London Borough of Hackney

Air Quality Annual Status Report for 2024

Date of publication: May 2025

This report provides a detailed overview of air quality in the London Borough of Hackney during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process[1].

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[1] LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19))

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Executive Summary

This report provides details of the air quality monitoring that has taken place in Hackney, and the progress that Hackney has made on its Air Quality Action Plan, over the calendar year 2024. It fulfils the London Borough of Hackney's duties under the London Local Air Quality Management (LLAQM) framework, pursuant to Part IV of the Environment Act 1995 (as amended). Hackney monitors nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$) and ozone (O_3). These measurements are compared to air quality standards, objectives, targets and guidelines (see Table A). The entire borough of Hackney has been designated an Air Quality Management Area (AQMA) since 2006 for exceedances of the NO_2 and PM_{10} objectives.

In 2024, Hackney carried out air quality monitoring at eight automatic monitoring sites and 151 NO_2 diffusion tube monitoring sites. Two new automatic monitoring sites were commissioned (Northwold Road and Graham Road), while one automatic monitor was decommissioned (Queensbridge Road). 13 new diffusion tube sites were commissioned, and 6 diffusion tube sites were discontinued, resulting in a net increase of 7 sites. Detailed information on the quality assurance and quality control (QA/QC) procedures carried out on the data is provided in Appendix A.

The trend of decreasing NO_2, which has been observed in recent years, continued in 2024 for the vast majority of monitoring sites (91% of diffusion tubes; and 4 of the 5 automatic monitors that continued to monitor in 2024). 13 monitoring sites measured a substantial reduction (>5 µg/m³) in annual mean NO_2 in 2024 compared to 2023. There was some evidence to show that these larger reductions are occurring on TfL red routes (Old Street, Wick Road/A12 and Stoke Newington High Street (A10)), as well as Albion Road in Stoke Newington. No clear pattern was observed for the locations that measured increases in NO_2.

One location (out of a total of 159 monitoring sites) measured an exceedance of the national air quality objective for annual mean NO_2 (40 µg/m³) in 2024. This was on Dalston Lane close to Pembury Circus (Site 63 - Delta Dalston Lane), where a concentration of 43.3 µg/m³ was measured (compared to 44 µg/m³ in 2023). One other site measured a concentration within 10% of the annual mean NO_2 objective (Site 76 - Stoke Newington High Street), which measured 36.5 µg/m³ (a substantial decrease from 44 µg/m³ in 2023).

There has been no indication of an exceedance of the 1-hour mean NO_2 objective since 2019.

Levels of PM_{10} were below the relevant national air quality objectives in 2024. There was a slight exceedance of the adopted annual mean PM_{10} target of 20 µg/m³ at one site (Homerton Library (HK011) - 20.2 µg/m³), with all other sites measuring concentrations <20 µg/m³. Overall trends in PM_{10} are less clear than NO_2, with no clear increase or decrease observed in recent years.

Levels of $PM_{2.5}$ were below the annual mean concentration target (10 µg/m³) at both sites where it was measured in 2024.

Hackney measures O_3 at one location (Old Street (HK006)). The 8-hour running mean objective (100 µg/m³ not to be exceeded more than 10 days per year) was exceeded in 2024, with 17 days >100 µg/m³. There is now a clear indication that the number of days of exceedance is increasing. Annual mean O_3 concentrations also continued to increase. This is a concern, although it is noted that O_3 is a secondary pollutant and its formation is reliant on many factors, including cross-boundary factors.

Hackney continued to deliver its Air Quality Action Plan 2021-2025 in 2024. This report provides detailed updates on each of the 47 actions in the Plan. Key achievements in 2024 include:

- Expansion of the air quality monitoring network, including a tripling of $PM_{2.5}$ monitoring capability, and new Breathe London sensors.
- Promotion of the Air Aware information tool through an advertising campaign across Hackney, the City of London, Newham and Tower Hamlets, and generating interest for joining the project amongst other London boroughs. A pharmacy pilot project - a collaboration with the NHS - produced around 400 quality conversations between pharmacists trained in air quality and high risk child asthma patients.
- Continued support of the Mayor of London's Non-Road Mobile Machinery (NRMM) Low Emission Zone, reducing emissions from machinery on construction sites to improve air quality in the local area.
- Progress on the implementation of a borough-wide Smoke Control Order to help better control emissions from solid fuel burning.

- Reducing emissions from heating systems in public buildings, including through £43.6m of investment progressing under the Public Sector Decarbonisation Phases 3b and 3c.
- The award of the third round of the Hackney Community Energy Fund, providing grants to new community projects to deliver clean energy upgrades.
- Jointly leading on the multi-borough Healthy Waterways project to engage the boating community and gather information on heating practices, with the aim of conducting research and supporting boat dwellers to make cleaner and healthier heating choices.
- Under the Zero Emissions Network (ZEN), 24 cargo bike grants were awarded to local businesses, 5 businesses took up a 12-month cargo bike leasing offer, 10 new business partners joined ZEN and 11 new business sustainable travel plans were produced.
- Progress with the Amhurst Road and Pembury Circus transformation scheme to greatly improve walking, cycling and bus reliability in Hackney Central.
- New tree planting in Springfield Park, Clapton Common and Millfields Park; over 100 new trees planted on Hackney housing estates; and new sustainable urban drainage systems (SuDS) installed at Calvert Avenue, Well Street, Northwold Road and Nightingale Road, greening the highway.
- Completion of protected cycle tracks at Crossway (Dalston) and progress on the Lea Bridge Road westbound protected cycleway.
- Over 500 new cycle hangars installed (by March 2025) under the cycle hangar expansion programme, helping those without cycle storage park on the highway. This brings the total number of hangars in Hackney to over 1,200.
- Carrying out wide-ranging activities to prevent engine idling, including engagement with communities and new signs and banners in hotspot locations.
- Installation of 734 new electric vehicle charging points (462 in lamp columns and 272 free-standing fast chargers), bringing the total to over 2,400.
- Installation of four new School Streets, bringing a total of 49 School Streets operating by the end of 2024.
- The approval of £400,000 investment to install 15 new planted green screens to protect school pupils from roadside air pollution.

Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQG	Air Quality Guideline [Value]
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQP	Air Quality Positive
AQS	Air Quality Standard
AURN	Automatic Urban and Rural Network
BAM	Beta Attenuation Monitor
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
CAZ	Central Activities Zone
CHP	Combined Heat and Power
CIL	Community Infrastructure Levy
CLP	Construction Logistics Plan
CMP	Construction Management Plan
CO_2e	CO_2-equivalent
CoCP	Code of Construction Practice
Defra	Department for Environment, Food and Rural Affairs
EIA	Environmental Impact Assessment
ESU	Equipment Support Unit
EV	Electric Vehicle
GLA	Greater London Authority
HVO	Hydrogenated Vegetable Oil
JSNA	Joint Strategic Needs Assessment
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LEN	Low Emission Neighbourhood

Abbreviation	Description
LLAQM	London Local Air Quality Management
LSO	Local Site Operator
LTN	Low Traffic Neighbourhood
MAP	Motorcycle Action Plan
NO_2	Nitrogen dioxide
NOx	Nitrogen oxides
NRMM	Non-Road Mobile Machinery
O_3	Ozone
PEP	Parking and Enforcement Plan
PM_{10}	Particulate matter less than 10 micron in diameter
$PM_{2.5}$	Particulate matter less than 2.5 micron in diameter
SO_2	Sulphur dioxide
TEA	Triethanolamine
TEB	Transport Emissions Benchmark
TfL	Transport for London
ULEZ	Ultra-Low Emission Zone
WHO	World Health Organization

Table A. Summary of National Air Quality and International Standards, Objectives and Guidelines

Pollutant	Standard / Objective / Guideline	Averaging Period	Date[1]
Nitrogen dioxide (NO_2)	200 µg/m³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO_2)	40 µg/m³	Annual mean	31 Dec 2005
Nitrogen dioxide (NO_2)	WHO AQG[2]: 10 µg/m³	Annual mean	-
Particles (PM_{10})	50 µg/m³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 45 µg/m³ not to be exceeded more than 3-4 times a year	24-hour mean	-
Particles (PM_{10})	40 µg/m³	Annual mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 15 µg/m³	Annual mean	-
Particles ($PM_{2.5}$)	10 µg/m³ [3]	Annual mean	2040
Particles ($PM_{2.5}$)	London Mayoral Objective[4]: 10 µg/m³	Annual mean	2030
Particles ($PM_{2.5}$)	WHO AQG[2]: 5 µg/m³	Annual mean	-
Particles ($PM_{2.5}$)	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Particles ($PM_{2.5}$)	WHO AQG[2]: 15 µg/m³	24-hour mean	-
Sulphur dioxide (SO_2)	266 µg/m³ not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO_2)	350 µg/m³ not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	125 µg/m³ not to be exceeded more than 3 times a year	24-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	WHO AQG[2]: 40 µg/m³ not to be exceeded more than 3-4 times a year	24-hour mean	-

Notes:

(1) Date by which to be achieved by and maintained thereafter
(2) 2021 World Health Organization Air Quality Guideline
(3) Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 under the Environment Act 2021
(4) London Mayoral Objective

1. Air Quality Monitoring

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	In AQMA?	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (m)	Inlet Height (m)	Pollutants Monitored	Monitoring Technique
HK006	Old Street	Roadside	532945	182570	Yes	18.0	8.5	3.0	NO_2, PM_{10}, $PM_{2.5}$, O_3	Chemiluminescence (NO_2), Beta-Attenuation Monitor (PM_{10}, $PM_{2.5}$), UV Photometer (O_3)
HK009	Queensbridge Road	Roadside	533941	184034	Yes	3.7	3.1	1.8	NO_2, PM_{10}	Chemiluminescence (NO_2), Beta-Attenuation Monitor (PM_{10})
HK010	Amhurst Road	Roadside	534379	185240	Yes	9.1	3.8	1.8	NO_2, PM_{10}	Chemiluminescence (NO_2), Beta-Attenuation Monitor (PM_{10})
HK011	Homerton Library	Roadside	535868	185134	Yes	4.7	5.1	1.8	NO_2, PM_{10}	Chemiluminescence (NO_2), Beta-Attenuation Monitor (PM_{10})
HK013	Green Lanes	Roadside	532185	187078	Yes	12.8	7.0	1.6	NO_2	Chemiluminescence
HK014	Dalston Lane	Roadside	534118	185034	Yes	3.0	2.2	1.8	NO_2, PM_{10}	Chemiluminescence (NO_2), Beta-Attenuation Monitor (PM_{10})
HK015	Northwold Road	Roadside	534680	186688	Yes	0.5	2.5	2.0	NO_2, PM_{10}, $PM_{2.5}$	Chemiluminescence (NO_2), Palas Fidas Light-Scattering (PM_{10}, $PM_{2.5}$)

HK016	Graham Road	Roadside	533969	184806	Yes	0.5	1.8	2.0	NO_2, PM_{10}, $PM_{2.5}$	Chemiluminescence (NO_2), Palas Fidas Light-Scattering (PM_{10}, $PM_{2.5}$)

Notes:

(1) 0 m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable

Table C. Details of Non-Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) [1]	Distance to Kerb of Nearest Road (m) [2]	Tube Co-located with Continuous Analyser?	Tube Height (m)
1	Old Street	Roadside	533313	182667	NO_2	YES	2.0	1.3	NO	2.0
3	Millfields Road	Roadside	534977	185892	NO_2	YES	4.0	3.4	NO	3.0
6	44 Great Eastern Street	Roadside	533236	182395	NO_2	YES	2.9	1.7	NO	2.5
8	Iceland Mare Street	Kerbside	534949	184914	NO_2	YES	4.0	0.7	NO	2.1
15	Rivington Street 4	Roadside	533333	182567	NO_2	YES	1.3	1.0	NO	2.1
16	Charlotte Road 1	Roadside	533208	182497	NO_2	YES	0.0	0.5	NO	2.6
17	Charlotte Road 2	Roadside	533218	182412	NO_2	YES	3.9	1.0	NO	2.3
18	Green Lanes 1	Kerbside	532798	185468	NO_2	YES	5.5	0.5	NO	2.2
19	Green Lanes 2	Roadside	532063	187504	NO_2	YES	4.0	1.1	NO	2.3
21	Green Lanes 3	Kerbside	532478	185981	NO_2	YES	10.5	0.6	NO	2.0
25	Green Lanes 7	Kerbside	532192	187214	NO_2	YES	16.0	0.8	NO	2.7
26	Curtain Road 1	Kerbside	533261	182605	NO_2	YES	1.7	0.8	NO	2.3
27	Holywell Lane 1	Roadside	533450	182292	NO_2	YES	6.5	1.0	NO	2.8
30	Homerton High Street	Roadside	535927	185130	NO_2	YES	3.8	0.8	NO	2.1
31	Kingsland High Street	Kerbside	533542	184821	NO_2	YES	3.2	2.3	NO	2.4
32	Rectory Road	Roadside	533851	186353	NO_2	YES	6.0	1.1	NO	2.4
33	Stamford Hill	Kerbside	533687	187785	NO_2	YES	4.2	0.8	NO	1.8
34	Southgate 4	Kerbside	533025	184425	NO_2	YES	6.6	0.5	NO	3.0
35	Middleton 1	Kerbside	533784	184437	NO_2	YES	5.0	0.6	NO	2.2
37	Triangle Road	Kerbside	534723	183880	NO_2	YES	3.4	0.6	NO	2.1
41	Richmond Road	Kerbside	534303	184476	NO_2	YES	8.6	0.5	NO	2.4

42	Murray Grove 2	Kerbside	532617	183052	NO_2	YES	1.3	0.9	NO	2.1
43	Cropley Street	Roadside	532550	183315	NO_2	YES	0.0	1.5	NO	2.3
44	New North Road 2	Kerbside	532606	183616	NO_2	YES	6.2	0.5	NO	2.1
49	Cardinal Pole	Kerbside	535551	184840	NO_2	YES	9.8	0.5	NO	2.7
50	Inspired Directions	Kerbside	533765	184796	NO_2	YES	3.7	0.5	NO	2.4
52	Filey Avenue 1	Kerbside	534483	187193	NO_2	YES	2.5	0.7	NO	2.3
54	Twinkle Stars Nursery 2	Roadside	532008	187388	NO_2	YES	0.0	7.7	NO	2.5
55	Our Lady High School 1	Roadside	533491	187892	NO_2	YES	10.0	3.2	NO	2.2
58	Morning Lane 2	Roadside	535311	184932	NO_2	YES	0.0	4.7	NO	2.7
60	Dymchurch House	Kerbside	534660	185252	NO_2	YES	12.0	0.4	NO	2.0
61	Amhurst Road LN 1	Kerbside	534917	184959	NO_2	YES	2.7	0.7	NO	2.4
62	Amhurst Road LN 2 - LC 10	Kerbside	534771	185074	NO_2	YES	8.7	0.6	NO	1.9
63	Delta Dalston Lane	Kerbside	534581	185171	NO_2	YES	2.8	0.6	NO	2.1
64	Shoreditch Park	Urban Background	532753	183557	NO_2	YES	N/A	N/A	NO	2.1
65	290 Mare St	Kerbside	534960	184758	NO_2	YES	2.8	0.7	NO	2.3
67	Wick Road	Kerbside	536375	184747	NO_2	YES	1.0	0.8	NO	2.1
68	The Salvation Army Cambridge Heath	Kerbside	534862	183824	NO_2	YES	2.1	0.6	NO	2.1
71	Temp Bus Stop/Stoke Newington Church Street	Kerbside	533582	186545	NO_2	YES	1.0	0.7	NO	2.0
72, 73, 74	HK6 Co-Location	Roadside	532947	182575	NO_2	YES	18.0	8.5	YES	3.0
75	Paragon Rd - LC6	Roadside	535149	184668	NO_2	YES	3.5	1.1	NO	2.0
76	Stoke Newington High Street	Kerbside	533619	186524	NO_2	YES	1.4	0.6	NO	2.6
77	Advantage Properties Stoke Newington Road	Kerbside	533591	185850	NO_2	YES	6.0	0.5	NO	1.7

80	68 Brighton Road	Kerbside	533374	185801	NO_2	YES	3.5	0.7	NO	2.1
82	Anthology Hoxton Press Bridport Place	Kerbside	532814	183616	NO_2	YES	N/A	0.5	NO	2.1
84	154 Kingsland Road	Kerbside	533477	183373	NO_2	YES	12.0	0.7	NO	2.2
85	St Leonards Hospital	Urban Background	533440	183435	NO_2	YES	0.0	N/A	NO	1.6
87	LEN Lordship Road 1	Kerbside	532930	186761	NO_2	YES	11.0	0.4	NO	2.2
88	LEN Lordship Road 2	Kerbside	532576	187444	NO_2	YES	10.0	0.4	NO	2.2
90	LEN Barbauld Road	Kerbside	533086	186066	NO_2	YES	4.5	0.6	NO	2.2
91	LEN Windus Road	Kerbside	533740	187025	NO_2	YES	3.9	0.4	NO	2.3
92	LEN Manor road	Kerbside	533215	187112	NO_2	YES	13.0	0.5	NO	2.2
95	The Tomlinson Centre Queensbridge Road	Roadside	533923	184048	NO_2	YES	5.1	5.2	NO	2.1
96	Kennaway Estate	Kerbside	532642	186175	NO_2	YES	14.0	0.6	NO	2.1
98	Stokey Vintage Stoke Newington High Street	Kerbside	533599	186314	NO_2	YES	1.8	0.7	NO	2.2
99	H&B News Albion Parade	Kerbside	532937	185963	NO_2	YES	2.9	0.6	NO	2.2
101	Homerton University Hospital 1	Urban Background	535598	185267	NO_2	YES	0.0	N/A	NO	2.0
102	Homerton University Hospital 2	Urban Background	535524	185355	NO_2	YES	0.0	N/A	NO	2.1
103	Homerton University Hospital 3	Kerbside	535730	185425	NO_2	YES	5.0	0.5	NO	2.1
107	Lea Bridge Road	Roadside	535143	186303	NO_2	YES	1.9	2.6	NO	2.1
108	St Dominic's Catholic Primary 4	Roadside	536237	184756	NO_2	YES	0.0	2.4	NO	2.8
115	Nile St 2	Roadside	532534	182870	NO_2	YES	0.5	1.8	NO	2.3
116	Vestry St	Kerbside	532728	182858	NO_2	YES	2.0	0.3	NO	2.8
117	Leonard St	Roadside	532885	182376	NO_2	YES	3.0	0.5	NO	2.2

120	Pitfield St 3	Kerbside	533041	182730	NO_2	YES	0.0	2.7	NO	2.2
121	Petchey Academy 1	Roadside	533906	185523	NO_2	YES	10.0	3.1	NO	2.3
122	Halley House 1	Roadside	533768	185429	NO_2	YES	0.0	3.4	NO	2.3
123	Graham Road - LC 32	Kerbside	534741	184863	NO_2	YES	4.1	0.4	NO	2.0
125	St John the Baptist 2	Kerbside	532953	183034	NO_2	YES	2.4	0.6	NO	2.4
129	Queensbridge 3	Kerbside	533961	183544	NO_2	YES	17.0	0.8	NO	2.5
130	Balls Pond Road 2	Kerbside	533356	184775	NO_2	YES	1.7	0.8	NO	2.7
131	Ponsford St - LC 8	Kerbside	535475	184962	NO_2	YES	5.3	0.8	NO	2.4
132	Pembury Estate Dalston Lane	Kerbside	534834	185195	NO_2	YES	16.0	0.6	NO	2.4
133	Mossbourne Parkside Academy	Roadside	534446	185083	NO_2	YES	1.0	2.5	NO	2.1
134	Woodberry Down 2	Kerbside	532518	187760	NO_2	YES	10.4	0.6	NO	2.7
137	London Fields P/S Entrance	Roadside	534640	183847	NO_2	YES	0.0	6.7	NO	2.8
139	Lubavitch Boys School 2	Roadside	533836	187740	NO_2	YES	0.0	3.9	NO	2.8
140	Lubavitch Girls School 1	Roadside	533646	187666	NO_2	YES	0.0	8.2	NO	2.8
141	Lyceum Preparatory	Kerbside	532997	182129	NO_2	YES	1.5	0.6	NO	2.2
147	Orchard Primary School	Kerbside	535382	184279	NO_2	YES	1.8	0.8	NO	2.2
149	Hackney New School 2	Kerbside	533476	183932	NO_2	YES	2.2	0.9	NO	2.3
153	The City Academy 1	Kerbside	535258	185174	NO_2	YES	4.6	0.6	NO	2.3
154	The City Academy 3	Roadside	535361	185076	NO_2	YES	0.0	3.0	NO	2.5
156	Berger P/S 2	Roadside	535707	184715	NO_2	YES	10.5	2.1	NO	2.6
157	St Scholastica's Primary New	Roadside	534374	186228	NO_2	YES	4.5	2.8	NO	1.8
159	Albion Road 1	Kerbside	532928	185866	NO_2	YES	9.1	0.7	NO	2.1
160	Albion Road 2	Kerbside	532871	185525	NO_2	YES	6.8	0.3	NO	2.1
161	William Patten 1	Kerbside	533464	186526	NO_2	YES	2.5	0.6	NO	2.2
162	William Patten 2	Kerbside	533521	186555	NO_2	YES	1.6	1.0	NO	2.6

166	Princess May 1	Kerbside	533509	185537	NO_2	YES	2.0	0.5	NO	2.3
167	Princess May 2	Kerbside	533563	185540	NO_2	YES	3.6	0.6	NO	2.3
172	Grasmere Primary School	Kerbside	532915	185763	NO_2	YES	2.1	0.6	NO	2.1
174	Colvestone Primary School	Kerbside	533651	185066	NO_2	YES	3.0	0.8	NO	2.0
176	Stoke Newington Nursery	Kerbside	533256	186502	NO_2	YES	2.0	0.5	NO	2.1
177	Rainbow Nursery	Kerbside	533275	185905	NO_2	YES	2.3	0.4	NO	2.1
178	St Monica's RC Primary School	Kerbside	533275	182810	NO_2	YES	2.3	0.7	NO	2.1
179	Hoxton Primary School	Roadside	533180	183363	NO_2	YES	0.0	1.0	NO	2.1
180	Toucan Day Nursery	Roadside	534323	183335	NO_2	YES	0.0	2.3	NO	2.1
181	Randal Cremer Primary School	Kerbside	533608	183353	NO_2	YES	1.8	0.4	NO	2.3
182	Grazebrook Primary School	Roadside	532933	186769	NO_2	YES	0.0	2.5	NO	1.8
186	Gainsborough Primary School	Kerbside	536957	184859	NO_2	YES	2.2	0.5	NO	2.1
188	St Matthias School	Roadside	533197	185493	NO_2	YES	0.0	1.7	NO	2.0
190	Daubeney Primary School	Roadside	536137	185610	NO_2	YES	2.2	0.4	NO	2.1
191	Rushmore Primary School	Roadside	535557	185741	NO_2	YES	2.3	0.7	NO	2.0
192	Millfields Community School	Roadside	535165	185886	NO_2	YES	2.2	0.6	NO	2.1
193	Mandeville Primary School	Roadside	535958	186107	NO_2	YES	2.8	0.6	NO	2.1
194	Lauriston School	Roadside	535638	183840	NO_2	YES	2.1	2.2	NO	2.1
195	Benthal Primary School	Kerbside	534175	186158	NO_2	YES	2.3	0.6	NO	1.8
196	Baden-Powell Primary School	Roadside	534715	186034	NO_2	YES	2.0	0.5	NO	2.1
197	Stormont House School	Urban Background	534513	185555	NO_2	YES	3.0	N/A	NO	1.8
198	Al Falah Primary School	Roadside	534664	186168	NO_2	YES	0.0	2.8	NO	2.1
199	Nightingale Primary School	Roadside	534581	185919	NO_2	YES	0.0	2.1	NO	2.0
201	Jubilee Primary School	Kerbside	534199	187065	NO_2	YES	2.0	0.6	NO	2.0

203	Tyssen Primary School	Kerbside	534156	187319	NO_2	YES	3.5	0.7	NO	2.0
204	Southwold Primary School	Roadside	535008	186764	NO_2	YES	0.5	2.2	NO	2.2
205	Harrington Hill Primary School	Kerbside	534891	187130	NO_2	YES	2.5	0.5	NO	2.1
206	Wentworth Nursery School 1	Kerbside	535965	184559	NO_2	YES	3.5	0.8	NO	2.2
209	St John of Jerusalem CE Primary School	Roadside	535363	184117	NO_2	YES	3.2	1.5	NO	2.3
210	Ridley Road	Kerbside	533996	185005	NO_2	YES	2.3	0.8	NO	2.0
211	Brownswood Road	Roadside	532047	186569	NO_2	YES	3.3	2.8	NO	2.3
212	CFR3 Victoria Park Road	Kerbside	535360	183845	NO_2	YES	6.4	0.5	NO	2.1
213	Woodberry Grove	Roadside	532350	187783	NO_2	YES	0.0	3.6	NO	2.4
214	Albion Road 3	Roadside	532970	186361	NO_2	YES	8.5	0.4	NO	2.0
215	186 Lower Clapton	Roadside	534887	186061	NO_2	YES	5.5	6.9	NO	2.0
216	Northwold Primary 1	Roadside	534250	186665	NO_2	YES	0.0	2.4	NO	2.0
217	1 Lordship Road	Kerbside	533116	186580	NO_2	YES	6.6	1.5	NO	2.0
218	Mare Street 2	Roadside	534854	183586	NO_2	YES	6.2	0.5	NO	2.0
219	Vince St	Roadside	532884	182581	NO_2	YES	8.7	0.4	NO	2.0
220	Mare Street	Roadside	534944	184441	NO_2	YES	4.3	0.6	NO	2.4
221	Powerscroft Road	Roadside	535319	185630	NO_2	YES	6.6	2.1	NO	2.0
222	196 Green Lanes	Roadside	532347	186700	NO_2	YES	0.0	10.3	NO	2.1
223	Hackney Central LN 1	Roadside	535062	184810	NO_2	YES	0.0	1.9	NO	1.9
224	Hackney Central LN 2	Roadside	534875	184882	NO_2	YES	1.8	3.6	NO	2.1
225	Dalston Lane LTN 1	Roadside	533595	185957	NO_2	YES	4.5	1.1	NO	2.2
226	Dalston Lane LTN 2	Kerbside	534008	185723	NO_2	YES	1.7	0.6	NO	2.1
227	Dalston Lane LTN 3	Kerbside	533857	185202	NO_2	YES	6.6	0.8	NO	2.1
228	Dalston Lane East / Narrow Way	Roadside	534923	185187	NO_2	YES	0.0	1.7	NO	2.3

229	The Olive School / Churchwell Path	Roadside	535076	185308	NO_2	YES	4.0	6.6	NO	2.3
230	Urswick Road	Kerbside	535207	185311	NO_2	YES	2.8	1.0	NO	2.0
231	143 Lower Clapton Road	Kerbside	535055	185626	NO_2	YES	2.3	0.8	NO	2.1
232	Digby Road	Roadside	535657	185046	NO_2	YES	4.5	5.2	NO	2.2
233	138 Shoreditch High Street	Kerbside	533416	182564	NO_2	YES	0.4	0.7	NO	2.2
234	Balls Pond Road 3	Roadside	533246	184787	NO_2	YES	0.0	5.4	NO	2.4
235	Rectory Road / Evering Road	Kerbside	533948	186094	NO_2	YES	1.8	0.6	NO	2.2
236	Raines Court Northwold Road	Kerbside	533759	186655	NO_2	YES	7.4	0.6	NO	2.1
237	Wick Road / Victoria Park Road	Kerbside	536426	184720	NO_2	YES	3.7	0.7	NO	2.1
238	East Road	Roadside	532852	183044	NO_2	YES	0.5	2.4	NO	2.2
239	Upper Clapton Road / Prout Road	Roadside	534861	186275	NO_2	YES	5.2	5.0	NO	2.3
240	St Mary's Primary School / Barn Street	Kerbside	533076	186498	NO_2	YES	2.1	0.5	NO	2.2

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

Automatic monitors

Two new roadside automatic monitors were installed in 2024 - Northwold Road (HK015) and Graham Road (HK016). Both of these monitoring stations include a Serinus S40 NOx chemiluminescence analyser and a Palas Fidas 200 in dual-channel configuration, measuring both PM_{10} and $PM_{2.5}$ via optical light scattering. Northwold Road was installed and commissioned in August 2024. This location was chosen to improve coverage of air quality monitoring in the north-east of the borough. Graham Road was installed and

commissioned in November 2024. This location was chosen to provide further data on traffic-related air pollution along one of the borough's busiest A roads, including to investigate the impact on particulate matter concentrations. As Graham Road was only installed in November 2024, there is insufficient annual data (<25%) to present in this report.

One automatic monitor was decommissioned in 2024 - Queensbridge Road (HK009). This monitor was decommissioned in April 2024 due to the expiration of the hire agreement (following installation in 2021). Queensbridge Road was initially installed to monitor any changes in air quality as a result of the London Fields Low Traffic Neighbourhood. The decision was made not to continue monitoring at this location due to ongoing data quality issues (particularly with NOx), the generally low concentrations that were measured and the need to focus resources in areas where further data are required.

Diffusion tubes

Six diffusion tubes were discontinued in 2024:

- Sites 110 to 113 inclusive (Brooke Road 2, Evering Road 1, Evering Road 2 and Heyworth Road) were initially installed to understand changes in air quality as a result of a Low Traffic Neighbourhood scheme north of Hackney Downs. These were removed due to very low measured concentrations of NO_2 at these locations.
- Site 171 (St Mary's Primary School 4) was removed due to access limitations of this location at a primary school. It was replaced with Site 240 (St Mary's Primary School / Barn Street) to maintain monitoring at this school.
- Site 184 (St Paul's with St Michael's CE Primary School) was removed due to low concentrations of NO_2 measured at this location, and persistent vandalism of the monitoring site.

13 new diffusion tubes were installed in 2024, resulting in a net increase of 7 diffusion tubes across the network in 2024.

12 of these sites (Sites 228 to 239) were installed and commissioned at the end of January or the start of February 2024. These were primarily installed to collect further data on traffic emissions on busy red routes and A roads. These locations were selected

either due to a previous lack of monitoring at these locations, or due to the potential impacts of upcoming road traffic schemes (including the Amhurst Road and Pembury Circus transformation, and traffic restrictions on Chatsworth Road). The thirteenth site, Site 240 (St Mary's Primary School / Barn Street), was installed in May following reported issues with accessing a previous diffusion tube representative of this location.

1.2 Comparison of Monitoring Results with AQOs

The results in this year's ASR have been presented to 1 decimal place in line with reporting guidance. Previous ASRs have presented concentrations without decimal places. For consistency in reporting, previous years' concentrations continue to be presented without decimal places.

Table D. Annual Mean NO_2 Monitoring Results: Automatic Monitoring (µg/m³)

Site ID	X OS Grid Ref	Y OS Grid Ref	Site Type	Valid data capture for monitoring period % [a]	Valid data capture 2024 % [b]	2018	2019	2020	2021	2022	2023	2024
HK006	532945	182570	Roadside	99.0	92.1	**50**	**47**	37	33	31	31	23.6
HK009	533941	184034	Roadside	99.9	38.4	-	-	-	-	-	-	27.8
HK010	534379	185240	Roadside	98.1	98.1	-	-	-	-	22	23	22.7
HK011	535868	185134	Roadside	93.1	93.1	-	-	-	-	28	28	24.1
HK013	532185	187078	Roadside	99.4	99.4	-	-	-	-	22	19	21.1
HK014	534118	185034	Roadside	97.5	97.5	-	-	-	-	-	36	33.3
HK015	534680	186688	Roadside	99.9	40.0	-	-	-	-	-	-	23.0

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the NO_2 annual mean AQO of 40 µg/m³ are shown in **bold**.

NO_2 annual means in excess of 60 µg/m³, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias.

All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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%).

Table E. Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg/m³)

Site ID	X OS Grid Ref	Y OS Grid Ref	Site Type	Valid data capture for monitoring period % [1]	Valid data capture 2024 % [2]	2018	2019	2020	2021	2022	2023	2024
1	533313	182667	Roadside	100.0	100.0	**55**	**48**	36	36	32	33	28.8
3	534977	185892	Roadside	100.0	100.0	33	34	24	24	22	21	20.8
6	533236	182395	Roadside	100.0	100.0	**63**	**50**	37	38	33	35	32.1
8	534949	184914	Kerbside	100.0	100.0	**64**	**67**	**49**	**43**	37	38	35.0
15	533333	182567	Roadside	100.0	100.0	35	31	23	23	22	21	20.1
16	533208	182497	Roadside	91.7	92.5	**42**	**43**	29	27	25	26	25.9
17	533218	182412	Roadside	100.0	100.0	**46**	**48**	35	37	35	34	31.9
18	532798	185468	Kerbside	100.0	100.0	-	**48**	31	33	32	31	25.5
19	532063	187504	Roadside	100.0	100.0	**61**	**60**	**45**	**47**	38	33	30.6
21	532478	185981	Kerbside	100.0	100.0	-	**50**	34	30	29	26	25.8
25	532192	187214	Kerbside	100.0	100.0	-	**42**	29	27	24	24	21.3
26	533261	182605	Kerbside	91.7	90.6	**53**	**48**	35	37	37	34	29.3
27	533450	182292	Roadside	100.0	100.0	**57**	**47**	32	32	30	30	28.8
30	535927	185130	Roadside	91.7	92.5	**48**	**48**	36	36	29	31	26.3
31	533542	184821	Kerbside	100.0	100.0	**53**	**50**	39	**41**	38	37	32.6
32	533851	186353	Roadside	100.0	100.0	**43**	**40**	30	29	29	27	23.7
33	533687	187785	Kerbside	100.0	100.0	**45**	**40**	31	31	31	29	27.1
34	533025	184425	Kerbside	91.7	92.5	**40**	39	26	24	24	22	20.7
35	533784	184437	Kerbside	100.0	100.0	37	36	25	22	20	20	19.3
37	534723	183880	Kerbside	83.3	83.0	-	29	22	21	20	20	17.2

41	534303	184476	Kerbside	83.3	83.0	37	35	24	20	19	19	16.9
42	532617	183052	Kerbside	100.0	100.0	**40**	37	35	25	22	21	20.5
43	532550	183315	Roadside	83.3	83.0	35	31	27	22	17	17	16.6
44	532606	183616	Kerbside	100.0	100.0	**53**	**54**	**44**	30	29	28	25.0
49	535551	184840	Kerbside	100.0	100.0	**49**	**45**	**42**	32	29	29	24.6
50	533765	184796	Kerbside	91.7	92.5	-	**57**	**49**	**47**	35	38	34.6
52	534483	187193	Kerbside	75.0	75.0	-	37	29	26	24	22	25.3
54	532008	187388	Roadside	83.3	84.9	-	**43**	32	32	29	28	26.2
55	533491	187892	Roadside	91.7	90.6	-	36	25	27	25	23	22.7
58	535311	184932	Roadside	100.0	100.0	-	**49**	34	34	31	30	28.3
60	534660	185252	Kerbside	91.7	90.6	-	**46**	35	36	32	31	29.2
61	534917	184959	Kerbside	91.7	90.6	27	**63**	**51**	**41**	36	38	35.5
62	534771	185074	Kerbside	91.7	92.5	29	26	34	33	31	27	26.6
63	534581	185171	Kerbside	100.0	100.0	-	**58**	**49**	**51**	**44**	**44**	**43.3**
64	532753	183557	Urban Background	100.0	100.0	-	33	23	22	21	21	17.6
65	534960	184758	Kerbside	91.7	92.5	-	**63**	**42**	39	33	31	31.4
67	536375	184747	Kerbside	100.0	100.0	-	**63**	39	**44**	40	40	32.6
68	534862	183824	Kerbside	91.7	90.6	-	**52**	34	34	31	28	27.5
71	533582	186545	Kerbside	91.7	90.6	-	**49**	35	**41**	40	36	23.6
72, 73, 74	532947	182575	Roadside	94.4	93.7	-	-	35	33	31	33	28.8
75	535149	184668	Roadside	83.3	83.0	-	34	23	21	20	20	18.4
76	533619	186524	Kerbside	100.0	100.0	**65**	**63**	**53**	**48**	40	**44**	36.5
77	533591	185850	Kerbside	50.0	49.1	-	-	25	27	25	24	19.5

80	533374	185801	Kerbside	91.7	90.6	-	-	21	19	18	17	16.2
82	532814	183616	Kerbside	100.0	100.0	-	-	20	19	19	18	17.9
84	533477	183373	Kerbside	91.7	92.5	-	-	25	29	24	26	22.2
85	533440	183435	Urban Background	83.3	84.9	-	-	-	16	15	15	15.1
87	532930	186761	Kerbside	75.0	75.0	-	-	23	20	18	16	16.8
88	532576	187444	Kerbside	91.7	92.5	-	-	24	23	21	19	18.1
90	533086	186066	Kerbside	100.0	100.0	-	-	23	23	20	20	17.9
91	533740	187025	Kerbside	100.0	100.0	-	-	24	22	21	21	17.1
92	533215	187112	Kerbside	100.0	100.0	-	-	27	25	24	20	21.5
95	533923	184048	Roadside	91.7	92.5	-	-	23	24	20	21	18.6
96	532642	186175	Kerbside	50.0	50.9	-	-	24	21	22	22	17.9
98	533599	186314	Kerbside	83.3	84.9	-	-	27	29	26	24	22.1
99	532937	185963	Kerbside	91.7	92.5	-	-	32	30	30	26	18.7
101	535598	185267	Urban Background	100.0	100.0	-	-	20	19	19	20	17.6
102	535524	185355	Urban Background	91.7	92.5	-	-	20	19	17	17	15.8
103	535730	185425	Kerbside	83.3	84.9	-	-	37	37	32	31	28.6
107	535143	186303	Roadside	91.7	92.5	-	-	**42**	**42**	35	37	32.6
108	536237	184756	Roadside	100.0	100.0	**43**	39	29	30	27	27	24.0
115	532534	182870	Roadside	83.3	83.0	37	38	30	24	23	23	19.2
116	532728	182858	Kerbside	100.0	100.0	**64**	**55**	**42**	38	31	37	30.0
117	532885	182376	Roadside	100.0	100.0	38	**42**	28	28	28	20	18.9
120	533041	182730	Kerbside	91.7	90.6	39	35	25	25	21	23	20.4

121	533906	185523	Roadside	91.7	92.5	**40**	37	28	25	24	23	21.7
122	533768	185429	Roadside	83.3	81.1	-	36	26	26	23	23	20.0
123	534741	184863	Kerbside	100.0	100.0	-	**47**	33	31	30	28	27.0
125	532953	183034	Kerbside	100.0	100.0	35	34	24	23	20	19	17.5
129	533961	183544	Kerbside	100.0	100.0	-	**40**	24	22	21	22	20.8
130	533356	184775	Kerbside	100.0	100.0	-	**45**	38	39	36	37	35.2
131	535475	184962	Kerbside	100.0	100.0	-	**44**	31	31	29	25	22.3
132	534834	185195	Kerbside	91.7	92.5	**50**	**47**	34	35	33	31	30.7
133	534446	185083	Roadside	100.0	100.0	-	38	31	32	29	28	26.5
134	532518	187760	Kerbside	100.0	100.0	**47**	**45**	36	35	26	26	27.2
137	534640	183847	Roadside	91.7	92.5	-	25	21	20	19	20	17.8
139	533836	187740	Roadside	100.0	100.0	**43**	**41**	33	31	28	26	25.8
140	533646	187666	Roadside	91.7	90.6	-	38	31	31	28	27	24.0
141	532997	182129	Kerbside	91.7	92.5	38	35	27	26	25	24	22.4
147	535382	184279	Kerbside	100.0	100.0	-	**46**	32	32	29	30	24.9
149	533476	183932	Kerbside	100.0	100.0	**50**	**43**	33	33	28	27	25.2
153	535258	185174	Kerbside	91.7	92.5	**43**	**45**	36	33	27	30	23.7
154	535361	185076	Roadside	100.0	100.0	**48**	**42**	30	30	24	22	23.0
156	535707	184715	Roadside	83.3	83.0	36	38	27	20	27	24	22.3
157	534374	186228	Roadside	100.0	100.0	-	-	20	20	19	18	16.7
159	532928	185866	Kerbside	100.0	100.0	-	-	27	29	28	25	21.8
160	532871	185525	Kerbside	100.0	100.0	-	-	31	34	31	30	23.5
161	533464	186526	Kerbside	91.7	90.6	29	26	22	21	19	18	16.8
162	533521	186555	Kerbside	100.0	100.0	**46**	**45**	31	34	33	30	24.4

166	533509	185537	Kerbside	100.0	100.0	29	27	21	23	20	18	17.9
167	533563	185540	Kerbside	91.7	90.6	**47**	**44**	32	32	32	28	26.5
172	532915	185763	Kerbside	100.0	100.0	**43**	**41**	36	38	36	31	25.9
174	533651	185066	Kerbside	91.7	92.5	-	-	23	23	21	21	20.4
176	533256	186502	Kerbside	100.0	100.0	-	-	24	22	20	17	16.7
177	533275	185905	Kerbside	100.0	100.0	-	-	22	19	18	16	15.7
178	533275	182810	Kerbside	83.3	83.0	-	-	24	23	20	20	19.2
179	533180	183363	Roadside	100.0	100.0	-	-	19	18	16	17	15.3
180	534323	183335	Roadside	91.7	90.6	-	-	21	20	18	18	17.3
181	533608	183353	Kerbside	75.0	75.0	-	-	19	20	19	18	17.6
182	532933	186769	Roadside	75.0	75.0	-	-	20	20	17	16	14.9
186	536957	184859	Kerbside	100.0	100.0	-	-	22	21	21	19	18.4
188	533197	185493	Roadside	83.3	83.0	-	-	20	20	18	18	16.0
190	536137	185610	Roadside	100.0	100.0	-	-	21	20	18	18	15.9
191	535557	185741	Roadside	100.0	100.0	-	-	30	20	16	17	15.6
192	535165	185886	Roadside	75.0	75.0	-	-	23	22	19	20	17.7
193	535958	186107	Roadside	100.0	100.0	-	-	20	19	18	16	17.4
194	535638	183840	Roadside	91.7	92.5	-	-	20	20	20	16	17.5
195	534175	186158	Kerbside	91.7	90.6	-	-	20	20	17	18	16.1
196	534715	186034	Roadside	100.0	100.0	-	-	18	18	19	16	16.2
197	534513	185555	Urban Background	66.7	66.0	-	-	21	20	18	18	16.3
198	534664	186168	Roadside	91.7	90.6	-	-	24	22	20	19	15.9
199	534581	185919	Roadside	83.3	83.0	-	-	22	19	17	18	17.1

201	534199	187065	Kerbside	66.7	67.9	-	-	21	20	18	18	15.4
203	534156	187319	Kerbside	100.0	100.0	-	-	21	22	19	18	17.0
204	535008	186764	Roadside	75.0	75.0	-	-	19	19	16	15	14.8
205	534891	187130	Kerbside	83.3	84.9	-	-	22	23	18	18	18.2
206	535965	184559	Kerbside	100.0	100.0	-	-	27	28	26	26	22.7
209	535363	184117	Roadside	83.3	81.1	-	-	18	19	16	16	16.7
210	533996	185005	Kerbside	83.3	83.0	-	-	-	34	31	30	26.4
211	532047	186569	Roadside	100.0	100.0	-	-	-	22	21	19	18.8
212	535360	183845	Kerbside	91.7	90.6	-	-	-	26	24	22	22.5
213	532350	187783	Roadside	83.3	84.9	-	-	21	22	20	19	15.2
214	532970	186361	Roadside	91.7	92.5	-	-	-	-	25	24	19.9
215	534887	186061	Roadside	100.0	100.0	-	-	-	-	29	26	23.2
216	534250	186665	Roadside	91.7	90.6	-	-	-	-	22	19	18.5
217	533116	186580	Kerbside	75.0	75.0	-	-	-	-	19	18	17.0
218	534854	183586	Roadside	100.0	100.0	-	-	-	-	34	32	30.6
219	532884	182581	Roadside	100.0	100.0	-	-	-	-	28	27	22.6
220	534944	184441	Roadside	91.7	92.5	-	-	-	-	25	25	24.5
221	535319	185630	Roadside	91.7	90.6	-	-	-	-	-	22	18.6
222	532347	186700	Roadside	91.7	90.6	-	-	-	-	-	20	19.5
223	535062	184810	Roadside	100.0	100.0	-	-	-	-	-	21	19.4
224	534875	184882	Roadside	100.0	100.0	-	-	-	-	-	29	23.8
225	533595	185957	Roadside	91.7	90.6	-	-	-	-	-	25	21.8
226	534008	185723	Kerbside	83.3	83.0	-	-	-	-	-	28	24.4
227	533857	185202	Kerbside	91.7	92.5	-	-	-	-	-	26	22.7

228	534923	185187	Roadside	91.7	90.6	-	-	-	-	-	-	33.4
229	535076	185308	Roadside	91.7	92.5	-	-	-	-	-	-	22.3
230	535207	185311	Kerbside	91.7	92.5	-	-	-	-	-	-	33.2
231	535055	185626	Kerbside	91.7	92.5	-	-	-	-	-	-	28.9
232	535657	185046	Roadside	66.7	66.0	-	-	-	-	-	-	23.1
233	533416	182564	Kerbside	91.7	90.6	-	-	-	-	-	-	25.4
234	533246	184787	Roadside	100.0	92.5	-	-	-	-	-	-	28.5
235	533948	186094	Kerbside	100.0	92.5	-	-	-	-	-	-	25.6
236	533759	186655	Kerbside	100.0	92.5	-	-	-	-	-	-	24.1
237	536426	184720	Kerbside	81.8	75.0	-	-	-	-	-	-	34.8
238	532852	183044	Roadside	90.9	83.0	-	-	-	-	-	-	27.2
239	534861	186275	Roadside	91.7	90.6	-	-	-	-	-	-	22.6
240	533076	186498	Kerbside	100.0	67.9	-	-	-	-	-	-	23.0

Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19.
Diffusion tube data has been bias adjusted.
Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the NO_2 annual mean objective of 40µg/m³ are shown in **bold**.

