>Haringey has a network of cycle routes across the borough including cycle lanes on main roads, separated cycle lanes and special fully signed, quiet routes. The borough is also part of the London Cycle network with cycle routes linking into those in neighbouring boroughs.</p> <p>The Council website actively promotes cycling and provides information and resources to assist, including cycling benefits, how to stay safe and cycle responsibly, cycling events, purchasing a bike, training opportunities and bike maintenance.</p> <p>We have invested heavily in cycle parking facilities over recent years and have installed over 1,400 publicly accessible on-street cycle parking spaces. We have installed cycle stands along town centres, outside shops, doctors’ surgeries, local underground and rail stations etc.</p>

Measure	Description
	<p>We have trialed a cycle parking rack in the shape of a car, known as a 'Car Bike Ports' which are able to take ten bicycles in a single car parking space. The message is, 'ditch the car and start cycling'.</p> <p>We have installed bike hangars on a number of residential streets to accommodate demand for secure residential cycle parking. To date we have installed 52 in the borough.</p> <p>The council continues to work with the Haringey Cycling Campaign www.haringeycyclists.org. Detailed information about cycling in Haringey on the Council's website:</p> <p>http://www.haringey.gov.uk/parking-roads-and-travel/travel/cycling</p>
<p>9. Sub regional Transport</p>	<p>Work continues to progress between the 4 North London Boroughs Haringey, Enfield, Barnet and Waltham Forest with the previously identified priorities:</p> <p>Supporting Londoners to cycle.</p> <p>Securing additional further investment for the rail network, particularly for larger, longer-term schemes.</p> <ul style="list-style-type: none"> - Identifying whether there are sub-regional areas of work arising from the Mayor's Accessibility Implementation Plan. - Making the bus network in north London more effective. - Engaging with the work of the Roads Task Force including identifying opportunities for effective interventions in north London. - Addressing the barriers / gaps that prevent some local stations from being effective orbital / radial interchanges. - Getting a better understanding of the issues and opportunities relating to freight in north London. - Opportunities for linking travel planning with development control. - Ensuring that transport contributes to public health including by encouraging more people to walk. <p>Following publication of the Mayors Draft Transport Strategy Haringey began development of the Local Implementation Plan (LIP). The Haringey Transport Strategy was publication in 2018 and the Low Emission Vehicle Strategy which incorporates the aspirations of the Mayors Draft Transport Strategy:</p> <p>http://www.haringey.gov.uk/search/haringey_cse/haringey%20transport%20strategy</p>
<p>10. Determining the Impact of developments on Local Air Quality</p>	<p>In March 2017 Haringey adopted the new Development Management Development Plan Which requires that Air quality assessments will be required for all major development and other development proposals, where appropriate.</p> <p>Where necessary, adequate mitigation must be provided.</p>

Measure	Description
	<p>In 2018 air quality was a consideration at the planning application stage for all major proposed developments.</p> <p>Air quality continues to be a requirement for consideration on all major planning applications and is included on the council's planning application validation checklist.</p>
<p>11. Car Free Developments</p>	<p>The council continues to encourage car-free developments.</p> <p>In March 2017 Haringey adopted the new Development Management Development Plan which sets clear standards for Transport and Parking and continues to encourage car-free developments.</p> <p>The Council will support proposals for new development with limited or no on-site parking where:</p> <ul style="list-style-type: none"> - There are alternative and accessible means of transport available; - Public transport accessibility is at least 4 as defined in the Public Transport Accessibility Index; - A Controlled Parking Zone (CPZ) exists or will be provided prior to the occupation of the development; - Parking is provided for disabled people; - Parking is designated for occupiers of developments specified as car capped. <p>The Council require that developments with high trip generating characteristics locate where public transport accessibility is high and car parking is minimised to mitigate generated car travel.</p> <p>The Council support the protection, improvement and creation of pedestrian and cycle routes in the Borough to encourage walking and cycling both as a means of transport and as a recreational activity.</p> <p>The Council also encourage improved links between pedestrian and cycle routes and public transport facilities, particularly at transport hubs.</p> <p>The Council will require the submission of a Travel Plan and a Transport Assessment/Statement in support of development proposals in accordance with the Transport for London thresholds</p>
<p>12. Control of Dust during demolition and construction phases</p>	<p>All approved major and medium sized developments are required via a planning condition to submit a Dust Management plan, detailing dust control measures from demolition and construction sites. Larger sites are required to register with the Considerate Constructors Scheme (CCS).</p> <p>In 2018, 29 planning applications required to submit a dust management plan and register with the CCS.</p> <p>Mayors Air Quality Funding (MAQF) enabled Haringey to recruit a shared (with Enfield Barnet and Waltham Forest) NRMM officer to review, condition and discharge all relevant planning applications and to carry out site visits to</p>

