

London Borough of Haringey for 2017
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This report provides a detailed overview of air quality in *London Borough of Haringey* during 2017. 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

1.1 Locations

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 <4m from the kerb; the sample inlet is in line with the building façades, demonstrating relevant exposure. This site is located in the 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.

Table B. Details of Automatic Monitoring Sites for 2017

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	Road-side	Yes	Yes (3m – residential).	4m	4m	NO ₂ ,	Chemiluminescent; TEOM FDMS
UK-AIR ID: UKA0056 8 EU Site ID: GB1024A	Haringey South	529987	188917	Urban Back-ground	Yes	No.	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 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.

There are currently thirteen diffusion tube monitoring locations throughout the borough and Table C below gives individual site details, locations for the 2016 and 2017 monitoring round. 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; one of the tubes is co-located with the monitoring station.

- In total, six of the diffusion tubes are located adjacent to school locations. School located diffusion tubes which monitoring ended in 2016 are HR21 (Lordship Lane Primary school), HR29 (Stamford Hill primary school) and HR33 (St Aidans School). Two additional diffusion tube locations, namely HR34 (Coleridge Primary school) and HR35 (Chesnuds Primary School) were placed in two different schools in 2017. All school diffusion tube monitoring sites are located within 150m of a main road carrying >10,000 vehicles per day.
- Five diffusion Tubes are now located on main road.
- HR08 is classified as an urban background however, the adjacent site is has been undergoing redevelopment to mixed use, residential and commercial. Once the development is complete, the diffusion tube location may have to be reclassified.
- Diffusion tube HR14 continues to be co-located with Haringey Roadside automatic monitoring site and the data is fed into the National Diffusion Tube Co-location study.
- Two of the diffusion tubes are located outside GP surgeries.
- Other diffusion tubes which monitoring ended in 2016 include HR19 (Jewsons Staff Car Park, N2) and HR23 (Holy trinity church Philip Lane).

Appendix C shows a map of the locations of all monitoring sites, automatic and non-automatic, in the borough as at December 2017.

Table C. Details of Non-Automatic Monitoring Sites for 2017

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
HR20	Highgate Primary School	527974	188329	Roadside	Y	<0.5m	4m	1.5m	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	Surgery, Green Lanes, N8	531758	188872	Roadside	Y	0m – located on building facade	4.5m	2.5m	NO ₂	N
HR28	Bounds Green Primary School, N11	530063	191324	Roadside	Y	7.5m	2m	2.5m	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
HR34 ^a	Coleridge Primary school	531079	187926	Roadside	Y	0m – located within school site.	<0.5m	2.5m	NO ₂	N
HR35 ^a	Chesnuds primary school	532324	188766	Roadside	Y	0m – located within school site.	<0.5m	2.5m	NO ₂	N
HR19 ^b	Jewsons Staff Car Park, N2	527897	188558	Roadside	Y	<0.5m	2.5m	2.5m	NO ₂	N

HR21 ^b	Lordship Lane Primary School	532010	190549	Roadside	Y	0m - located in school playground	N/A	1.5m	NO ₂	N
HR23 ^b	Holy Trinity Church, N15	533720	189471	Roadside	Y	10m	20m	0.5m	NO ₂	N
HR29 ^b	Stamford Hill Primary School, N17	532881	188049	Urban Background	Y	0m – located in school playground	22m	3m	NO ₂	N
HR33 ^b	St Aidens School, N4			Urban Background	Y	0m – located next to playground	2m	2 m	NO ₂	N

^a new locations and ^b monitoring ended in 2016

1.2 Comparison of Monitoring Results with Air Quality Objectives (AQOs)

The results presented are after adjustments for “annualisation” and for distance to a location of relevant public exposure, the details of which are described in Appendix A.

Table D1 presents 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.

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 2017 % ^b	Annual Mean Concentration (µg m ⁻³)						
				2011 ^c	2012 ^c	2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c
UK-AIR ID: UKA00260 EU Site ID: GB0637A	Automatic	99	99	38	42	43	48	40	43	40
UK-AIR ID: UKA00568 EU Site ID: GB1024A	Automatic	100	100	-	-	26	24	24	26	24

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 NO₂ were identified at the two Haringey locations, where the annual objective of 40µg/m³ 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.