NO_2 annual means exceeding 60µg/m³, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been “annualised” in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Data capture

All of the automatic monitors measuring NO_2 achieved good data capture (>85%) for their monitoring periods in 2024. Queensbridge Road (HK009) was decommissioned in April 2024, and Northwold Road (HK015) was installed and commissioned in August 2024. Therefore, there is only data capture for part of the year for these sites and the results have been annualised. Further information is provided in Appendix A.

Diffusion tube data capture for 2024 was generally good, and much improved on 2023 when two entire months of data loss occurred. In total, only 8 of 151 (5%) monitoring sites required annualisation in 2024. Further details of the annualisation and bias adjustment process are provided in Appendix A. Full monthly diffusion tube results are provided in Appendix B.

Exceedances of the air quality objectives

None of the automatic monitoring sites recorded an exceedance of the annual mean NO_2 objective of 40 µg/m³ in 2023. The highest recorded concentration was 33.3 µg/m³ at Dalston Lane (HK014), although this is not within 10% of the annual mean objective.

Among the diffusion tube monitoring sites, there was **one** exceedance of the annual mean NO_2 objective in 2024. This was Site 63 (Delta Dalston Lane), a kerbside monitoring site, which recorded 43.3 µg/m³. This site is located on Dalston Lane close to Pembury Circus junction. This site has exceeded the objective in all years since its commission in 2019, although there is a clear downward trend in concentrations. The concentration in 2024 is 1 µg/m³ lower (when rounded) than in 2023.

Following distance correction at Site 63, the concentration is estimated to be below the annual mean objective at the nearest sensitive receptor (i.e. the nearest residential property), at 34.7 µg/m³. This is below 10% of the annual mean objective.

In addition, **one** diffusion tube recorded a concentration within 10% of the annual mean objective: Site 76 - Stoke Newington High Street, which measured 36.5 µg/m³. Site 76 exceeded the objective in 2023 (44 µg/m³). Therefore, a sharp decrease in NO_2 concentration (7 µg/m³, when rounded) has been observed at this site in 2024. No other site measured an annual mean concentration within 10% of the objective; this is a decrease of eight sites compared to 2024, where nine sites were within 10%.

Trends

The overall trend in recent years has been one of significant decreases in NO_2. This trend has been observed at all long-term monitoring sites since around 2017, with a significant reduction in exceedances of the annual mean NO_2 objective across Hackney, and no annual mean concentrations >60 µg/m³ (representing a possible exceedance of the 1-hour mean objective) since 2019. This trend has broadly continued in 2024, with only some minor increases noted at a small number of monitoring sites.

Of the five automatic monitoring sites that continued to operate between 2023 and 2024, four sites measured a decrease in annual mean NO_2, and one site (Green Lanes (HK013)) measured an increase (+2 µg/m³, when rounded). Most notably, Old Street (HK006) measured a substantial decrease (-7 µg/m³, when rounded).

Of the 138 diffusion tubes that continued to operate between 2023 and 2024, a decrease in annual mean NO_2 was observed at 125 (90.6%) sites, and an increase was observed at 13 (9.4%) sites.

Six monitoring sites measured an increase greater than 1 µg/m³, with the greatest increase observed at Site 52 (Filey Avenue 1, +3 µg/m³). The remaining increases were less than 2 µg/m³ when rounded (Sites 92, 134, 154, 193 and 194). No clear trends were observed as to the location of sites measuring these increases.

There were 13 monitoring sites where the measured decrease was greater than 5 µg/m³. The following notable trends and observations were made in regards to these decreases:

- Five of the 13 monitoring sites are on TfL red routes, and these include sites that previously measured high concentrations or exceedances. These include:
    - The Old Street (HK006) automatic monitor (-7 µg/m³);
    - The Wick Road/A12 junction. Site 67 measured 40 µg/m³ in 2023; a decrease of 7 µg/m³ was measured in 2024;
    - Sites around the junction of Stoke Newington High Street and Church Street (Site 71, -12 µg/m³; Site 76, -8 µg/m³; and Site 162, -6 µg/m³). Note that Site 76 measured an exceedance in 2023 (44 µg/m³).
- Four monitoring sites are located along Albion Road and its junction with Green Lanes in Stoke Newington (Site 18, -6 µg/m³; Site 99, -7 µg/m³; Site 160, -7 µg/m³; and Site 172, -5 µg/m³)
- Site 116 (Vestry Street) measured a decrease of 7 µg/m³. This is notable considering the large increase that was measured in 2023. It is thought the reason for this was roadworks in the vicinity causing significant queuing traffic and congestion.
- Site 224 (Hackney Central LN 2), located outside the Graham Road entrance of Hackney Central station, measured a decrease of 5 µg/m³. Graham Road (A1207) is a main through route. However, it is observed that another site on this road (Site 123 - Graham Road - LC 32) measured a smaller decrease of 1 µg/m³.
- Site 147 (Orchard Primary School) measured a decrease of 5 µg/m³. This is located on the A106 Well Street, a main through road.
- Site 153 (City Academy 1) measured a decrease of 6 µg/m³. This contrasts to Site 154 (City Academy 3) where an increase of 1 µg/m³ was observed. This could be due to the differing traffic conditions at each site.

Figure 1 shows the trend in annual mean NO_2 concentrations at the automatic monitoring sites in Hackney.

Figure 2 to **Figure 14** show the trends in annual mean NO_2 concentrations at diffusion tube sites in Hackney, grouped by location (ward).

Figure 1. Annual Mean NO_2 Concentrations at Automatic Monitoring Sites

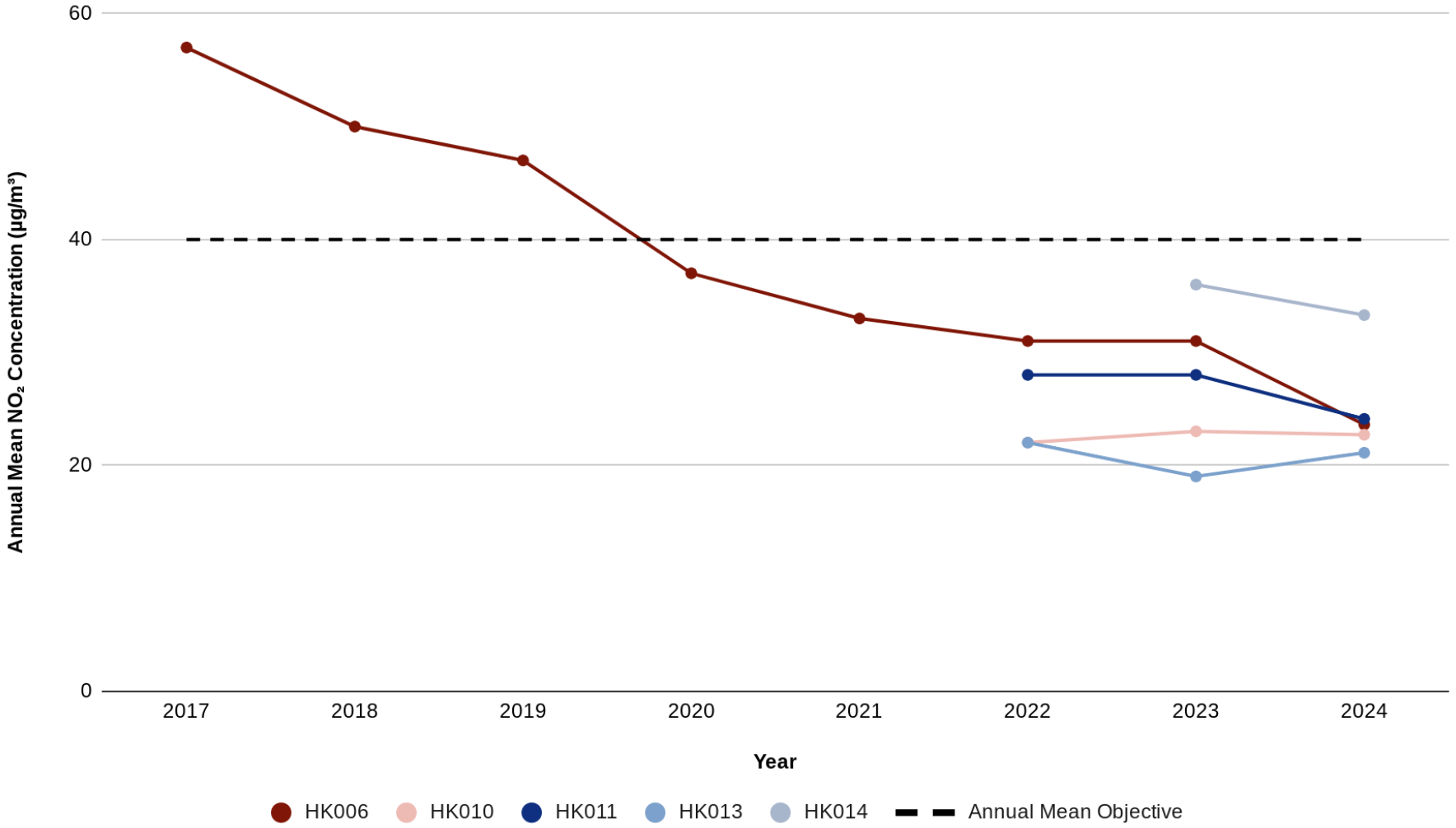

Figure 2. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Brownswood and Woodberry Down

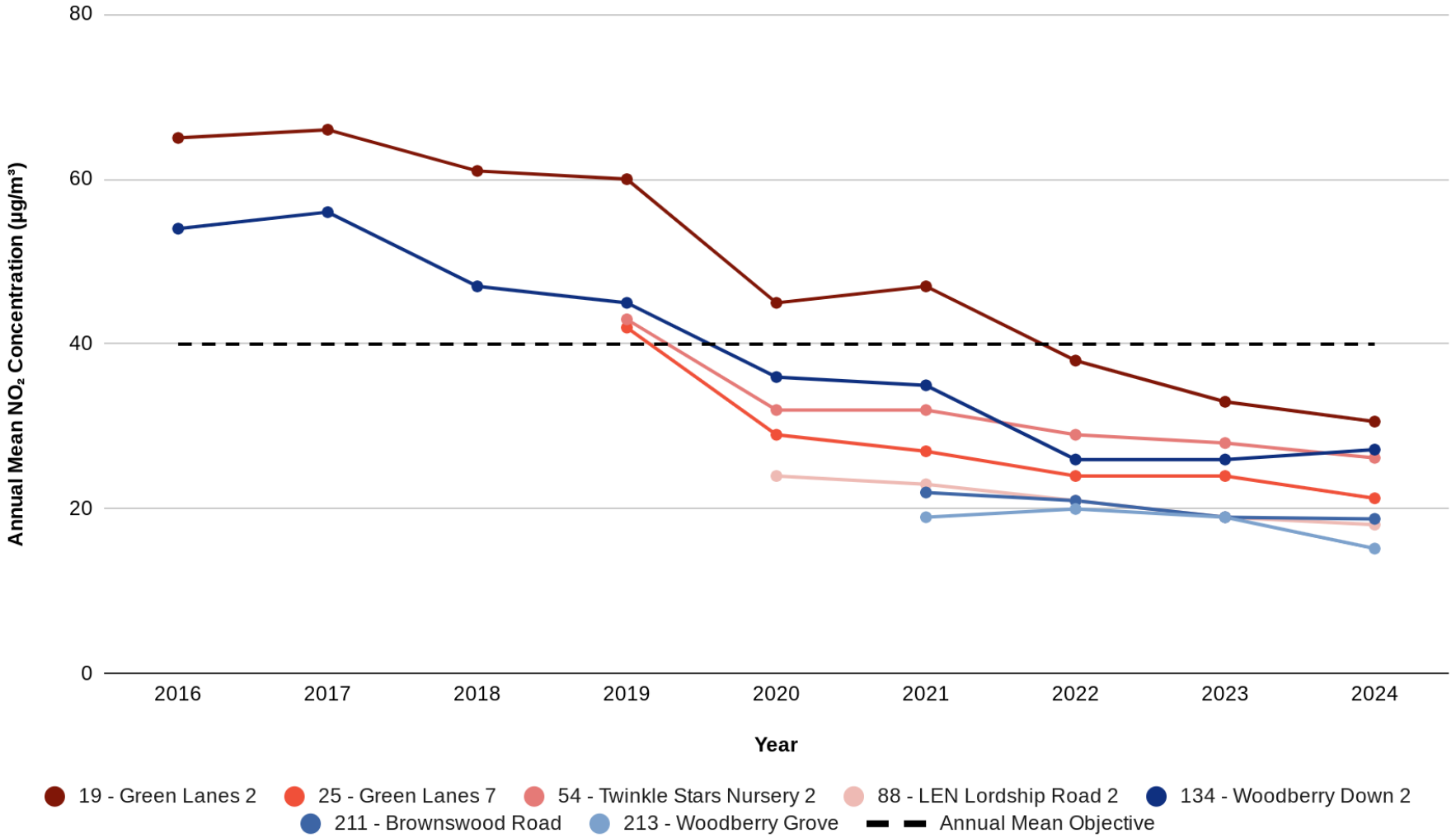

Figure 3. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Cazenove, Springfield and Stamford Hill West

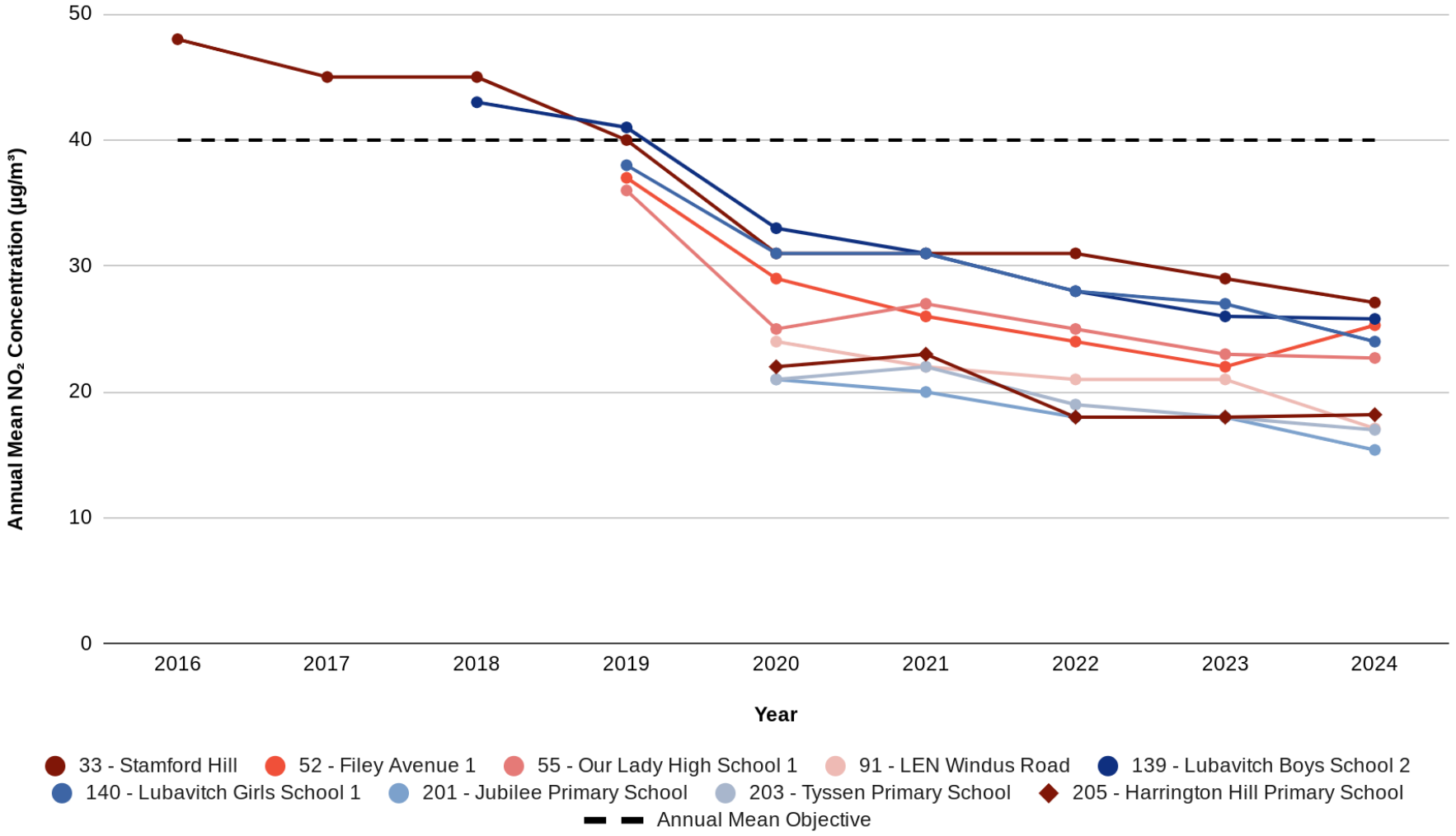

Figure 4. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Clissold

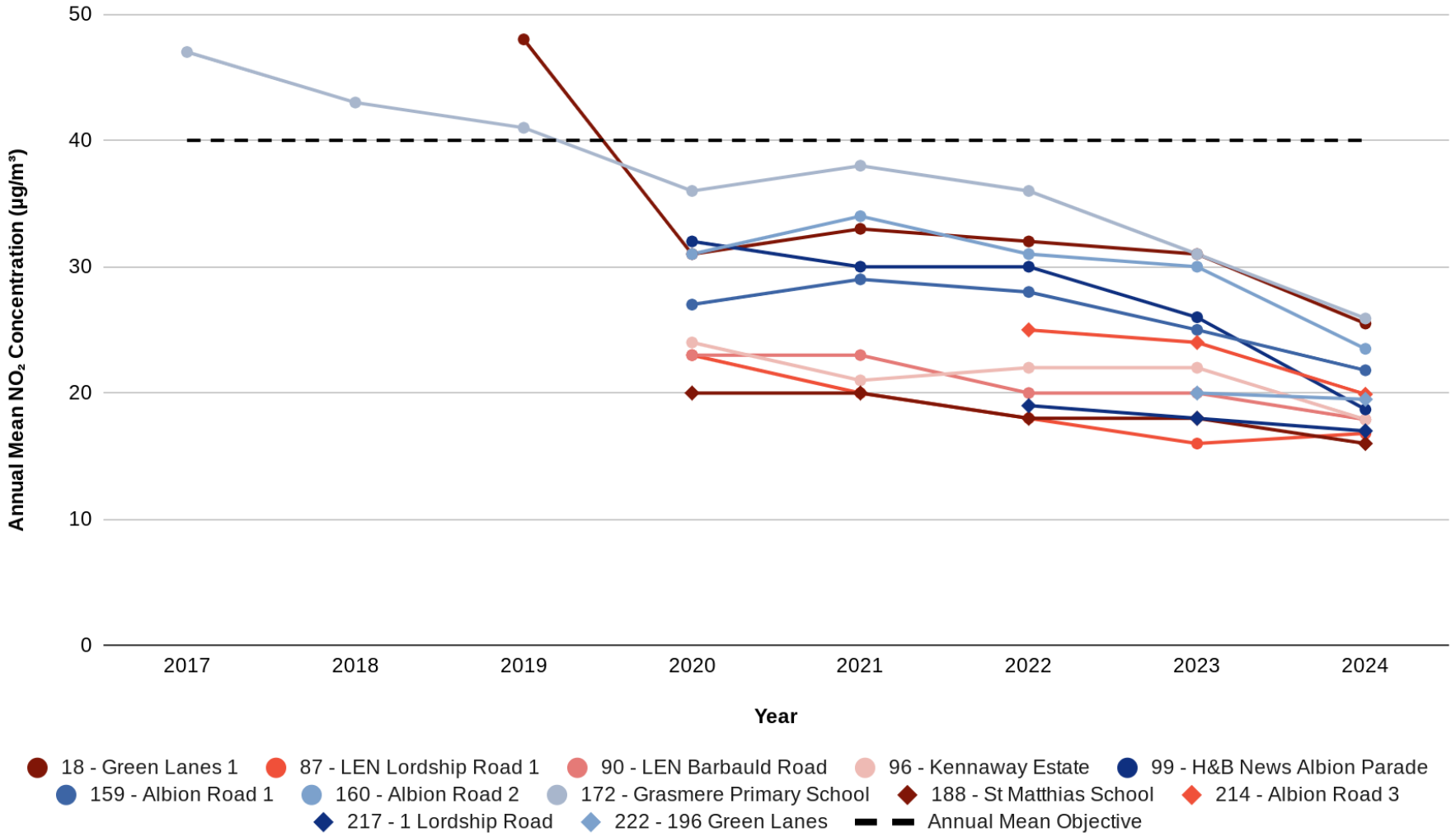

Figure 5. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Dalston and Shacklewell

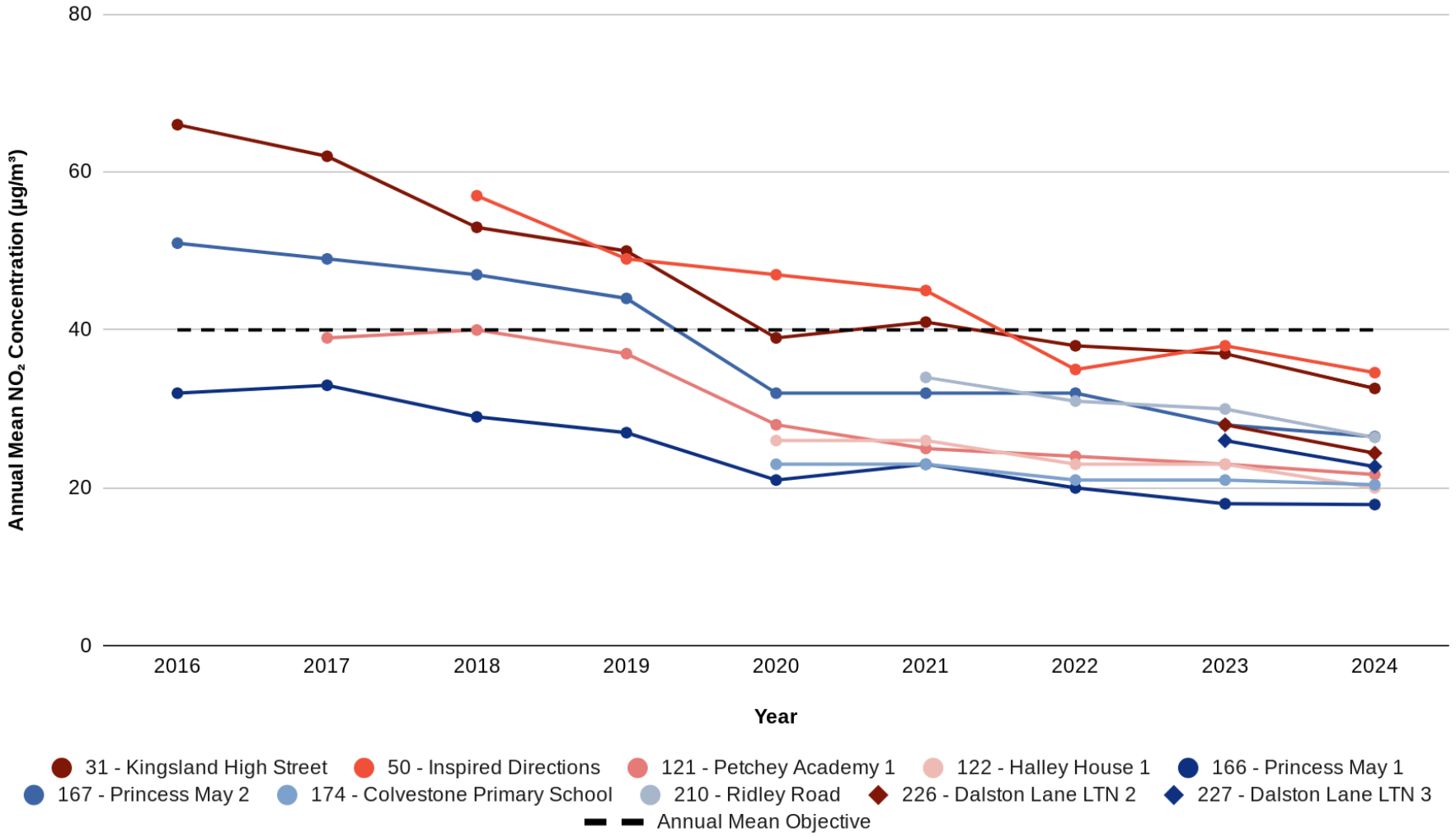

Figure 6. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Hackney Central

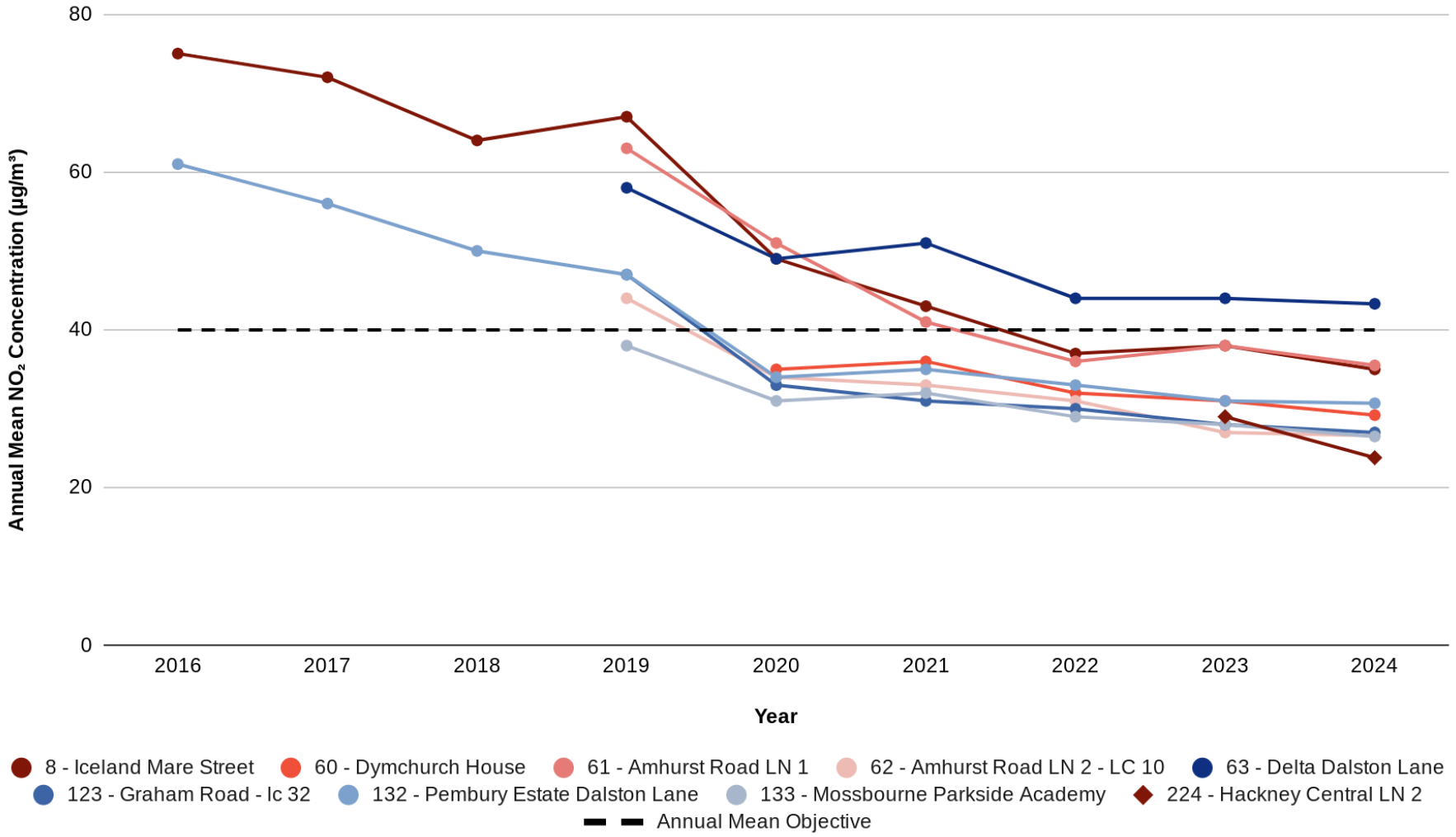

Figure 7. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Hackney Downs

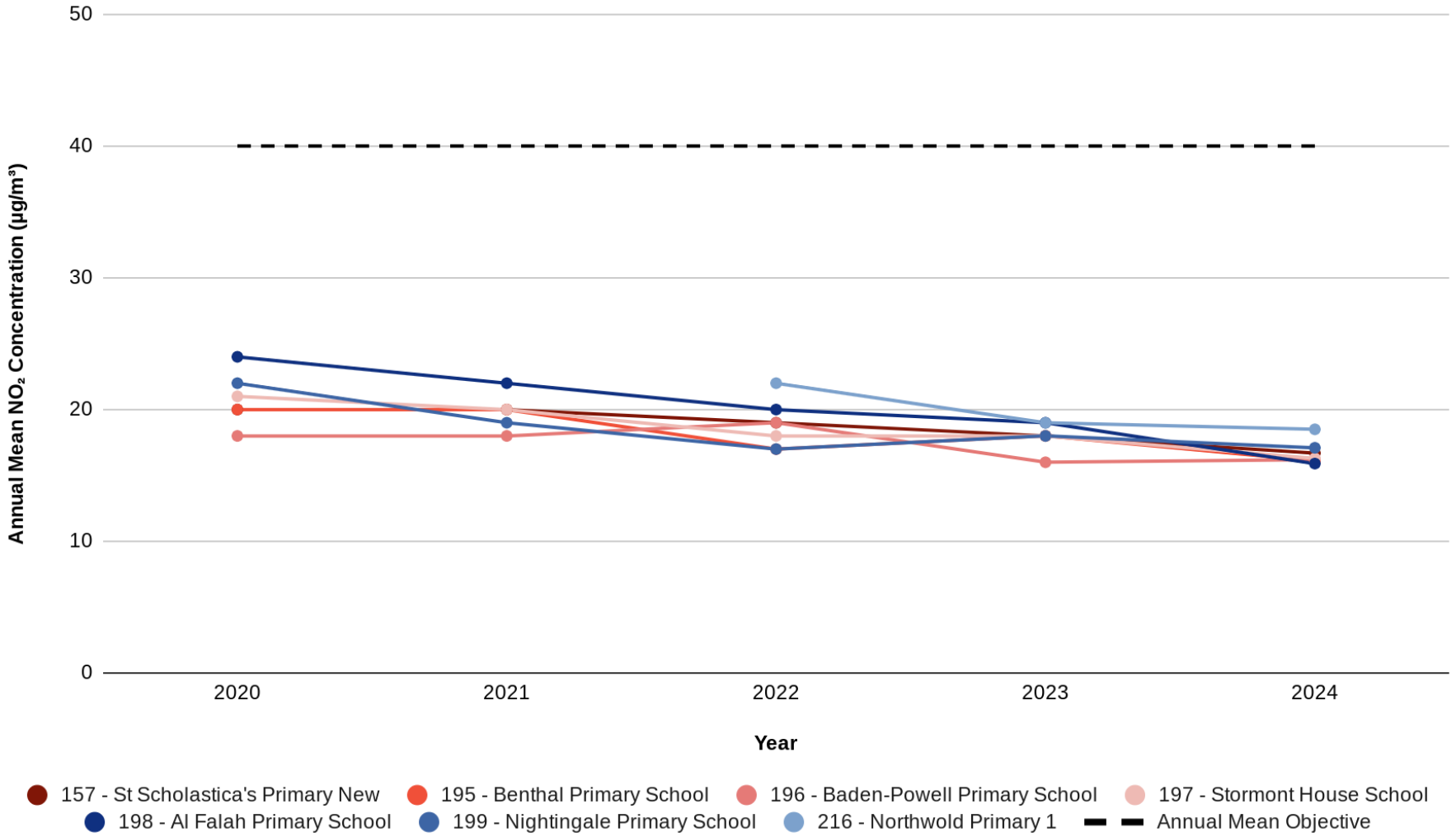

Figure 8. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Hackney Wick and Victoria