Measure	Description
	ensure that dust management plans are effective. Unfortunately, the officer left prematurely, and his work ceased.
13. Biomass Boilers	No biomass boilers were proposed in 2018
14. Tree Planting	<p>170 new trees were planted during the 2017/18 tree planting programme. The majority of these (91) were planted in parks using a grant from the GLA. All of the sites identified were immediately adjacent or close to roads with high air pollution levels. Data from the GLA stated they have an annual mean NO₂ air pollution measuring between 58 to 91 micrograms per metre cubed (ug/m³). The new trees were planted in existing gaps in canopy cover or in groups to improve the density of green corridors. All the sites are well used by the local community for recreation and leisure activities and they are all in areas where large regeneration projects are either underway or planned. 49 new street trees were planted, which were funded by private sponsorship or were part of planned highway refurbishment schemes. It is proposed to plant up to 125 new trees during the 2018/19 tree planting programme.</p>
15. Controlling emissions through climate change actions	<p>The council continues to promote sustainable measures for the sectors: homes, workplaces, transport and energy. This is in accordance to <i>Haringey 40:20</i>, an ambitious target to reduce CO₂ emissions in the borough by 40% by 2020. This ambition was superseded in 2018, with a more challenging target of being zero carbon by 2050. Analysis was conducted to determine a route map as to how this could be achieved. Early in 2019, a Climate Emergency was declared by the Council, to become a zero-carbon borough by 2030. Work will now be conducted to determine which actions we can bring forward from our zero carbon by 2050 work to meet this ambition.</p> <p>Data on Haringey's emissions from 2016 (which is the latest data available) show a 5.6 per cent decrease between 2015 and 2016. However, emissions in the transport sector grew by 0.6 per cent. Over two-thirds of London local authorities saw an increase in transport emissions.</p> <p>Each year Haringey council produces an annual carbon report providing a transparent year on year account of progress made to reduce carbon emissions from the Council's operations and the borough as a whole. The 2018 report can be downloaded at:</p> <p>http://www.haringey.gov.uk/sites/haringeygovuk/files/annualcarbonreport2018_final.pdf</p>
16. Industrial Process Emissions	Haringey council continues to ensure that emissions to atmosphere from small industrial businesses are controlled and regulated in accordance with the Environmental Permitting (England and Wales) Regulations 2010.