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 2017 % ^b	Annual Mean Concentration (µg m ⁻³)						
				2011 ^c	2012 ^c	2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c
HR06	Roadside	97	97	<u>62</u>	<u>69</u>	56	42	51	44	41
HR08	Urban Background	85	85	37	32	30	25	31	28	27
HR14	Roadside	98	98	44	46	39	37	39	33	34
HR20	Roadside	97	97	39	37	32	29	33	31	30
HR24	Roadside	98	98	45	42	41	33	43	37	33

Site ID	Diffusion Tube type	Valid data capture for monitoring period % ^a	Valid data capture 2017 % ^b	Annual Mean Concentration ($\mu\text{g m}^{-3}$)						
				2011 ^c	2012 ^c	2013 ^c	2014 ^c	2015 ^c	2016 ^c	2017 ^c
HR25	Roadside	98	98	36	37	34	34	33	30	29
HR27	Roadside	98	98	42	44	40	33	43	36	33
HR28	Roadside	82	82	-	-	40	30	35	33	34
HR30	Roadside	98	98	-	-	-	-	50	43	40
HR31	Roadside	97	97	-	-	-	-	-	59	52
HR32	Roadside	97	97	-	-	-	-	-	<u>69</u>	55
HR 34	Coleridge Primary school	97	97	-	-	-	-	-	-	31
HR 35	Chesnuds primary school	70	70	-	-	-	-	-	-	22

Notes: Exceedence 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 exceedence 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. Only HR06, HR31 and HR32 exceed the objectives. With the exception of the three sites, all of the diffusion tubes above are located in or adjacent to hotspot locations, as identified by the Bureau Veritas AQ modelling.

Data is 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 and have poor accuracy. 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 HG1 (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 the 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 for 2017 is 0.90

All of the sites are roadside sites, except for

- The former mortuary site (HR08) which is being redeveloped for mixed –use and,
- Sites HR34 and HR35, which are located in a school playgrounds

Table E shows that there have been no exceedances of the hourly NO₂ objective in 2017.

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
UK-AIR ID: UKA00260 EU Site ID: GB0637A	99	100	0	0	1	0	0	6	5
UK-AIR ID: UKA00568 EU Site ID: GB1024A	97	99	-	-	-	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 2017.

The 2017 annual Mean NO₂ Concentration in the London Borough of Haringey have been appended 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 need 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 provides below provides a brief summary of Haringey's progress against the Air Quality Action Plan, showing progress 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 are compliant with the requirements of the Low Emission Zone.</p> <p>The council owned vehicle fleet has diminished due to outsourcing, with only a handful of council owned vehicles remaining. All vehicles remaining in council ownership are compliant with the requirements of the Low Emission Zone.</p> <p>1 Two electric vehicles are available for staff use</p> <p>2 Tracking with lightfoot (blackbox)</p> <p>3 Driver training is part of driver standard check</p>

<p>2. Electric Vehicle Charging Points</p>	<p>There are currently 21 charge points in 10 locations. We are installing 65 new charge points between June and December 2018, and 13 of the current charge points will be replaced with new ones, totalling 78 new point's altogether. These 78 charge points span across 26 locations.</p> <p>https://www.sourcelondon.net/</p> <p>TfL have installed a rapid charger on the A10 and the council have planned to install 3 more in 2018 one in a taxi rank in Wood Green and 2 in car parks. These are in addition to the 78 charge points.</p>
<p>3. Car Clubs</p>	<p>There are two types of car clubs operational in Haringey, round trip car club operated by Zip-Car and City Car and One Way Car club operated by Drive Now. In 2017 the number of car club vehicles operating in Haringey has risen to 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+ DriveNow vehicles.</p>
<p>4. Travel Plans</p>	<p>Haringey encourages and supports all schools across the borough to develop and implement school travel plans. These travel plans demonstrate how schools are implementing initiatives 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 STH team to promote initiatives and messages more effectively.</p> <p>95% (65 schools) of schools in Haringey have travel plans. More information is available at:</p> <p>http://www.haringey.gov.uk/parking-roads-and-travel/travel/school-journeys</p> <p>The AQ Apprentice works closely with the Travel Plan officer to raise awareness of air quality and health impacts and to encourage and promote alternative ways of travel to school.</p>
<p>5. 20 mph zones / Community Streets</p>	<p>All streets in Haringey have a 20mph speed limit with the exception of main roads and TfL managed roads.</p>