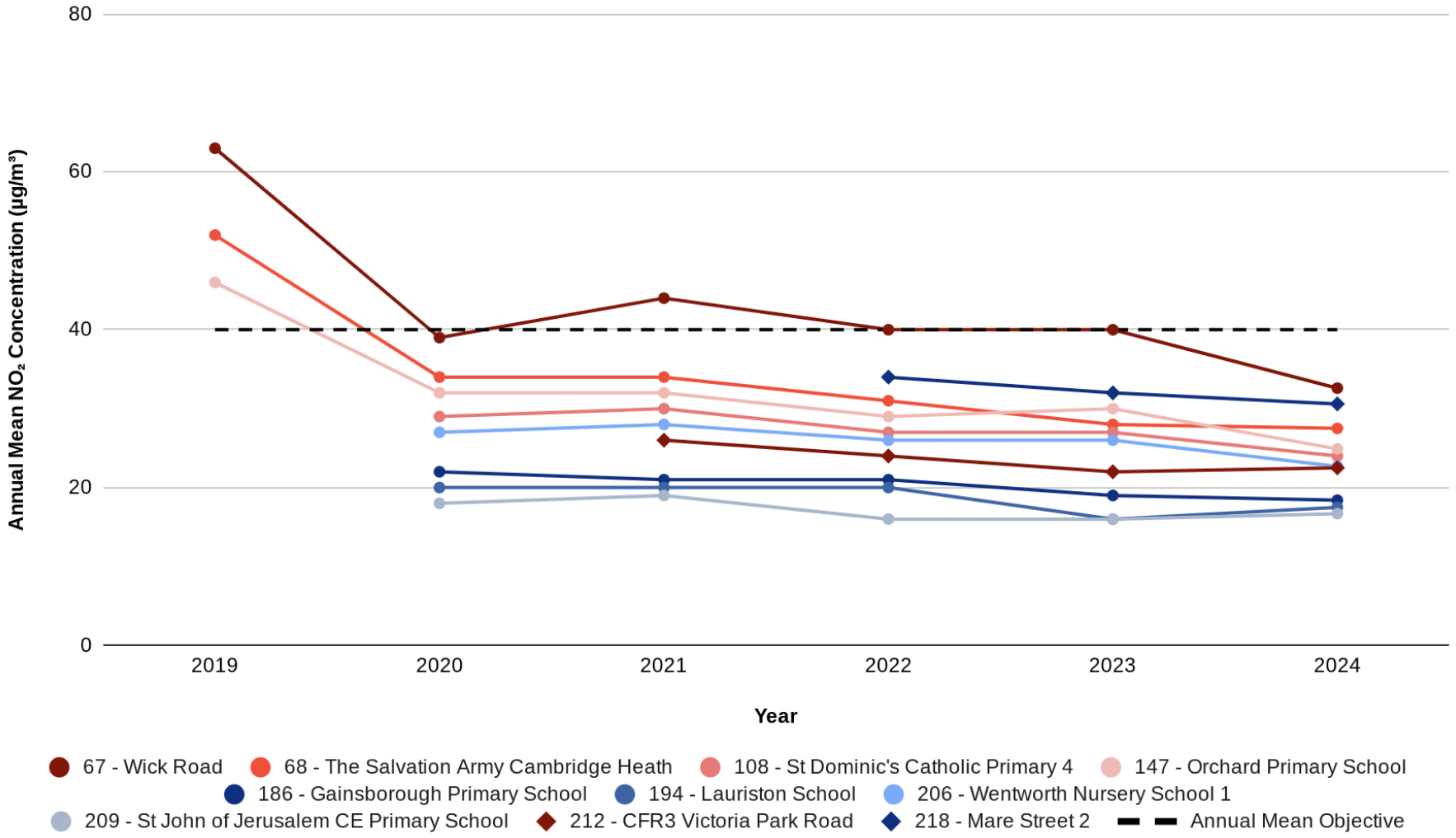

Figure 9. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Homerton

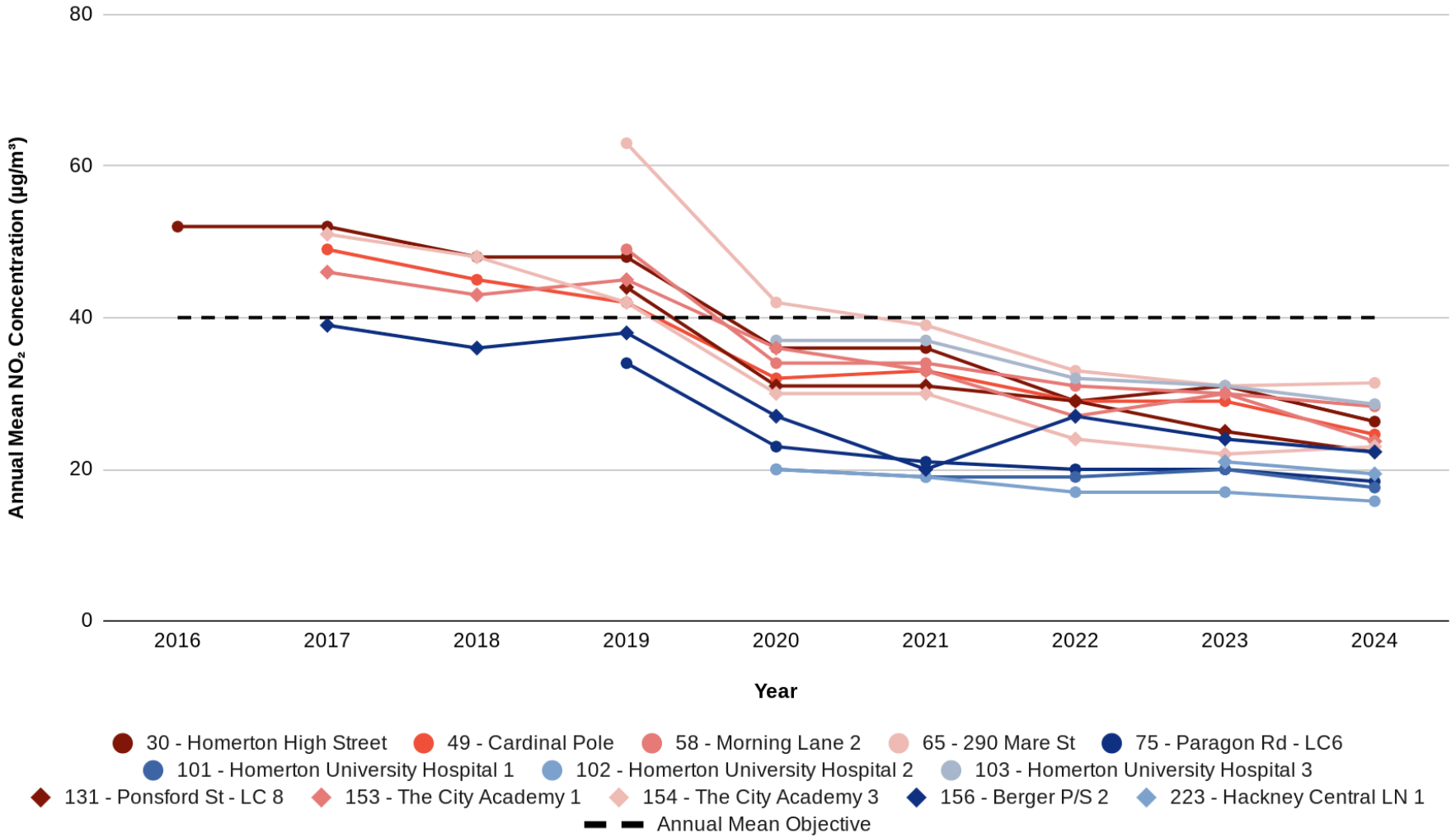

Figure 10. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Hoxton East and Shoreditch

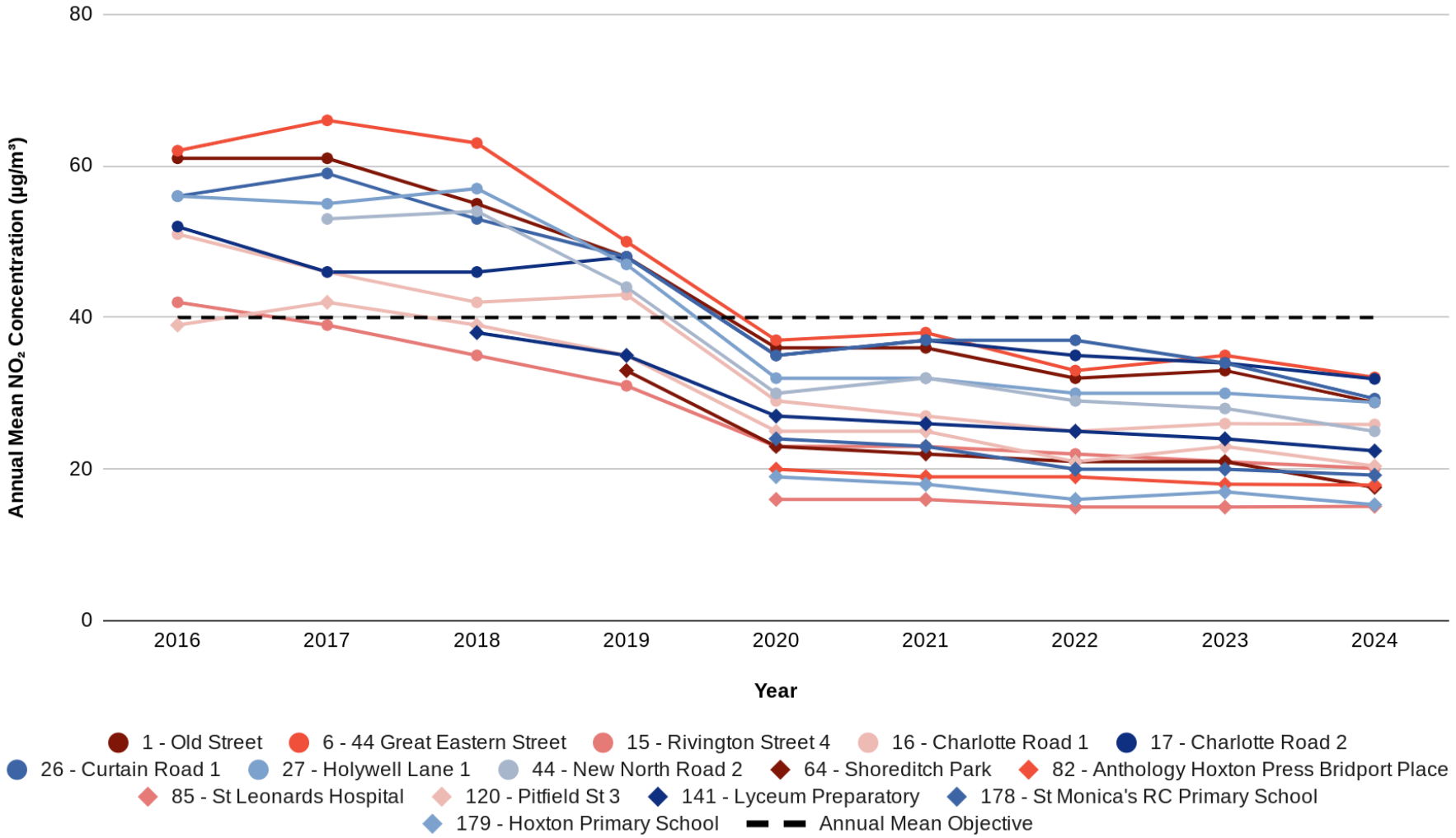

Figure 11. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Hoxton West and Haggerston

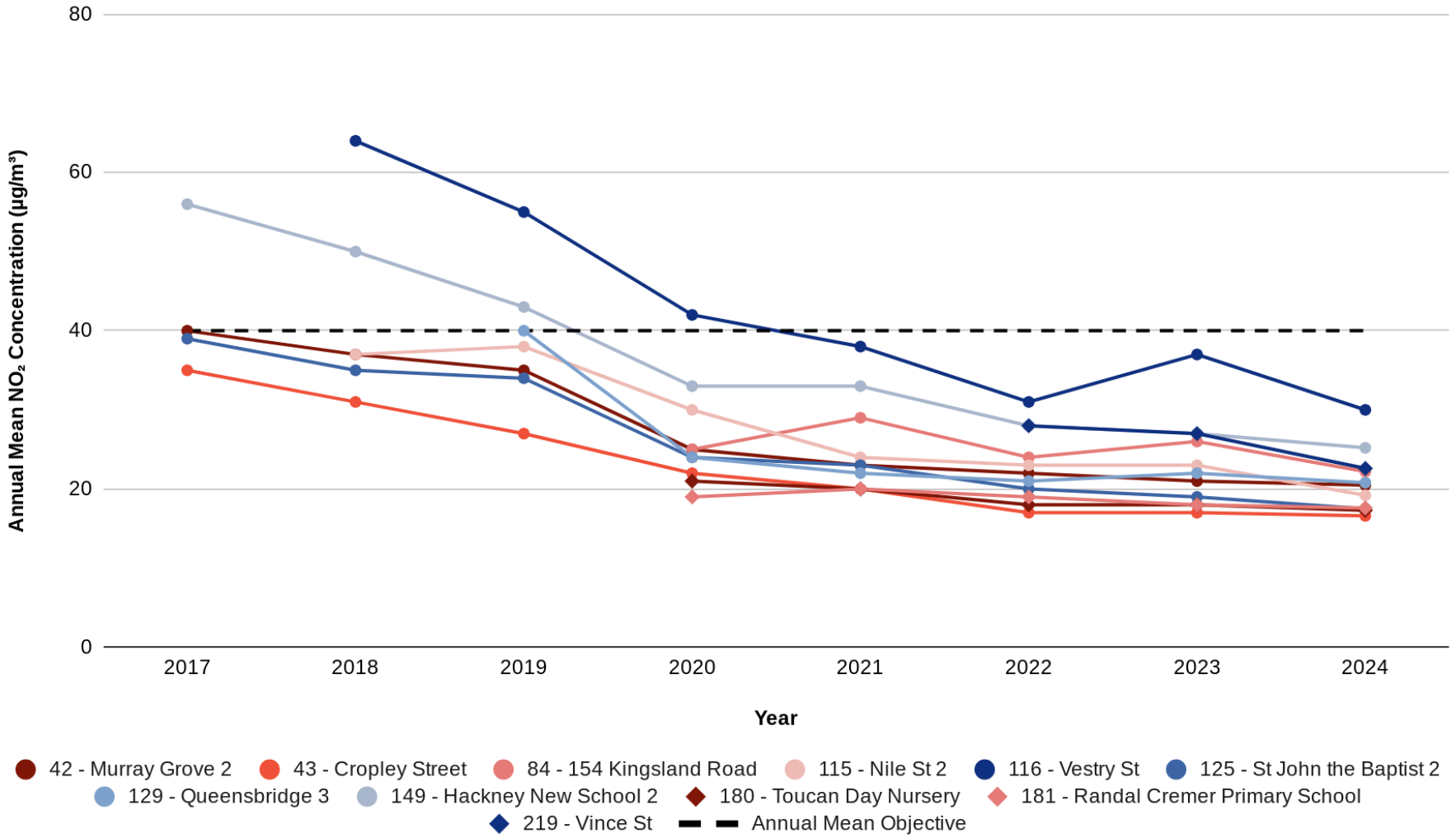

Figure 12. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Lea Bridge and King's Park

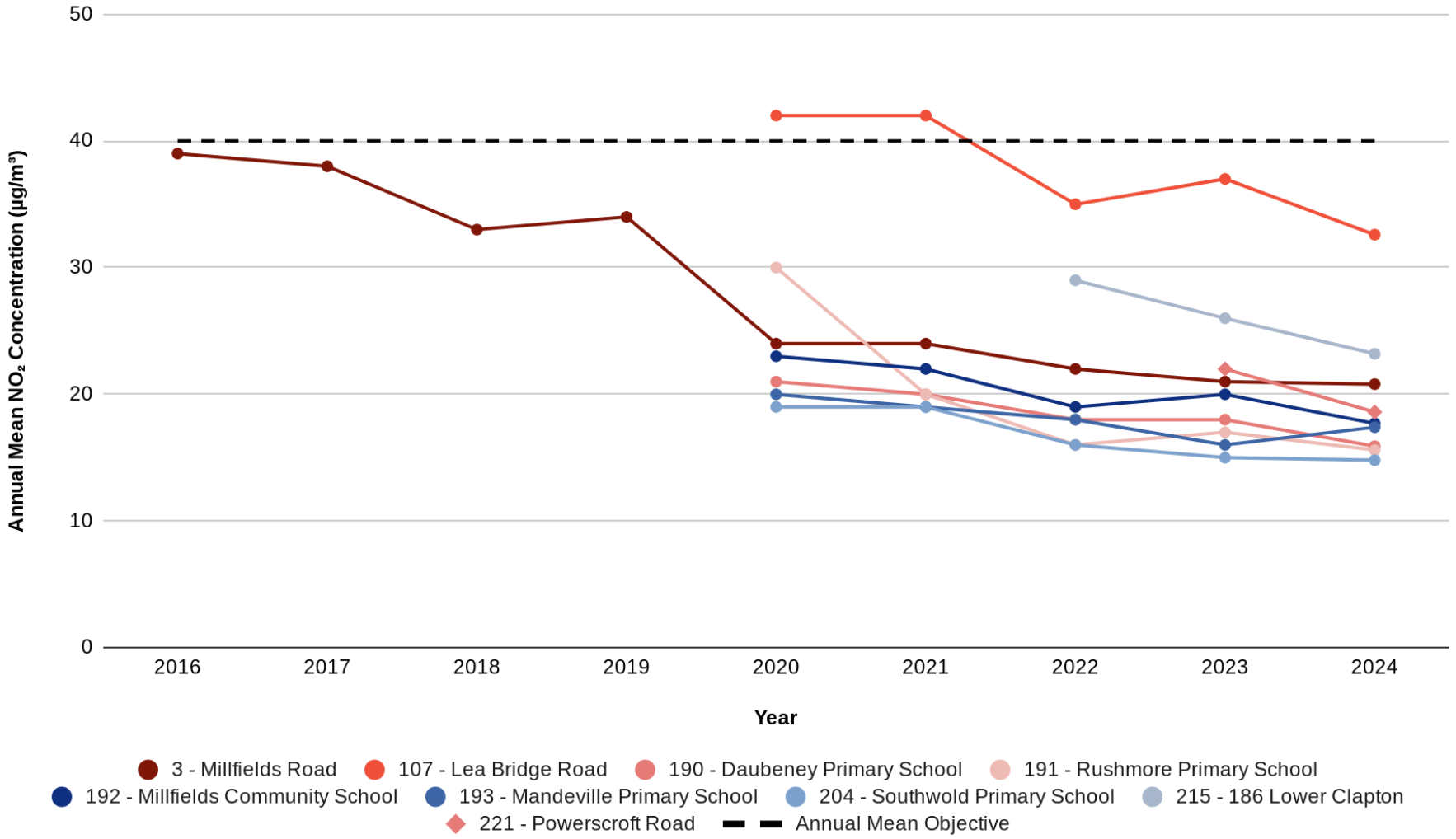

Figure 13. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in London Fields and De Beauvoir

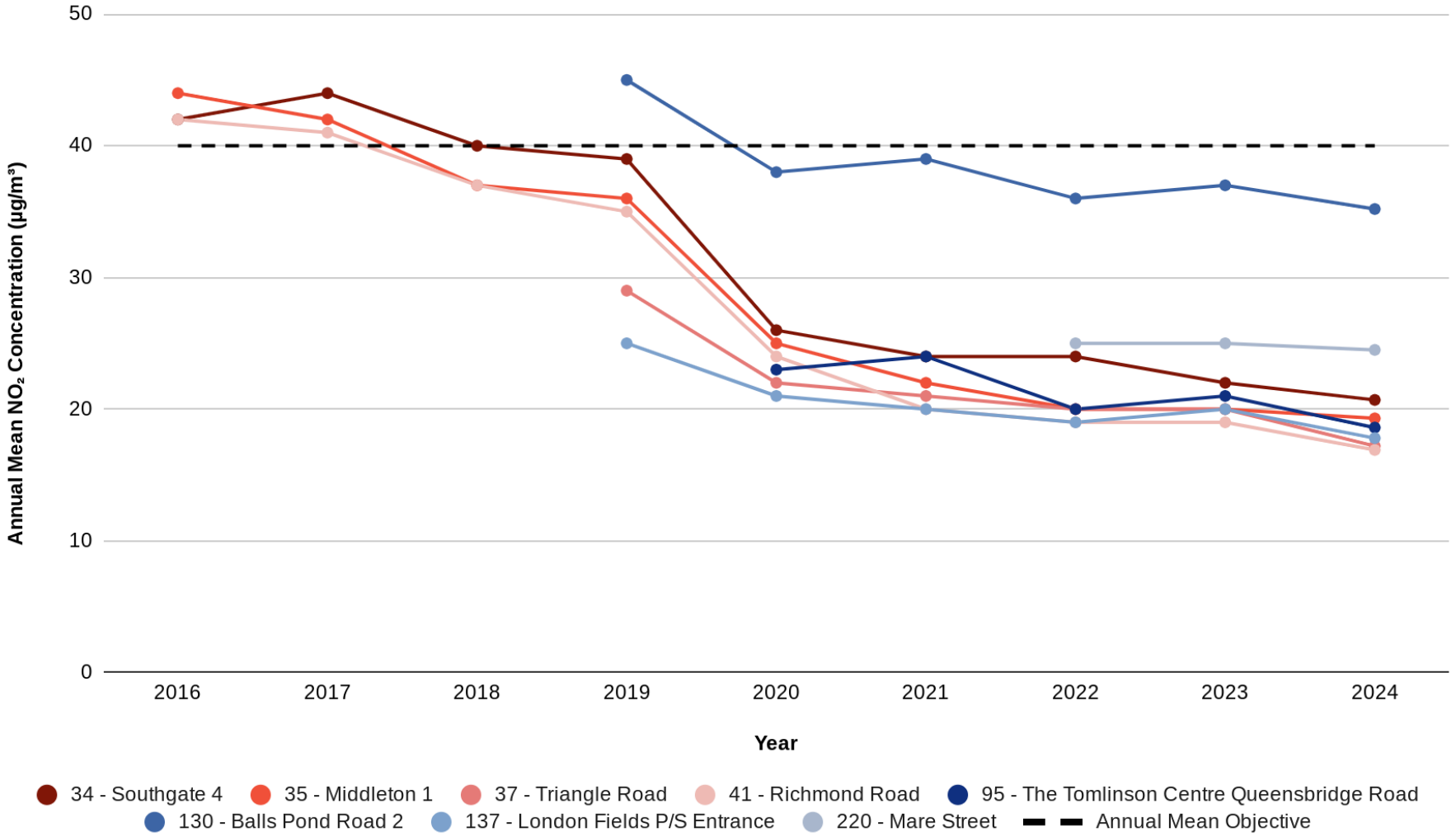

Figure 14. Annual Mean NO_2 Concentrations at Diffusion Tube Sites in Stoke Newington

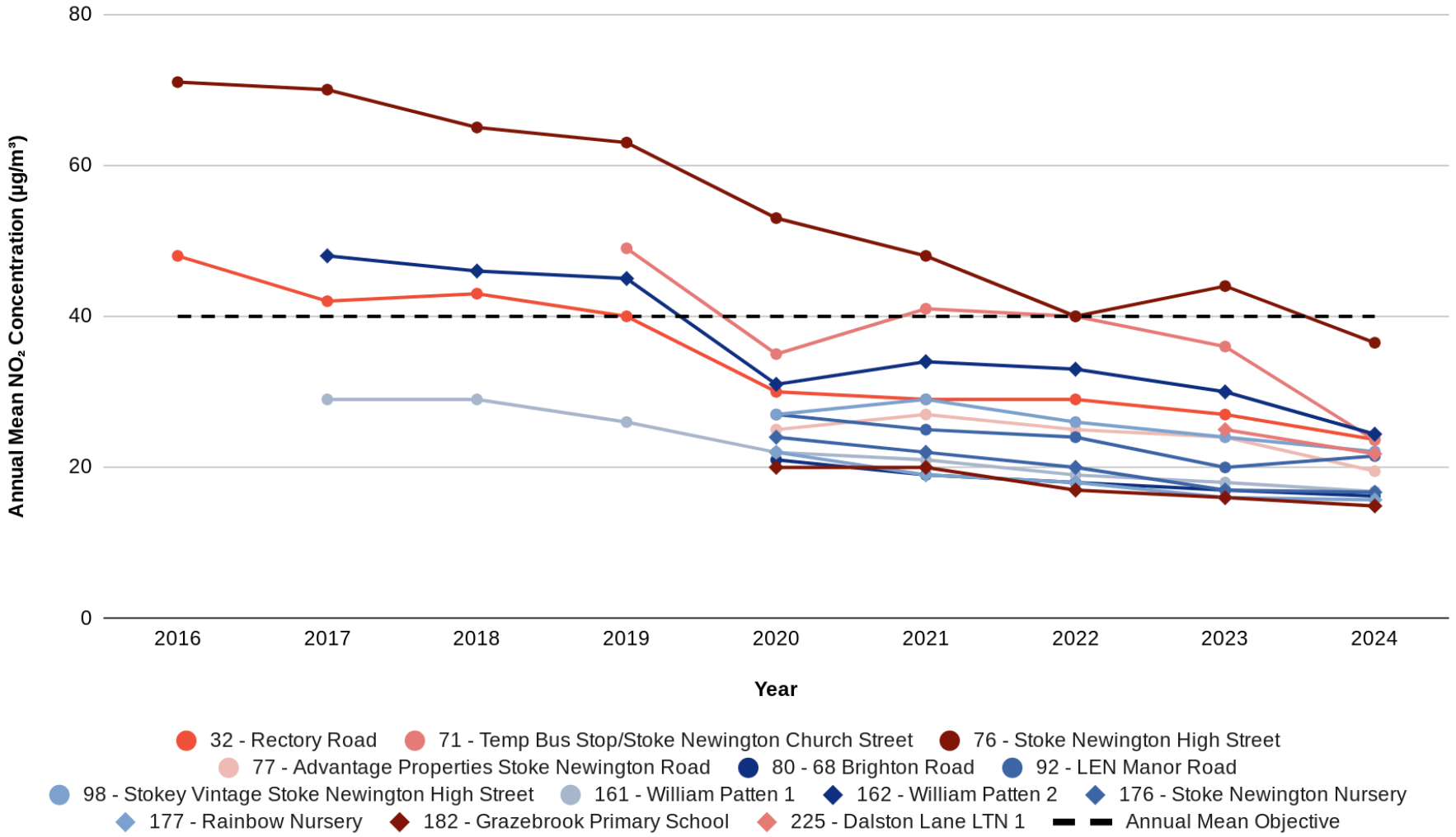

Table F. NO_2 Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg/m³

Site ID	X OS Grid Ref	Y OS Grid Ref	Site Type	Valid data capture for monitoring period % [(a)]	Valid data capture 2024 % [(b)]	2018	2019	2020	2021	2022	2023	2024
HK006	532945	182570	Roadside	99.0	92.1	0	0	0	0	0	0	0
HK009	533941	184034	Roadside	99.9	38.4	-	-	-	-	-	-	0 (131)
HK010	534379	185240	Roadside	98.1	98.1	-	-	-	-	0 (108.7)	0 (78.0)	0
HK011	535868	185134	Roadside	93.1	93.1	-	-	-	-	0 (80.5)	0	0
HK013	532185	187078	Roadside	99.4	99.4	-	-	-	-	0 (83.0)	0	0
HK014	534118	185034	Roadside	97.5	97.5	-	-	-	-	-	0 (97.3)	0
HK015	534680	186688	Roadside	99.9	40.0	-	-	-	-	-	-	0 (78)

Notes

Results are presented as the number of 1-hour periods where concentrations greater than 200 µg/m³ have been recorded.

Exceedance of the NO_2 short term AQO of 200 µg/m³ over the permitted 18 hours per year are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

(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%)

Table F shows that the 1-hour mean NO_2 objective was not exceeded at any automatic monitoring site in 2024. There have been no exceedances of this objective at automatic monitoring sites in recent years. The 99.8th percentile is shown for Queensbridge

Road (HK009) and Northwold Road (HK015), where annual data capture was less than 85%. Both of these values are well below the AQO value of 200 µg/m³.

In addition, no diffusion tube site recorded an annual mean concentration >60 µg/m³ in 2024, indicating that exceedances of the 1-hour mean NO_2 objective are unlikely. An exceedance of this value at a diffusion tube site was last measured in 2019.

Table G. Annual Mean PM_{10} Automatic Monitoring Results (µg/m³)

Site ID	X OS Grid Ref	Y OS Grid Ref	Site Type	Valid data capture for monitoring period % [(a)]	Valid data capture 2024 % [(b)]	2018	2019	2020	2021	2022	2023	2024
HK006	532945	182570	Roadside	90.6	70.9	24	22	19	20	20	19	19.7
HK009	533941	184034	Roadside	91.8	33.4	-	-	-	-	21	16	17.1
HK010	534379	185240	Roadside	91.5	91.5	-	-	-	-	21	21	17.2
HK011	535868	185134	Roadside	81.2	81.2	-	-	-	-	22	22	20.2
HK014	534118	185034	Roadside	92.3	89.4	-	-	-	-	-	20	17.9
HK015	534680	186688	Roadside	100.0	40.0	-	-	-	-	-	-	15.1

Notes

The annual mean concentrations are presented as µg/m³.

Exceedances of the PM_{10} annual mean AQO of 40 µg/m³ are shown in **bold**.

All means have been "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

Data capture

Data capture for PM_{10} varied across the monitoring network for the year 2024.

- Good data capture (>85%) was observed at Amhurst Road (HK010) and Dalston Lane (HK014).

- There was significant disruption to data capture at Old Street (HK006) due to an ongoing firmware issue with the new BAM1020 monitor installed at the start of 2024. This presented issues with the data ratification process. This required a substantial amount of downtime and repair to resolve the issue.
- The Queensbridge Road (HK009) only operated for part of the year until April 2024, after which the site was decommissioned. The data from this monitor has thus been annualised.
- There was a period of data loss at Homerton Library (HK011) due to an issue with both the communications system and the BAM clock. This led to a period of data loss at the end of May to the start of July.
- Northwold Road (HK015) was installed in August 2024, so only a partial year of data was collected. However, data capture during this period was excellent. The results have been annualised.

Exceedances and trends

Table G shows that there has not been any exceedance of the annual mean PM_{10} objective between 2018 and 2024. In 2024, there was a slight exceedance of Hackney's adopted PM_{10} target of 20 µg/m³ at HK011 (20.2 µg/m³). All other monitors measured an annual mean concentration below the adopted PM_{10} target.

Three monitoring sites (HK010, HK011 and HK014) measured a decrease in concentrations in 2024 compared to 2023, the largest of which was at Amhurst Road (3 µg/m³ when rounded). A slight increase (1 µg/m³) was observed at HK006 and HK009.

The trend in PM_{10} concentrations in 2024 generally reflects previous trends, i.e. that there is no clear increase or decrease borough-wide in recent years. However, more sites measured a decrease than an increase, and the decreases were generally larger than the increases. There was one exceedance of the adopted target in 2024, compared to two in 2023 (with one further site meeting the target).

Figure 15 shows the trends in annual mean PM_{10} concentrations between 2018 and 2024.

Figure 15. Annual Mean PM_{10} Concentrations at Automatic Monitoring Sites

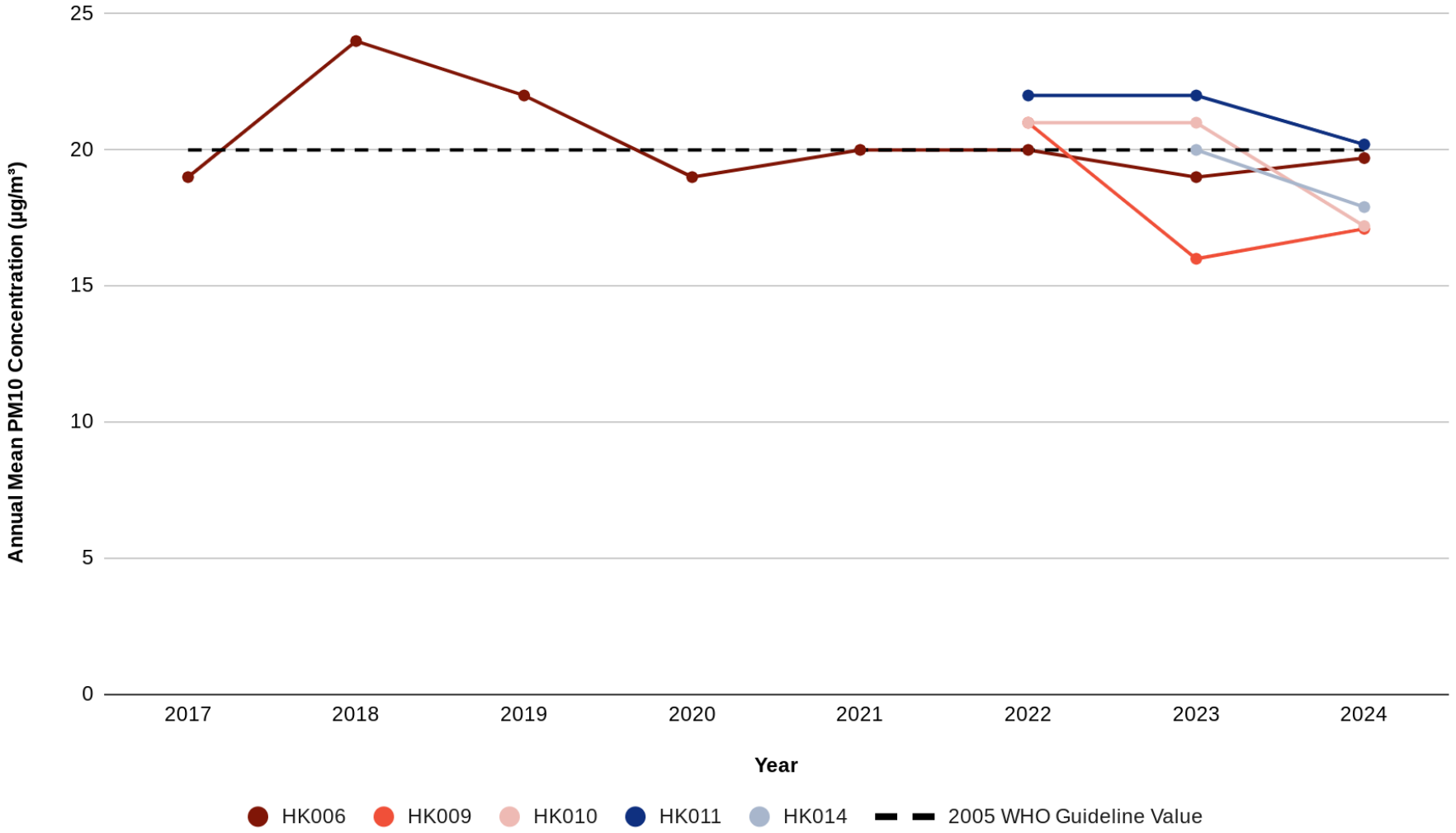

Table H. PM_{10} Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM_{10} 24-Hour Means > 50 µg/m³

Site ID	X OS Grid Ref	Y OS Grid Ref	Site Type	Valid data capture for monitoring period % [a]	Valid data capture 2024 % [b]	2018	2019	2020	2021	2022	2023	2024
HK006	532945	182570	Roadside	90.6	70.9	2	6	3	1	3 (29.2)	0	0 (31)
HK009	533941	184034	Roadside	91.8	33.4	-	-	-	-	6 (30.8)	0	0 (30)
HK010	534379	185240	Roadside	91.5	91.5	-	-	-	-	3 (29.3)	6 (31.0)	1
HK011	535868	185134	Roadside	81.2	81.2	-	-	-	-	1 (30.9)	5	1 (35)
HK014	534118	185034	Roadside	92.3	89.4	-	-	-	-	-	1 (25.0)	0
HK015	534680	186688	Roadside	100.0	40.0	-	-	-	-	-	-	0 (31)

Notes

Exceedances of the PM_{10} 24-hour mean objective (50 µg/m³ over the permitted 35 days per year) are shown in **bold.**

Where the period of valid data is less than 85% of a full year, the 90.4th percentile is provided in brackets.

(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%).

Table H shows that there was no exceedance of the 24-hour PM_{10} objective in 2024 (i.e. more than 35 days where the 24-hour mean concentration is >50 µg/m³). At sites where data capture was <85%, the 90.4th percentiles were below the objective value of 50 µg/m³.

In 2024, all sites either remained at zero days where the 24-hour mean was >50 µg/m³, or measured a decrease. This is a positive trend.

Table I. Annual Mean $PM_{2.5}$ Automatic Monitoring Results (µg/m³)

Site ID	X OS Grid Ref	Y OS Grid Ref	Site Type	Valid data capture for monitoring period % [(a)]	Valid data capture 2024 % [(b)]	2018	2019	2020	2021	2022	2023	2024
HK006	532945	182570	Roadside	87.6	87.6	10	9	8	8	9	**12**	9.4
HK015	534680	186688	Roadside	100.0	40.0	-	-	-	-	-	-	9.5

Notes

The annual mean concentrations are presented as µg/m³.

Exceedances of the $PM_{2.5}$ annual mean concentration target of 10 µg/m³ are shown in **bold**.

All means have been "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

Data capture was good at both monitoring sites in 2024, noting that Northwold Road (HK015) was installed in August 2024. As a result, results for Northwold Road have been annualised.

Table I shows that between 2018 and 2024, there was one exceedance of the annual mean concentration target of 10 µg/m³ at Old Street (HK006), in 2023. No exceedance was observed at Old Street or Northwold Road in 2024.

At HK006, there was a decline and plateau in concentrations between 2018 and 2022, followed by an observed increase in 2023. However, concentrations have again reduced in 2024 and were below the target of 10 µg/m³. **Figure 16** shows the trend in annual mean $PM_{2.5}$ concentrations at HK006 between 2018 and 2024.

Figure 16. Annual Mean $PM_{2.5}$ Concentrations at Old Street (HK006) Automatic Monitoring Site

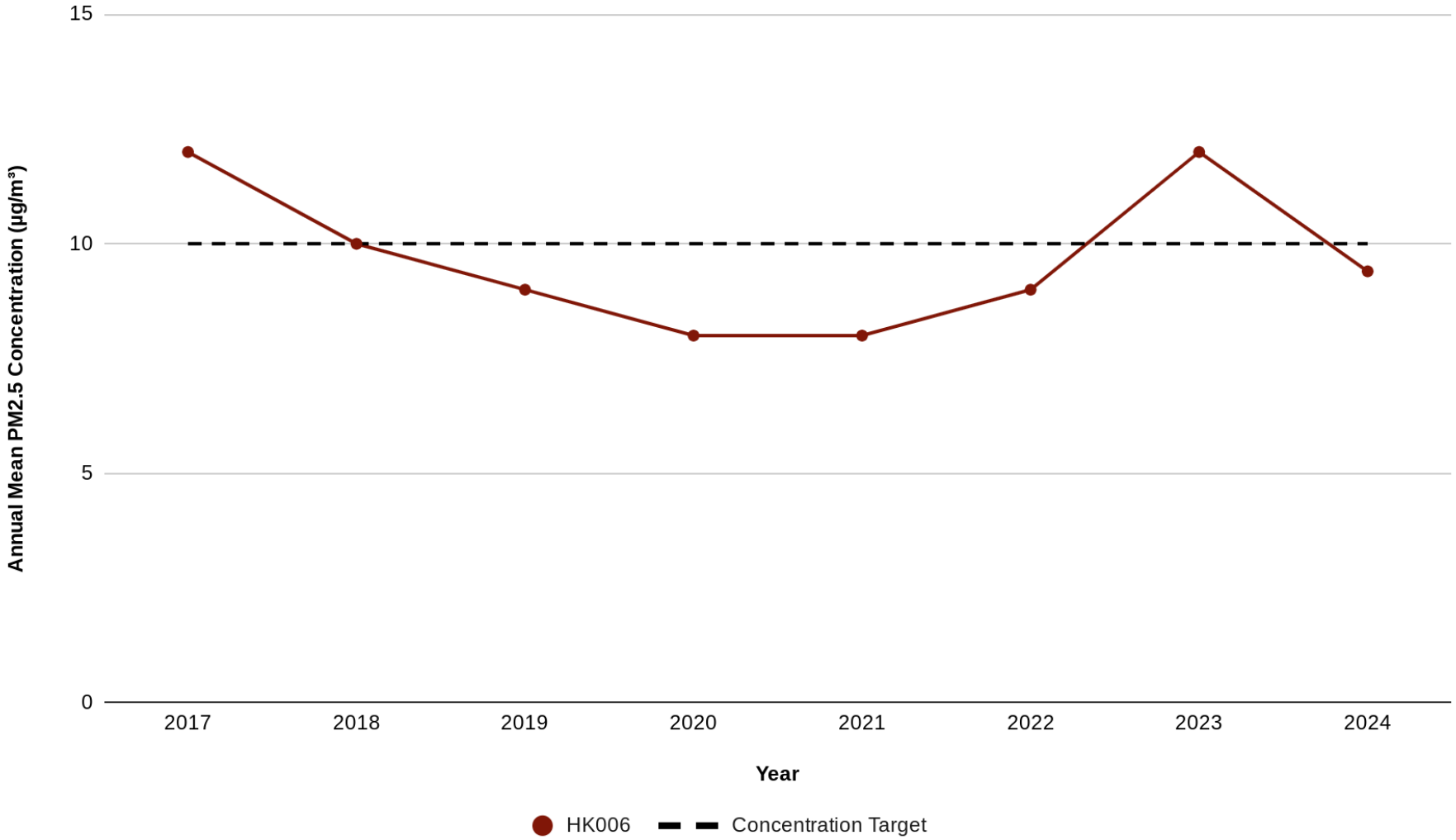

Table J. Annual Mean O_3 Automatic Monitoring Results (µg/m³)

Site ID	Valid data capture for monitoring period % [(a)]	Valid data capture 2024 % [(b)]	2018	2019	2020	2021	2022	2023	2024
HK006	86.9	86.9	32	30	36	38	42	46	49

Notes

The annual mean concentrations are presented as µg/m^3.

(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%).

Table J compares the continuously monitored annual mean O_3 concentrations between 2018 and 2024 at Old Street (HK006). There is evidence of a consistently increasing trend since 2018. Note, there is no AQO or AQS for annual mean O_3.

Note, we have observed that annual mean O_3 results for 2022 and earlier reported in previous ASRs do not align with the results reported by our data management unit. We have investigated these errata, but the reasons for this cannot be concluded. As these results are reported voluntarily, this does not represent an objective or limit value compliance issue. However, we wish to highlight this for transparency. The values presented in **Table J** above are those that are reported by our current data management unit (Ricardo-AEA) and are thus considered to be the most robust and consistent.

Table K. Running 8-Hour Mean O_3 Automatic Monitoring Results (No. of Days >100 µg/m³)

Site ID	Valid data capture for monitoring period % [(a)]	Valid data capture 2024 % [(b)]	2018	2019	2020	2021	2022	2023	2024
HK006	86.9	86.9	5	6	**11**	2	10	**13**	**17**

Notes

Results are presented as the number of instances where monitored concentrations are greater than the objective concentration.

Exceedances of the O_3 running 8-hour mean objective (100 µg/m³ not to be exceeded more than 10 days/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%).