Measure	Description
	As at December 2018 there were 44 dry cleaners' premises, 4 Part B premises and 16 petrol stations permitted to operate in the borough. These figures have not changed since 2017.
17. Smoke and Emissions from Bonfires	<p>The council continues enforce smoke emissions from bonfires. There have also been complaints about smoke from wood burning on canal boats and from restaurants using charcoal grills. These are proving challenging to deal with due to the limitations of current legislation.</p> <ul style="list-style-type: none"> • 2011 - 111 bonfire complaints • 2012 - 78 bonfire complaints • 2013 - 100 bonfire complaints. • 2014 - 71 bonfire complaints • 2015 – 77 bonfire complaints • 2016 – 73 bonfire complaints • 2017 – 102 bonfire complaints • 2018 – 65 bonfire complaints
18. Air Pollution and Health	<p>The air quality pages on the council website are regularly updated. Airtext, along with Walkit.com are promoted on these pages. The air quality team has established good links with the Public Health team. Air quality is a topic in the Public Health JSNA; it is updated each year and is available to download at:</p> <p>http://www.haringey.gov.uk/index/social_care_and_health/health/jsna/jsna-wider-determinants/jsna-environment.htm</p> <p>In 2018 the MAQF funded a series of public health engagement projects and activities to raise awareness of the issues around Air Pollution and Health. The following projects were completed, and an evaluation report has been submitted to the GLA:</p> <ul style="list-style-type: none"> - An Air Quality Health Engagement project was delivered by the Pollution team. Consisting of 4 public information AQ stands at various locations around the borough; 2 in Wood Green shopping area, 1 in Crouch End and 1 in the Tottenham area. In addition to this – 2000 postcards were designed and printed – promoting Airtext & Haringey's air monsters. A number of which were distributed to all 9 libraries in Haringey as well as being distributed at the AQ stands and the Health Group seminars. - There is still a total of 3 Health groups in Haringey (2 x Breathe Easy Groups and 1 x Stroke group), providing AQ information. - An Air Quality Action Day promoting no-idling to raise awareness of car exhaust fumes outside the school gates. Officers handed out leaflets and gave advice to parents/carers dropping and picking up their children at two Haringey Schools. - We have responded to complaints about operators transporting children with Special Educational Needs & Disabilities (SEND) to schools/colleges

Measure	Description
	<p>around the borough have been leaving their engines idling outside of the school/college.</p> <ul style="list-style-type: none"> - The smarter travel team delivered cycle maintenance workshops to pupils at three schools in Haringey, teaching the basics of bike maintenance and giving the trainees an opportunity to use the tools needed and to put into practice what they had learnt. A total of 80 young people was trained. <p>Three schools and one nursery in Haringey were selected by the GLA to receive an audit funded by the Mayor of London. The audit identified measures to protect pupils' health from air pollution and will also examine new ways to lower emissions and exposure to pollution in and around schools and the nursery. The audit has been completed and the implementation of school measures are ongoing.</p>
<p>19. Air Pollution Information Air quality monitoring Dissemination of Information School Awareness Project</p>	<ul style="list-style-type: none"> - Haringey council continues to monitor the pollutants of concern across the borough. All analysers at the 2 continuous monitoring stations are affiliated to the AURN (Defra's national network). There are 13 diffusion tube sites in the borough, located where there is risk of exposure and possible exceedances of the Governments objective. - Use of MAQF grant to deliver Air Quality workshops for council officers across a range of service areas. The community workshops and public meetings were specifically to capture ideas and public opinions, which were debated and formed a starting point for the councils new AQAP. Feedback from the workshops also has been used to inform the council's updated 2019-2024 air quality action plan. - Formation of an internal steering group to demonstrate commitment to air quality objectives and inform the AQAP. <p>The Air Quality Apprentice role was a great success; raising awareness of air pollution and the benefits of alternative modes of transport using the 'air monsters'; engaging with over 7581 pupils, carrying out 6 AQ focused lessons and 37 assemblies at 24 primary schools in the borough. In addition to this, the apprentice participated in 27 other Smarter Travel activities, using the opportunity to raise awareness and promote air quality issues. Events included the Hari Bear walk, an AQ talk and presentation to Hornsey Pensioners Healthy Lungs Forum, participation at the Haringey Health & Well Being Fair – promoting AQ and associated issues at the Smarter Travel stall, the design of an air quality postcard for air text and Walkit, assisted with the Hari-bear tour and walk to school week, encouraging and facilitating behavioural change such as walking and cycling. This post ceased in Oct 2018.</p> <p>The unfortunately premature departure of the air apprentice left a number of outstanding commitments that the Active Travel Team had to absorb.</p>