<p>6. No Idling Zones</p>	<p>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.</p> <ul style="list-style-type: none"> • An Air Quality Action Day was Held in 2017 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. • Following a number of complaints, transport operators who transport children with Special Educational Needs & Disabilities (SEND) to schools/colleges around the borough have been written to reminding them not to leave their engines idling outside of the school/college.
<p>7. Smarter Travel Promotion</p>	<p>There are a number of national and local campaigns to encourage take-up of sustainable modes of transport promoted by Haringey's Smarter Travel Team, more information can be found at http://www.haringey.gov.uk/index/environment_and_transport/travel/smartertravel.htm.</p> <p>A range of active travel projects were carried out in 2017. e.g:</p> <ul style="list-style-type: none"> • STARS Accredited schools – 65 (28 have achieved Gold Status, 14 Silver and 23 bronze) • Promotion of Walk to school week • Borough celebration event – 21 schools attended. • Delivered a training program for 80 children teaching 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 7670 pupils, carrying out 9 AQ focussed lessons and 39 assemblies at 27 primary schools in the borough. • 27 other Smarter Travel activities, using the opportunity to raise awareness and promote air quality issue. Events included the Hari Bear walk, an AQ talk and presentation to Hornsey Pensioners Healthy Lungs Forum, helping out at the Haringey Health & Well Being Fair – promoting AQ and associated issues at the Smarter Travel stall. • The Haringey Personal Travel Planning (PTP) & Walk Zone Project involves undertaking Personal Travel Planning and a 10-minute Walk Zone project with six identified primary schools per year between May and November 2017, and May to October 2018, totalling work at 12 schools. • 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

	<p>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> <p>Walk Zones - 10-minute Walk Zone projects are delivered with 6 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>8. Cycle Routes and Cycle Parking</p>	<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, bike maintenance, 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> <p>We have trialed a cycle parking rack in the shape of cars, known as ‘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 Bikehangars 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 : 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> <ul style="list-style-type: none"> • Supporting Londoners to cycle. • Securing additional further investment for the rail network, particularly for larger, longer-term schemes. • 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 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 for publication in 2018 and the Low Emission Vehicle Strategy which incorporates the aspirations of the MTS :</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. Where necessary, adequate mitigation must be provided.</p> <p>In 2017 air quality was a consideration at the planning application stage for 7 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> <p>There are alternative and accessible means of transport available;</p> <p>Public transport accessibility is at least 4 as defined in the Public Transport Accessibility Index;</p>

	<p>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> <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. 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. The Council also encourage improved links between pedestrian and cycle routes and public transport facilities, particularly at transport hubs. 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>
12. Control of Dust during demolition and construction phases	<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). In 2017-18, 22 planning applications required to submit a dust management plan and register with the CCS. Mayors Air Quality Funding (MAQF) has 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 ensure that dust management plans are effective.</p>
13. Biomass Boilers	<p>No biomass boilers were proposed in 2017</p>
14. Tree Planting Tim	<p>Haringey manages over 35,000 trees of which 11,000 are street trees, and responds to over 2,500 calls a year relating to trees. In the last 10 years, we have planted 5,425 new and replacement trees, 3,994 were street trees. The capital budget for tree planting ceased in 2016 and since then tree planting has been reliant on other budgets.</p> <p>The 2018 winter tree planting programme will be utilising funding from a number of internal and external sources. This will enable 200 Trees to be planted on all sites across the borough. They include ward budgets, new Parks and Highways refurbishments schemes and private sponsorship from residents</p> <p>Haringey is in the process of developing the Parks and Open Spaces Plan due for publication 2018-19</p>

<p>15. Controlling emissions through climate change actions</p>	<p>The council continues to promote sustainable living measures for issues such as water, energy, food and travel. In addition to the Haringey 40:20; an ambitious target to reduce CO₂ emissions in the borough by 40% by 2020. In April 2017 figures have shown per capita carbon emissions in the borough have fallen by 40% since 2005 and that we have already met the 40:20 target. Haringey has the third largest decrease in carbon emission per capita.</p> <p>Alongside the Mayor of London, the leader of Haringey, stated Haringey's ambition to become a Zero Carbon authority by 2050. This will supersede the 2020 target. To help us achieve this, Haringey worked with a panel of experts to deliver a set of recommendations for action – now set out in the report of the Zero 50 Commission. The Council and its partners will make choices now to embed these recommendations into their work, ensuring we continue to promote sustainable economic growth by creating new jobs, saving money and delivering carbon reduction</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 2017 report can be downloaded at:</p> <p>http://www.haringey.gov.uk/sites/haringeygovuk/files/annualcarbonreport2017_final.pdf</p>
<p>16. Industrial Process Emissions</p>	<p>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. As at December 2017 there were 44 dry cleaners premises, 4 Part B premises and 16 petrol stations permitted to operate in the borough.</p>
<p>17. Smoke and Emissions from Bonfires</p>	<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