Table K shows the number of days between 2018 and 2024 that 8-hour running mean O_3 concentrations were above the objective value of 100 µg/m³, which is not to be exceeded more than ten days per year. There were 17 days where the running 8-hour mean exceeded 100 µg/m³ in 2024, and thus the objective was not met. There is now a clear indication that there is an increasing number of days where 100 µg/m³ is exceeded since 2018, with the AQS exceeded in 2020, 2023 and 2024.

O_3 is a seasonal pollutant and undergoes complex formation chemistry based on many factors, including precursor pollutant concentrations, temperature and sunlight. There is thus much year-on-year variability. The increase in exceedance days may be partially due to a reduction in NOx emissions and concentrations, which is resulting in higher tropospheric O_3 concentrations; this is because O_3 tends to be removed from the atmosphere by reacting with nitric oxide (NO), a component of NOx. An increase in hot, sunny days as a result of climate change may also be a contributing factor to increased O_3 formation.

The increase in concentrations of O_3 is a concern. Although outside of local authority control due to ozone precursors tending to be emitted away from urban areas, Hackney is proposing specific actions relating to O_3 in the revised Air Quality Action Plan.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 12 months. The AQAP should specify how air quality targets will be achieved and maintained, and provide dates by which measures will be carried out.

Hackney designated a single borough-wide AQMA in 2006, a description and further details of which can be found in **Table L**. Figure A in Appendix C provides a map of the air quality monitoring locations within the borough and the boundary of the AQMA. The air quality objectives pertinent to the current AQMA designation are as follows:

- NO_2 - annual mean and 1-hour mean
- PM_{10} - 24-hour mean

The figures in **Table L** demonstrate that Hackney is not yet compliant with the annual mean NO_2 objective. In terms of the 1-hour mean NO2 objective, there have been no annual mean NO_2 concentrations >60 µg/m³ (which may suggest an exceedance of the 1-hour mean objective as per LLAQM.TG(19)) since 2019. Taking into account the results of automatic monitoring (**Table E**), this suggests that Hackney has been in compliance with the 1-hour mean NO_2 objective since 2020.

The results of PM_{10} monitoring suggest that Hackney is in compliance with the 24-hour mean PM_{10} objective, with no exceedances recorded in recent years and no annual mean concentrations exceeding 32 µg/m³ (which may suggest an exceedance of the 24-hour mean objective as per LLAQM.TG(19)). However, Hackney is continuing to work towards reducing particulate matter concentrations as low as possible, and has committed to meeting the 2005 World Health Organization guideline values (as outlined in Measure 1 of the AQAP, see **Table M**). This also equates to the 4th interim target of the much tighter 2021 WHO guideline values for both PM_{10} and $PM_{2.5}$. As this commitment has not yet been met, the AQMA designation for this pollutant will remain.

Table L. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by National Highways?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Hackney AQMA	Declared 29th June 2006	NO_2 annual mean	An area covering the whole borough of Hackney	NO	48.1 µg/m³	43 µg/m³	Not compliant	Hackney Air Quality Action Plan 2021-2025 Published 2021	https://hackney.gov.uk/air-quality#plan
		NO_2 1-hour mean		NO	-	None	5 [b]		
		PM_{10} 24-hour mean		NO	30 days; 29.7 µg/m³ (annual mean) [a]	None	21 [c]		

London Borough of Hackney confirms the information on UK-Air regarding their AQMA is up to date.
London Borough of Hackney confirms that all current AQAPs have been submitted to GLA.

2.2 Air Quality Action Plan Progress

Hackney's current Air Quality Action Plan was adopted in 2021 and runs to 2025. It is currently being reviewed with a view to adopt a new Air Quality Action Plan at the end of 2025.

Table M provides a brief summary of Hackney's progress against the Air Quality Action Plan, showing progress made this year.

Table M. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
18	Public health and awareness raising	Raise awareness of air quality and encourage behaviour change through campaigns and working with local communities	Air Aware project complete 2024 and currently maintained Others ongoing	LWA Other London Boroughs Air quality champions GLA NHS and healthcare partners	We have continued to promote relevant community events related to air quality on the Air Aware web tool and have used our voice at the Central London Air Quality Cluster Group and other meetings (e.g. NHS NE London AQ group) to improve awareness among other boroughs of the tool. An advertising campaign for the Air Aware tool was launched in May and this resulted in a noticeable increase in users of the tool (approx 370 new users during the 3 week advertising period). 3 other London boroughs are currently advancing towards joining Air Aware - which will expand reach in other areas of London. Current usage stats show 3.2k new users in the 12 months to May 2025. Hackney ran a promotional stall at the GLA Air Quality Networking Event in July 2024 and spoke at the National Air Quality Conference on 6 November to promote Air Aware. Alongside Air Aware, the Defra-funded project also involved the training of healthcare practitioners on the topic of air quality. Training sessions were recorded and have been made available, to support other healthcare practitioners, on the Newham Training Hub for a period of 3 years. Between Feb 24 and Sep 24 these videos were viewed 35 times.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
					Through an NHS and LA collaboration to deliver the pharmacy pilot project, approximately 400 quality conversations - between pharmacists trained in air quality and high risk child asthma patients - were held in 2024. These conversations included identifying to patients how they could reduce exposure to air pollution, with pharmacists pointing patients to Air Aware as a resource that could help their patients identify positive behaviour changes.
37	Cleaner transport	Continue expansion of infrastructure to support low emission vehicles (installing charging infrastructure including rapid chargers) and assess impacts of Low Emission Vehicles (LEVs) on air quality	Next review 2026	Streetscene Installation partners	Electric Vehicle charging points to facilitate the transition away from polluting Internal combustion engine vehicle (ICE) vehicles is a major priority. Over 2024, 734 new charging points have been installed across the borough including 462 powered from lamp columns and 272 free-standing fast chargers. Hackney plans to deliver 3,000 charge points by the end of 2026 with the first 1,500 by end of 2025.
41	Schools and communities	Reduce air pollution near schools and protect children by delivering more green screens	Current tranche to be delivered end of 2025	LWA Streetscene	Hackney has committed to invest approximately £400,000 on the delivery of additional green screens at schools in the borough. A major procurement exercise took place in 2024 to deliver a total of 15 new green screens. Schools were selected based on a number of criteria, including the likelihood of exposure to high levels of air pollution from nearby roads. The 15 green screens are scheduled to be installed in 2025. This is in addition to the 6 screens that were planted prior to 2024.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
1	Monitoring and other core statutory duties	Adopt WHO Guidelines for PM with a compliance deadline for 2030	Complete 2021	LWA	The 2005 WHO guideline values for air quality were adopted as part of the Air Quality Action Plan 2021-2025. These align with the 4th interim target values for particulate matter (PM10 and PM2.5) and the 1st interim target value for NO2 of the 2021 WHO guidelines. Hackney is now considering how to adopt more stringent targets in the AQAP that will come into force in 2026. Hackney continues to require applications for new developments that provide an air quality assessment to assess against the 2005 WHO guidelines for PM. Hackney's air quality monitoring maps on the website have been updated to provide a greater indication and differentiation of compliance with WHO guideline values and interim targets.
2	Monitoring and other core statutory duties	Maintain air quality monitoring network (PM and NO2), review as required and provide data in line with TG(19) timescales and guidance and ensure public access to monitoring data	Ongoing	LWA TfL	A number of changes were made to the air quality monitoring network in 2024, with an overall expansion of monitoring across Hackney. Two new automatic monitors were installed and commissioned in 2024, at Northwold Road (HK015) and Graham Road (HK016). These are reference-level monitors that monitor NO_2, PM_{10} and $PM_{2.5}$. The location of HK015 was selected to expand monitoring capability in the north-east of the borough. HK016 was located on Graham Road to provide the Council with data along the borough's busiest through roads. The addition of these two monitors greatly improves the Council's monitoring of $PM_{2.5}$. The site at Queensbridge Road (HK009), monitoring NO_2 and PM_{10}, was decommissioned in 2024 given the expiry of the hire agreement. This brings the total number of automatic monitors at the end of 2024 to seven. The NOx and PM_{10} analysers at Old Street (HK006) were upgraded at the beginning of 2024 as the older equipment was reaching the end of its serviceable life.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
					At the end of 2024, there were a total of 151 diffusion tube monitoring sites in Hackney. This is an increase of seven sites compared to 2023. Many of the new sites were installed to support traffic schemes, or along red routes where monitoring was previously lacking. Data management is being undertaken by Ricardo-AEA, and all data from the automatic monitors is available at https://www.airqualityengland.co.uk/local-authority/?la_id=194. The Council's website was updated to include data from the 2023 Annual Status Report. The NO_2 monitoring map was updated using feedback from public and Air Quality Champions to better reflect WHO guideline values. This is live at https://hackney.gov.uk/air-quality. The Council responds to requests for monitoring data on an ad hoc basis.
3	Monitoring and other core statutory duties	Undertake dispersion modelling of the borough	Borough-wide model complete 2022 Ongoing as required	LWA Air quality consultants (external)	A dispersion modelling study was commissioned in the second half of 2024 to understand the potential air quality impacts of two upcoming traffic schemes that may affect traffic on main roads (the Amhurst Road and Pembury Circus Transformation and the Chatsworth Road bus gate). A baseline modelling study of the borough was completed in 2022. A number of studies have been completed in subsequent years to support traffic schemes, including LTNs and the Stoke Newington Low Emissions Neighbourhood.
4	Monitoring and other core statutory duties	Report health-based air quality statistics at ward level on Hackney website	2026	LWA Public Health (PHIT) Councillors	The Land Water Air team attended the Health in Hackney (HiH) Scrutiny Commission in September 2024 to provide an update on health-related air quality issues. There was a shared desire from members of HiH to provide positive healthcare messaging related to the measured reduction in air pollution across the borough, e.g. reductions in clinical presentation. An update to the HiH will be provided in 2025 following joint work with PHIT. An air quality-specific update to the Joint Strategic Needs Assessment (JSNA) was published by the City and Hackney Public Health Intelligence

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
					Team (PHIT) in 2023. Presentation of health-based air quality statistics has been incorporated into PHIT's forward plan.
5	Monitoring and other core statutory duties	Facilitate cross-borough partnership to review through traffic impacts in Hackney	2026	Streetscene	An evidence base for a review of Hackney's Transport Strategy was produced in 2024 to support the review of the Strategy in 2025. This includes evidence to support traffic reduction on main roads (Main Roads Strategy) and alternative kerbside uses (Kerbside Strategy).
6	Monitoring and other core statutory duties	Achieve Gold Standard in GLA's Cleaner Air Borough status programme	N/A	LWA	CAB status has been discontinued. However, good practice continues to be shared with others. For example, Hackney attended the GLA's Air Quality Networking Event in July 2024 to demonstrate the progress and impact of the successful Air Aware project.
7	Monitoring and other core statutory duties	Fulfil statutory duties under LLAQM	Ongoing	LWA	The ASR for 2023 was submitted on time and approved by the GLA with only very minor changes. It was published on Hackney's website in August 2024: https://hackney.gov.uk/air-quality-reports. The existing AQMA designation has been maintained. This is due to continued exceedances of the annual mean NO_2 objective. The 1-hour mean NO_2 objective has now not been exceeded since 2019, which would suggest Hackney is now complying with this objective and consideration will be given to removing this designation. The statutory designation for 24-hour mean PM_{10} will remain given the commitment to reduce concentrations of PM to as low a level as possible. Hackney began early engagement on a new Air Quality Action Plan in June 2024 to expand the involvement of the public in creating the new plan. An engagement survey ran from 6th September 2024 to 1st November 2024, which received 178 responses. A number of other activities and events that aimed to gather views and opinion also took place up until 19th November 2024. The engagement report is available to view at: https://consultation.hackney.gov.uk/public-realm/copy-of-air-

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
					quality-action-plan-2020-2025/. Statutory consultation on the new AQAP will take place in 2025.
8	Monitoring and other core statutory duties	Fulfil statutory duties to investigate complaints of Statutory Nuisance (smoke, bonfires, etc) and take appropriate enforcement action	Ongoing	LWA Enforcement (Environmental Protection)	Nine complaints were received in relation to smoke, fumes, bonfires or fugitive cooking emissions in 2024. All reports and complaints are investigated in line with the Environmental Protection enforcement policy.
9	Emissions from development and buildings	Minimising emissions from construction	CoCP complete 2022 Ongoing	LWA Streetscene Planning	Applicants are required to consult Hackney's Code of Construction Practice (CoCP) at the planning stage: https://hackney.gov.uk/air-quality-and-planning#code. Major sites are required to produce a Construction Management Plan through a planning condition. Smaller sites may be directed to the CoCP through an informative. All relevant planning applications include a condition to ensure compliance with the NRMM Low Emission Zone standards. Hackney is enforcing the GLA's Air Quality Positive policy in line with the London Plan Guidance, and considers potential improvements that could be made during the construction phase. Three EIA-scale applications were reviewed in 2024.
10	Emissions from development and buildings	Reducing emissions from Combined Heat and Power (CHP)	Ongoing	LWA Planning	All applications for new CHP are referred to the Land Water Air Team for comment. No fossil-fuel based CHP applications were submitted in 2024. It is unlikely the Council will receive future applications for CHP due to changes in building regulations and London Plan policies on reducing greenhouse gases.
11	Emissions from	Enforce Air Quality Neutral policy	Ongoing	LWA Planning	The Land Water Air team assesses all relevant planning applications for compliance with the Air Quality Neutral policy. 32 applications were assessed for compliance with the Air Quality Neutral LPG requirements;

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	development and buildings				15 of these were assessed against the full benchmarks, while 17 were assessed against the requirements for minor developments.
12	Emissions from development and buildings	Ensuring adequate, appropriate and well-located green space and infrastructure is included in new and existing developments	Ongoing	LWA Planning	Hackney's Local Plan 2033 contains a number of planning policies related to green space in new developments and these will continue to be applied. These include commitments to green and open space to combat pollution in place-based policies Policy PP2 (Dalston), PP5 (Enhanced Corridors), Policy PP8 (Shoreditch and Hoxton) and PP10 (Homerton). Improving green and open space and maximising green infrastructure are also tenets of a number of development management policies. In relation to new development, these include LP1 (Design Quality and Local Character), LP41 (Liveable Neighbourhoods), LP42 (Walking and Cycling), LP46 (Protection and Enhancement of Green Infrastructure), LP47 (Biodiversity and SINCs), LP48 (New Open Space), LP49 (Green Chains and Green Corridors), LP50 (Play Space) and LP53 (Water and Flooding). Section 11 of the Local Plan is dedicated to green and open spaces. Planning obligations and CIL have been used to deliver improvements to green spaces in recent years, details of which are in the Local Plan Authority Monitoring Reports (https://hackney.gov.uk/planning-policy).
13	Emissions from development and buildings	Minimise emissions from construction through investigating and piloting innovative solutions to reduce construction-based emissions	Target scheme by 2025	LWA Planning	Recommendations on piloting dust mitigation measures were made at pre-app stage to two major developments in Shoreditch and Stamford Hill. Formal comments were made to encourage a dialogue between the construction contractors and the Council for the major Shoreditch Island Site application. The application process is still underway for this development.
14	Emissions from	Ensure enforcement of Non-Road Mobile	Ongoing	LWA Planning	Every planning application where compliance with the NRMM Low Emission Zone standards will be required is reviewed. A condition for

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
	development and buildings	Machinery (NRMM) air quality policies		LB Merton and NRMM project team	compliance with the emission standards of the relevant zone (CAZ/Opportunity Area or Greater London) is then recommended. Hackney participates in the pan-London scheme to monitor compliance with the NRMM Low Emission Zone standards. 17 audits took place in 2024, of which 6 sites were self-compliant; 15 sites were compliant following engagement or had no NRMM on-site; and 2 sites were non-compliant (due to both non-registration and non-compliance with emissions standards).
15	Emissions from development and buildings	Promote and enforce the borough's Smoke Control Area	Ongoing	LWA Enforcement	Engagement took place on proposals to revoke all of Hackney's existing historic Smoke Control Orders and to replace these with a single consolidated Order. The proposals also included extending the controls to include waterways. Approval of the revocation was granted by the Secretary of State and a date will now be set for the coming into force of a new Order. The objections received are being considered as part of the decision-making process on the new Order. Officers have received training in the enforcement of smoke controls through our ongoing membership of the London Wood Burning Project.
16	Emissions from development and buildings	Promote and deliver energy efficiency and retrofitting projects in workplaces and homes	Progress reported each year (CAP)	Hackney Light and Power	Phase 3 of the Green Homes Programme (delivering improvements to privately-owned or privately-rented homes) is ongoing, although some delays were experienced due to resident uptake, grant administrator delays and availability of retrofit coordinators. Most beneficiaries of the scheme are owner-occupiers. Implementation of Phase 4 will take place in 2025 with some changes proposed by Hackney Light and Power. Projects have progressed under the Public Sector Decarbonisation Scheme (PSDS). 9 sites were awarded funding under PSDS Phase 3b, with a total project budget of £16.8m and a saving of 1,550 tCO_2e per year. Air source heat pump schemes at Homerton Library, Queensbridge

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					Leisure Centre, Millfields School and Holmleigh School were completed. Other schemes are due for completion in 2025. £26.8m of projects are being carried out under PSDS Phase 3c, which was awarded in April 2024, with savings of 1,850 tCO_2e per year. Applications for PSDS Phase 4 were submitted in November 2024. 320 surveys were undertaken as part of the Social Housing Decarbonisation Fund, with 240 considered eligible for works. 2 contractors were appointed in June and September 2024. A Warm Homes: Social Housing application was successful as part of the London consortium. Phase 1 of the Local Area Energy Plan neared completion towards the end of 2024. The Residential Solar PV Pilot project, with 1MW of solar panels installed on residential estates, is due to go live in the second half of 2025. The Council entered works contracts and concession agreements with suppliers at the end of 2024. By the end of 2024, three rounds of the Hackney Community Energy Fund had been launched. By June 2024, all Round 1 projects were completed; Round 2 projects are underway and due to be paid and completed by the end of 2024; Round 3 grant letters issued in 2024.
17	Emissions from development and buildings	Masterplanning and redevelopment areas aligned with Air Quality Positive and Healthy Streets approaches	Ongoing	Planning	Given the nature of the borough, there are few very large redevelopment areas where masterplans are proposed. Area Action Plans (AAPs) and area-based planning polices are instead the most appropriate ways to align with Air Quality Positive and Health Streets approaches in Hackney. The Dalston Plan continued to move towards adoption in 2024, which included many elements of the Healthy Streets approach to deliver improvements in air quality. This included a section specifically on ‘Sustainable transport options and high quality public realm’.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
					A Regulation 18 consultation on the draft Future Shoreditch AAP and the direction of travel took place from 8 July to 23 September 2024. This AAP includes objectives to improve sustainable transport options, encourage walking and cycling, improve the public realm and improve the environmental quality of Shoreditch (through reduction of traffic congestion, increased planting, enhancement of green space and new public spaces). A consultation on the proposed submission draft (Regulation 19) of the Stamford Hill AAP took place from 7 May to 19 July 2024. The vision statement includes a commitment to 'an improved public realm… and connected to a choice of sustainable modes of transport.' There is also a commitment to active and sustainable travel in new developments.
19	Public health and awareness raising	Develop a Joint Strategic Needs Assessment (JSNA) that will focus on air quality and human health	2024 Scrutiny ongoing	LWA Public Health (PHIT) Councillors	An air quality-specific update to the JSNA was published in partnership with the City of London and Hackney Public Health Intelligence Team (PHIT) at the end of 2023. There has been no specific work on updating this document in 2024, although it now forms part of the PHIT's business as usual work. An update was again presented in September 2024 to the Health in Hackney (HiH) Scrutiny Commission, providing an update on air quality in Hackney and progress on measures. Among others, the following health-related topics were raised: ● Focusing on areas where health impacts are the greatest, e.g. trunk roads, including on monitoring air quality in these areas ● Harnessing positive evidence on health and data to improve public acceptability of air quality measures (e.g. ULEZ) ● Promoting the positive health benefits of sustainable transport modes An update to the HiH Scrutiny Commission on health-related air quality issues is proposed in 2025.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
20	Public health and awareness raising	Develop and promote the existing high air pollution alert system	2025	LWA airTEXT GLA	Hackney uses the airTEXT system of air quality alerts. By the end of 2024, there were 516 active subscribers receiving airTEXT alerts, an increase of 31 since the end of 2023. These are split by text (402), email (60), X/Twitter (34) and voicemail (20). In 2024, there were 11 days on which airTEXT alerts were issued for Hackney. A total of 3,353 alerts were sent to subscribers by text, email or voicemail. As part of the ZEN project (MAQF4), preliminary investigations took place into promoting reduced price or cost-free sustainable transport options on high pollution days. Progress on this is likely to take place in 2025.
21	Public health and awareness raising	Continue to collaborate in the cross-borough project encouraging canal boat owners to switch from wood burning stoves and diesel engines to electric or more sustainable fuels	Current project to be delivered through 2025/26	LWA Other London boroughs External contractors	Hackney is jointly leading a multi-borough project which secured funding from the Mayor of London to engage boat dwellers and gather information about their current practices and needs for heating their home. The Healthy Waterways programme will conduct research to understand how air pollution, fuel use, and energy options impact boat dwellers across London. The first phase of the programme is being led by Hackney. A consultant researcher has been appointed to carry out a survey of around 500 boat dwellers across 15 boroughs. The findings will help inform local authorities, waterways organisations, and policymakers to improve support for boat dwellers.
22	Delivery servicing and freight	Deliver Freight Action Plan as part of the Hackney Transport Strategy	Delivery of Strategy in 2026	Streetscene	An evidence base for a review of Hackney's Transport Strategy was produced in 2024. This includes evidence to support through traffic reduction on main roads (Main Roads Strategy) and alternative kerbside uses (Kerbside Strategy), e.g. for delivery and consolidation hubs. A market engagement process took place in 2024 to deliver further last mile logistics hubs in the borough (including Bentley Road Car Park).

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
					There are also actions on reducing emissions from freight and promoting sustainable freight options have been included in the Council's Climate Action Plan to 2030.
23	Delivery servicing and freight	Develop area-wide Construction Logistics Plans and review local CLPs	Ongoing	LWA Planning Streetscene	All major planning applications must submit a Construction Logistics Plan which is reviewed by both transport and air quality officers. The CLP may form part of a Construction (Environmental) Management Plan which also considers air quality, dust and waste management. Applicants are encouraged to consider Hackney's Code of Construction Practice. Where relevant, streetworks officers can work with applicants to coordinate construction logistics in areas where there is a high concentration of development. Construction logistics are currently coordinated in one main area of the borough (the area of redevelopment around the Colville Estate in Hoxton).
24	Deliver servicing and freight	Work with consumers and delivery companies to help reduce local emissions through the Zero Emissions Network	ZEN project ongoing (MAQF)	Streetscene	The Zero Emissions Network (ZEN) project continues to operate with funding from the MAQF4, now covering Hackney, Newham, Tower Hamlets, City of London and Westminster. 24 cargo bike grants were awarded to local businesses in 2024, helping them switch from motor vehicles to cargo bikes. This switch was promoted by the businesses themselves, on Council social media channels and in the Love Hackney newsletter. 5 businesses took up the new 12 month cargo bike leasing offer. There were 10 new ZEN partners, including two bike subscription / leasing companies, an event space company, food and drink partners, a bike insurance and e-bike hire companies. A tender was also issued for a new operator of the cargo bike share scheme. 265 travel surveys were carried out with employees, which informed the production of 11 new business sustainable travel plans.

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					More information is available on https://www.cargobikeshare.cc/ and https://zeroemissionsnetwork.com/.
25	Borough Fleet	Increase the proportion of electric vehicles in the borough fleet, supported by charging infrastructure to match growth and reduce numbers of petrol/diesel fleet vehicles being used for Council services	Ongoing - as update	Fleet Management	Around 20% of the Council's fleet is now comprised of electric vehicles, representing a steady increase from 16% in 2022. Expansion of the EV fleet has been restricted by necessary depot space for recharging. Work is progressing on a solution to this that does not compromise fleet security (e.g. concerns for vans that are left on-street for charging). The use of alternative fuels is also being investigated for the fleet that cannot currently be electrified.
26	Borough Fleet	Re-establish use of Hydrotreated Vegetable Oil (HVO) as an alternative fuel source by securing a new bulk contract	Complete	Fleet Management	HVO fuel is used in the majority of the Council's internal combustion engine vehicles as business as usual. Evidence suggests that HVO fuel is more NOx efficient at the tailpipe than mineral diesel. In 2024, the total liquid fuel consumption was 1,146,120 litres, 947,432 litres (83%) of which was HVO. The remaining fuel consumption was mineral diesel and petrol. This amounts to an estimated saving of approximately 2,760 tonnes of CO_2 over the year compared to if HVO fuel was not used.
27	Borough Fleet	Increase the number of bikes, electric bikes and cargo bikes in the Council fleet to ensure there are enough forms of sustainable transport for staff to use	Ongoing	Facilities Management Parks and Green Spaces	Hackney operates a staff Travel Plan to reduce travel and encourage the use of sustainable modes. Part of this includes a pool bike scheme to encourage staff to hire a bike for work trips and make deliveries. These are available during business hours, and include pedal bikes and one cargo bike. A quadricycle took place in previous years for Parks and Waste Services but was deemed unsuccessful due to maintenance issues.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
28	Borough Fleet	Collaborate with other public sector organisations to assess emissions in Hackney and identify funding for zero emission vehicle trials	Funding bids assessed annually	LWA NHS North East London	Hackney participates in an Air Quality Action Group which brings together people working in the NHS with local authorities and other organisations to coordinate actions on air quality in the north-east London area. This forum is to be used for identifying opportunities for joint working and collaborating on funding bids. No funding opportunities were identified to support zero emission vehicle trials in 2024.
29	Localised solutions	Ensure that air quality and transport policies are integrated and that air quality impacts are assessed	Ongoing	LWA Streetscene Parking Services Air quality consultants (external)	An air quality modelling study was commissioned in 2024 to support the delivery of the Amhurst Road and Pembury Circus transformation scheme and the Chatsworth Road traffic reduction scheme. Hackney routinely reviews its air quality monitoring and will ensure there is sufficient data to support and monitor traffic schemes. The following changes were made in 2024: ● New automatic monitors on Northwold Road and Graham Road. These can be used to monitor the impact of Low Traffic Neighbourhood measures (e.g. bus gates and traffic filters) that may alter traffic flows. ● NO_2 diffusion tubes were installed to gather data on the Amhurst Road and Pembury Circus transformation and the Chatsworth Road traffic reduction schemes. ● NO_2 diffusion tubes were added to red routes to fill gaps in data collection along the borough's busiest through roads. ● Breathe London monitors were installed to support MAQF projects (ZEN and Super LEN) and were planned for high traffic and high NO_2 areas in 2025. The Policy Collaboration Group (PCG) is made up of representatives from Land Water Air, Streetscene (Sustainable Transport) and Parking Services. PCG meets quarterly to discuss schemes and plans that may

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
					impact upon air quality and how to ensure policy consistency across the Council.
30	Localised solutions	Implement Low Emission Neighbourhoods (LENs)	Current tranche by end of 2025	Streetscene LWA	Work on the implementation of low traffic measures (formerly Local Traffic Neighbourhoods, LTNs) continued in Hoxton East, Dalston and Chatsworth Road. Consultation and implementation is planned for 2025. Progress continued on the delivery of the Government funded £19m Levelling Up Fund project in Hackney Central (known as the Amhurst Road and Pembury Circus transformation). The proposals include new green space and trees around Hackney Central, a bus gate on Amhurst Road and a reconfiguration of Pembury Circus. Construction work began in 2025. Additional air quality monitoring was implemented for assessment of the above schemes in 2024 (see progress on Action 29 above).
31	Localised solutions	Deliver Britain's First 21st century street in Colvestone Crescent, Dalston	N/A	N/A	No update on this action specifically in 2024, as the 21st century streets project at Colvestone Crescent has been put on hold. However, Hackney continues to commit to the principles of 21st century streets elsewhere, as detailed in our progress in other actions. These include: ● The adoption of the Child-Friendly Places SPD ● Improvements to support sustainable and active streets, including pedestrian priority programmes, tree planting and green infrastructure projects ● The Parklets programme ● Expansion of cycle hangars and cycle infrastructure ● Rollout of electric vehicle charging infrastructure
32	Localised solutions	Expanding and improving green infrastructure	Ongoing	Streetscene Housing	Hackney undertook a new round of hedge planting at the end of 2024 as part of the Hedge Planting Project 2024-25, using whips of native species.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
				Parking Services Parks and Green Spaces	This project was a collaboration between Parks and Green Spaces and volunteer groups. The following main planting sessions took place: ● Springfield Park - 70m of planting along fenceline ● Clapton Common - 100 whips in clumps along the edge of the park along the road ● Millfield Park - ~2,000 whips (~900 m^2) as a mini woodland along the edge of the park Over 100 trees were planted in communal green space on Hackney housing estates in 2024. A number of new SuDS schemes, including rain gardens and urban greening, were completed, including at Calvert Avenue, Well Street, Northwold Road and Nightingale Road. These schemes created around 150 m^2 of new green infrastructure in the highway.
33	Cleaner Transport	Provide new infrastructure to support walking and cycling, including secure cycle parking, and assess air quality impacts of new infrastructure	***	Streetscene	Cycle improvements on Crossway (Dalston) were completed. Works on the Lea Bridge Road westbound segregated cycle track and the second phase of the Queensbridge Road segregated cycle track progressed, with completion scheduled for 2025. The Hackney Central Levelling Up Fund project will deliver wide-ranging cycle and pedestrian improvements around Amhurst Road, Pembury Circus and the eastern end of Dalston Lane. Works were approved in 2024. The cycle hangar expansion programme continued, with the aim of an additional 675 on-road cycle hangars by 2026. This programme, which began in 2023, led to an increase in cycle hangars of 151 by March 2024 and 506 by March 2025. Priorities of the hangar programme are shifting to estate hangars, although progress has been slower. A map of installed and proposed hangars is available at: https://hackney.gov.uk/cycle-hangar Funding has been secured for the expansion of cargo bike share, which will fund additional hubs and bikes. One new hub was installed near

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
					Chatsworth Road; funding was secured for hubs in Dalston, Hackney Wick, Hackney Central and Leonard Circus. The Council continues to fund cycle training to school pupils although this has faced some funding shortages.
34	Cleaner Transport	Roll out Hackney's anti-idling campaign to discourage vehicle users idling their engines	Ongoing - as discussed	LWA	Idling complaints are logged and mapped with a response sent to all complainants. 18 complaints on idling were received directly by the Land Water Air team during 2024 (7 repeat and 11 new complaints). This compares to 11 complaints received in 2023. Of these complaints, the majority related to idling private vehicles. Letters were written to identifiable businesses where idling was able to be linked to a specific organisation. 6 of the repeat complaints related to private vehicle idling on the same stretch of Road. In response to this, 5 new anti-idling signs were installed in October 2024 to discourage idling in this location. The last repeat complaint related to a location where anti-idling signage was already in place (around Benthal Primary school). Further work has been undertaken in 2025 at this location. Following the identification of suitable schools, 10 new anti-idling banners were installed outside primary schools across the borough during 2024. In addition, anti-idling engagement sessions were held during school pick up or drop off at four of the primary schools that installed banners.
35	Cleaner Transport	Hold regular temporary Car-Free days	Significant updates by end of 2025	Streetscene LWA Climate, Sustainability and	Hackney proactively supports occasional road closures for events, e.g. the Hackney Half Marathon to encourage and promote alternative uses of the borough's roads. Hackney was successful in securing Mayor's Air Quality Fund (MAQF4) funding for the Zero Emissions Network, which includes a proposal for car-free days based on Bogotá's Ciclovía programme. This is progressing.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
				Environmental Services	Sustainability Day 2024 took place on 29 June 2024. Stands to promote the Zero Emissions Network and sustainable transport options were included alongside a trial cargo bike.
36	Cleaner Transport	Deliver updated Parking and Enforcement Plan	PEP to be delivered in stages and reviewed in 2028	Parking Services	Implementation of the Parking and Enforcement Plan (PEP) is underway. In 2024, the Community Support Permit was introduced using a 13-band, emissions based pricing structure, replacing a previous Health and Social Care Permit. An All Zone External Permit using the 13 bands is being proposed. Motorcycle parking charges entered into force in July 2024. Charges are being phased in over a period of three years. Car club permit pricing is planned to be revised based on the 13-band emissions structure.
38	Cleaner Transport	Develop and assess potential impacts of Motorcycle Action Plan	N/A	Parking Services	A separate MAP is no longer being developed. Motorcycle parking charges were approved by Cabinet in March 2023 as part of the Parking and Enforcement Plan 2022-27. They entered into force in July 2024. Parking charges are based on emissions and include a diesel surcharge.
39	Cleaner Transport	Improve public transport facilities in the borough	Ongoing	Streetscene	The Amhurst Road and Pembury Circus transformation proposes a new bus gate and bus stop changes to improve bus reliability on this frequently congested part of Hackney Central. The plans were approved in 2024 with construction beginning in 2025. Improvements to the entrance to Hackney Downs station on Dalston Lane were also proposed as part of the Levelling Up Fund grant. Preliminary designs progressed in 2024. A review into bus stop interchanges as trip generators (a CAP action) is planned but has not yet been funded.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
40	Schools and Communities	Reduce air pollution near schools and protect children through the delivery of School Streets programme	Ongoing - see update	Streetscene	Four new School Streets were introduced in 2024: SS50 (Clapton Girls' Academy), SS51 (Hackney New Primary School), SS52 (Grasmere Primary School) and SS53 (The Urswick School). These are implemented using Experimental Traffic Orders for up to 18 months. By the end of 24, there were 49 School Streets in operation in the borough. Despite the new Schools Streets in 2024, this represents no net change since 2023, due to the removal of three School Streets due to school closures, and the suspension of one School Street.
42	Schools and Communities	Reduce air pollution near schools through promoting uptake of STARS programme	Ongoing	Streetscene	There are 45 Hackney schools engaged with TfL's Travel for Life programme, which has replaced the STARS programme. From September 2024, 7 of these had achieved Gold accreditation, 2 had achieved Silver accreditation and 4 had achieved Bronze.
43	Schools and Communities	Facilitate and lead programme of audits at schools	Funding dependent	LWA	Work was carried out over 2022 and 2023 to identify schools, nurseries etc. that are most likely to be exposed to high levels of air pollution. This was a combination of modelling, monitoring and GIS analysis. Hackney also undertakes NO_2 diffusion tube monitoring at 51 schools and educational settings (a third of all diffusion tube sites), alongside other sites representative of nearby locations. Air quality audits can only be carried out when additional funding sources are identified. Hackney was not successful in a bid to secure funding from Defra's Air Quality Grant Scheme in 2023 and no sources of funding were identified in 2024.
44	Schools and Communities	Review pollutant concentrations at all health centres, hospitals and care homes, and where relevant,	Complete Audits are funding dependent	LWA	An analysis using GIS was carried out in 2023, using both monitoring and dispersion modelling data, to identify health centres, hospitals and care homes where pollutant concentrations may be elevated. This study identified four care homes and 25 medical facilities (primary care and

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
		implement an audit and improvement scheme			community healthcare facilities) where NO_2 concentrations are potentially the highest. No funding sources were identified in 2024 to undertake audits and improvements. Hackney also carries out NO_2 monitoring using diffusion tubes at Homerton University Hospital and St Leonard's Hospital.
45	Lobbying	Lobby central Government to control and reduce emissions which are outside of Hackney's control	Ongoing	LWA Comms	Hackney collaborated in a one-to-one online session with researchers at Defra to help evaluate a platform for disseminating air quality information and data. This was followed up with a written submission. Hackney also worked with Defra regarding issues about wording in the Environment Act 2021 regarding 'smoke' at workshops. It was confirmed that the borough's enforcement approach would be set out in its Enforcement Policy.
46	Lobbying	Lobby TfL to expand the Ultra Low Emission Zone (ULEZ) and introduce more fully electric buses on routes within Hackney	Ongoing	LWA Streetscene TfL	The ULEZ has been effective in Hackney since October 2021. As the benefits for air quality in Hackney from the introduction of the ULEZ have been recognised, Hackney was supportive of further expansion of the ULEZ provided that adequate support systems were in place. Reports into the air quality benefits since the expansion of the ULEZ to all of London have been published and Hackney has helped to raise awareness of these reports. The 276 (Stoke Newington – Newham Hospital) bus route became fully electric in 2024.
47	Lobbying	Work with others to reduce pollution that is outside of Hackney's control	Ongoing	LWA Other London Boroughs	Hackney continues to collaborate with neighbouring boroughs on projects which cross borough boundaries, including jointly leading the Healthy Waterways Project to improve air quality along the waterways and participating in the London WoodBurning Project, the Commercial Cooking Working Group and the pan-London anti-engine-idling campaign. Hackney

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress ● Emissions/Concentration data ● Benefits ● Negative impacts / Complaints
				Environment Agency TfL GLA	is represented at the central London Air Quality Cluster Group and attends the London Steering Group on a rota basis. Through the Cluster Group, Hackney has contributed to discussions to make representation to the Environment Agency on its revised guidance for small stacks. Hackney regularly attends the Air Pollution Research in London (APRIL) group, including in July 2024 on issues surrounding particulate matter emissions and domestic burning. Hackney Council officers have met with representatives from the GLA to discuss plans and policy measures for helping to reduce $PM_{2.5}$ emissions from non-transport sources in order to meet relevant targets.

3. Planning Update and Other New Sources of Emissions

Table N. Planning requirements met by planning applications in Hackney in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	78 applications were reviewed for air quality impacts (50 applications; 16 discharges of conditions; 8 pre-apps; 2 EIA screening or scoping opinions; 2 prior approvals). 21 applications included a full air quality assessment.
Number of planning applications required to undertake construction dust monitoring and reporting (Please specify how you get access to dust monitoring data i.e. online tool or CSV file)	7 applications were instructed to monitor construction dust via planning condition
Number of CHPs/Biomass boilers refused on air quality grounds	0 (no new applications received for CHP)
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions as detailed in Air Quality Neutral LPG (london.gov.uk) point 3.1.5.	0
Number of developments required to install Ultra-Low NO_X boilers	7
Number of developments where an AQ Neutral building and/or transport assessments undertaken	15 major applications completed an AQ Neutral assessment
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	2
Number of planning applications with S106 agreements including other requirements to improve air quality	0
Number of planning applications with CIL payments that include a contribution to improve air quality	0
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas Number of planning applications with conditions related to NRMM included. Number of developments registered at www.nrmm.london. Number of audits (based on the pan-London project report and / or inhouse auditing programme) % of sites unregistered prior to audit % of sites compliant with Stage IV of the Directive and/or exemptions to the policy.	20 conditions included 11 sites audited 3 sites (27%) registered and compliant 10 of 11 sites (91%) compliant after audit or had no NRMM on-site 1 site (9%) non-compliant due to non-registration
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas) Number of planning applications with conditions related to NRMM included. Number of developments registered at www.nrmm.london.	2 conditions included 6 sites audited 3 sites (50%) registered and compliant

Condition	Number
Number of audits (based on the pan-London project report and / or inhouse auditing programme) % of sites unregistered prior to audit % of sites compliant with Stage IIIB of the Directive and/or exemptions to the policy.	5 of 6 sites (83%) compliant after audit or had no NRMM on-site 1 site (17%) non-compliant through non-registration and non-compliant NRMM

3.1 New or significantly changed industrial or other sources

No new or significantly changed industrial or other sources of air pollution were identified in 2024.

4. Additional Activities to Improve Air Quality

4.1 London Borough of Hackney Fleet

Around 20% of the Council's fleet is now comprised of electric vehicles, representing a steady increase from 16% in 2022. The Council also operates 49 of its own charge points across 13 sites.

A feasibility project took place with UK Power Networks to assess the possibility and investment costs for upgrading the power supply to Millfields Depot to allow further expansion of electric vehicles, including to waste vehicles and HGVs. However, there is a possibility that this could be cost-prohibitive at present, alongside a lack of depot space.

The majority of the Council's internal combustion engine vehicles use HVO fuel, which is more NOx efficient at the tailpipe. Approximately 2,760 tonnes of CO_2 are saved through the use of HVO, representing 83% of the Council's total liquid fuel consumption.

4.2 Planning Enforcement

Details of the most common air quality-related planning conditions that are recommended in Hackney, and how these are enforced, are provided below.

Compliance with NRMM Low Emissions Zone standards

All relevant sites are required via planning condition to comply with these standards and to register their site on the Mayor of London's NRMM Register. The NRMM Low Emissions Zone is enforced through financial support of the NRMM audit team based at Merton Council. Hackney receives an annual report on audit visits and rates of compliance.