Measure	Description
	These included supporting Lordship Lane Primary with the lead up to implementing the first school street in Haringey and delivering air quality presentations to schools. Unfortunately, the existing workloads of the Active Travel Officers meant that they are unable to target as many schools as originally envisaged. However, in order to complete this work, Haringey council plan to create a sustainable solution for our teachers to deliver the messages and incorporate air quality into their curriculum, through the production of a Schools Air Quality Resource pack. This resource pack will include all the resources used by the Air Quality Apprentice; interactive lesson plans; slide presentation; stickers; worksheets etc. The resource packs can be adapted to make it age appropriate for the different school year groups. This is vital tool to help support schools implementing initiatives such as a School Street.

3. Planning Update and Other New Sources of Emissions

Table G. Planning requirements met by planning applications in London Borough of Haringey in 2018

Action	2018	Notes
a) Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	<u>29</u>	<i>Mostly submitted at the application stages</i>
b) Number of planning applications required to monitor for construction dust	<u>36</u>	
c) Number of CHPs/Biomass boilers refused on air quality grounds	<u>Zero</u>	
d) Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	<u>Zero</u>	
e) Number of developments required to install Ultra-Low NO _x boilers	<u>36</u>	
f) Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>36</u>	
g) Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	<u>Zero</u>	
h) Number of planning applications with S106 agreements including other requirements to improve air quality	<u>Zero</u>	
Number of planning applications with CIL payments that include a contribution to improve air quality	<u>Zero</u>	

Action	2018	Notes
i) NRMM: Central Activity Zone and Canary Wharf Number of conditions related to NRMM included. Number of developments registered and compliant. Please include confirmation that you have checked that the development has been registered at www.nrmm.london and that all NRMM used on-site is compliant with Stage IIIB of the Directive and/or exemptions to the policy.	N/A	
NRMM: Greater London (excluding Central Activity Zone and Canary Wharf) Number of conditions related to NRMM included. Number of developments registered and compliant. Please include confirmation that you have checked that the development has been registered at www.nrmm.london and that all NRMM used on-site is compliant with Stage IIIA of the Directive and/or exemptions to the policy.	<u>29</u> 29 Registered on NRMM and mostly compliant	

Haringey internal database called M3 was used to automatically record the above figures where possible.

3.1 *New or significantly changed industrial or other sources*

No significantly changed industrial or other sources have been identified. There are however increasing concerns about emissions from restaurants using charcoal burners within the borough.

Appendix A Details of Monitoring Site QA/QC

A.1 Automatic Monitoring Sites

Haringey's automatic monitoring stations are part affiliated to the Automatic Urban & Rural Network (AURN). AURN sites have Defra funding as the data is more rigorously scrutinised with traceability to EU standards. Part affiliated sites are part funded by Defra and part funded by the local authority.

Defra's London AURN data manager is the Environmental Research Group (ERG), Kings College London. ERG collates the data on a daily basis, validates it before sending it onto the national data managers; who ratify it to EU standards.

Routine calibrations are undertaken fortnightly (roadside site) and monthly (background site). Each site is audited bi-annually following a full service. The calibrations support the quality assurance and quality control (QA/QC) checks that are carried out on the raw data to the AURN standard. This is to ensure that:

- Data is representative of ambient concentrations in the area
- Measurements are accurate and precise in order to meet monitoring requirements
- Data can be consistently compared with data from national and international standard sites
- Measurements are consistent over time

Further information on data validation and ratification is available on the Defra website: www.uk-air.defra.gov.uk

PM₁₀ Monitoring Adjustment

No PM10 was monitored during the 2018 round.

A.2 Diffusion Tube Quality Assurance / Quality Control

Haringey's diffusion tubes are prepared and analysed by Lambeth Scientific Services who are a UKAS accredited laboratory. This laboratory participates in the WASP scheme (Workplace Analysis Scheme for Proficiency) to meet European standards and is involved in the network field inter-comparison exercise operated by NETCEN, which assesses the sampling and analytical performance of the tubes. Nitrogen dioxide diffusion tubes are prepared using the 50% triethanolamine (TEA) in acetone method.