	<ul style="list-style-type: none"> • 2015 – 77 bonfire complaints • 2016 – 73 bonfire complaints • 2017 – 102 bonfire complaints
<p>18. Air Pollution and Health</p>	<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 style="text-align: center;">http://www.haringey.gov.uk/index/social_care_and_health/health/jsna/jsna-wider-determinants/jsna-environment.htm</p> <p>In 2017 MAQF funded a series of public health engagement projects and activities to raise awareness of the issues around Air Pollution and Health:</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. • A total of 3 Health groups in Haringey (2 x Breathe Easy Groups and 1 x Stroke group), providing an AQ presentation, Airtext and Walkit leaflets and 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 around the borough have been leaving their engines idling outside of the school/college.

	<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 were trained <p>Three schools in Haringey were selected by the GLA to receive an audit funded by the Mayor of London. The audit will identify 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. The audit has been completed and the results are due</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 eight Air Quality workshops for council officers across a range of service areas, including councillors, two community workshops for local residents and two public meetings. 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 air quality action plan. • Formation of an internal steering group to demonstrate commitment to air quality objectives and inform the next AQAP. <p>The Air Quality Apprentice role has been a great success; raising awareness of air pollution and the benefits of alternative modes of transport using the 'air monsters'; engaging with over 7670 pupils, carrying out 9 AQ focused lessons and 39 assemblies at 27 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 airtex and Walkit, assisted with the Hari-bear tour and walk to school week, encouraging and facilitating behavioral change such as walking and cycling</p>

3. Planning Update and Other New Sources of Emissions

Progress to date is as follows:

- table to capture data and information required has been instigated
- AQ planning conditions recommended where applicable for NRMM requirements, Control of Construction dust and CHP and boiler emission limits.
- AQ assessments and AQ neutral assessments required for all major planning proposals.

Table G. Planning requirements met by planning applications in *London Borough of Haringey* in 2017

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	<u>6</u>
Number of planning applications required to monitor for construction dust	<u>49</u>
Number of CHPs/Biomass boilers refused on air quality grounds	<u>0</u>
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	<u>11</u>
Number of developments required to install Ultra-Low NO _x boilers	<u>28</u>
Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>6</u>
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	<u>2</u>
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>
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	<u>19</u>

all NRMM used on-site is compliant with Stage IIIA of the Directive and/or exemptions to the policy.	19 registered and compliant Registered on NRMM. London NRMM compliant
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In 2017 planning lists were searched weekly for planning applications. Relevant applications were passed to the NRMM officer who evaluated the content of the Construction Environmental Management Plan(s) (CEMP) and Demolition Methods Statements included in relevant planning application. Where adequate these were recommended for discharge conditions relevant to Dust/NRMM or further information requested.

3.1 *New or significantly changed industrial or other sources*

No significantly changed industrial or other sources have been identified.

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 send 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 2017 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 0.9 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 HR 35 have been adjusted because the data capture rate for all monitoring data for 2017 was 70% 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 2017

Table H. NO₂ Diffusion Tube Results

Site ID	Site address	Valid data capture for monitoring period % ^a	Valid data capture 2017 % ^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	97	97	73	47	46	42	44	48	44	44	48	51	26	30	45	41	
HR08	Mortuary/ St James	85	85	50	28	32	22	23	-	17	24	-	33	31	35	30	27	
HR14	639 High Road, N17	98	98	55	41	36	33	34	34	33	31	40	45	35	39	38	34	
HR20	Highgate Primary school	97	97	54	36	23	33	32	38	31	26	33	36	23	30	33	30	
HR24	Westbury medical centre	98	98	57	44	34	40	32	47	34	42	31	32	21	29	37	33	
HR25	Rowland Hill Nursery, White Hart Lane	98	98	51	37	26	27	24	34	22	28	30	32	36	34	32	29	
HR27	The old surgery Green Lanes	98	98	56	41	38	30	29	33	30	55	29	40	36	28	37	33	
HR28	Bounds Green primary school	82	82	70	37	33	32	36	33	29	36	33	-	-	34	37	34	
HR30	Earlsmead primary	98	98	69	48	42	42	45	56	40	38	46	41	27	43	45	40	
HR31	Wood Green High Road	97	97	74	74	84	63	57	47	40	63	49	58	42	40	58	52	