Submission of a Construction (Environmental) Management Plan

Any development where construction works might lead to possible dust and PM emissions are required by planning condition to produce a CMP or CEMP. The conditions are suitably detailed to ensure these plans include all required information to a sufficient standard, which are reviewed by planning and air quality officers. Applicants must ensure the measures in these plans are implemented throughout the duration of construction works.

Enforcement takes place if complaints are received relating to the construction site (e.g. dust nuisance or non-compliance with certain measures such as traffic routing). In this instance, officers will investigate the site to ensure they are complying with their plan. Any non-compliance can then be dealt with informally, or via a breach of planning condition.

Construction dust monitoring

The largest and highest risk sites, such as those in very close proximity to schools, hospitals etc. are required to undertake dust monitoring using indicative real-time monitors meeting MCERTS ‘Indicative’ certification for PM. Applicants must submit details of their dust monitoring scheme to the planning authority for approval via condition. The scheme must be in accordance with Section 5 of Hackney Council's Code of Construction Practice, the Mayor of London's Control of Dust and Emissions during Construction and Demolition SPG and the IAQM's Guidance on Monitoring in the Vicinity of Demolition and Construction Sites. The submission must include information on:

- Details of the type and locations of the monitors
- The emission alert trigger levels to be employed
- The responsibilities of on-site personnel in the vent of a trigger alert, including how this is communicated to the local authority as appropriate
- The agreed procedure for responding to a trigger alert
- Reporting on an agreed and regular basis

Installation of ultra-low NOx boilers

Applicants installing gas-fired (or other fossil fuel) boilers and other heating systems are required to provide evidence to the local planning authority that the installed boilers meet the ultra low NOx emission standard (dry NOx emission rate equivalent to or less than 32 mg/kWh). A condition is applied which must be submitted prior to occupation.

Inlets, vents and exhausts

Where it is possible that mechanical ventilation systems (and so on) may intake air from more polluted façades or parts of the building, a condition is applied to require the applicant to submit details of the positions of air intakes, vents and exhausts.

Details must be submitted prior to occupation. This is to prevent the provision of polluted air to habitable rooms and the mixing of intake and exhaust air.

4.3 Pan-London NRMM Auditing Project

Hackney is an active member of the Pan-London NRMM project. Hackney supported the NRMM enforcement project in 2024 and will continue to support the project through match funding.

Hackney primarily enforces the NRMM emissions standards through planning conditions. A standard NRMM planning condition is recommended for all major planning applications where NRMM is expected to be used on the construction site. On larger sites where extensive dust producing works are likely to take place and impact upon local air quality, a planning condition is recommended to produce a Construction Management Plan (CMP). The CMP must align with Hackney Council's Code of Construction Practice (CoCP) and GLA guidance, and cover a range of potential environmental issues including air quality, dust and emissions from machinery.

The following condition wording is recommended for sites within the Central Activities Zone and Opportunity Areas; in addition, planning officers are specifically informed that the site is within an area where more stringent NRMM emissions standard apply:

All Non-Road Mobile Machinery (NRMM) of net power of 37 kW and up to and including 560 kW used during the course of site preparation, demolition and construction phases shall comply with the emissions standards of the Mayor of London's NRMM Low Emission Zone for the Central Activities Zone and Opportunity Areas. Unless in compliance with these standards, no NRMM shall be on-site, at any time, whether in use or not, without the prior written consent of the local planning authority. The applicant shall keep an up-to-date register of all NRMM used during site preparation, demolition and construction phases on the online register at https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/pollution-and-air-quality/nrmm.

Reason: To comply with London Plan Policy SI 1 and to ensure emissions from the site during the construction phase are acceptable with regard to public health and amenity.

The following condition wording is recommended for all other sites (i.e. outside the CAZ and OAs) where the Greater London standards apply. This condition wording has been used uniformly from the start of 2025 after Stage IV emissions standards came into effect across all of London.

All Non-Road Mobile Machinery (NRMM) of net power of 37 kW and up to and including 560 kW used during the course of site preparation, demolition and construction phases shall comply with the emissions standards of the Mayor of London's NRMM Low Emission Zone. Unless in compliance with the NRMM Low Emission Zone standards, no NRMM shall be on-site, at any time, whether in use or not, without the prior written consent of the local planning authority. The applicant shall keep an up-to-date register of all NRMM used during site preparation, demolition and construction phases on the online register at https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/pollution-and-air-quality/nrmm.

Reason: To comply with London Plan Policy SI 1 and to ensure emissions from the site during the construction phase are acceptable with regard to public health and amenity.

4.4 Air Quality Alerts

The London Borough of Hackney is a member of the airTEXT consortium (https://www.airtext.info/). A link to sign up to the service is provided on the Council website at https://hackney.gov.uk/raising-air-quality-awareness.

At the end of 2024, there were 516 active subscribers receiving airTEXT alerts, an increase of 31 since the end of 2023. These are split by text (402), email (60), X/Twitter (34) and voicemail (20).

In 2024, there were 11 days on which airTEXT alerts were issued for Hackney. A total of 3,353 alerts were sent to subscribers by text, email or voicemail.

The Council uses its own social media and communications channels to raise awareness about air quality alerts when they are issued by the Mayor of London.

4.5 Air Quality Positive

In 2024, Hackney reviewed three Air Quality Positive Statements in support of EIA-scale planning applications. However, these were all related to the same major

development (known as *Bishopsgate Goods Yard*); one application was a GLA notification relating to a reserved matters approval, while the other two applications related to smaller plots of the wider development only.

None of the reviewed Air Quality Positive Statements included any measures considered new or innovative to improve air quality.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

Instrument Changes

The NOx and PM_{10} analysers at Old Street (HK006) were upgraded at the start of 2024. Both of these analysers were very old and replacement parts for their continued operation were becoming difficult to source. In addition, the PM_{10} TEOM-FDMS was approaching redundancy due to increasingly limited data to maintain the Volatile Correction Model (VCM) to establish data equivalence.

The NOx analyser was replaced with an equivalent Teledyne T200 Chemiluminescence NOx analyser. The PM_{10} TEOM-FDMS was replaced by a BAM1020 PM_{10} analyser. The new instruments comply with the MCERTS UK Type Approval for Gaseous Analysers (for NOx) and MCERTS for UK Particulate Matter (demonstrating equivalence to the reference method for PM_{10}).

See Section 1.1 for information on the sites that were newly commissioned and decommissioned in 2024.

Data Management

Hackney Council employed Ricardo-AEA as the data management unit throughout 2024 for all automatic monitoring sites. All valid data from the automatic monitoring stations is available at https://www.airqualityengland.co.uk/local-authority/?la_id=194.

Calibrations and Audits

Routine Local Site Operator (LSO) duties, including calibrations, are carried out at all automatic monitors in accordance with Defra guidance. Calibration reports are sent to the data management unit (Ricardo-AEA) within two working days.

Independent QA/QC audits are carried out bi-annually at each monitor by the data management unit.

PM_{10} Monitoring Adjustment

PM_{10} monitoring at HK006, HK009, HK010, HK011 and HK014 was carried out using BAM1020 beta-attenuation monitors. These concentrations were made reference equivalent by correcting for slope as outlined in LLAQM.TG(19).

PM_{10} and $PM_{2.5}$ monitoring at HK015 and HK016 uses Palas Fidas 200 optical light-scattering technology. Data are processed using the Method 11 algorithm, which is certified reference-equivalent in theUK. $PM_{2.5}$ data are corrected for slope by dividing by 1.06.

From 2024, Hackney no longer samples any particulate matter using TEOM, and as such has not corrected any PM_{10} measurements for loss of volatile compounds using the Volatile Correction Model.

A.2 Diffusion Tubes

Preparation, Supply and Analysis

Hackney Council used two diffusion tube suppliers in 2024. The change was due to the lapse of the supply contract, at which point a procurement exercise took place.

- SOCOTEC Didcot (January to April 2024, 4 months)
- Lambeth Scientific Services (May to December 2024, 8 months)

The 50% triethanolamine (TEA) in acetone preparation method was used in both instances.

Both suppliers confirm that their samples are analysed in accordance with Defra's 'Diffusion Tubes for Ambient NO2 Monitoring: Practical Guidance'[2].

Using results from the triplicate co-location site at HK006, diffusion tube precision was 'good' overall. 11 of 12 months showed 'good' precision (with coefficient of variation (CV) <20%), with 9 of 12 months CV <10%. Further information is shown in **Figure 17**.

[2] Defra's 'Diffusion Tubes for Ambient NO2 Monitoring: Practical Guidance' https://laqm.defra.gov.uk/documents/0802141004_NO2_WG_PracticalGuidance_Issue1a.pdf

Figure 17. Precision and Accuracy of Triplicate Diffusion Tubes

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements

Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 µgm-3	Tube 2 µgm-3	Tube 3 µgm-3	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean
1	3/1/2024	31/1/2024	44.7	42.7	42.0	43	1.4	3	3.5
2	31/1/2024	6/3/2024	39.7	38.2	41.5	40	1.7	4	4.1
3	6/3/2024	3/4/2024	37.8	37.2	42.2	39	2.7	7	6.8
4	3/4/2024	1/5/2024	29.4	29.1	38.0	32	5.1	16	12.6
5	1/5/2024	5/6/2024	28.0	26.0	30.0	28	2.0	7	5.0
6	5/6/2024	3/7/2024	33.0	33.0	32.0	33	0.6	2	1.4
7	3/7/2024	31/7/2024	33.0	33.0	33.0	33	0.0	0	0.0
8	31/7/2024	4/9/2024	34.0	34.0		34	0.0	0	0.0
9	4/9/2024	2/10/2024	25.0	44.0	29.0	33	10.0	31	24.9
10	2/10/2024	6/11/2024	38.0	36.0	39.0	38	1.5	4	3.8
11	6/11/2024	4/12/2024	35.0	36.0	41.0	37	3.2	9	8.0
12	4/12/2024	8/1/2025	39.0		34.0	37	3.5	10	31.8
13									

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Automatic Method		Data Quality Check	
Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
26.19	17.6	Good	Poor Data Capture
22.98	99.5	Good	Good
20.68	99.7	Good	Good
18.02	99.7	Good	Good
22.83	100.0	Good	Good
19.12	99.1	Good	Good
18.90	99.9	Good	Good
18.98	99.6	Good	Good
23.15	96.4	Poor Precision	Good
30.74	99.6	Good	Good
33.78	99.4	Good	Good
28.81	95.8	Good	Good
		Good precision	Good Overall

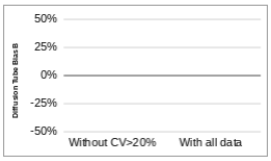
(Check average CV & DC from Accuracy calculations)

Site Name/ ID:	HK6 Co-Location

Precision: 11 out of 12 periods have a CV smaller than 20%

Accuracy (with 95% confidence interval)
without periods with CV larger than 20%
Bias calculated using 10 periods of data
Bias factor A: 0.67 (0.59 - 0.78)
Bias B: 49% (28% - 71%)
Diffusion Tubes Mean: 35 µgm-3
Mean CV (Precision): 6
Automatic Mean: 23 µgm-3
Data Capture for periods used: 99%
Adjusted Tubes Mean: 23 (21 - 27) µgm-3

Accuracy (with 95% confidence interval)
WITH ALL DATA
Bias calculated using 11 periods of data
Bias factor A: 0.67 (0.6 - 0.77)
Bias B: 48% (29% - 68%)
Diffusion Tubes Mean: 35 µgm-3
Mean CV (Precision): 8
Automatic Mean: 23 µgm-3
Data Capture for periods used: 99%
Adjusted Tubes Mean: 23 (21 - 27) µgm-3



Jaume Targa, for AEA
Version 04 - February 2011

AIR-PT is an independent proficiency testing scheme, which is designed to test the proficiency of laboratories undertaking analysis of chemical pollutants. In rounds 062, 063, 065 and 066, 50% of results from Lambeth Scientific Services were satisfactory. However, it is noted that participation in AIR-PT is just one measure of accuracy and precision of diffusion tubes.

Bias Adjustment

The diffusion tube data presented within this ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of NO_2 diffusion tubes to under or over-read relative to a reference chemiluminescence analyser. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from the NO_x/NO_2 continuous analysers. Alternatively, a national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Bias Adjustment Factor from Local Co-location Studies

Hackney Council has a co-location of triplicate diffusion tubes alongside the automatic analyser at one site (HK006 Old Street). This is a large, walk-in cabin roadside monitoring site which measures NO_2, particulate matter (PM_{10} and $PM_{2.5}$) and ozone. It is located 8.5 m from the kerb of Old Street (A501), a six-lane main road, with an inlet height of 3 m.

Given that the diffusion tube supplier was changed in May 2024, local bias adjustment factors have not been calculated for this year. It was decided that the short periods would introduce an additional layer of uncertainty compared to the use of national bias adjustment factors (discussed below).

National Bias Adjustment Factor

The national bias adjustment factors for the two laboratories used in 2024, for 50% TEA in acetone preparation, were obtained from the national database (version 04/25)[3]:

- SOCOTEC Didcot: 0.80
- Lambeth Scientific Services: 0.81

Discussion of Choice of Factor to Use

In this instance, a single national bias adjustment factor has been used. A factor of 0.81 was applied to all measurements.

A local bias adjustment factor was not used due to the change in diffusion tube supplier, which would have unacceptably increased the uncertainty in calculating locally-derived factors.

Two bias adjustment factors from the two diffusion tube suppliers were derived from the national database, which were very close in value (0.80 and 0.81). Advice was sought from the LAQM Helpdesk on how to apply these factors, and whether to apply each factor separately to the monitoring periods from each laboratory. Given the very similar factors derived, advice was given to apply the same factor across all monitored concentrations, erring on the slightly higher factor. This is because using two different factors and weighting accordingly was unlikely to have a material impact on bias-adjusted annual mean concentrations, while significantly increasing a possibility of calculation errors.

Hackney continues to operate a co-location triplicate site at HK006 that can be used to calculate local factors in future years.

[3] Defra (2025), National Bias Adjustment Factors. Available: https://laqm.defra.gov.uk/air-quality/air-quality-assessment/national-bias/

Table O. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.81
2023	National	03/24	0.77
2022	Local	-	0.73
2021	National	03/22	0.78
2020	National	03/21	0.77
2019	National	03/20	0.75
2018	National	03/19	0.76
2017	National	03/18	0.77
2016	National	03/17	0.79

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Where data capture is less than 75% and greater than 25% of a full calendar year (i.e. between 3 and 9 months), the raw mean should be 'annualised' in line with the methodology outlined in Box 4.2 and Box 4.3 of LLAQM.TG(19). This adjusts the raw mean for comparison to the annual mean objective using data from nearby automatic background monitoring sites.

Annualisation was required at the following sites in 2024:

- 8 NO_2 diffusion tube sites - see **Table P**
- Automatic NO_2 monitoring sites - Queensbridge Road (HK009) and Northwold Road (HK015) - see **Table Q**
- Automatic PM_{10} monitoring sites - Old Street (HK006), HK009 and HK015 - see **Table R**
- Automatic $PM_{2.5}$ monitoring sites - HK015 - see **Table S**

Continuous monitoring data for NO_2 annualisation was taken from the London Bloomsbury, London Haringey Priory Park South and London Westminster urban background AURN sites, and the Tower Hamlets Victoria Park urban background site.

Continuous monitoring data for PM_{10} and $PM_{2.5}$ annualisation was taken from the London Bloomsbury, London Honor Oak Park and London North Kensington urban background AURN sites, and the Tower Hamlets Victoria Park urban background site.

Distance Adjustment

Where annual mean NO_2 concentrations are >36 µg/m³, distance correction has been used to estimate the concentration at the nearest relevant receptor. This is carried out using the NO_2 fall-off with distance calculator as specified in LLAQM.TG(19). The results are presented in **Table T**.

The results from two diffusion tube sites were distance corrected. Of these, no exceedances were reported at the nearest relevant receptors and concentrations were not within 10% of the objective.

Table P. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor *London Bloomsbury*	Annualisation Factor *London Haringey Priory Park South*	Annualisation Factor *London Westminster*	Annualisation Factor *Tower Hamlets Victoria Park*	Average Annualisation Factor	Raw Data Annual Mean (µg/m³)	Annualised Annual Mean (µg/m³) [(a)]
77	1.01151	1.03016	0.96792	1.00573	1.00383	24.0	24.1
96	0.98360	0.99273	0.95204	0.96945	0.97445	22.7	22.1
182	1.05893	1.11578	1.09803	1.13668	1.10235	16.7	18.4
197	0.97391	1.00124	1.00619	1.04134	1.00567	20.0	20.2
201	0.97972	0.94965	0.97371	0.95542	0.96462	19.7	19.0
204	1.01184	1.01638	1.00028	1.02124	1.01243	18.0	18.3
232	0.97632	0.92309	0.96539	0.94198	0.95170	30.0	28.5
240	1.05056	1.09617	1.02295	1.01600	1.04642	27.1	28.4

(a) Annualised annual mean prior to bias adjustment.

Table Q. Automatic NO_2 Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A_m)	HK009		HK015	
			Period Mean (P_m)	Ratio (A_m / P_m)	Period Mean (P_m)	Ratio (A_m / P_m)
London Bloomsbury	93.6	22.5	24.7	0.914	23.6	0.956
London Haringey Priory Park South	96.1	14.3	16.8	0.851	14.9	0.959
London Westminster	98.3	20.1	21.1	0.950	22.2	0.907
Tower Hamlets Victoria Park	99.4	13.8	14.2	0.974	15.9	0.868
Average (R_a)			0.922		0.922	
Raw Data Annual Mean (M)			30.1		24.9	
Annualised Annual Mean (M x R_a)			27.8		23.0	

Table R. Automatic PM_{10} Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A_m)	HK006		HK009		HK015	
			Period Mean (P_m)	Ratio (A_m / P_m)	Period Mean (P_m)	Ratio (A_m / P_m)	Period Mean (P_m)	Ratio (A_m / P_m)
London Bloomsbury	94.0	12.4	12.3	1.011	12.5	0.992	13.7	0.903
London Honor Oak Park	99.3	10.7	10.6	1.004	10.7	1.000	11.7	0.909
London North Kensington	99.3	11.7	11.7	1.003	11.5	1.016	12.9	0.907
Tower Hamlets Victoria Park	97.5	13.2	13.2	0.998	13.1	1.008	14.2	0.929
Average (R_a)			1.004		1.004		0.912	
Raw Data Annual Mean (M)			19.6		17.1		16.5	
Annualised Annual Mean (M x R_a)			19.7		17.1		15.1	

Table S. Automatic $PM_{2.5}$ Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A_m)	HK015	
			Period Mean (P_m)	Ratio (A_m / P_m)
London Bloomsbury	96.8	8.0	7.8	1.025
London Honor Oak Park	94.0	7.3	8.2	0.894
London North Kensington	99.6	6.7	7.5	0.890
Tower Hamlets Victoria Park	99.6	7.2	8.1	0.891
Average (R_a)			0.925	
Raw Data Annual Mean (M)			10.2	
Annualised Annual Mean (M x R_a)			9.5	

Table T. NO_2 Fall off With Distance Calculations

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Background Concentration (µg/m³)	Monitored Concentration (Annualised and Bias Adjusted (µg/m³)	Concentration Predicted at Receptor (µg/m³)
63	0.6	3.4	16.3	43.3	34.7
76	0.6	2.0	16.3	36.5	32.1

Appendix B Full Monthly Diffusion Tube Results for 2024

Table U. NO_2 2024 Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref	Y OS Grid Ref	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.81)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
1	533313	182667	41.9	38.9	35.3	34.6	29	31	35	36	29	42	40	34	35.6	28.8		
3	534977	185892	35.3	28.7	26.6	18.9	22	22	24	20	23	30	30	27	25.6	20.8		
6	533236	182395	34.9	40.6	40.9	39.6	32	40	40	37	44	45	46	35	39.6	32.1		
8	534949	184914	54.5	51.4	55.7	48	34	40	43	40	37	42	45	28	**43.2**	35.0		
15	533333	182567	31	28.2	26.4	20.4	20	21	21	16	24	29	32	29	24.8	20.1		
16	533208	182497	35	37.6	32.1	26.7	26	29	30	27	31	38		39	31.9	25.9		
17	533218	182412	47.5	44.4	40.2	40.6	29	38	38	37	31	44	46	37	39.4	31.9		
18	532798	185468	34.4	38.6	36.5	29.7	31	29	29	23	22	39	36	30	31.5	25.5		
19	532063	187504	46.6	43.4	37.7	34.9	32	41	36	31	37	40	43	31	37.8	30.6		
21	532478	185981	43.6	36.2	29.2	32.4	27	34	27	24	27	33	40	29	31.9	25.8		
25	532192	187214	36.2	31	26.5	22.5	22	26	23	20	24	28	29	27	26.3	21.3		
26	533261	182605	45.8	44.2	39	30.9		35	35	28	33	38	42	27	36.2	29.3		
27	533450	182292	40.5	37.2	39.6	33.8	32	31	34	32	33	43	43	27	35.5	28.8		
30	535927	185130	43.7	37	36.1	29.9	28	29	33	30		38	33	19	32.4	26.3		
31	533542	184821	40.3	48.6	41.9	34.7	31	38	41	37	39	48	47	36	**40.2**	32.6		
32	533851	186353	42.4	39.6	30.5	26.7	23	22	23	24	27	34	31	28	29.3	23.7		
33	533687	187785	44.3	42.3	39.8	27.4	28	31	33	29	28	40	32	26	33.4	27.1		
34	533025	184425	28.9	30.5	29.5	18.5	24	24	22	20		29	34	21	25.6	20.7		
35	533784	184437	24.5	28.8	24.7	18	20	20	23	18	20	28	34	27	23.8	19.3		
37	534723	183880		24.1	26.6	15.8	22	18	21	15	20		26	24	21.3	17.2		
41	534303	184476	28.5	26.3	20.7	15.5	19	17	19	17	20	26			20.9	16.9		
42	532617	183052	32.1	30	26.3	17.9	21	19	21	18	20	30	32	37	25.4	20.5		
43	532550	183315		18.8	23.4	16.4	24	18	18	16	19	26	25		20.5	16.6		

44	532606	183616	38.8	29	30.1	25.5	27	27	29	26	36	39	36	27	30.9	25.0		
49	535551	184840	35.5	36.6	28.1	29	28	29	27	27	28	35	34	27	30.4	24.6		
50	533765	184796		52.9	50.4	40	24	39	49	45	37	47	46	40	**42.8**	34.6		
52	534483	187193	62.2	30.8	27.3		30		27	20		30	30	24	31.3	25.3		
54	532008	187388	35.2	25.8			32	32	41	28	32	36	35	27	32.4	26.2		
55	533491	187892	36.9	28.7	29.8	27.3	24	26	26	19	28	30	32		28.0	22.7		
58	535311	184932	43.5	43	37.5	31.1	30	29	34	31	32	38	37	33	34.9	28.3		
60	534660	185252	39.5	43.6	40.2	24.7	31	37	35		31	40	37	37	36.0	29.2		
61	534917	184959	35.6	52.3	56.4	42.3	38	43	46	41	39	45	44		**43.9**	35.5		
62	534771	185074	40.4	34.2	37.8	28.1	32	31	33	22		37	38	28	32.9	26.6		
63	534581	185171	65.3	70.1	57.2	52.3	35	57	53	50	53	51	50	47	**53.4**	**43.3**	34.7	Not within 10% of objective after dist correction
64	532753	183557	23.2	15.5	24.9	18.3	19	26	18	16	18	28	26	28	21.7	17.6		
65	534960	184758	46.8	44.4	44.6	36.2	34	33		34	35	45	40	33	38.7	31.4		
67	536375	184747	27.4	45.5	41.2	42.6	35	40	35	39	46	44	48	39	**40.2**	32.6		
68	534862	183824	39.7	32.1	39.9	29.5	27	27	35	29	33	40	41		33.9	27.5		
71	533582	186545	21.9		37.7	30.7	26	29	26	25	29	36	33	26	29.1	23.6		
72	532947	182575	44.7	39.7	37.8	29.4	28	33	33	34	25	38	35	39	34.7	28.1		Triplicate 72, 73, 74
73	532947	182575	42.7	38.2	37.2	29.1	26	33	33	34	44	36	36		35.4	28.7		Triplicate 72, 73, 74
74	532947	182575	42	41.5	42.2	38	30	32	33		29	39	41	34	36.5	29.6		Triplicate 72, 73, 74
75	535149	184668	31	27.9	24.8	16.8	20	18	20	18	21	30			22.8	18.4		
76	533619	186524	64.7	62.1	52.8	44.7	37	42	44	41	34	43	36	39	**45.0**	36.5	32.1	Not within 10% of objective after dist correction
77	533591	185850				20.2	23	24			17	28	32		24.0	19.5		
80	533374	185801	32.1	24.3	22.6	14.1	15	17	15		13	25	23	19	20.0	16.2		
82	532814	183616	25.9	28.5	25.3	15.5	18	18	19	16	20	25	29	25	22.1	17.9		
84	533477	183373	35.1	31.6	26.7	12.6	26	24	23	24		33	38	28	27.5	22.2		
85	533440	183435	22.6	20.5	17.4	11.4	18			13	16	24	25	18	18.6	15.1		

87	532930	186761	29.8	21.6	22.6	14.4	15	17				22	23	21	20.7	16.8		
88	532576	187444	30.3	23.1	23.2	17.5	15	22		18	21	23	29	24	22.4	18.1		
90	533086	186066	34.4	31.3	25.2	16.1	13	16	15	17	20	25	30	22	22.1	17.9		
91	533740	187025	22.7	28.2	23.2	17	18	19	18	16	15	25	28	23	21.1	17.1		
92	533215	187112	35.6	31	27	20.4	21	20	24	36	22	28	27	26	26.5	21.5		
95	533923	184048	34.1	25.4	22.8	17.3	19	18	18	17		27	27	27	23.0	18.6		
96	532642	186175		28.3			22		17		21		26	22	22.7	17.9		
98	533599	186314		35.9	33.5	23.8	17		19	23	29	33	31	28	27.3	22.1		
99	532937	185963		31.1	28	17.3	19	24	22	15	14	29	30	24	23.0	18.7		
101	535598	185267	30.3	19.2	23.6	14.2	20	18	20	17	19	27	29	23	21.7	17.6		
102	535524	185355	24	22.1	21.4	14.7	17		15	12	12	25	26	26	19.6	15.8		
103	535730	185425	45	32	40.2		27	30		28	37	41	41	32	35.3	28.6		
107	535143	186303	45.7	43.7	52	41.6	31	32	37	39		43	42	36	**40.3**	32.6		
108	536237	184756	36.6	32.5	30.8	25.8	24	28	25	24	30	33	31	35	29.6	24.0		
115	532534	182870		25.2	31.3	19.5	24	19	18		20	28	31	21	23.7	19.2		
116	532728	182858	48.4	40.4	40.3	32.7	37	34	34	31	29	42	45	30	37.0	30.0		
117	532885	182376	27.7	24.1	22.1	19.5	23	21	22	18	21	28	30	23	23.3	18.9		
120	533041	182730	35	23.1	27.8	19	19	21	23	21	24		31	33	25.2	20.4		
121	533906	185523	37.3	32.7	31.1	22	25	14	23	21		32	33	23	26.7	21.7		
122	533768	185429	34.4		25.8	18.5	20	21	22		21	31	28	25	24.7	20.0		
123	534741	184863	46.4	31.8	32	30.1	29	33	32	27	32	35	39	32	33.3	27.0		
125	532953	183034	27.3	23.6	23.8	16.5	17	18	18	14	20	25	29	27	21.6	17.5		
129	533961	183544	31.9	28.6	24.9	21.1	24	23	25	21	24	28	32	24	25.6	20.8		
130	533356	184775	50.1	56.2	47.9	31.7	36	41	49	41	38	47	47	37	**43.5**	35.2		
131	535475	184962	39.4	28.9	28.8	26.8	22	24	28	23	21	33	36	20	27.6	22.3		
132	534834	185195	43.5	47.4	42.5		36	32	37	34	32	39	41	33	37.9	30.7		
133	534446	185083	42.4	33.6	32.3	28.4	26	32	34	25	32	37	40	30	32.7	26.5		
134	532518	187760	39.7	33.8	34	32.6	24	34	36	34	27	38	37	33	33.6	27.2		
137	534640	183847		26.9	23.2	16	23	17	23	17	21	27	28	19	21.9	17.8		
139	533836	187740	36.7	39.5	33.1	27.2	27	33	33	28	30	34	34	27	31.9	25.8		
140	533646	187666	45.2	30.4	32.1	25.4		26	24	17	29	34	34	29	29.6	24.0		
141	532997	182129	36.2	36.2		22.3	23	26	23	21	25	32	35	24	27.6	22.4		
147	535382	184279	36.7	41	34.3	22.6	24	20	30	28	27	37	39	29	30.7	24.9		
149	533476	183932	38.4	35	33.2	26.1	27	29	29	27	32	34	35	27	31.1	25.2		
153	535258	185174	41.1	38.6	27.1	24.6	23	27	25	31		27	32	25	29.2	23.7		
154	535361	185076	39.2	29	24.8	23.6	26	24	26	23	30	30	35	30	28.4	23.0		

156	535707	184715	34.3	33.8	19.4	27.5	28	30	27	17		34	24		27.5	22.3		
157	534374	186228	25.6	25.3	23	14.5	17	17	16	17	18	26	26	22	20.6	16.7		
159	532928	185866	40	31.6	29.4	17	22	28	23	22	20	30	33	27	26.9	21.8		
160	532871	185525	40.4	41.2	31.3	21.1	28	25	20	24	26	33	31	27	29.0	23.5		
161	533464	186526	26	25.2	22	11.9	17	17	16	15	26	24	28		20.7	16.8		
162	533521	186555	37.2	40.5	34.7	23.9	23	32	28	26	25	33	32	26	30.1	24.4		
166	533509	185537	32	29.6	28.1	16.6	20	17	16	15	14	26	30	21	22.1	17.9		
167	533563	185540	38.7	36.1	38	26.5		29	28	31	27	39	37	30	32.8	26.5		
172	532915	185763	49.8	45.8	36.4	21.2	29	26	28	26	27	34	33	27	31.9	25.9		
174	533651	185066	29.7	34.2	28.2	19.4	21	18	23	21		28	29	25	25.1	20.4		
176	533256	186502	31.9	24.3	22.2	15.3	17	16	17	14	18	25	24	22	20.6	16.7		
177	533275	185905	27.1	23.5	21.9	14	17	17	13	14	13	26	24	22	19.4	15.7		
178	533275	182810	30.2	27.8		14.5	20	18	22		18	27	27	33	23.8	19.2		
179	533180	183363	24.5	18.1	19.9	14	17	15	15	14	18	24	24	23	18.9	15.3		
180	534323	183335	27.4	23.2	20.4	13.9	20	18	21		17	26	25	23	21.4	17.3		
181	533608	183353	29.7		18	24.4	14			15	19	26	25	25	21.8	17.6		
182	532933	186769	21.2	23.1	18.7	14.4	13	16	15	13	16				16.7	14.9		
186	536957	184859	32.4	29	22.1	18.2	19	18	21	17	19	26	25	26	22.7	18.4		
188	533197	185493	31.5			14.4	15	16	16	15	18	25	25	22	19.8	16.0		
190	536137	185610	29.8	20.9	18.6	11.4	18	15	15	15	18	24	28	22	19.6	15.9		
191	535557	185741	27.5	20.2	21.1	13.8	14	17	16	16	16	24	25	20	19.2	15.6		
192	535165	185886	30.7			17.8	19	17	17	17		25	28	25	21.8	17.7		
193	535958	186107	29.5	27.6	21.2	15.9	17	18	22	14	13	25	25	30	21.5	17.4		
194	535638	183840	30.8	24.3	20.8	15.6	18		18	15	16	25	28	26	21.6	17.5		
195	534175	186158	28.4	26.4	23.2	14.7	16	17	14	15	17		25	22	19.9	16.1		
196	534715	186034	28.2	22.7	21.3	14.1	16	18	15	15	16	24	33	17	20.0	16.2		
197	534513	185555	29.2	21.7	19.1	14.3	19		20		17			20	20.0	16.3		
198	534664	186168	17.5		22.9	16.8	18	20	13	17	19	27	24	21	19.7	15.9		
199	534581	185919	29	25.1	22.2		16	17	16		15	25	25	21	21.1	17.1		
201	534199	187065	19.1	22.5	23.6		15		17	13			25	22	19.7	15.4		
203	534156	187319	30.5	24.3	21	16.8	18	18	18	15	20	23	28	19	21.0	17.0		
204	535008	186764	24.5	21.4	18	12.4	15		16	14	17		24		18.0	14.8		
205	534891	187130	27.2	24.6	26.2		17	21		13	18	27	27	24	22.5	18.2		
206	535965	184559	36.8	28.1	32.2	22.9	23	25	29	20	24	33	39	24	28.1	22.7		
209	535363	184117	20.6	22.1	21.8	13.4		16	17		18	24	33	20	20.6	16.7		
210	533996	185005	36.2	29.4	40.1	28.3	28		31	27	31	40	35		32.6	26.4		

211	532047	186569	32.3	30.3	25.1	15.7	14	21	21	21	21	28	25	24	23.2	18.8		
212	535360	183845	35.7	33.3	29.4	21.1	25	24	24	24	25		33	31	27.8	22.5		
213	532350	187783		23.4	25.4	15.4	11	17	19	14	14	26		23	18.8	15.2		
214	532970	186361	31.5	30.7	26.5	19.7	21	22	21	22	21	30		25	24.6	19.9		
215	534887	186061	39.5	32.3	30.8	27.5	26	24	24	28	26	35	30	21	28.7	23.2		
216	534250	186665	29.2	28.9	23.8	15.9	19	19	20		15	28	29	24	22.9	18.5		
217	533116	186580	33.8		23.6	14.8	16			15	12	26	28	20	21.0	17.0		
218	534854	183586	47.5	43.7	43.1	35.1	29	33	40	34	35	41	40	32	37.8	30.6		
219	532884	182581	28	34.5	33.7	26.9	21	24	27	26	20	32	32	30	27.9	22.6		
220	534944	184441	40.3	29.6	32	25.1	28	27	26	24		36	35	30	30.3	24.5		
221	535319	185630	36.4	32.3	23.5	18.8	15	18	21	22	16	17	32		22.9	18.6		
222	532347	186700	34.6	29.7	25.5	18.6		21	20	19	19	27	27	24	24.1	19.5		
223	535062	184810	30.9	27.5	21.5	18.4	23	19	21	18	22	28	29	29	23.9	19.4		
224	534875	184882	37	26.6	35.3	25.6	23	26	29	26	25	35	35	29	29.4	23.8		
225	533595	185957	39.3	29.8	34	22.6	19	24	22	24	22		30	29	26.9	21.8		
226	534008	185723	41.2	38.9	31.7			30	25	23	23	33	31	25	30.2	24.4		
227	533857	185202	35.3	30.2	29.9	23.6	24		25	24	21	32	34	29	28.0	22.7		
228	534923	185187	55.2		46.7	36.3	33	45	50	41	36	41	36	34	**41.3**	33.4		
229	535076	185308	32.6	23.6	23.7		26	25	25	23	39	29	32	24	27.5	22.3		
230	535207	185311	54.3	44.7	44.3	40.3	35	38		40	37	41	42	34	**41.0**	33.2		
231	535055	185626	43.7	42.5	31.3	30.7	30	35	36	34	34	39		36	35.7	28.9		
232	535657	185046	36.1	30.6	31.2	26.8			28	27		34	26		30.0	23.1		
233	533416	182564	42.2	38.1	32.4	26.6		27	26	24	29	31	36	32	31.3	25.4		
234	533246	184787		41.8	42.9	31.9	34	36	40	24	31	41	38	27	35.2	28.5		
235	533948	186094		35.2	32.6	32.6	28	29	28	29	29	37	37	30	31.6	25.6		
236	533759	186655		30.1	34	28.7	25	29	31	29	25	34	32	30	29.8	24.1		
237	536426	184720		54.6	52.7	46.9	32	44		47	38		45	27	**43.0**	34.8		
238	532852	183044		39.2	32.1	26		32	31	28	26	37	38	46	33.5	27.2		
239	534861	186275	37.1		29.7	25.1	24	24	31	21	26	33	30	26	27.9	22.6		
240	533076	186498					25	25	25	27	26	32	29	28	27.1	23.0		

All erroneous data has been removed from the NO_2 diffusion tube dataset presented in Table R.
Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19.
Local bias adjustment factor used.
National bias adjustment factor used.
Where applicable, data has been distance corrected for relevant exposure in the final column.

London Borough of Hackney confirms that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

Exceedances of the NO_2 annual mean objective of 40µg/m³ are shown in **bold**.

NO_2 annual means exceeding 60µg/m³, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

See Appendix A for details on bias adjustment and annualisation.