- One diffusion tube is co-located with an automatic analyser for NO₂. This is at the Haringey Roadside monitoring site. All diffusion tube results have been appropriately bias adjusted, using the analytical laboratory adjustment factor 1.02 as only one diffusion tube is co-located.
- Co-ordination of a quality assurance/quality control (QA/QC) framework, aimed at the analytical laboratories that supply and analyse the diffusion tubes currently comprises:

- Promotion of the independent Workplace Analysis Scheme for Proficiency (WASP), operated by the Health and Safety Laboratory, with yearly assessment against agreed performance criteria.
- Operation of a field intercomparison exercise, in which diffusion tubes are co-located with an automatic analyser: from January 2006 this is at a roadside site.
- Operation of a QC solution testing scheme. Participation is recommended for any laboratory that prepares or analyses NO₂ diffusion tubes used by Local Authorities for LAQM purposes.
- Quarterly summaries of participating laboratories' performance in the WASP scheme over the preceding 12 months, prepared by AEA, are available by clicking on the links below:

<http://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html>

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

The data for HR08 Mortuary/St James has been adjusted because the data capture rate for all monitoring data for 2018 was 68% which below 75% of a full calendar year.

Distance Adjustment

All monitoring locations are representative of public exposure. No Distance adjustment is required.

Appendix B Full Monthly Diffusion Tube Results for 2018

Table H. NO₂ Diffusion Tube Results

Site ID	Site address	Valid data capture for monitoring period % ^a	Valid data capture 2018 % ^b	Annual Mean NO ₂														Annual mean – raw data ^c	Annual mean – bias adjusted ^c
				Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec				
HR06	Archway	100	100	30	35	52	28	18	37	27	37	39	37	34	42	35	35		
HR08	Mortuary/ St James	68	68	27	38	38	22	24	-	-	18	-	-	30	43	30	30		
HR14	639 High Road, N17	99	99	26	32	42	28	28	21	31	25	32	37	43	44	32	33		
HR24	Westbury medical centre	93	93	24	34	42	32	21	20	36	34	38	32	35	46	33	33		
HR25	Rowland Hill Nursery, White Hart Lane	98	98	35	37	41	30	23	61	25	22	31	30	32	43	34	35		
HR27	The old surgery Green Lanes	88	88	35	37	38	25	37	23	29	27	34	26	32	-	31	31		
HR30	Earlsmead primary	99	99	31	52	46	39	40	31	45	43	49	44	51	52	44	44		
HR31	Wood Green High Road	97	97	47	49	72	37	55	25	97	81	93	60	73	89	65	65		
HR32	Archway Road/Southwood	82	82	-	68	73	49	51	-	89	61	-	63	53	77	65	66		
HR34	Coleridge Primary school	91	91	25	36	45	24	25	18	33	23	35	32	37	36	31	31		
HR35	Chesnuds primary school	99	99	29	36	36	28	29	22	26	33	33	30	22	43	31	31		
HR36	Holy Trinity CE School, Tottenham	98	98	29	3	46	20	18	21	36	30	41	36	36	44	30	30		
HR37	Weston Park/Broadway, N8	86	86	-	43	42	25	24	21	36	29	42	-	45	46	35	36		