HR32	Archway Road/Southwood Lane	97	97	99	71	61	67	59	60	40	45	77	78	34	45	61	55
HR34	Coleridge Primary school	97	97	33	42	35	29	29	32	33	31	36	35	36	36	34	31
HR35	Chesnuds primary school	70	70	48	47	31	36	34	-	-	43	27	-	33	35	24	22

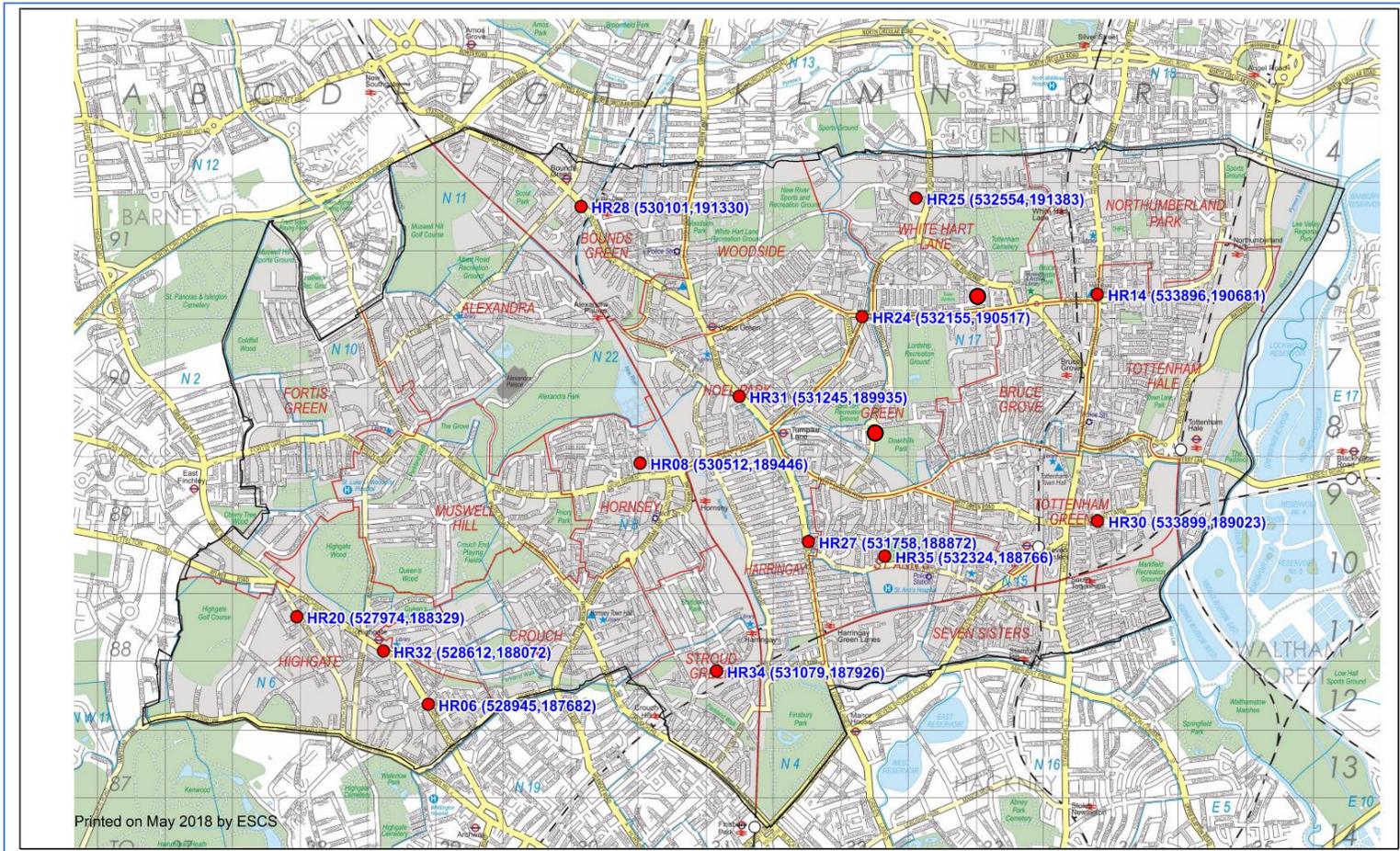
Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold**.