Appendix C Maps of Monitoring Locations and AQMAs

Figure A. Map of Non-Automatic Monitoring Site(s)

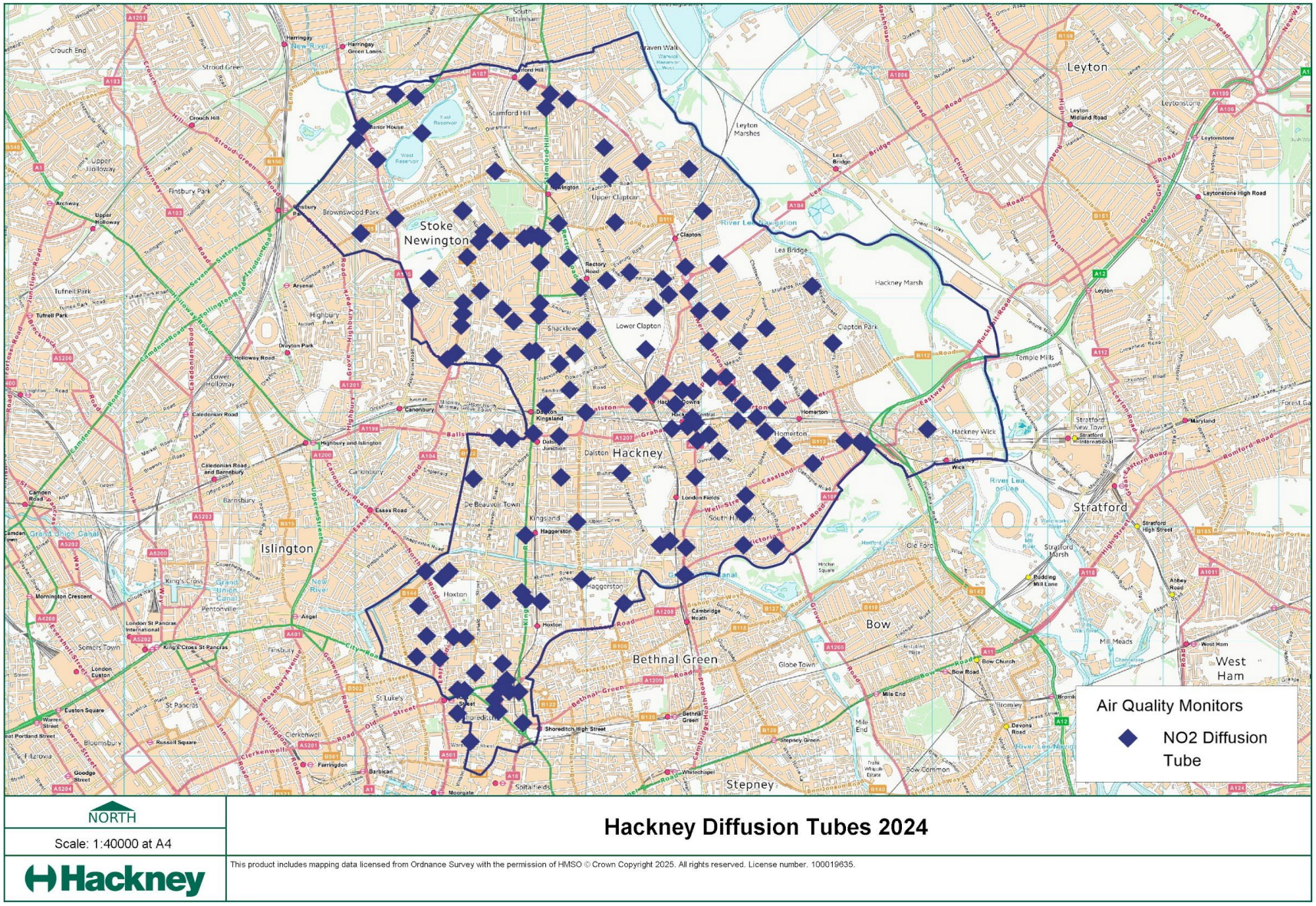


Figure B. Map of Non-Automatic Monitoring Sites (South Area)

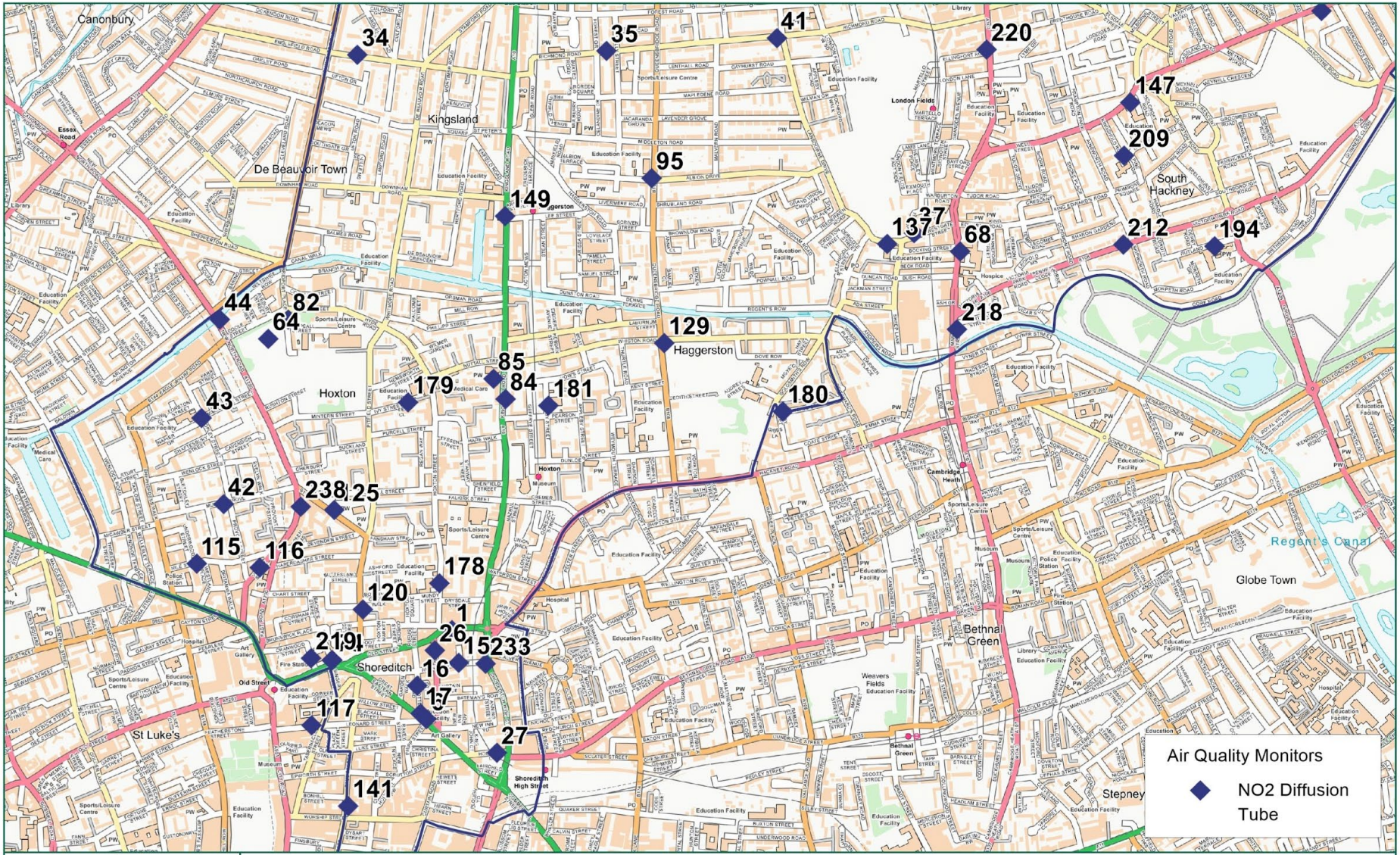


Figure C. Map of Non-Automatic Monitoring Sites (Central Area)

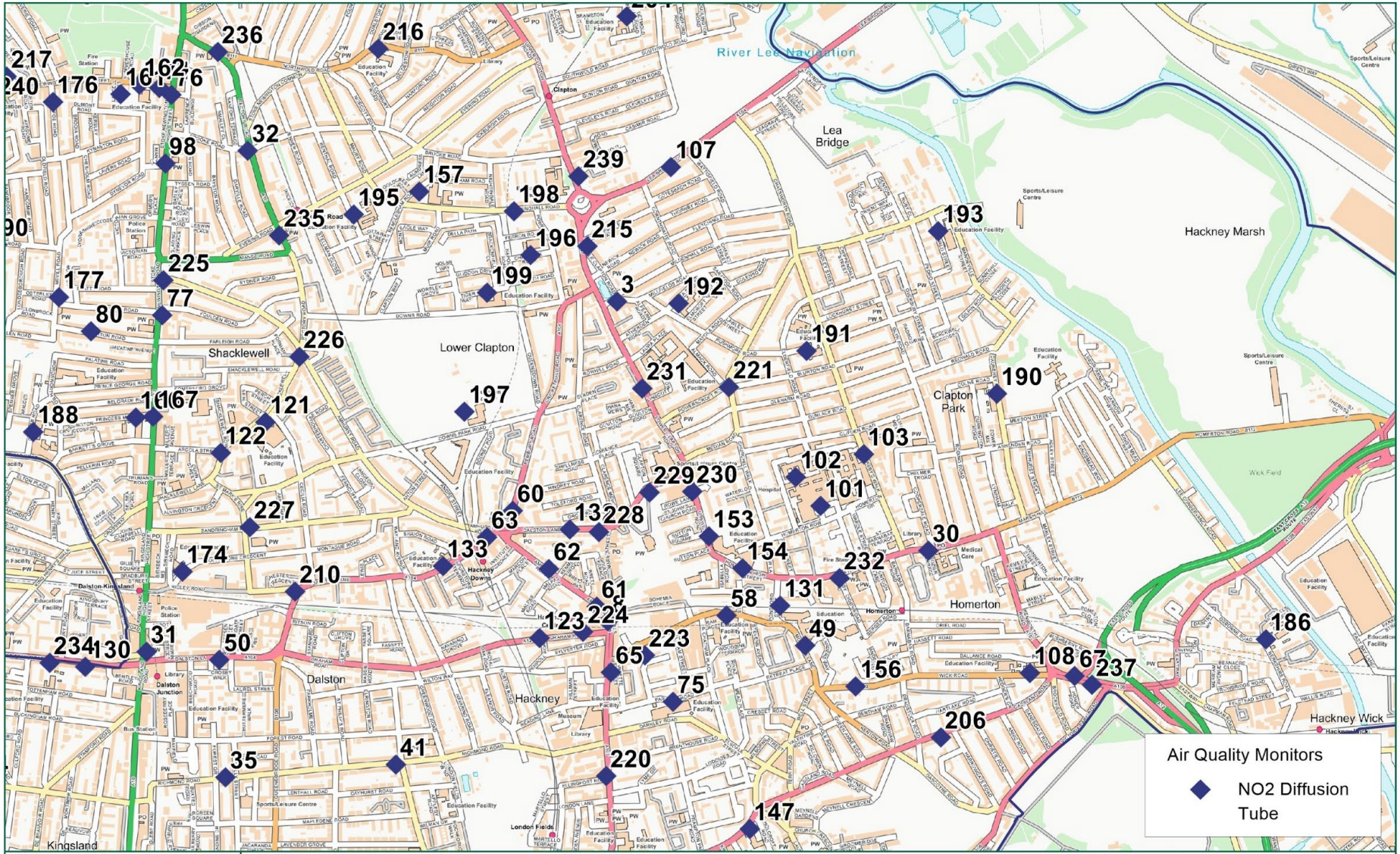


Figure D. Map of Non-Automatic Monitoring Sites (North West Area)

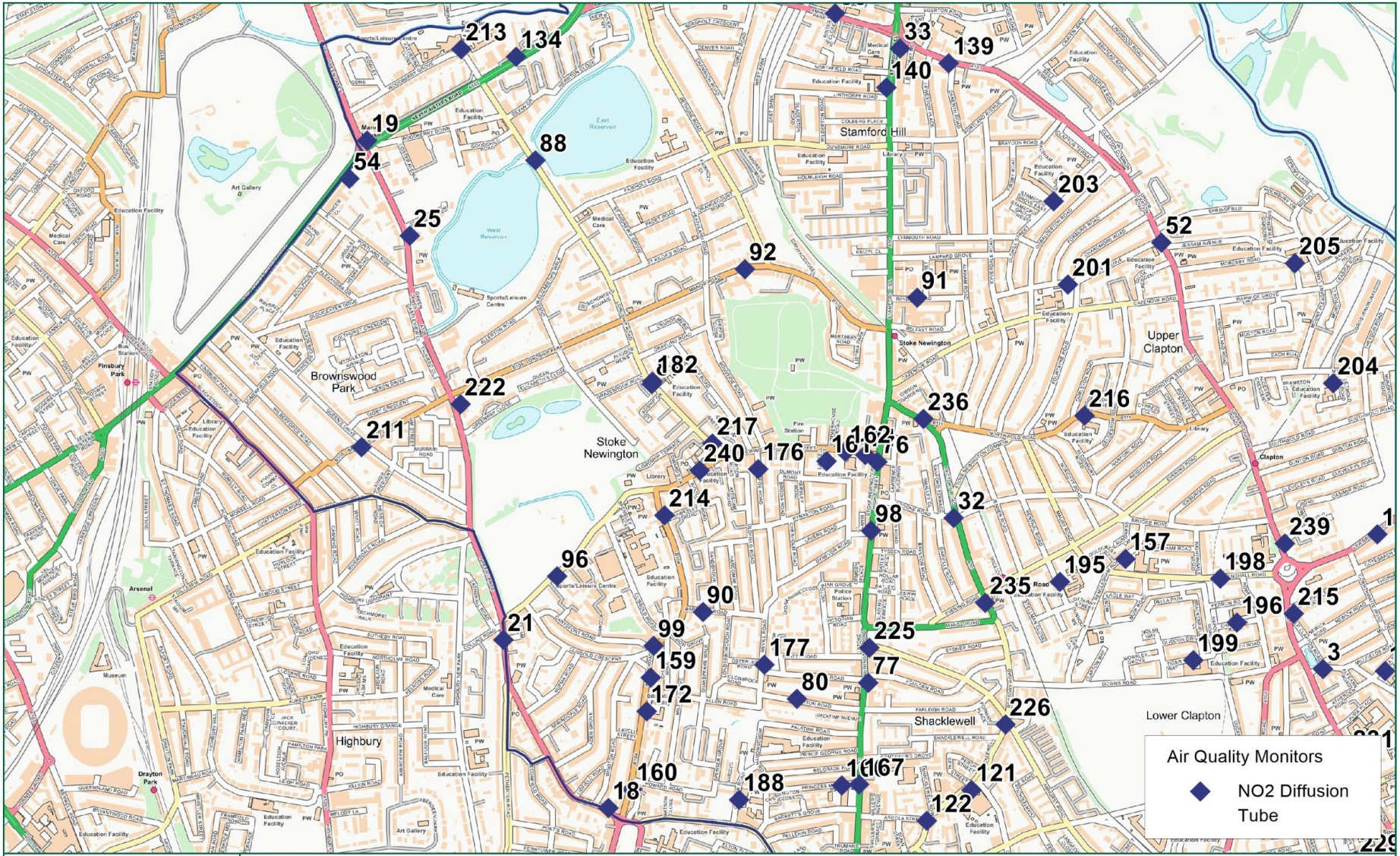


Figure E. Map of Non-Automatic Monitoring Sites (North East Area)

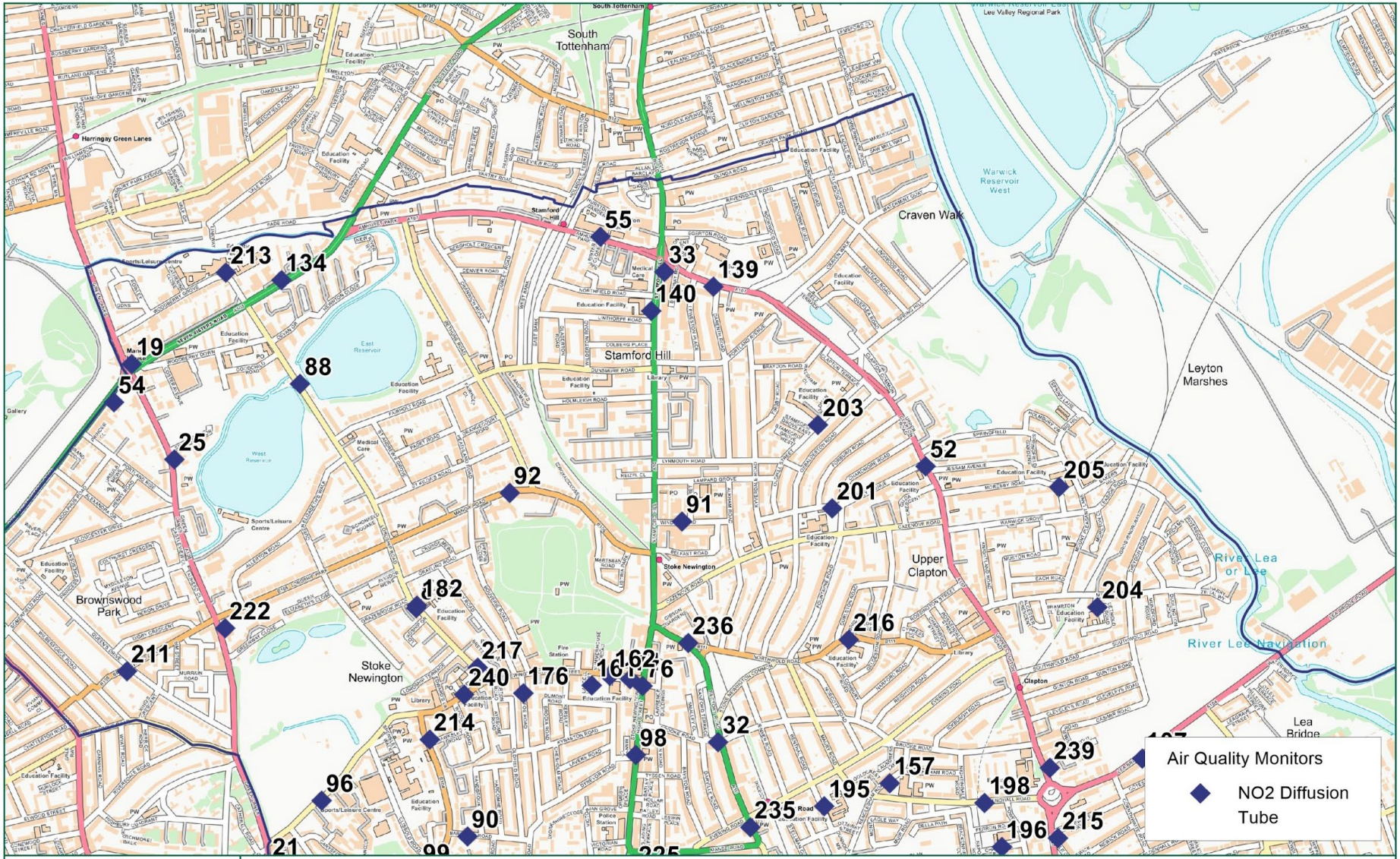
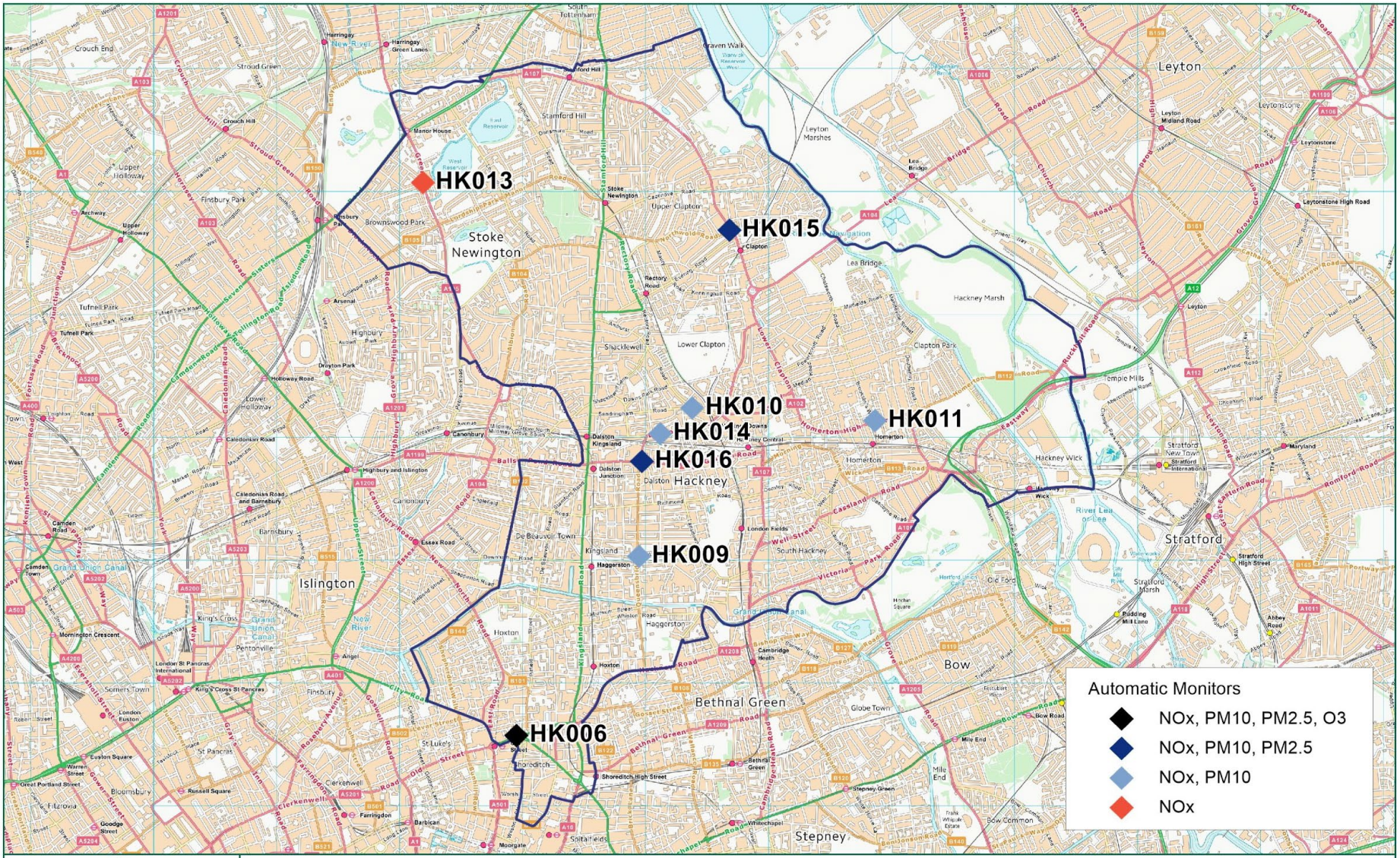


Figure F. Map of Automatic Monitoring Sites



Hammersmith & Fulham Air Quality Annual Status Report for 2024

Date of publication: May 2025

This report provides a detailed overview of air quality in Hammersmith& Fulham during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process[1].

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[1] LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19))

Contents

Tables

Figures

Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQP	Air Quality Positive
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
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 and International Standards, Objectives and Guidelines

Pollutant	Standard / Objective / Guideline	Averaging Period	Date[1]
Nitrogen dioxide (NO_2)	200 µg m^{-3} not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO_2)	40 µg m^{-3}	Annual mean	31 Dec 2005
Nitrogen dioxide (NO_2)	WHO AQG[2]: 10 µg m^{-3}	Annual mean	
Particles (PM_{10})	50 µg m^{-3} not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 45 µg m^{-3} not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM_{10})	40 µg m^{-3}	Annual mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 15 µg m^{-3}	Annual mean	
Particles ($PM_{2.5}$)	10 µg m^{-3}[3]	Annual mean	2040
Particles ($PM_{2.5}$)	London Mayoral Objective[4]: 10 µg m^{-3}	Annual mean	2030
Particles ($PM_{2.5}$)	WHO AQG[2]: 5 µg m^{-3}	Annual mean	
Particles ($PM_{2.5}$)	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Particles ($PM_{2.5}$)	WHO AQG[2]: 15 µg m^{-3}	24-hour mean	
Sulphur dioxide (SO_2)	266 µg m^{-3} not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO_2)	350 µg m^{-3} not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	125 µg m^{-3} mot to be exceeded more than 3 times a year	24-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	WHO AQG[2]: 40 µg m^{-3} not to be exceeded more than 3-4 times a year	24-hour mean	

Notes:

(1) Date by which to be achieved by and maintained thereafter

(2) 2021 World Health Organisation Air Quality Guidelines

(3) Environmental Target Regulations under the Environment Act 2021

(4) London Mayoral Objective

1. Air Quality Monitoring

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Inlet Height (m)
HF4	Shepherds Bush Town Centre	Roadside	532313	179900	NO_2, PM_{10}, $PM_{2.5}$	YES	Chemiluminescent; TEOM for PM_{10} until 23/11/2021 and then Continuous Beta attenuation Particulate Monitor (BAM) for PM_{10} and $PM_{2.5}$	6	2	2
HF5	Hammersmith Town Centre	Roadside	523343	178567	NO_2, PM_{10}, $PM_{2.5}$, O_3	YES	Chemiluminescent. Continuous Beta attenuation Particulate Monitor (BAM) for PM_{10} and $PM_{2.5}$, UV absorption	3.7	1.2	2.3
HF6	Fulham Town Centre	Roadside	525339	177244	NO_2, PM_{10}, $PM_{2.5}$, O_3	Yes	Chemiluminescent. FIDAS for PM_{10} and $PM_{2.5}$, UV absorption	14	3.5	2.3
HF7	Riverwalk	Urban Background	523389	178131	NO_2, PM_{10}, $PM_{2.5}$, O_3	Yes	Chemiluminescent. FIDAS for PM_{10} and $PM_{2.5}$, UV absorption	17.5	3.5	2.3
HF8	Wormwood Scrubs	Roadside	522784	181215	NO_2, PM_{10}, $PM_{2.5}$, O_3	Yes	Chemiluminescent. FIDAS for PM_{10} and $PM_{2.5}$, UV absorption	10.5	4.1	2.3
HF9	Sands End	Roadside	525732	175671	NO_2, PM_{10}, $PM_{2.5}$, O_3	Yes	Chemiluminescent. FIDAS for PM_{10} and $PM_{2.5}$, UV absorption	9.3	7.8	2.3

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable

Table C. Details of Non-Automatic Monitoring Sites for 2024

There are no Non-Automatic Monitoring sites located in the borough.

1.2 Comparison of Monitoring Results with AQOs

Table D. Annual Mean NO_2 Monitoring Results: Automatic Monitoring (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
HF4	532313	179900	Roadside	99.75	99.75	**71.0**	**60**	**43**	**41**	35	36	34
HF5	523343	178567	Roadside	98.99	98.99	-	**53**	37	**44**	**45**	**40**	37
HF6	525339	177244	Roadside	99.56	99.56	-	-	-	-	-	-	25
HF7	523389	178131	Urban Background	83.42	83.42	-	-	-	-	-	14	13
HF8	522784	181215	Roadside	99.60	99.60	-	-	-	-	-	-	18
HF9	525732	175671	Roadside	99.65	99.65	-	-	-	-	-	16	15

Notes:

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the NO_2 annual mean AQO of 40 µg m^{-3} are shown in **bold**.

NO_2 annual means in excess of 60 µg m^{-3}, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias.

All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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%)..

Table E. Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg m^{-3})

There are no Non-Automatic Monitoring sites in the borough.

Table F. NO_2 Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg m^{-3}

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %([a])	Valid data capture 2024 %([b])	2018	2019	2020	2021	2022	2023	2024
HF4	532313	179900	Roadside	99.75	99.75	8	4	0	0	0	1	0
HF5	523343	178567	Roadside	98.99	98.99	-	2	1	2	7	0	1
HF6	525339	177244	Roadside	99.56	99.56	-	-	-	-	-	-	0
HF7	523389	178131	Urban Background	83.42	83.42	-	-	-	-	-	0	0(70)
HF8	522784	181215	Roadside	99.60	99.60	-	-	-	-	-	-	0
HF9	525732	175671	Roadside	99.65	99.65	-	-	-	-	-	4	0

Notes

Results are presented as the number of 1-hour periods where concentrations greater than 200 µg m^{-3} have been recorded.

Exceedance of the NO_2 short term AQO of 200 µg m^{-3} over the permitted 18 hours per year are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

(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%)

Table G. Annual Mean PM_{10} Automatic Monitoring Results (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %(a)	Valid data capture 2024 %(b)	2018	2019	2020	2021	2022	2023	2024
HF4	532313	179900	Roadside	95.46	95.46	26.4	25	28	34	38.8	22	20
HF5	523343	178567	Roadside	89.07	89.07	-	22	19	19	22.5	17	15
HF6	525339	177244	Roadside	71.77	71.77	-	-	-	-	-	-	13.1
HF7	523389	178131	Urban Background	98.88	98.88	-	-	-	-	-	-	12
HF8	522784	181215	Roadside	97.92	97.92	-	-	-	-	-	-	14
HF9	525732	175671	Roadside	99.98	99.98	-	-	-	-	-	-	13

Notes

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the PM_{10} annual mean AQO of 40 µg m^{-3} are shown in **bold**.

All means have been “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

.

Table H. PM_{10} Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM_{10} 24-Hour Means > 50 µg m^{-3}

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
HF4	532313	179900	Roadside	95.46	95.46	4	11	13	**55**	**74**	9	1
HF5	523343	178567	Roadside	89.07	89.07	-	5	5	1	8	6	0
HF6	525339	177244	Roadside	71.77	71.77	-	-	-	-	-	-	0(20)
HF7	523389	178131	Urban Background	98.88	98.88	-	-	-	-	-	-	0
HF8	522784	181215	Roadside	97.92	97.92	-	-	-	-	-	-	0
HF9	525732	175671	Roadside	99.98	99.98	-	-	-	-	-	-	0

Notes

Exceedances of the PM_{10} 24-hour mean objective (50 µg m^{-3} over the permitted 35 days per year) are shown in **bold.**

Where the period of valid data is less than 85% of a full year, the 90.4th percentile is provided in brackets.

(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%).

Table I. Annual Mean $PM_{2.5}$ Automatic Monitoring Results (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
HF4	532313	179900	Roadside	97.12	97.12	-	-	-	-	**13.5**	**10**	9
HF5	523343	178567	Roadside	98.04	98.04	-	**15**	**14**	**11**	**10**	9	9
HF6	525339	177244	Roadside	71.77	71.77	-	-	-	-	-	-	7.8
HF7	523389	178131	Urban Background	98.88	98.88	-	-	-	-	-	-	8
HF8	522784	181215	Roadside	97.92	97.92	-	-	-	-	-	-	8
HF9	525732	175671	Roadside	99.98	99.98	-	-	-	-	-	-	7

Notes

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the $PM_{2.5}$ annual mean concentration target of 10 µg m^{-3} are shown in **bold**.

All means have been “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

Table J. Annual Mean Ozone (O_3) Automatic Monitoring Results (µg m-3)

Site ID	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2019	2020	2021	2022	2023	2024
HF5	95.65	95.65	0	2	2	0	0	2
HF6	99.33	99.33	-	-	-	-	-	**12**
HF7	93.62	93.62	-	-	-	-	-	**20**
HF8	99.81	99.81	-	-	-	-	-	**23**
HF9	95.49	95.49	-	-	-	-	-	**21**

Notes

Exceedances of the 8 hour mean O_3 objective (100 µg/m^{-3} over the permitted 10 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%)

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 12 months. The AQAP should specify how air quality targets will be achieved and maintained and provide dates by which measures will be carried out.

A summary of AQMAs declared by the London Borough of Hammersmith & Fulham can be found in Table L. The table presents a description of the AQMA that is currently designated within Hammersmith& Fulham. Appendix C provides maps of AQMA and also the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designation are as follows:

- NO_2 annual mean.
- PM_{10} 24-hour mean.

Table K. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance : Declaration	Level of Exceedance : Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
London Borough of Hammersmith & Fulham	Declared 03/10/2000	NO_2 Annual Mean 40 µg m^{-3}	Entire borough	NO	41 µg m-3	37 µg m^{-3}	1	AQAP 2025-2030 16/12/2024	https://www.lbhf.gov.uk/sites/default/files/2025-06/h-f_web_air-quality-action-plan_2025-2030-110625.pdf
London Borough of Hammersmith & Fulham	Declared 03/10/2000	PM_{10} 24 Hour mean 50 µg m^{-3} not to be exceeded more than 35 times a year	Entire borough	NO	50 µg m^{-3}	51 µg m^{-3}	2	AQAP 2025-2030, 16/12/2024	https://www.lbhf.gov.uk/sites/default/files/2025-06/h-f_web_air-quality-action-plan_2025-2030-110625.pdf

☒ **London Borough of Hammersmith & Fulham confirm the information on UK-Air regarding their AQMA(s) is up to date (confirm by selecting in box).**

☒ **London Brough of Hammersmith & Fulham confirm that all current AQAPs have been submitted to GLA (confirm by selecting in box).**

2.2 Air Quality Action Plan (AQAP) Progress

The Hammersmith & Fulham AQAP was adopted in 2002. Our new 2025-2030 Action Plan was adopted in January 2025, and next year's ASR will include brand new updates on the actions in the new AQAP.

The AQAP 2025-2030 was approved and adopted by full council on 20th January 2025. This AQAP goes far beyond the legal requirements for councils on air quality, by committing Hammersmith & Fulham by 2030 to comply with the more ambitious annual mean WHO (2021) air quality Guideline Values for Nitrogen Dioxide NO_2 (10ug/m^{-3}) and Particulates PM_{10} (15ug/m^{-3}) and $PM_{2.5}$ (5ug/m^{-3}). It also includes actions to tackle pollution from new sources not usually addressed by local authorities, such as indoor air pollution.

Table M provides a brief summary of London Borough of Hammersmith & Fulham progress against the Air Quality Action Plan, showing progress made this year.

Table L. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
Our designated 3 key measures are highlighted in bold in the table below.			
1	Emissions from developments and buildings	Ensuring emissions from construction are minimised	The council continues to follow all relevant policy in working to minimise and mitigate construction emissions.
2	Emissions from developments and buildings	Ensuring enforcement of Non Road Mobile Machinery (NRMM) air quality policies	
3	Emissions from developments and buildings	Enforcing CHP and biomass air quality policies	
4	Emissions from developments and buildings	Enforcing Air Quality Neutral policies	

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
5	Emissions from developments and buildings	Ensuring adequate, appropriate, and well located green space and infrastructure is included in new developments	• As of 2024, the council has used its planning process to deliver 27,957m2 of green roofs across the borough. Forming part of a wider strategy to 'green the grey', green roofs can remove pollution, boost biodiversity and enhance the beauty of our built environment. • Biodiversity Net Gain (BNG) became a statutory planning requirement for all eligible developments in England from February 2024. This requires new developments to have a measurably positive impact on biodiversity. The council is ensuring that all developments abide by this policy and maximise BNG onsite wherever possible.
6	Emissions from developments and buildings	The whole of the borough has been designated as a Smoke Control Area. The associated restrictions will be fully promoted and enforced including a review of the air pollution impacts of approved appliances and fuels and potential local restrictions.	In 2024 the council introduced a new borough-wide smoke control area, utilising new powers under the Environment Act 2021. More details can be found at: Smoke Control Order 2024 | London Borough of Hammersmith & Fulham
7	**Emissions from developments and buildings**	Promoting and delivering in the Council's own stock energy efficiency retrofitting projects in workplaces and homes (Including using the GLA RE:FIT programme) to replace old	• As of 2024 312 H&F social homes are heated by air source heat pumps or hybrid heating systems. The pumps transfer heat from outside air to central

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		polluting heat and energy plant with new low emission plant (e.g. old boilers with new ultra low-NO_x boilers); and top-up lost insulation in combination with other energy conservation measures.	heating systems and offer a more sustainable and efficient alternative to boiler-only heating systems. • We secured funding to deliver heat pumps in thirteen council-owned buildings and four schools, and these projects are now underway. • We now have ten communal hybrid heat systems in housing estates in H&F. These systems provide heating for households from a central and partially renewable source, cutting emissions and residents' energy bills. • We are installing one of west London's largest heat pump systems at the Civic Campus in Hammersmith. This project will provide clean, efficient heating to over 200 homes, commercial and business premises and our new and improved Town Hall. • The council reached the final stage of its innovative Energiesprong pilot in 2024, delivering whole house retrofitting to eleven council homes to improve their energy efficiency and cut fuel costs for tenants. • We have delivered energy efficiency works to more than 1,500 social homes in the past two years, including measures to improve insulation and ventilation and replacing windows and doors. This will enhance the comfort of

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			homes, reduce energy bills and save approximately 390 tonnes of CO2 per year. • We have delivered whole house retrofit plans to 166 privately-owned houses and flats in H&F, enabling residents to identify the best energy efficiency measures for their homes.
8	Emissions from developments and buildings	The council to promote and deliver Blue/Green schemes like Sustainable Drainage Systems (SuDs) in homes and offices and private schemes via the development control planning process.	• We continued to deliver sustainable drainage systems (SuDS) throughout 2024. SuDS manage water in ways that mimic natural drainage processes and reduce flood risk, such as by replacing hard surfaces with permeable alternatives that allow water to infiltrate the ground. As of 2024, we have delivered SuDS in 43,481m2 of our highways. • The council helped pupils at Old Oak Primary School to install planters in their playground, which capture rainwater and slow the flow of water to drains. We also hosted sessions to teach pupils about SuDS and their importance in the context of a changing climate.
9	Cleaner transport	The need to plan for walkability to be recognised in SPDs in local plan	In 2024 the council began the process of writing a new Local Plan; further details of this will be provided in next year's ASR, as we will

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			have begun the formal consultation process for the new Local Plan.
10	Emissions from developments and buildings	The council to exercise its enforcement powers to ensure that developers fulfil commitments in delivering greening; also, to seek ways of maintaining mature tree cover when planning for new developments.	• As of 2024, the council has used its planning process to deliver 27,957m2 of green roofs across the borough. Forming part of a wider strategy to 'green the grey', green roofs can remove pollution, boost biodiversity and enhance the beauty of our built environment. • Biodiversity Net Gain (BNG) became a statutory planning requirement for all eligible developments in England from February 2024. This requires new developments to have a measurably positive impact on biodiversity. The council is ensuring that all developments abide by this policy and maximise BNG onsite wherever possible.
11	Emissions from developments and buildings	Local plan to specify the need to consider the impact of all new developments on air quality.	In 2024 the council began the process of writing a new Local Plan; further details of this will be provided in next year's ASR, as we will have begun the formal consultation process for the new Local Plan.
12	Emissions from developments and buildings	Support residents by providing energy efficiency advice and by installing small and low-cost energy efficiency measures to combat climate change. Reduce their energy bills and carbon footprint through the Healthy (Healthier)	• In 2024 we launched H&F Healthy Homes to help residents make their homes warmer and more cost efficient. The service, which offers energy-saving advice, home visits and assistance with accessing financial support, builds on

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		Homes project and through home energy visits by trained green experts.	H&F's Winter Ready Homes Scheme, which helped more than 1,700 residents to enhance their homes with simple efficiency measures such as LED lightbulbs and radiator foil. • We have delivered whole house retrofit plans to 166 privately-owned houses and flats in H&F, enabling residents to identify the best energy efficiency measures for their homes.
13	Emissions from developments and buildings	Arboricultural and greening policies to be promoted in the local plan and SPDs.	In 2024 the council began the process of writing a new Local Plan; further details of this will be provided in next year's ASR, as we will have begun the formal consultation process for the new Local Plan.
14	Public health and awareness raising	The council and other decision makers to keep under review new environmental initiatives and best practices as these come forward.	This is a BAU action – the council continues to monitor, review and adopt best practice as these arise, in particular around new guidance and requirements to minimise emissions from construction.
15	**Public health and awareness raising**	Ensure that Director of Public Health and Deputy Director of Public Health for H&F have been fully briefed on the scale of the problem in your local authority area; what is being done, and what is needed. A briefing should be provided.	The Council's Better Air Better Health partnership was launched in 2024, consisting of a formal collaboration between the council (including its Public Health team), Imperial College Healthcare NHS Trust, and Imperial College. The council's Director of Public Health sits on the partnership board and is fully engaged with the council's work in this area.
16	Public health and awareness raising	Public Health Teams should be supporting engagement with local stakeholders (businesses, schools, community groups and	The Council's Better Air Better Health partnership was launched in 2024, consisting of a formal collaboration between the council

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		healthcare providers). They should be asked for their support via the Deputy Director for Public Health for H&F when projects are being develop: utilising the reach of public health services to this stakeholder group and developing the key public health messaging for stakeholders.	(including its Public Health team), Imperial College Healthcare NHS Trust, and Imperial College. The council's Director of Public Health sits on the partnership board and is fully engaged with the council's work in this area. Public health colleagues are involved in early project development, and funding opportunities are sought at the intersection of air quality and public health. A 2024 example of this was the Air Quality Grant Funded awarded (and then retracted by Central Government) Indoor AQ Monitoring project that was developed in partnership with our public health team and LSE.
17	Public health and awareness raising	Director of Public Health to have responsibility for ensuring their online Joint Strategic Needs Assessment (JSNA) has up to date information on air quality impacts on the population	AQ information is included in JSNA and the public health team is aware of this requirement.
18	Public health and awareness raising	Strengthening co-ordination with Public Health by ensuring that at least one Consultant-grade public health specialist within the borough has air quality responsibilities outlined in their job profile	This action to be confirmed in next year's ASR.
19		Ensure that the Head of Transport has been fully briefed on the Public Health duties and the fact that all directors (not just Director of Public Health) are responsible for delivering them, as well as on air quality opportunities and risks related to transport in the borough. Provide a briefing to be disseminated amongst the Transport team.	Regular briefings and involvement between the Climate and Transport teams took place in 2024. One example of close co-working was our school streets programme.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
20	Public health and awareness raising / Delivery servicing and freight	Engagement with businesses to increase workplace travel plans and implement local air quality improvement measures	The council's Climate Alliance, its environmental business network, had a lunch and learn session on air quality, with follow up information provided to businesses on emissions from freight and on indoor air quality.
21	Public health and awareness raising	Promotion of availability of airTEXT and walkit.com.	The council continues to promote airTEXT to residents and schools in our messaging and pollution alert services.
22	Cleaner transport	Encourage schools to join the TfL STARS accredited travel planning programme and GLA's Healthy Schools' London Programme by providing information on the benefits to schools and supporting the implementation of such programmes.	The council has a dedicated officer working on Travel for Life.
23	Public health and awareness raising	Air quality at schools, such as The Mayor's School Air Quality Audits' Initiative Focus on air quality at schools- through delivery of air quality teaching sessions with schools and air quality audits.	In 2024 all primary schools in the borough received air quality audits, outlining key recommendations and actions to schools to reduce emissions and to mitigate exposure levels for pupils. Engagement through teaching sessions took place in 2024 through assemblies and other engagement of our school streets programme.
24	Public health and awareness raising	Raise awareness of the impact of individual behaviour on air quality within the council and to the public including events such as National Clean Air Day.	The council undertook a number of events for Clean Air Day in 2024, including a number of active travel events and play streets at schools.
25	Public health and awareness raising	Public air pollution alerts and forecast to be made more widely available.	We continue to promote air pollution forecasts, and in 2024 worked with Imperial College London on their Awair project. For more details see the project website: Awair

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
26	Public health and awareness raising	Lobby central government to retain air quality legislation after withdrawal from the European Union in 2019.	No update was taken against this action in 2024.
27	Public health and awareness raising	Lobby central government to meet World Health Organization (WHO) air quality guidelines	No update was taken against this action in 2024, however in 2024 the council's drafted Air Quality Action Plan 2025-30 committed the council to meeting the WHO air quality guideline levels by 2030.
28	Cleaner transport	Lobby tyre, brake and clutch manufacturers to use materials which reduce small particles released through wear.	No update was made against this action in 2024.
29	Cleaner transport / Delivery servicing and freight	Develop a procurement policy document for air quality to require that suppliers have Fleet Operator Recognition Scheme (FORS) accreditation	Contractors are required to have FORS accreditation; this extends to requirements for contractors working on construction sites in the borough.
30	Cleaner transport / Delivery servicing and freight	Develop a procurement policy document for air quality to require that suppliers have sustainable logistical measures in place (and include requirements for preferentially scoring bidders based on their sustainability criteria)	Air quality is included in wider procurement documents as well as in the council's social values requirements for contracts over £100,000.
31	Borough Fleet	Join the Fleet Operator Recognition Scheme (FORS) for the borough's own fleet and obtain Gold accreditation	Action complete.
32	Borough Fleet	Increase the number of hydrogen, electric, hybrid, and cleaner vehicles in the borough's fleet	20% of the council's fleet is fully electric, with more improvements expected in next year's ASR. Highlights in 2024 include a full feasibility study was undertaken for the electrification of our main fleet depot. And we worked with Veolia to introduce 20 electric vehicles in our waste fleet. This includes 8 electric cargo bikes. See for