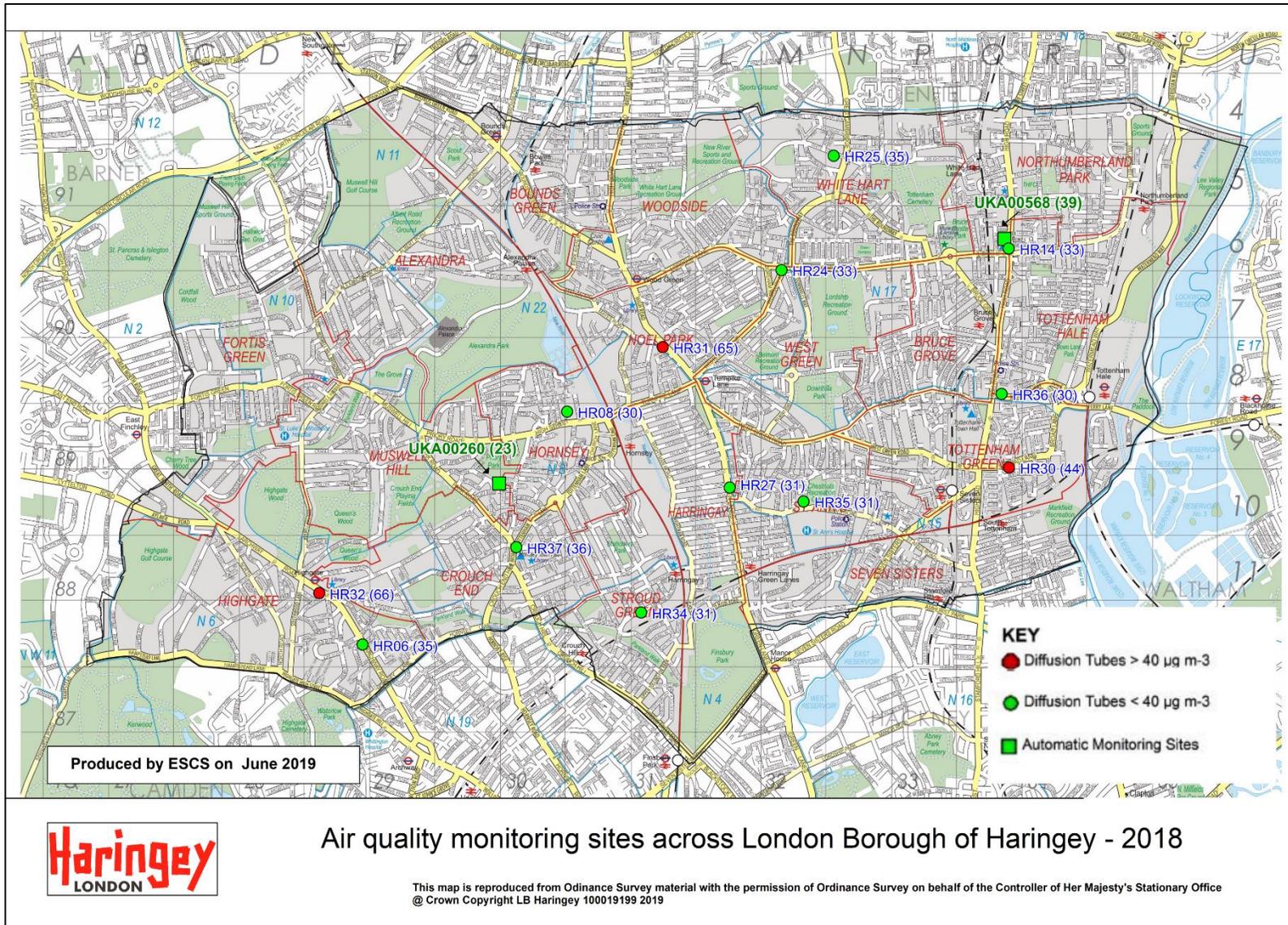
Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold**.

^a Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

^b Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

^c Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Appendix C 2018 Monitoring Site Locations and Annual Mean NO₂ Concentration



Note: The values denoted in parentheses represent Annual mean NO₂ concentrations in µg m⁻³. Location points shown in red fill (i.e. HR31, HR32 and HR30) denote where the NO₂ air quality objective of 40 µg m⁻³ was exceeded and location points in green (e.g. HR34) denote no exceedances.