^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%)

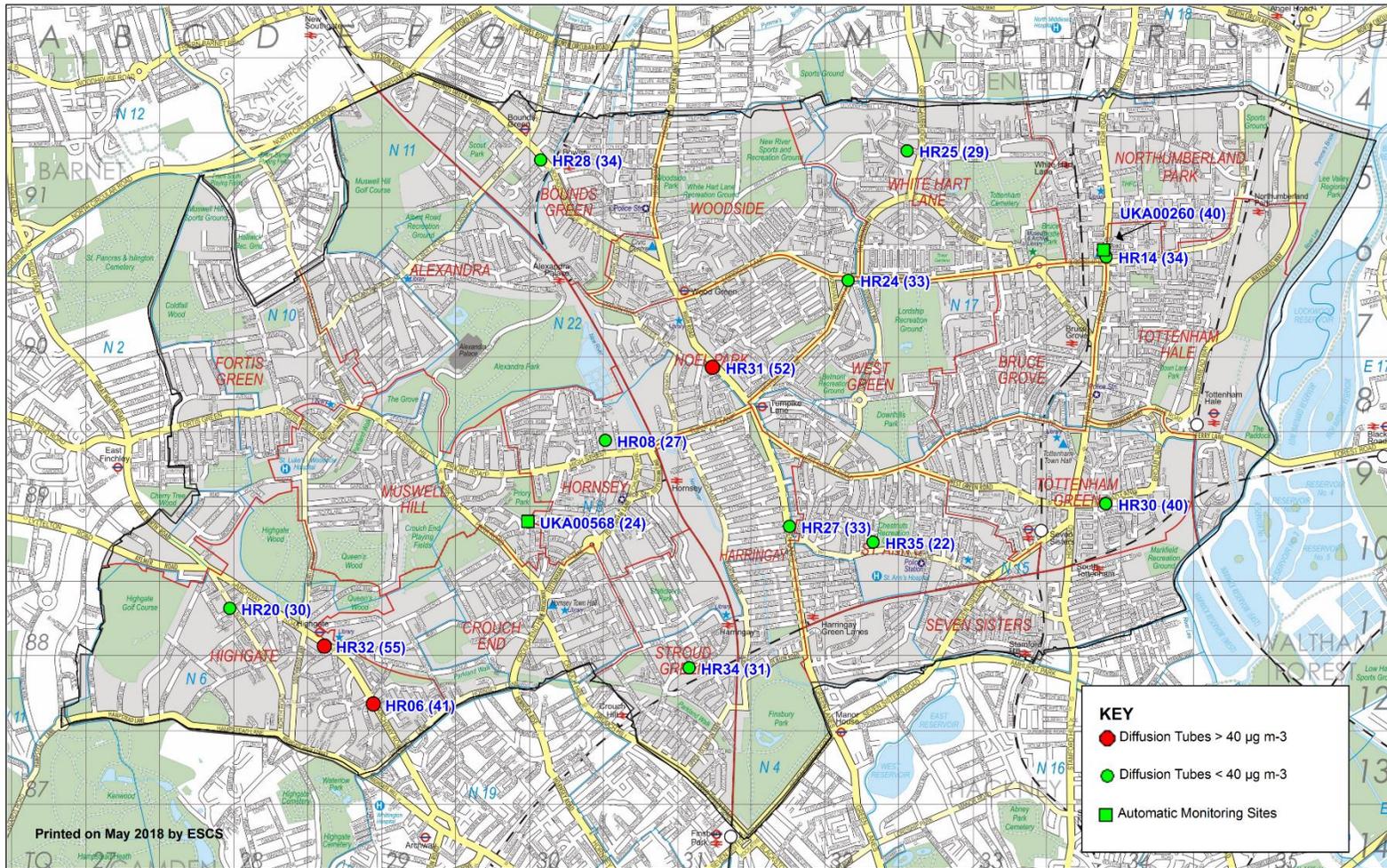
^c Means should be "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Appendix C Monitoring Site Locations and 2017 Annual Mean Concentrations



Air Quality Monitoring Diffusion Tube Sites across London Borough of Haringey

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2017 Annual Mean NO₂ Concentration in London Borough of Haringey

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