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			more details: H&F waste team's electric fleet has hit the streets | London Borough of Hammersmith & Fulham
33	Borough Fleet	Accelerate uptake of new Euro VI larger vehicles (e.g. HGVs) in the borough's fleet	Action complete.
34	Borough Fleet	Smarter Driver Training for drivers of vehicles in Borough's Own Fleet i.e. through training of fuel efficient driving and providing regular re-training of staff	No update in 2024 for this action.
35	Localised solutions	The council to increase tree, hedge and grass planting on council-owned land and highways.	• The council completed the H&F Tree Strategy 2024-2030 in 2024. This sets out our plan to preserve and expand the borough's urban forest in the years to come, including a commitment to increase canopy coverage to 16.5% by 2030. This will help to improve air quality, regulate temperature and provide wildlife habitats. • As of 2024, H&F Council has funded the creation of five Tiny Forests. Tiny Forests are dense, fast-growing woodlands, about the size of a tennis court. Each forest packs 600 native trees into a small urban area. • The number of 'friends of' park groups in H&F grew in 2024, with the creation of Friends of Fulham Cemetery. These groups have supported the council's ecological projects, with monitoring schemes and habitat creation for example. Friends of Wormholt Park helped to deliver a Tiny Forest planting

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			day in December 2024, attended by more than 120 residents who planted hundreds of new trees.
36	Localised solutions	Implement opportunities for small scale LENs (Low Emission Neighbourhoods) and investigate opportunities for funding of further LEN projects	This action is being undertaken as BAU across a number of council projects – LEN principles are assessed for school streets and neighbourhood improvement programmes. For example in 2024 we introduced 3 school streets with a range of 'plus' measures also being implemented alongside the timed closures.
37	Localised solutions	The council will commit to modify the pruning regime of trees on main roads in the borough	BAU action being undertaken by various teams across the council.
38	Localised solutions	The council to increase playing fields, pocket parks, and sporting facilities in the borough to enable residents to keep fit and active.	BAU action being undertaken by various teams across the council. Examples of work undertaken in 2024 includes: • H&F Council spent £400,000 to create a new community garden at Frank Banfield Park in 2024. This includes a new wildflower meadow, raised planters, a living habitat wall and wildlife pond, and a new community space made from repurposed shipping containers. The project was delivered thanks to residents who volunteered to plant the shrubs and build the habitat wall. • H&F Council installed new Pollinator Pitstops in 2024. These support local

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			populations of pollinating insects, such as bees and butterflies, by providing them with the plants they need for survival. For example, we partnered with environmental groups Earthwatch and BugLife to deliver bulb planting in Hammersmith Park and North Open Space. • The H&F Green Investment facilitated the transformation of Eelbrook Common in April 2024, as the remnants of the old paddling pool were replaced by a vibrant wildflower garden. Residents volunteered to create the garden, which has enhanced the look and feel of the space, provided a home for local wildlife and improved flood resilience.
39	Cleaner transport	Discouraging unnecessary idling by taxis, coaches and other vehicles through enforcement and awareness raising campaigns and carryout patrols in hotspot areas such as taxi ranks bus stands and schools	We continue to discourage idling through signage, although no specific anti idling events took place in 2024.
40	Cleaner transport	Speed control measures e.g. lowering the speed limit to 20mph in built up residential areas	We are a 20mph borough. Roads, bridges and pavements | London Borough of Hammersmith & Fulham
41	Cleaner transport	Increase the proportion of electric, hydrogen and ultra-low emission vehicles in Car Clubs	There are now 46 car club bays on street in Hammersmith and Fulham which are operated by Zipcar and Enterprise Car Club. We have plans to introduce more as demand grows. We have not actively engaged with providers in

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			2024 but improvements in the makeup of their fleet are continuing.
42	Cleaner transport	To hold Very Important Pedestrian Days (e.g. no vehicles on certain roads on a Sunday) and similar initiatives per year	Play streets (x5) and school streets (x3) were implemented during 2024, although no specific events as listed in the action were undertaken.
43	Cleaner transport	Free or discounted residential parking permits for zero emission cars	A review was undertaken of our overall parking permit approach in 2024, with a new policy implemented in February 2025. As such a full update will be provided in next year's ASR.
44	Cleaner transport	Review of surcharge on diesel vehicles below Euro 6 standards for Resident and Controlled Parking Zone permits	A review was undertaken of our overall parking permit approach in 2024, with a new policy implemented in February 2025. As such a full update will be provided in next year's ASR.
45		Installation of residential electric charge points	There are now more than 2,600 electric vehicle charging points in H&F and every home or office is now within at least 400 metres of a charging point.
46	Cleaner transport	Installation of rapid chargers to help enable the take up of electric private hire vehicles and commercial vehicles (in partnership with TfL and/or OLEV)	There are now more than 2,600 electric vehicle charging points in H&F and every home or office is now within at least 400 metres of a charging point.
47	**Cleaner transport**	Reprioritisation of road space; reducing parking at some destinations and or restricting parking on congested high streets and A roads to improve bus journey times, cycling experience, and reduce emissions caused by congested traffic	• H&F Council installed 46 cycle hubs and an additional 276 secure cycle parking spaces for residents. • We created 66 new dockless parking spaces for e-bikes and 127 new e-bike geo-zones to expand access to this cleaner, greener and more active form of travel.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
48	Cleaner transport	Provision of infrastructure to support walking and cycling. To enable more people to take up cycling to travel around the borough and to allow children to walk to school more easily. More safer cycle routes will be developed by the council and TfL. The council together with its strategic partners such as TfL, to develop plans to increase pedestrianisation, cycling and greening in its town centres.	• H&F Council installed 46 cycle hubs and an additional 276 secure cycle parking spaces for residents. • The council funded training sessions to help over 3,000 children and adults learn to cycle in 2024. 72 H&F residents participated in in All Ability cycle sessions for people with learning difficulties and disabilities. • We've funded initiatives to support residents to repair their bikes at low or no cost, such as weekly Dr Bike sessions, which supported the maintenance of over 2,000 bikes in 2024. • The council teamed up with schools and community hubs to launch Beat the Street, a game awarding points and prizes to incentivise active travel across H&F. Over 13,000 residents participated, cycling, walking or wheeling more than 95,000 miles.
49	Cleaner transport	Work with and lobby the Mayor of London, GLA and TfL to take the necessary actions to improve air quality in the borough, e.g. by extending the ULEZ to include the borough	This action is complete – H&F supported the expansion of the ULEZ and are proud to have seen the benefits of this policy in our borough and in the rest of London.

3. Planning Update and Other New Sources of Emissions

Table M. Planning requirements met by planning applications in Hammersmith & Fulham

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	667
Number of planning applications required to undertake construction dust monitoring and reporting (Please specify how you get access to dust monitoring data i.e. online tool or CSV file)	9 On-line tool
Number of CHPs/Biomass boilers refused on air quality grounds	0
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions as detailed in Air Quality Neutral LPG (london.gov.uk) point 3.1.5.	0
Number of developments required to install Ultra-Low NO_X boilers	0
Number of developments where an AQ Neutral building and/or transport assessments undertaken	22
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	21
Number of planning applications with S106 agreements including other requirements to improve air quality	39
Number of planning applications with CIL payments that include a contribution to improve air quality	0
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas	
Number of planning applications with conditions related to NRMM included.	2
Number of developments registered at www.nrmm.london.	3
Number of audits (based on the pan-London project report and / or inhouse auditing programme)	3 audits
% of sites unregistered prior to audit	0
% of sites compliant with Stage IV of the Directive and/or exemptions to the policy.	100%
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas)	
Number of planning applications with conditions related to NRMM included.	37
Number of developments registered at www.nrmm.london.	9 registered
Number of audits (based on the pan-London project report and / or inhouse auditing programme)	9 audits
% of sites unregistered prior to audit	0%
% of sites compliant with Stage IIIB of the Directive and/or exemptions to the policy.	100%

3.1 New or significantly changed industrial or other sources

No new sources identified.

4. Additional Activities to Improve Air Quality

4.1 London Borough of Hammersmith & Fulham Fleet

As of March 2025, 23% of the council fleet is pure EV, with 40% of long term leased vehicles being EVs.

4.2 Planning Enforcement

All relevant planning applications are reviewed in respect of Dust Risk Assessment of the sites and Hoarding, NRMM and Air Quality Dust Management (AQDMP) conditions are recommended if required. The AQDMP conditions are enforced with the assistance of the Environmental Protection and Planning enforcement teams. NRMM compliance conditions are monitored via the Pan London NRMM Auditing Project.

4.3 Pan-London NRMM Auditing Project

Hammersmith & Fulham council are continuing to support the pan-London NRMM auditing project in 2025-2026.

The standard NRMM condition is as below and is applied to all relevant planning applications and is included in the decision notice:

Planning Condition -Non- Road Mobile Machinery (NRMM)

Within a minimum of seven days prior to commencement of the enabling works, site clearance or demolition works within each phase of the development hereby permitted, details of the Non-Road Mobile Machinery (NRMM) to be used shall be submitted to and approved in writing by the Local Planning Authority. The NRMM shall have CESAR Emissions Compliance Verification (ECV) identification and shall comply with the minimum Stage V NOx and PM_{10} emission criteria of The Non-Road Mobile Machinery (Type-Approval and Emission of Gaseous and Particulate Pollutants) Regulations 2018 and its subsequent amendments. This will apply to both variable and constant speed engines for both NOx and PM. An inventory of all NRMM shall be registered on the London GLA NRMM register GLA-NRMM-Register. Approved details shall be fully implemented and thereafter permanently retained and maintained until occupation of the complete development.

4.4 Air Quality Alerts

Hammersmith and Fulham Council support *air*TEXT (https://www.airtext.info/).

The Mayor's air quality alert messaging is cascaded to Public Health and Education departments of Hammersmith & Fulham councils.

4.5 Air Quality Positive

The borough has no examples of innovative mitigation measures committed as part of a submitted Air Quality Positive Matrix which aligns with the Air Quality Positive London Plan Guidance.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

Data management and Local Site Operator (LSO) duties for Hammersmith & Fulham's automatic monitoring stations have been completed by Ricardo Energy and Environment since November 2017. All real-time data from the monitoring stations are independently collected and validated on a daily basis. A combination of automatic and manual checks is used to assess data, identify and diagnose potential equipment faults and adjust data to take account of calibration tests. Automatic overnight calibrations are supplemented with regular manual calibrations of analysers, every two weeks. The procedures used conform to the EU standards that are a requirement of the AURN.

All data is formally ratified and is available online by accessing the Air quality in England (airqualityengland.co.uk) and selecting Hammersmith & Fulham within the 'Select local authority' menu bar. During this process the validation decisions can be ratified with the benefit of hindsight and using greater information, such as service records, calibration records and the results of station audits. Station audits are carried out Ricardo Energy and Environments in house audit team every six months.

PM_{10} Monitoring Adjustment

At Shepherds Bush Town Centre (HF4), and Hammersmith Town Centre (HF5), monitoring sites the equipment for monitoring PM is an unheated PM_{10} BAM and a smart heated $PM_{2.5}$ BAM. Therefore, the corrections set out in LLAQM.TG(19) for the MetOne BAM have been applied (sections 4.43 to 4.47) and the PM_{10} data will be multiplied by 0.833 and no correction has been applied to the $PM_{2.5}$ measurements.

Adjustment of the raw data is completed by Ricardo Energy and Environment through the current data management contract; therefore, this is also true of any data that is presented on the Air Quality England website.

Annualisation has been completed for PM_{10} at the Fulham Town Centre (HF6) site as detailed below due to data capture being below 75%.

A.2 Diffusion Tubes

Not Applicable.

Factor from Local Co-location Studies

Not Applicable

Discussion of Choice of Factor to Use

Not Applicable

Table N. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
<2024>	<National>	<09/24>	<1.06>
<2023>	<National>	<06/23>	<1.08>
<2022>	<National>	<09/21>	<1.07>
<2021>	<National>	<06/19>	<1.05>
<2020>	<National>	<03/18>	<1.01>
<2019>	<Local>	<->	<0.88>
<2018>	<Local>	<->	<0.88>
<2017>	<Local>	<->	<0.88>

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Where data capture is less than 75% and greater than 25% of a full calendar year, in accordance with LLAQM.TG (19), annualisation was undertaken.

PM_{10} and $PM_{2.5}$ data capture at Fulham Town Centre (HF6) was below 75% as such annualisation has completed as detailed in Table O and Table S respectively.

Distance Adjustment

Not Applicable

Table O. Non-Automatic Monitoring Data Adjustment

Not Applicable

Table P. Automatic NO_2 Monitoring Data Adjustment

Not Applicable

Table Q. Automatic PM_{10} Monitoring Data Adjustment

Background Site	Annual Data Capture	Annual Mean (A_m)	Fulham Town Centre (HF6)	
			Period Mean (P_m)	Ratio (A_m/P_m)
London Honor Oak Park	99.6	10.7	9.9	1.083
London North-Kensington	99.6	11.9	11.0	1.082
London Bloomsbury	94.0	12.4	11.5	1.074
Average (R_a)			**1.080**	
Raw Data Annual Mean (M)			**12.1**	
Annualised Annual Mean (M x R_a)			**13.1**	

Table R. Automatic $PM_{2.5}$ Monitoring Data Adjustment

Background Site	Annual Data Capture	Annual Mean (A_m)	Fulham Town Centre (HF6)	
			Period Mean (P_m)	Ratio (A_m/P_m)
London Honor Oak Park	99.6	6.7	6.1	1.098
London North-Kensington	99.6	7.2	6.6	1.093
London Bloomsbury	94.0	7.3	6.7	1.087
Average (R_a)			**1.093**	
Raw Data Annual Mean (M)			**7.2**	
Annualised Annual Mean (M x R_a)			**7.8**	

Table S. NO_2 Fall off With Distance Calculations

Not Applicable

Appendix B Full Monthly Diffusion Tube Results for 2024

Table T. NO_2 2024 Diffusion Tube Results (µg m^{-3})

Not Applicable

.

Appendix C Map(s) of Monitoring Locations and AQMAs

Figure A. Map of AQMA (Entire Borough)

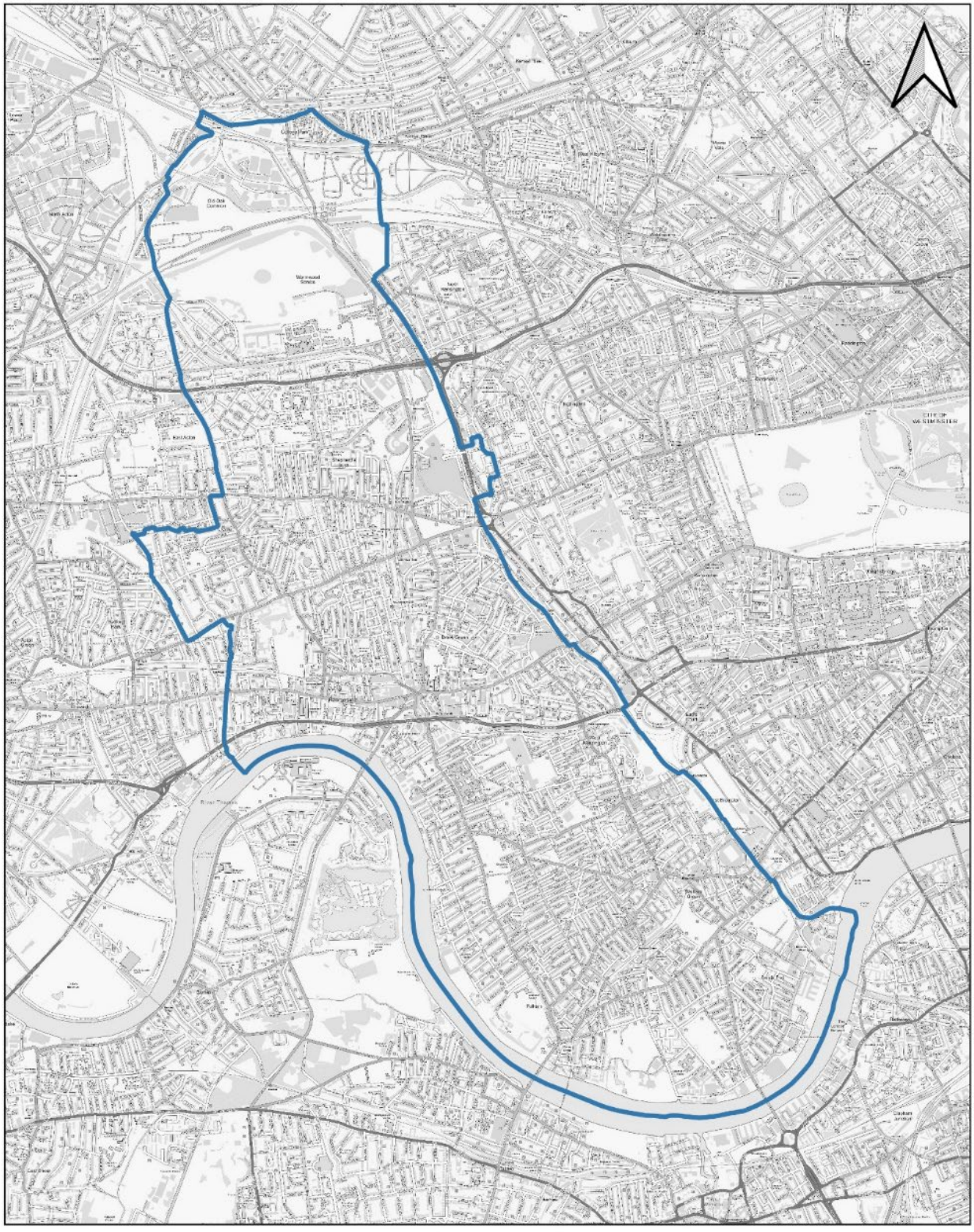

Figure B. Map of Automatic Air Quality Monitoring Sites

London Borough of Haringey
Annual Air Quality Status Report 2024

This report provides a detailed overview of air quality in London Borough of Haringey during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process[1].

Contact details:

[redacted]
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Date of publication – May 2025

[1] LLAQM Policy and Technical Guidance 2019 (LLAQM.TG (19))

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Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQP	Air Quality Positive
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
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 and International Standards, Objectives and Guidelines

Pollutant	Standard / Objective / Guideline	Averaging Period	Date[1]
Nitrogen dioxide (NO_2)	200 µg m^{-3} not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO_2)	40 µg m^{-3}	Annual mean	31 Dec 2005
Nitrogen dioxide (NO_2)	WHO AQG[2]: 10 µg m^{-3}	Annual mean	
Particles (PM_{10})	50 µg m^{-3} not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 45 µg m^{-3} not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM_{10})	40 µg m^{-3}	Annual mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 15 µg m^{-3}	Annual mean	
Particles ($PM_{2.5}$)	10 µg m^{-3} [3]	Annual mean	2040
Particles ($PM_{2.5}$)	London Mayoral Objective[4]: 10 µg m^{-3}	Annual mean	2030
Particles ($PM_{2.5}$)	WHO AQG[2]: 5 µg m^{-3}	Annual mean	
Particles ($PM_{2.5}$)	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Particles ($PM_{2.5}$)	WHO AQG[2]: 15 µg m^{-3}	24-hour mean	
Sulphur dioxide (SO_2)	266 µg m^{-3} not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO_2)	350 µg m^{-3} not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	125 µg m^{-3} mot to be exceeded more than 3 times a year	24-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	WHO AQG[2]: 40 µg m^{-3} not to be exceeded more than 3-4 times a year	24-hour mean	

Notes:

(1) Date by which to be achieved by and maintained thereafter

(2) 2021 World Health Organisation Air Quality Guidelines

(3) Environmental Target Regulations under Environment Act 2021

(4) London Mayoral Objective

1. Air Quality Monitoring

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

For Haringey Roadside, (High Road Tottenham, N17) the nearest relevant exposures 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 at 639 High Road, Tottenham and is classified as a Roadside site. Monitoring at this location has been undertaken since December 1994.

The Haringey South site is located in a local park (Priory Park, N8) 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 with monitoring at the location started in November 2012. In 2013, the monitoring equipment was relocated to its current location within the park from another area within the park for safety reasons.

The third automatic monitoring station (Wood Green Monitoring Station, N22) is locally managed by the council and is classified as a Roadside site. Monitoring at this location commenced in May 2021.

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Inlet Height (m)
UK-AIR ID: UKA00260 **EU Site ID:** GB0637A	Haringey Roadside (639, High Road)	Roadside	533894	190707	NO_2,	Yes	Borough	APNA-370	3m – residential	4	4

UK-AIR ID: UKA00568 **EU Site ID:** GB1024A	Haringey South (Priory Park)	Urban Background	529987	188917	NO_2, PM10, PM2.5, Ozone	Yes	Borough	APNA-370; Chemiluminescent	N/A	N/A	3.5
Site ID: HG005	Haringey Wood Green, (14 High Rd Hornsey, London N22 6HH)	Roadside	531255	189961	NO_2, PM10, PM2.5	Yes	Borough	APNA-370; APDA-372	1	1	2

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable

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. In March 2021, nineteen additional monitoring locations HR39 – HR57 were added to the existing sixteen monitoring locations as part of the Council's effort to implements its action on the measures submitted in the approved AQAP.

Table C below gives individual site details, locations for the 2024 monitoring round. There were thirty-five diffusion tubes monitoring locations throughout the borough in 2024. 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 or adjacent to hotspot locations where possible.

Three of the diffusion tubes 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; a triplicate site from July 2020 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: In 2019, two additional monitoring locations in HR21 and HR38 began whilst HR28 also re-commenced.

Table C. Details of Non-Automatic Monitoring Sites for 2024

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
HR06	200A, Archway Road, N6 5BA	Roadside	528945	187682	NO2	Haringey AQMA	<0.5	1.5	No	2.5
HR08	7 Cross Lane N8 7QG	Urban Background	530512	189446	NO2	Haringey AQMA	2.0	0.0	No	2.5
HR14a, HR14b, HR14c	639 High Road, N17	Roadside	533890	190710	NO2	Haringey AQMA	3.0	4.0	Yes	3.5
HR21	Lordship Lane Primary School, N22 5PS	Roadside	532010	190549	NO2	Haringey AQMA	0.0	N/A	No	3.5
HR24	Westbury Medical Centre, 205 Westbury Av., N22 6RX	Roadside	532155	190517	NO2	Haringey AQMA	0.0	9.0	No	3.5
HR25	Rowland Hill Nursery, White Hart Lane	Roadside	532554	191383	NO2	Haringey AQMA	0.0	7.0	No	1.5
HR27	The Old Surgery, 572 Green Lanes, N8 0RP	Roadside	531758	188872	NO2	Haringey AQMA	0.0	4.5	No	2.0
HR28	Bounds Green Primary School, N11 2QG	Roadside	530063	191324	NO2	Haringey AQMA	7.5	2.0	No	1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
HR30	Earlsmead Primary School, N17	Roadside	533899	189023	NO2	Haringey AQMA	0.0	0.5	No	2.5
HR31	97/101 High Road, N22 6BB	Roadside	531245	189935	NO2	Haringey AQMA	3.0	0.5	No	2.5
HR32	271 Archway Road, N6 5AA	Roadside	528612	188072	NO2	Haringey AQMA	1.0	0.5	No	2.5
HR34	Coleridge Primary school	Roadside	531079	187926	NO2	Haringey AQMA	0.0	0.5	No	2..0
HR35	Chestnuts Primary School	Roadside	532324	188766	NO2	Haringey AQMA	0.0	0.5	No	2.0
HR36	Holy Trinity CE School, Tottenham	Roadside	533842	189581	NO2	Haringey AQMA	0.0	2.0	No	2.5
HR37	Weston Park/Broadway, 48 The Broadway, N8 9TP	Roadside	530123	188420	NO2	Haringey AQMA	0.0	2.0	No	2.5
HR38	Welbourne Primary School N15	Roadside	533991	189460	NO2	Haringey AQMA	0.0	2.0	No	2.0
HR39	Fortismere School, N10 1NE	Roadside	528180	189842	NO2	Haringey AQMA	2.0	1.0	No	2.0
HR40	Opposite Highgate Private Hospital, 17 – 19 View Road,	Roadside	527884	188089	NO2	Haringey AQMA	5.0	0.5	No	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
	Highgate. N6 4DJ									
HR41	258 Muswell Hill Broadway, N10 3SH	Roadside	528797	189636	NO2	Haringey AQMA	1.0	1.0	No	2.0
HR42	15 Stanhope Road, N6 5NE	Roadside	529254	188051	NO2	Haringey AQMA	1.0	1.0	No	2.5
HR43	St Aidan's VC Primary School, N4 4RR	Roadside	531018	188018	NO2	Haringey AQMA	2.0	0.5	No	2.5
HR44	North Harringay Primary School, N8 0NU	Roadside	531303	189128	NO2	Haringey AQMA	5.0	1.0	No	2.5
HR45	Tiverton Primary School, Pulford Road. N15 6SP	Roadside	532866	188246	NO2	Haringey AQMA	5.0	1.0	No	2.0
HR46	St John Vianney Roman Catholic Primary School, N15 3HB	Roadside	531882	189187	NO2	Haringey AQMA	5.0	1.0	No	2.0
HR47	134 West Green Rd, N15 5AD	Roadside	533117	189142	NO2	Haringey AQMA	3.0	1.0	No	2.0
HR48	Mulberry Primary School, N17 9RB	Roadside	534022	190341	NO2	Haringey AQMA	2.0	0.5	No	2.0
HR49	151 Mount Pleasant Road, N17 6TQ	Roadside	533199	190058	NO2	Haringey AQMA	1.0	1.0	No	2.5
HR50	Belmont Junior School, Rusper Road, N22 6RA	Roadside	532063	189889	NO2	Haringey AQMA	2.0	1.0	No	2.0

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
HR51	76 Coburg Road, N22 6UB	Roadside	530691	189963	NO2	Haringey AQMA	5.0	1.0	No	2.5
HR52	263 Victoria Road, N22 7XH	Roadside	529423	190621	NO2	Haringey AQMA	3.0	1.0	No	2.0
HR53	56 Partridge Way, N22 8DW	Roadside	530497	190904	NO2	Haringey AQMA	5.0	2.0	No	2.5
HR54	Woodside High Road/ White Hart Lane, N22 5QJ	Roadside	531617	191114	NO2	Haringey AQMA	5.0	1.0	No	2.5
HR55	Risley Ave. Primary, London N17 7AB	Roadside	533257	190739	NO2	Haringey AQMA	5.0	0.5	No	2.5
HR56	Dukes Aldridge Academy, Almond Road, N17 0PG	Roadside	534205	191270	NO2	Haringey AQMA	5.0	0.5	No	2.5
HR57	Campsbourne School Nightingale Lane, N8 7AF	Roadside	530186	189628	NO2	Haringey AQMA	1.0	1.0	No	2.0

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

1.2 Comparison of Monitoring Results with AQOs

Table D. Annual Mean NO_2 Monitoring Results: Automatic Monitoring (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %[a]	Valid data capture 2024 %[b]	2018	2019	2020	2021	2022	2023	2024
UK-AIR ID: UKA00260 **EU Site ID:** GB0637A	533894	190707	Roadside	99.11	99.edc	39	37	33	32	30	27	25
UK-AIR ID: UKA00568 **EU Site ID:** GB1024A	529987	188917	Urban Background	96.06	96.06	23	22	16	18	17	16	14
Site ID: HG005	531255	189961	Roadside	99.13	99.13	-	-	-	**44**	**44**	**48**	**41**

Notes:

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the NO_2 annual mean AQO of 40µg m^{-3} are shown in **bold**.

NO_2 annual means in excess of 60µg m^{-3}, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias.

All means have been “annualised” in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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%).

No exceedances of the NO_2 annual objective of 40µg/m3 have been identified at either of the two existing Haringey locations, therefore the annual objective for NO_2 has been achieved.

However, there is an exceedance of the annual objective at the locally managed Wood Green Monitoring Station. Whilst there is an exceedance at this site, NO_2 concentrations have fallen from 2023 levels.

The NO_2 trend at both Haringey Roadside and Priory Park South continues to show a gradual reduction in NO_2 concentrations year on year.

Table E. Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg m^{-3})

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)(1)	Valid Data Capture 2024 (%)(2)	2018	2019	2020	2021	2022	2023	2024
HR06	528945	187682	Roadside	100	100.0	35.0	36.3	30.2	32.8	35.2	32.2	25.3
HR08	530512	189446	Urban Background	100	100.0	19.0	29.5	20.3	25.3	26.4	26.1	21.3
HR14a, HR14b, HR14c	533890	190710	Roadside	100	100.0	33.0	34.1	31.3	30.9	30.5	24.7	23.2
HR21	532010	190549	Roadside	92.5	92.5	-	23	22.0	21.4	23.3	19.8	16.6
HR24	532155	190517	Roadside	100	100.0	33.0	34.1	28.7	30.8	32.9	27.4	26.3
HR25	532554	191383	Roadside	60.4	60.4	35.0	27.4	20.2	23.0	24.5	22.4	14.7
HR27	531758	188872	Roadside	100	100.0	31.0	36.4	29.0	32.7	31.2	30.8	24.5
HR28	530063	191324	Roadside	75	75.0	-	30.7	29.0	30.5	26.7	25.3	20.9
HR30	533899	189023	Roadside	100	100.0	**44.0**	39.6	33.1	30.1	32.1	26.4	21.8
HR31	531245	189935	Roadside	83	83.0	**65.0**	**67.8**	**71.5**	**62.3**	**64.5**	**61.1**	**56.2**
HR32	528612	188072	Roadside	100	100.0	**66.0**	**53.4**	**49.5**	**54.0**	**50.9**	**45.8**	**43.3**
HR34	531079	187926	Roadside	100	100.0	31.0	32.1	28.2	29.7	32.0	34.8	37.8
HR35	532324	188766	Roadside	100	100.0	31.0	30.5	22.3	23.8	25.5	23.0	20.0
HR36	533842	189581	Roadside	90.6	90.6	30.0	33.9	29.1	29.1	29.3	29.8	24.5
HR37	530123	188420	Roadside	100	100.0	36.0	**42.2**	29.6	32.3	33.4	35.8	26.9
HR38	533991	189460	Roadside	100	100.0	-	24.5	21.4	22.4	23.6	21.9	16.5
HR39	528180	189842	Roadside	100	100.0	-	-	-	21.6	26.6	21.7	16.9

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)([1])	Valid Data Capture 2024 (%)([2])	2018	2019	2020	2021	2022	2023	2024
HR40	527884	188089	Roadside	100	100.0	-	-	-	25.5	29.3	26.1	21.1
HR41	528797	189636	Roadside	92.5	92.5	-	-	-	**42.5**	**44.0**	**48.9**	36.9
HR42	529254	188051	Roadside	66	66.0	-	-	-	21.0	22.7	21.9	16.7
HR43	531018	188018	Roadside	90.6	90.6	-	-	-	19.3	21.2	20.2	15.2
HR44	531303	189128	Roadside	100	100.0	-	-	-	19.9	21.1	19.6	16.5
HR45	532866	188246	Roadside	100	100.0	-	-	-	17.5	22.1	18.5	15.9
HR46	531882	189187	Roadside	92.5	92.5	-	-	-	20.6	21.1	24.3	18.5
HR47	533117	189142	Roadside	90.6	90.6	-	-	-	30.3	30.2	26.3	24.4
HR48	534022	190341	Roadside	83	83.0	-	-	-	20.6	23.8	23.0	17.8
HR49	533199	190058	Roadside	100	100.0	-	-	-	23.7	27.4	20.2	19.0
HR50	532063	189889	Roadside	100	100.0	-	-	-	19.2	20.8	19.4	16.9
HR51	530691	189963	Roadside	100	100.0	-	-	-	20.4	21.9	18.5	15.7
HR52	529423	190621	Roadside	100	100.0	-	-	-	28.7	27.4	26.1	23.8
HR53	530497	190904	Roadside	100	100.0	-	-	-	22.5	25.7	20.5	19.4
HR54	531617	191114	Roadside	100	100.0	-	-	-	20.9	25.3	21.7	19.2
HR55	533257	190739	Roadside	92.5	92.5	-	-	-	31.2	31.3	30.3	23.7
HR56	534205	191270	Roadside	100	100.0	-	-	-	22.5	23.9	20.2	16.0
HR57	530186	189628	Roadside	100	100.0	-	-	-	19.9	21.5	20.7	17.8

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19.**

☒ **Diffusion tube data has been bias adjusted.**

☒ **Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction**

Notes:

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the NO_2 annual mean objective of 40µg m^{-3} are shown in **bold**.

NO_2 annual means exceeding 60µg m^{-3}, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Similarly to the 2023 data, HR31 (Wood Green High Road) and HR32 (Archway/Southwood) continues to exceed the NO_2 annual air quality objective. However, the overall concentrations of NO_2 have decreased at these sites when compared to 2023 data.

HR41 (Muswell Hill) no longer exceeds the annual objective, showing a decrease in annual mean NO_2 concentrations when compared to 2023 data.

All diffusion tube locations, apart from HR34 (Coleridge Primary School), saw a decrease in annual mean NO_2 concentrations when compared to 2023 data. This site has seen frequent Thames Water maintenance works during 2024. The works and their associated traffic distribution are thought to have contributed to this site's increase in NO_2.

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. Therefore, the government recommends 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 HR14 (639 High Road, Tottenham) and submits the data annually.

Using the Diffusion Tube Processing Tool, the local bias adjustment factor has been calculated for this co-location study. The local factor has been calculated to be 0.85.

To ensure consistency with previous reports, it is the national laboratory average adjustment factor (Lambeth Scientific Services) that is applied to the raw annual average concentrations to obtain the bias adjusted results.

The bias adjustment factor used was 0.81, based on 2 studies by Lambeth Scientific Services for year 2024.

Table F. NO_2 Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200µg m^{-3}

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %([a])	Valid data capture 2024 %([b])	2018	2019	2020	2021	2022	2023	2024
UK-AIR ID: UKA00260 **EU Site ID:** GB0637A	533894	190707	Roadside	99.11	99.11	0	0	0	0	0	0	0
UK-AIR ID: UKA00568 **EU Site ID:** GB1024A	529987	188917	Urban Background	96.06	96.06	0	0	0	0	0	0	0
Site ID: HG005	531255	189961	Roadside	99.13	99.13	-	-	-	0 (120)	0	2	0

Notes

Results are presented as the number of 1-hour periods where concentrations greater than 200µg m^{-3} have been recorded.

Exceedance of the NO_2 short term AQO of 200µg m^{-3} over the permitted 18 hours per year are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

(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%)

No exceedances of the NO_2 hourly objective (200µg/m3 over the permitted 18 hours per year) have been identified at the Haringey locations. Therefore, the annual objective has been achieved.

Table G. Annual Mean PM_{10} Automatic Monitoring Results (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %([a])	Valid data capture 2024 %([b])	2018	2019	2020	2021	2022	2023	2024
Site ID: HG005	531255	189961	Roadside	99.97	99.97	-	-	-	16	19	16	13

Notes

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the PM_{10} annual mean AQO of 40µg m^{-3} are shown in **bold**.

All means have been "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

Whilst monitoring for PM_{10} ceased in Haringey in 2014, this was recommenced at the Wood Green monitoring station in May 2021. However, the historical PM_{10} monitoring data is available at: https://uk-air.defra.gov.uk/data/.

No exceedances of the PM_{10} annual objective of 40µg/m3 have been identified at the Haringey location. Therefore, the annual objective has been achieved.

Table H. PM_{10} Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM_{10} 24-Hour Means > 50 µg m^{-3}

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
Site ID: HG005	531255	189961	Roadside	99.97	99.97	-	-	-	0 (24)	8	1	0

Notes

Exceedances of the PM_{10} 24-hour mean objective (50 µg m^{-3} over the permitted 35 days per year) are shown in **bold.**

Where the period of valid data is less than 85% of a full year, the 90.4th percentile is provided in brackets.

(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%).

No exceedances of the PM_{10} 24-hour mean objective (50µg/m3 over the permitted 35 days per year) have been identified at the Haringey location. Therefore, the 24-hour mean objective has been achieved.

Table I. Annual Mean $PM_{2.5}$ Automatic Monitoring Results (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
Site ID: HG005	531255	189961	Roadside	99.97	99.97	-	-	-	10	12	10	9

Notes

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the PM2.5 annual mean concentration target of 10 µg m-3 are shown in **bold.**

All means have been "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

In January 2016; Defra's AURN London Network managers (Environmental Research Group, Kings College, London) notified the Council of its intention to remove the $PM_{2.5}$ 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 $PM_{2.5}$ 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 $PM_{2.5}$ instrument from the site at Haringey Roadside to another AURN site'.

However, whilst $PM_{2.5}$ monitoring was stopped in the borough since that time, this was recommenced at the Wood Green monitoring station in May 2021. The historical $PM_{2.5}$ monitoring data is available at: https://uk-air.defra.gov.uk/data/.

No exceedances of the $PM_{2.5}$ annual objective of 10µg/m3 have been identified at the Haringey location. Therefore, the annual objective has been achieved.

There have also not been any exceedances of the London Mayoral PM2.5 annual objective of 10µg/m3 at this location, Therefore, the London Mayoral objective has been achieved.

Table J. Other Pollutants

Days where maximum rolling 8hr mean >100ug/m3: (AQS Objective <=10) for Ozone

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2024 %[b]	2024
UK-AIR ID: UKA00568 **EU Site ID:** GB1024A	76.32	76.32	**86**

Notes

Exceedances of the Ozone rolling 8-hour mean objective maximum rolling 8hr mean (>100ug/m3: (AQS Objective <= 10)) are shown in **bold**.

All means have been “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

There is an exceedance of the annual objective of Days where maximum rolling 8hr mean >100ug/m3: (AQS Objective <= 10) for Ozone identified at the Haringey Priory Park South (Urban Background Location). Therefore, the annual objective has not been achieved.

The Ozone analyser at this site has suffered technical issues resulting in low data capture of 76.32%. The analyser has subsequently been fully serviced, re-installed and tested to ensure that sufficient data is captured for 2025 and beyond.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 12 months. The AQAP should specify how air quality targets will be achieved and maintained, and provide dates by which measures will be carried out.

A summary of AQMAs declared by London Borough of Haringey can be found in Table K. The table presents a description of the AQMA that is currently designated within Haringey. Appendix C provides maps of the AQMA and also the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designation are as follows:

- NO_2 annual mean.
- PM_{10} 24-hour mean.

Table K. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Haringey AQMA	01/07/2001	NO_2 – Annual Mean	Borough wide AQMA	NO	-	**56.2**	0	London Borough of Haringey AQAP 2019-2024	AQAP
Haringey AQMA	01/07/2001	PM10 – 24 Hour Mean	Borough wide AQMA	NO	-	0 Exceedances (50 µg m-3 over the permitted 35	2	London Borough of Haringey AQAP 2019-2024	AQAP

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
						days per year)			

☒ **London Borough of Haringey confirm the information on UK-Air regarding their AQMA(s) is up to date**

☒ **London Borough of Haringey confirm that all current AQAPs have been submitted to GLA**

2.2 Air Quality Action Plan Progress

Haringey's current Air Quality Action Plan was adopted in 2019 and outlines 25 measures the Council will take to improve air quality in the borough between 2019-2024.

The Council is currently drafting a revised action plan, which sets out the measures to improve air quality in Haringey between 2025 and 2030. This draft action plan has been reviewed by the GLA and was presented to Cabinet on 22 April 2025. The Council will launch a public consultation to gather feedback on the action plan before final adoption in late 2025.

Table provides a brief summary of London Borough of Haringey progress against the Air Quality Action Plan, showing progress made this year. New projects which commenced in 2024 are shown at the bottom of the table.

Table L. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
8	Emissions from developments and buildings	a. Promoting and delivering energy efficiency and energy supply retrofitting projects in workplaces and homes through EFL retrofit programmes such as RE: FIT, RE: NEW and through borough carbon offset funds to replace old boilers/top-up lost insulation in combination with other energy conservation measures.	Ongoing / 2025	• The Council has been awarded £1.4m Public Sector Decarbonisation Funding for the decarbonisation of the heating system at the Civic Centre. This will be implemented during the build out which will be completed in 2027. • The Council awarded a contract for the repair of 17 of its solar PV systems in July 2024. By repairing faulty systems, the contract will deliver increased onsite renewable generation, and reduce grid imported electricity. • A retrofit project commenced in 2024 on the Coldfall Estate. The project seeks to retrofit 200 council homes with fabric insulation measures including external wall insulation. • Funding has been awarded for the further retrofit of 403 council homes, with works commencing in 2025.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
				• 222 Energy Doctor visits have been undertaken in 2024, assisting with the installation of small energy efficiency measures. • The Council has an Affordable Energy Strategy to tackle fuel poverty in the borough and offers energy advice through SHINE London. In 2024, 466 residents were helped over the phone, with 163 getting home visits. Saving the average home c£250 per year in energy costs. • The Council took part in a funding London consortium bid to secure Warm Homes Local Grant funding from April 2025 for eligible fuel poor homes in borough. • The Council has included Retrofit and grant information on Haringey's council website in order to promote retrofit to private homeowners. • Information and awareness provided to private landlords in the borough to encourage retrofit in private rented sector. • Year 3 of the Community Carbon Fund was awarded in 2024, for a total of £75,533, to 13 projects. Whilst one project will be delivered at a later date, all other 12 projects have been delivered. These projects included grants for: a thermal imaging camera, replacement lighting, a solar PV system, and two feasibility studies to decarbonise Ferry Lane Primary School and the Hornsey Vale Community Association. The latter is looking to replace their current gas boiler solution with a low-carbon system with the possibility of connecting the neighbouring Weston Park Primary School and Hornsey Housing Trust. This will result in reduced local combustion emissions when implemented. • The Council allocated over £2m from the collected Carbon Offset Fund to decarbonisation projects across a range of buildings and projects.
14	Public health and awareness raising	Air quality in and around schools	2025/2026	• The Council's Smarter Travel and Streetspace Teams have delivered an additional 9 school streets in 2024, bringing the total to 34 School Streets projects, operating adjacent to 42 education establishments located across

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
				the borough. We continue to offer support and guidance to schools and help to deliver these schemes. • 12 further school streets schemes are currently in design and consultation stages and, should they be approved, are expected to launch during 2025/26. • A map showing these school streets can be found at: School Streets map | Haringey Council • The Council continues to support national campaigns that support the discourage of car use and idling outside school buildings. • The Council also offer bespoke Walk to School Weeks campaigns for all Primary Schools in the borough.
24	Cleaner Transport	a. Installation of Ultra-low Emission Vehicle (ULEV) infrastructure (electric vehicle charging points, rapid electric vehicle charging point and hydrogen refuelling stations): Support GLA in the Expansion of ULEZ b. Increasing the proportion of electric, hydrogen and ultra-low emission vehicles in Car Clubs c. Increase the introduction and use of electric vehicle Car Clubs across the borough d. Reprioritisation of road space; reducing parking at some destinations and or restricting parking on congested high streets and A roads to improve bus journey times, cycling experience, and reduce emissions caused by congested traffic.	Ongoing	• In 2024 the Council installed an additional 64 standard EV points, with a total of 295 EV points now installed at various locations in the borough. These are Lamp column, standard, fast and rapid EV points. A map to these points can be found at: EVCPs Locations Haringey – Google My Maps • The Zipcar Car Club Scheme has increased the proportion of electric vehicles in their Flex car club fleet, with 91% of the fleet now electric. • Following the submission of an Expression of Interest (Stage 1 of the application) in May 2023, Partnership 6 has been provisionally allocated LEVI funding totalling approximately £7,544,000, for the purpose of delivering on-street electric vehicle charging infrastructure to support residents to make the switch to electric vehicles. The indicative capital funding allocation, exclusively to the Council, is £1,257,333.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
1	Monitoring and other core statutory duties	a. With the support of all relevant teams, monitoring to include maintaining the borough's two automatic and 13 N_{Ox} diffusion tube monitors across the borough and expand monitoring networks, especially around schools. b. Complete and submit Annual Status Reports on time. c. Update AQAPs every five years at a minimum and follow LLAQM guidance when doing this; check/amend AQMA's as required.	Ongoing	• Monitoring continues at the additional 19 NOx diffusion tubes, 1 automatic monitoring station and 2 indicative monitors added in 2021. • In 2024, the Council increased monitoring by an additional 3 indicative monitors. This takes our total monitoring sites to 35 passive sites, 3 automatic monitoring sites and 9 indicative monitors. • The works to install the replacement for an end-of-life ozone analyser at our Priory Park site were completed in 2024. • The Council continues to complete and submit our Annual Status Reports on time. • The Council is currently drafting a revised Air Quality Action Plan, which sets out the measures to improve air quality in Haringey between 2025 and 2030. This draft action plan has been reviewed by the GLA and will be presented at Cabinet on 22 April 2025. If approved, the Council will launch a public consultation to gather feedback on the action plan before its final adoption.
2	Emissions from developments and buildings	a. Investigate the potential for larger development areas to proactively assess air quality impacts cumulatively. b. Ensuring emissions from demolition and construction are minimised	2024	• The Council continues to deliver on this measure. In 2024, 30 planning applications were required to submit a dust management plan and register with the Considerate Constructors Scheme.
3	Emissions from developments and buildings	a. Ensuring enforcement of non-road mobile machinery (NRMM) air quality policies	Ongoing	• The Council continues to deliver on this measure alongside the GLA. In 2024, of the 14 sites audited, 12 were compliant, 2 have not yet got NRMM within scope that can be audited, and 0 sites were completed. • 28 sites were registered on the NRMM website in 2024.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
4	Emissions from developments and buildings	a. Reducing emissions from CHP. b. Enforcing CHP air quality policy. Ensure smaller developments use ultra-low NO_x Boilers.	2024	• The Council continues to monitor the impact of CHP plant within our borough, and in 2023, no developments with CHPs boilers were subject to GLA emission limits and/or other restrictions to reduce emissions. • No biomass boiler was installed in 2024. • One development was subject to Ultra-Low NOx boiler conditions in 2024.
5	Emissions from developments and buildings	a. Enforce Air Quality Neutral (AQN) policy	Ongoing	• The Council continue to enforce this policy, and in 2024, there were 16 developments where AQ Neutral Assessments were undertaken.
6	Emissions from developments and buildings	a. Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new and existing developments.	2024	• The Council continues to ensure that exposure in amenity spaces is considered during development. This means having the activities appropriate in existing amenity areas and at the design stage for the new sites. We aim to ensure there is a provision for green infrastructure in each development approved by the planning service.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
7	Emissions from developments and buildings	a. Declaring Smoke Control Zones and ensuring they are fully promoted. To include: an awareness campaign, engagement with suppliers, and active enforcement. b. Ensuring that Smoke Control Areas are appropriately identified and fully enforced.	Ongoing	• The Council continues to enforce smoke emissions from bonfires and the burning of solid fuels. • The Council continues to receive complaints of smoke nuisance from a range of sources, including wood burning on canal boats, restaurants using charcoal grills, and bonfires. In 2024, 67 smoke complaints were received which is approximately 3% less than the number of complaints received in 2023. • The Council continues to be a member of the Pan-London "Healthy Waterways" project, which aims to target the boating community to encourage positive changes to reduce CO2 emissions and exposure to air pollution by transitioning from solid fuels to electricity for heating and cooking.
8	Emissions from developments and buildings	b. Promoting and delivering energy efficiency and energy supply retrofitting projects in workplaces and homes through EFL retrofit programmes such as RE: FIT, RE: NEW and through borough carbon offset funds to replace old boilers/top-up lost insulation in combination with other energy conservation measures.	Ongoing / 2025	• The Council secured £1.4m Public Sector Decarbonisation Funding for the decarbonisation of the heating system at the Civic Centre. • The Council awarded a contract for the repair of 17 of its solar PV systems in July 2024. By repairing faulty systems, the contract will deliver increased onsite renewable generation, and reduce grid imported electricity. • A retrofit project commenced in 2024 on the Coldfall Estate. The project seeks to retrofit 200 council homes with fabric insulation measures including external wall insulation. • Funding has been awarded for the further retrofit of 403 council homes, with works commencing in 2025. • 222 Energy Doctor visits have been undertaken in 2024, assisting with the installation of small energy efficiency measures. • The Council has an Affordable Energy Strategy to tackle fuel poverty in the borough and offers energy advice

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
				through SHINE London. In 2024, 466 residents were helped over the phone, with 163 getting home visits. • The Council took part in a funding London consortium bid to secure Warm Homes Local Grant funding from April 2025 for eligible fuel poor homes in borough. • The Council has included Retrofit and grant information on Haringey's council website in order to promote retrofit to private homeowners. • Information and awareness provided to private landlords in the borough to encourage retrofit in private rented sector. • Year 3 of the Community Carbon Fund was awarded in 2024, for a total of £75,533, to 13 projects. Whilst one project will be delivered at a later date, all other 12 projects have been delivered. These projects included grants for: a thermal imaging camera, replacement lighting, a solar PV system, and two feasibility studies to decarbonise Ferry Lane Primary School and the Hornsey Vale Community Association. The latter is looking to replace their current gas boiler solution with a low-carbon system with the possibility of connecting the neighbouring Weston Park Primary School and Hornsey Housing Trust. This will result in reduced local combustion emissions when implemented. • Officers have been working to allocate over £2m from the collected Carbon Offset Fund to decarbonisation projects across a range of buildings, with a final decision on the allocation due in 2025.
9	Emissions from developments and buildings	a. Installation of residential electric charge points within developments. b. Master planning and redevelopment areas aligned with Air Quality Positive and Healthy Streets approaches.	2024	• In 2024 the Council installed an additional 64 standard EV points, with a total of 295 EV points now installed at various locations in the borough. These are Lamp column, standard, fast and rapid EV points. A map to these points can be found at: EVCPs Locations Haringey – Google My Maps

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
				• In addition to the above, where applicable, the Council continues to recommend the installation of EVCP within new developments at the planning stage.
10	Public health and awareness raising	a. Public Health department taking shared responsibility for borough air quality issues and implementation of Air Quality Action Plans. b. Public Health Teams should be supporting engagement with local stakeholders (businesses, schools, community groups and healthcare providers). They should be asked for their support via the DPH when projects are being developed. c. Directors of Public Health (DsPH) fully briefed on the scale of the problem in your local authority area; what is being done, and what is needed. A briefing should be provided. d. Directors of Public Health to have responsibility for ensuring their Joint Strategic Needs Assessment (JSNA) has up to date information on air quality impacts on the population. e. Strengthening co-ordination with Public Health by ensuring that at least one public health specialist within the borough has air quality responsibilities outlined in their job profile.	Ongoing / 2025	• Public Health continue to work with Regeneration to improve green spaces and trees within town centres and areas in a negative deficit of trees and green space. • We are also working at a strategic level to work with planning policy to improve air quality within the new local plan; parks and green space strategy and housing strategy. • Public Health are preparing two updated Joint Strategic Needs Assessments (JSNA) for both Place and Air Quality, which are expected to be completed in mid/late 2025.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		f. Director of Public Health to sign off Statutory Annual Status Reports and all new Air Quality Action Plans.		
11	Public health and awareness raising	a. Engagement with businesses as part of the 'Liveable Neighbourhoods' project in Crouch End	2019	• This project was put on hold indefinitely, so no further progress on this project.
12	Public health and awareness raising	a. Supporting Airtext, promotion and dissemination of high pollution alert services.	Ongoing	• The Council continues to deliver on this measure in 2024 by disseminating high pollution alert service to members of the public. • AirText awareness raising was mainly carried out by the Active Travel Team as part of their work, promoting the AirText information to our schools and giving them information regarding usage. Promotion occurs at every engagement event such as road shows (approx. 10 per year). • The Council is currently updating our AirText webpages to include advice on what measures can be taken to reduce exposure to poor air quality during high pollution alerts. • The Council is also preparing an updated comms package for when a high pollution alert is received.
13	Public health and awareness raising	a. Encourage schools to join the TfL STARS accredited travel planning programme	Ongoing	• The Smarter Travel Team have 62 school travel plans accredited for 2024. These include: 42 Gold, 6 Silver, 6 Bronze and 8 engaged. • Smarter Travel also promote and offer resources and activities such as Walk to school week, cycle training, cycle around the borough, Year 6 transition project, and road safety projects, working with Public Health to link campaigns covering health, safety, and wellbeing such as the Healthy Schools Project. • The Council also assists schools that are keen to deliver after school play streets to highlight being car free. The

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
				Council also supports the Metropolitan Police Force with speed awareness projects. • In addition, the Smarter Travel Team support our schools to engage with commissioned partners to access cycle training which builds active/independent travel.
14	Public health and awareness raising	a. Air quality in and around schools	2025/2026	• The Council's Smarter Travel and Streetspace Teams have delivered an additional 9 school streets in 2024, bringing the total to 34 School Streets projects, operating adjacent to 42 education establishments located across the borough. We continue to offer support and guidance to schools and help to deliver these schemes. • 12 further school streets schemes are currently in design and consultation stages and, should they be approved, are expected to launch during 2025/26. • A map showing these school streets can be found at: School Streets map | Haringey Council • The Council continues to support national campaigns that support the discourage of car use and idling outside school buildings. • The Council also offer bespoke Walk to School Weeks campaigns for all Primary Schools in the borough.
15	Delivery servicing and freight	a. Update of procurement policies to reduce pollution from logistics and servicing. b. Ensure local authority procurement policies include a requirement for suppliers with large fleets to have attained bronze Fleet Operator Recognition Scheme (FORS) accreditation or equivalent standard. c. Priority loading for ultra-low emission delivery vehicles.	Ongoing	• The Council also continues to follow the rules set by procurement for any freight that falls under our service areas. • FORS Silver standard for construction deliveries is required within Construction Logistics Plans (CLPs) for schemes with high / cumulative impacts, including Tottenham Hale and Wood Green. Regular monitoring work takes place to ensure suppliers' compliance with FORS.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
				• Contractors are required, via Construction Logistics Plans, to explore feasible options to move materials (and waste away) by river or by rail.
16	Delivery servicing and freight	a. Reducing emissions from deliveries to local businesses and residents: Re-organisation of freight to support consolidation (or micro-consolidation) of deliveries, by setting up or participating in new logistics facilities, and/or Potentially additional cost depending upon type of contract and distance needed to travel	2025	• With this major exercise likely to have contractual, cost and service disruption implications, this action will be reviewed as part of the new contract when service round is due for review.
17	Borough Fleet	a. Reducing emissions from council fleets: Increasing the number of hydrogens, electric, hybrid, bio-methane and cleaner vehicles in the boroughs' fleet		• In October 2024, Cabinet approved the procurement of a new integrated waste contract from April 2027. • Given the Council's commitment to reduce its impact on the environment, and commitment to move to a ZE fleet, it is recommended that the Council should introduce some EV into its fleet. However, it is recognised that a full EV fleet comes at a significant additional cost compared to the alternatives, and as such this would not be sustainable in the current financial position. • It is therefore recommended that a hybrid fleet is purchased from 2027 for the new Contract, which will ensure that all smaller vehicles are EVs, whilst the large vehicles are fuelled using HVO to reduce some of the emissions associated with these vehicles.
18	Localised solutions	a. Expanding and improving green Infrastructure (GI)	2025/2026	• Ongoing discussions are underway between Regeneration, Parks & Leisure, Property, Procurement & Legal, and external consultants to design a complete park makeover at Bull Lane along with a new Selby Centre and some housing.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
				• The Council are working with the Football Foundation and others to plan and design Football Foundation-funded PlayZones (caged MUGA facilities) at 4 parks including: Belmont Park, Bruce Castle Park, Downhills Park, and Hartington Park. • Works are underway at Wood Green Common to implement PlayZone and landscape improvements. These works will being ongoing into 2025/26. • Ongoing work to implement a co-produced masterplan and new community hub at Down Lane Park. • Numerous parks improvement projects related to play and sports implemented in 2024/5 in 10 parks and greenspaces at the borough. • Improvements in Finsbaury Park including: play areas, toilets and water tanks, baseball provision, lighting, signage & interpretation, entrances, boundaries and planting beds. • Design and procurement of Lordship Rec Changing Places accessible toilet/welfare facility for implementation in 2025/26. • Undertaken works to identify suitable sites for three new Local Nature Reserves. Two locations have been confirmed, these are The Paddock and Westbury Banks. • During 2024, the Council planted 738 new trees. 568 of these were street trees, 142 were planted in parks and open spaces and 28 on housing sites. • The Council has panted 4 Tiny Forests, each of which consist of 600 samplings. Two were in parks, one was in a school, and one was in New River Sports Centre. These were funding through private sponsorship, Defra's Urban Tree Challenge and Local Authority Treescapes Fund, CIL money, S106 agreements and capital funds.
19	Localised solutions	a. Low Emission Neighbourhoods (LENs) b. Low Emission Vehicle Strategy	2024	• In December 2024, a 12-month review of the three experimental Low Traffic Neighbourhoods that were

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		c. Road closures around Schools d. Public recognition of businesses that contribute to good air quality e. Publicity of air quality status and Council activity		implemented in 2022 was undertaken. This demonstrated that the schemes were achieving their intended traffic calming objectives. • Following the above review and a final consultation on the LTN schemes, on 10 December 2024 the Cabinet made the decision to make all three LTNs permanent. • These schemes have been shortlisted for the MJ Achievement Award for 'Best Transport Decarbonisation Project'. The Winner of the award with be announced June 2025.
20	Clean Transport	a. Ensuring that Transport and Air Quality policies and projects are integrated	Ongoing	• Officers from both Transport Planning and Pollution Teams continue to work together as evident in the Council's ongoing School Streets and Low Traffic Neighbourhood projects. • Officers continue to provide considerable input into relevant policy documents, including AQAPs, Safe and Sustainable Transport Strategy, Kerbside Strategy, as well as AQ concerns on all planning applications.
21	Clean Transport	a. Discouraging unnecessary idling by taxis and other vehicles	Ongoing	• The Council continues to drive behavioural change through its participation in the Pan London Anti-idling Project and enforcement. • The Council has increased anti-idling road signage at idling hotspots including outside schools that do not benefit from traffic calming measures such as School Streets. • The Council continues to work with TFL and GLA to reduce emissions from transport sources. • In the financial year 2024-25 we received 32 complaints about idling vehicles. 31 of those complaints have been investigated and the case closed.
22	Clean Transport	a. Regular temporary car free days	2024	

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
				• The Council continues to offer assistance with School Play Streets. • 1 resident led play street was organised in 2024.
23	Cleaner Transport	a. Using parking policy to reduce pollution emissions such as free or discounted parking charges or residential parking permits for zero emission cars and/ or surcharges on diesel vehicles below Euro 6 standards for Resident and Controlled Parking Zone permits	2022	• No further update beside the progress reported in the 2022 report.
24	Cleaner Transport	e. Installation of Ultra-low Emission Vehicle (ULEV) infrastructure (electric vehicle charging points, rapid electric vehicle charging point and hydrogen refuelling stations): Support GLA in the Expansion of ULEZ f. Increasing the proportion of electric, hydrogen and ultra-low emission vehicles in Car Clubs g. Increase the introduction and use of electric vehicle Car Clubs across the borough h. Reprioritisation of road space; reducing parking at some destinations and or restricting parking on congested high streets and A roads to improve bus journey times, cycling experience, and reduce	Ongoing	• In 2024 the Council installed an additional 64 standard EV points, with a total of 295 EV points now installed at various locations in the borough. These are Lamp column, standard, fast and rapid EV points. A map to these points can be found at: EVCPs Locations Haringey – Google My Maps • The Zipcar Car Club Scheme has increased the proportion of electric vehicles in their Flex car club fleet, with 91% of the fleet now electric. • Following the submission of an Expression of Interest (Stage 1 of the application) in May 2023, Partnership 6 has been provisionally allocated LEVI funding totalling approximately £7,544,000, for the purpose of delivering on-street electric vehicle charging infrastructure to support residents to make the switch to electric vehicles. The indicative capital funding allocation, exclusively to the Council, is £1,257,333.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		emissions caused by congested traffic.		
25	Cleaner Transport	a. Provision of infrastructure to support walking and cycling. To enable cycling by increasing the number of secure cycle parking spaces.		• In 2024 the Council installed 95 bike hangers, accommodating an additional 570 bikes. A total of 380 cycle storage facilities are now installed across the borough which can accommodate 2280 bikes. • A map to these hangers can be found at: On street Cycle Parking (storage) Locations - Haringey – Google My Maps • We have also consulted on a proposal to install a further 45 bike hangers which will be installed in June/July 2025.

3. Planning Update and Other New Sources of Emissions

Table M. Planning requirements met by planning applications in London Borough of Haringey in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	16
Number of planning applications required to undertake construction dust monitoring and reporting (Please specify how you get access to dust monitoring data i.e. online tool or CSV file)	30 Data for these sites can be accessed via online tool, regular reports from developers, and from ad-hock data requests.
Number of CHPs/Biomass boilers refused on air quality grounds	0
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions as detailed in Air Quality Neutral LPG (london.gov.uk) point 3.1.5.	0
Number of developments required to install Ultra-Low NO_X boilers	1
Number of developments where an AQ Neutral building and/or transport assessments undertaken	16
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	1
Number of planning applications with S106 agreements including other requirements to improve air quality	0
Number of planning applications with CIL payments that include a contribution to improve air quality	0
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas Number of planning applications with conditions related to NRMM included. Number of developments registered at www.nrmm.london. Number of audits (based on the pan-London project report and / or inhouse auditing programme) % of sites unregistered prior to audit % of sites compliant with Stage IV of the Directive and/or exemptions to the policy.	N/A
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas) Number of planning applications with conditions related to NRMM included. Number of developments registered at www.nrmm.london. Number of audits (based on the pan-London project report and / or inhouse auditing programme)% of sites unregistered prior to audit % of sites compliant with	There are 30 conditions related to NRMM at the relevant building sites. 28 sites were registered on the nrmm website in 2024. In 2024, of the 14 sites audited, 12 were in compliant, 2 have not yet a NRMM within the scope (37 – 560KW) on

Condition	Number
Stage IIIB of the Directive and/or exemptions to the policy.	site that can be audited, and 0 sites were completed.

Records of the above information on planning applications are kept in the Haringey internal database called M3PP. This is also duplicated in the pollution team planning folder for officers' comment and recommendation.

The NRMM record is from the yearly audit report submitted to the council through its membership of Pan London NRMM as well as from the registered information on the nrmm.london website for the council.

3.1 New or significantly changed industrial or other sources

No new sources identified

4. Additional Activities to Improve Air Quality

4.1 London Borough of Haringey Fleet

As of 2024, the council has responsibility for 502 vehicles. There are over 250 vehicles in the council fleet with 13 zero-emitting vehicles in total. This is spread across multiple service areas including Parks, Housing, and Highways Services and has recently increased due to the in-sourcing of the Council's Housing Services' fleet previously called Homes for Haringey fleet.

The largest outsourced fleeting is with Veolia. The breakdown of Waste fleet can be seen below:

Fuel	Count	%
Diesel	98	89%
Hybrid/Diesel	4	4%
Electric	8	7%

A review of how the Council's Waste Fleet will transition to a Zero Emission (ZE) fleet (waste and cleansing services only) has also been undertaken, looking at the future options for waste and cleansing services from 2027. When the current contract with Veolia expires, a new fleet replacement programme will begin.

4.2 Pan-London NRMM Auditing Project

We can confirm that the London Borough of Haringey will continue to support the NRMM Enforcement project in 2025-2026.

The standard wording used when recommending NRMM planning conditions is as follows:

NRMM (x3)

a. Prior to the commencement of the development, evidence of site registration at http://nrmm.london/ to allow continuing details of Non-Road Mobile Machinery (NRMM) and plant of net power between 37kW and 560 kW to be uploaded during the construction phase of the development shall be submitted to and approved by the Local Planning Authority.

   REASON: To protect local air quality and comply with Policy 7.14 of the London Plan and the GLA NRMM LEZ

b. Evidence that all plant and machinery to be used during the demolition and construction phases of the development shall meets Stage IV of EU Directive 97/68/ EC for both NOx and PM emissions shall be submitted to the Local Planning Authority.

   REASON: To protect local air quality and comply with Policy 7.14 of the London Plan and the GLA NRMM LEZ

c. During the course of the demolitions, site preparation and construction phases, an inventory and emissions records for all Non-Road Mobile Machinery (NRMM) shall be kept on site. The inventory shall demonstrate that all NRMM is regularly serviced and detail proof of emission

limits for all equipment. All documentation shall be made available for inspection by Local Authority officers at all times until the completion of the development.

REASON: To protect local air quality and comply with Policy 7.14 of the London Plan and the GLA NRMM LEZ

The above conditions are recommended for all planning applications that include demolition and/or construction phases.

4.3 Air Quality Alerts

We can confirm that London Borough of Haringey supports *air*TEXT (https://www.airtext.info/) which can be accessed through the following link on the council website: https://new.haringey.gov.uk/environment/pollution/air-quality/airtext-air-quality-alerts

Haringey is currently in the process of developing a dedicated Comms package to further assist with the cascade of the Mayor's air quality alert messaging.

4.4 Air Quality Positive

We can confirm that London Borough of Haringey has not received any innovative mitigation measures committed as part of a submitted Air Quality Positive Matrix which aligns with the Air Quality Positive London Plan Guidance.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

Haringey's two automatic monitoring stations are part affiliated to the Automatic Urban & Rural Network (AURN), whilst the third is locally managed by Ricardo Energy and Environment (Ricardo).

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), Imperial 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 monthly for both Haringey Wood Green and Haringey Priory Park South, whilst Haringey Roadside is calibrated on a fortnightly basis. Calibrations are undertaken by ESU1.

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 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: https://uk-air.defra.gov.uk/data/changes-to-ratified-data.

PM_{10} Monitoring Adjustment

Whilst PM10 monitoring recommenced in May 2021, no monitoring adjustment was done for 2024.

A.2 Diffusion Tubes

Haringey's diffusion tubes are prepared and analysed by Lambeth Scientific Services which is a UKAS accredited laboratory.

This laboratory participates in the Air Proficiency Testing (AIR – PT) scheme to meet European standards and is involved in the network field inter-comparison exercise operated by LGC, which assesses the sampling and analytical performance of the tubes. Nitrogen dioxide diffusion tubes are prepared using the 50% triethanolamine (TEA) in acetone method.

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 Air Proficiency Testing (AIR – PT) scheme, 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 Air Proficiency Testing (AIR – PT) scheme over the preceding 12 months, prepared by LGC.

Factor from Local Co-location Studies

Diffusion tubes are considered to have limitations. Therefore, the government recommends 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 one of our roadside locations, HR14 (639 High Road, Tottenham), and submits the data annually.

Using the Diffusion Tube Processing Tool, the local bias adjustment factor for this co-location study has been calculated to be 0.85.

Discussion of Choice of Factor to Use

The local factor has been calculated to be 0.81.

To ensure consistency with previous reports, it is the national laboratory average adjustment factor (Lambeth Scientific Services) that has been applied to the raw annual average concentrations to obtain the bias adjusted results.

The bias adjustment factor was based on 2 studies by Lambeth Scientific Services.

Table N. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	03/25	0.81
2023	National	03/24	0.85
2022	National	03/23	0.97
2021	National	03/22	0.97
2020	National	03/21	0.96

National Diffusion Tube Bias Adjustment Factor Spreadsheet

Spreadsheet Version Number: 03/25

Follow the steps below **in the correct order** to show the results of **relevant** co-location studies

Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods

Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet

This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.

This spreadsheet will be updated at the end of June 2025

LAQM Helpdesk Website

The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.

Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.

Step 1: Select the Laboratory that Analyses Your Tubes from the Drop-Down List

If a laboratory is not shown, we have no data for this laboratory.

Step 2: Select a Preparation Method from the Drop-Down List

If a preparation method is not shown, we have no data for this method at this laboratory.

Step 3: Select a Year from the Drop-Down List

If a year is not shown, we have no data[2]

Step 4:

Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor[3] shown in blue at the foot of the final column.

If you have your own co-location study then see footnote[4]. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953

Analysed By[1]	Method To undo your selection, choose (All) from the pop-up list	Year[2] To undo your selection, choose (All)	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m^3)	Automatic Monitor Mean Conc. (Cm) (µg/m^3)	Bias (B)	Tube Precision[4]	Bias Adjustment Factor (A) (Cm/Dm)
Lambeth Scientific Services	50% TEA in acetone	2024	KS	Marylebone Road Intercomparison	10	44	35	26.5%	G	**0.79**
Lambeth Scientific Services	50% TEA in acetone	2024	UB	Spelthorne Borough Council	12	22	18	20.1%	G	**0.83**
Lambeth Scientific Services	50% TEA in acetone	2024		**Overall Factor[3] (2 studies)**				**Use**		**0.81**

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Where data capture is less than 75% and greater than 25% of a full calendar year (between 3 and 9 months), the mean should be “annualised” – i.e. adjusted using the methodology outlined in LLAQM.TG(19) before being compared to annual mean objectives.

HR25 and HR42 were adjusted in line with the methodology outlined in LLAQM.TG(19).

The result of this adjustment is displayed in Table O.

Distance Adjustment

The exceedances measured at HR31, HR32 and HR41 are not representative of public exposure. Therefore, in line with LLAQM.TG(19) distance adjustment has been undertaken to estimate NO_2 concentrations at the nearest receptor.

The result of this adjustment can be found in Table P

Table O. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor Haringey Roadside	Annualisation Factor Haringey Priory Park South	Annualisation Factor Wood Green	Average Annualisation Factor	Raw Data Annual Mean (µg m^{-3})	Annualised Annual Mean (µg m^{-3})	Comments
HR25	0.9344	0.8528	0.9665	0.9179	19.7	18.1	
HR42	1.0249	1.0513	1.0085	1.0282	20.0	20.6	

Table P. NO_2 Fall off With Distance Calculations

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted (µg m^{-3})	Background Concentration (µg m^{-3})	Concentration Predicted at Receptor (µg m^{-3})	Comments
HR31	0.5	3.5	56.2	22.2	**44.5**	*Predicted concentration at Receptor above AQS objective.*
HR32	0.5	1.5	43.3	20.1	38.8	*Predicted concentration at Receptor within 10% the AQS objective.*
HR41	1.0	2.0	36.9	20.2	34.6	

Appendix B Full Monthly Diffusion Tube Results for 2024

Table Q. NO_2 2024 Diffusion Tube Results (µg m^{-3})

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.81)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
HR06	528945	187682	39.0	32.0	32.0	28.0	34.0	30.0	27.0	22.0	33.0	34.0	38.0	26.0	31.3	25.3		
HR08	530512	189446	23.0	36.0	30.0	23.0	23.0	23.0	25.0	18.0	24.0	30.0	34.0	26.0	26.3	21.3		
HR14a	533890	190710	34.0	33.0	26.0	27.0	31.0	27.0	25.0	27.0	29.0	31.0	31.0	28.0	-	-		Triplicate Site with HR14a, HR14b and HR14c - Annual data provided for HR14c only
HR14b	533890	190710	33.0	33.0	27.0	26.0	30.0	27.0	29.0	24.0	28.0	30.0	30.0	25.0	-	-		
HR14c	533890	190710	35.0	30.0	26.0		21.0	31.0	24.0		30.0	32.0	31.0	28.0	28.6	23.2		
HR21	532010	190549	27.0	22.0	23.0	18.0	18.0	16.0	16.0	12.0		25.0	26.0	23.0	20.5	16.6		
HR24	532155	190517	38.0	33.0	36.0	29.0	33.0	31.0	28.0	26.0	32.0	36.0	37.0	31.0	32.5	26.3		
HR25	532554	191383	23.0	24.0			7.0	18.0				22.0	25.0	19.0	19.7	14.7		
HR27	531758	188872	38.0	36.0	35.0	29.0	34.0	25.0	26.0	17.0	30.0	32.0	32.0	29.0	30.3	24.5		
HR28	530063	191324	34.0			23.0	27.0	21.0		15.0	25.0	31.0	31.0	25.0	25.8	20.9		
HR30	533899	189023	30.0	28.0	29.0	24.0	30.0	26.0	25.0	20.0	26.0	28.0	33.0	24.0	26.9	21.8		
HR31	531245	189935	70.0	75.0	63.0	60.0	65.0	70.0	79.0	58.0	74.0	80.0			69.4	**56.2**	**44.5**	
HR32	528612	188072	51.0	58.0	55.0	52.0	50.0	56.0	62.0	47.0	57.0	55.0	54.0	45.0	53.5	**43.3**	38.8	
HR34	531079	187926	54.0	36.0	49.0	41.0	53.0	53.0	49.0	44.0	48.0	49.0	49.0	35.0	46.7	37.8		
HR35	532324	188766	27.0	27.0	27.0	23.0	26.0	22.0	22.0	19.0	24.0	26.0	29.0	24.0	24.7	20.0		
HR36	533842	189581	34.0	34.0	32.0	27.0	26.0	26.0	26.0		30.0	29.0	36.0	33.0	30.3	24.5		
HR37	530123	188420	42.0	42.0	43.0	33.0	28.0	32.0	17.0	26.0	29.0	37.0	40.0	29.0	33.2	26.9		
HR38	533991	189460	26.0	23.0	23.0	19.0	20.0	16.0	16.0	12.0	21.0	23.0	24.0	22.0	20.4	16.5		
HR39	528180	189842	24.0	23.0	23.0	18.0	21.0	21.0	18.0	19.0	12.0	25.0	27.0	20.0	20.9	16.9		
HR40	527884	188089	34.0	27.0	30.0	23.0	26.0	22.0	24.0	17.0	26.0	30.0	31.0	23.0	26.1	21.1		
HR41	528797	189636	51.0	56.0	49.0		41.0	42.0	45.0	37.0	40.0	47.0	50.0	43.0	45.5	36.9	34.6	
HR42	529254	188051			27.0	23.0			15.0	12.0	18.0	25.0	25.0	15.0	20.0	16.7		
HR43	531018	188018	22.0		22.0	17.0	19.0	16.0	15.0	12.0	16.0	20.0	26.0	22.0	18.8	15.2		
HR44	531303	189128	25.0	22.0	24.0	19.0	20.0	17.0	15.0	13.0	20.0	23.0	26.0	20.0	20.3	16.5		
HR45	532866	188246	27.0	20.0	21.0	18.0	19.0	14.0	15.0	12.0	20.0	23.0	25.0	21.0	19.6	15.9		
HR46	531882	189187	30.0	30.0		19.0	20.0	17.0	17.0	18.0	20.0	26.0	28.0	26.0	22.8	18.5		
HR47	533117	189142	39.0		34.0	28.0	28.0	18.0	24.0	21.0	35.0	34.0	43.0	28.0	30.2	24.4		
HR48	534022	190341	28.0			22.0	20.0	20.0	19.0	17.0	14.0	26.0	29.0	25.0	22.0	17.8		

HR49	533199	190058	30.0	24.0	28.0	23.0	21.0	16.0	21.0	14.0	23.0	27.0	31.0	23.0	23.4	19.0		
HR50	532063	189889	28.0	22.0	22.0	19.0	20.0	17.0	15.0	15.0	21.0	24.0	26.0	22.0	20.9	16.9		
HR51	530691	189963	20.0	22.0	21.0	18.0	18.0	21.0	16.0	12.0	19.0	22.0	25.0	19.0	19.4	15.7		
HR52	529423	190621	37.0	35.0	30.0	25.0	29.0	28.0	25.0	23.0	30.0	35.0	26.0	29.0	29.3	23.8		
HR53	530497	190904	29.0	26.0	27.0	23.0	16.0	18.0	22.0	17.0	24.0	31.0	33.0	22.0	24.0	19.4		
HR54	531617	191114	33.0	30.0	26.0	20.0	21.0	20.0	23.0	14.0	23.0	26.0	28.0	20.0	23.7	19.2		
HR55	533257	190739	37.0	31.0	29.0	25.0	31.0	29.0	26.0	25.0	31.0	29.0		29.0	29.3	23.7		
HR56	534205	191270	16.0	22.0	22.0	19.0	19.0	16.0	18.0	12.0	20.0	22.0	27.0	24.0	19.8	16.0		
HR57	530186	189628	26.0	22.0	25.0	20.0	17.0	16.0	19.0	28.0	18.0	24.0	28.0	20.0	21.9	17.8		

☒ **All erroneous data has been removed from the NO_2 diffusion tube dataset presented in Table .**

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19.**

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

☒ **Where applicable, data has been distance corrected for relevant exposure in the final column.**

☒ **London Borough of Haringey confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

Exceedances of the NO_2 annual mean objective of 40µg m^{-3} are shown in **bold**.

NO_2 annual means exceeding 60µg m^{-3}, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

Appendix C Map(s) of Monitoring Locations and AQMAs

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Figure A. Map of Non-Automatic Monitoring Site(s)

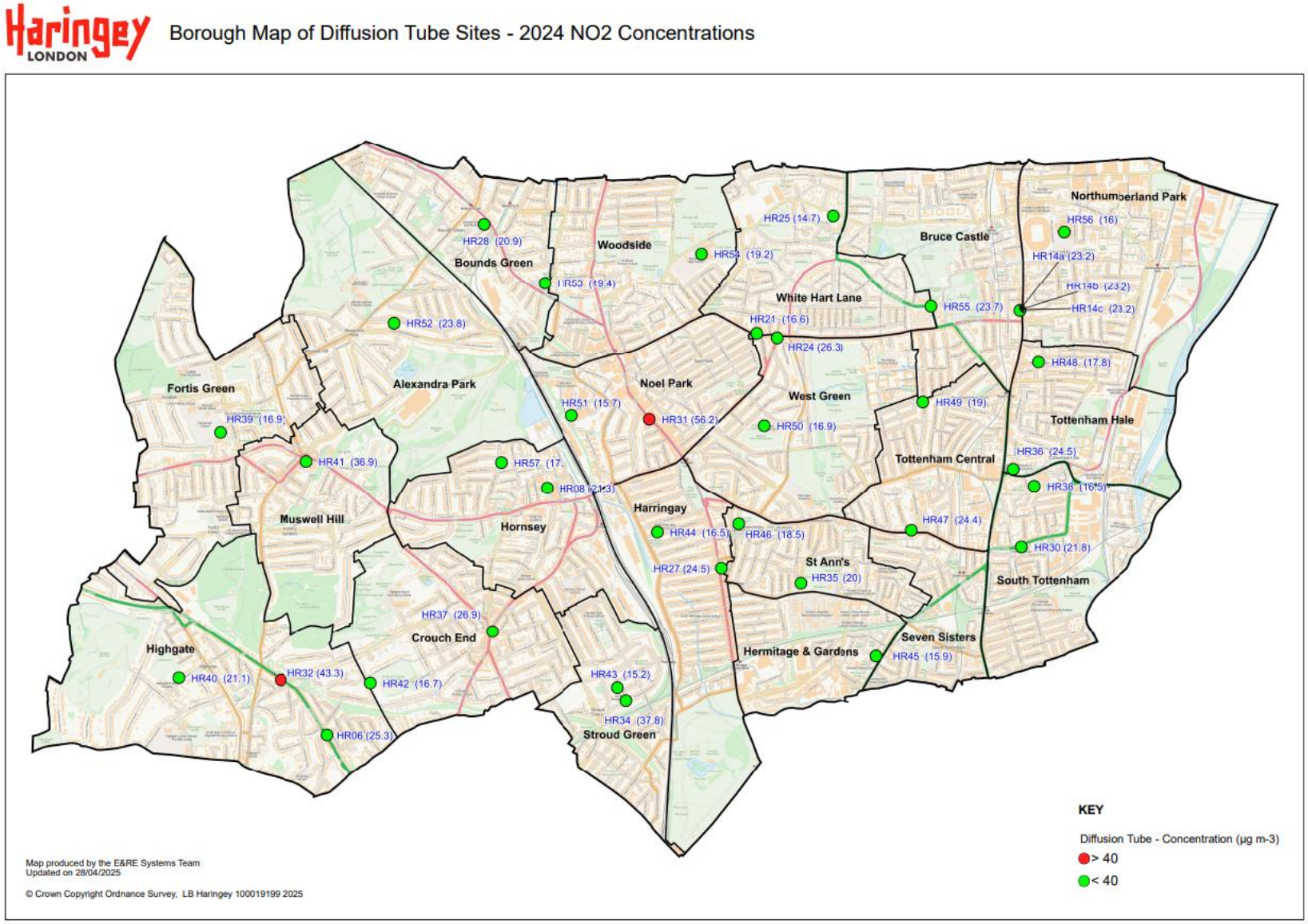
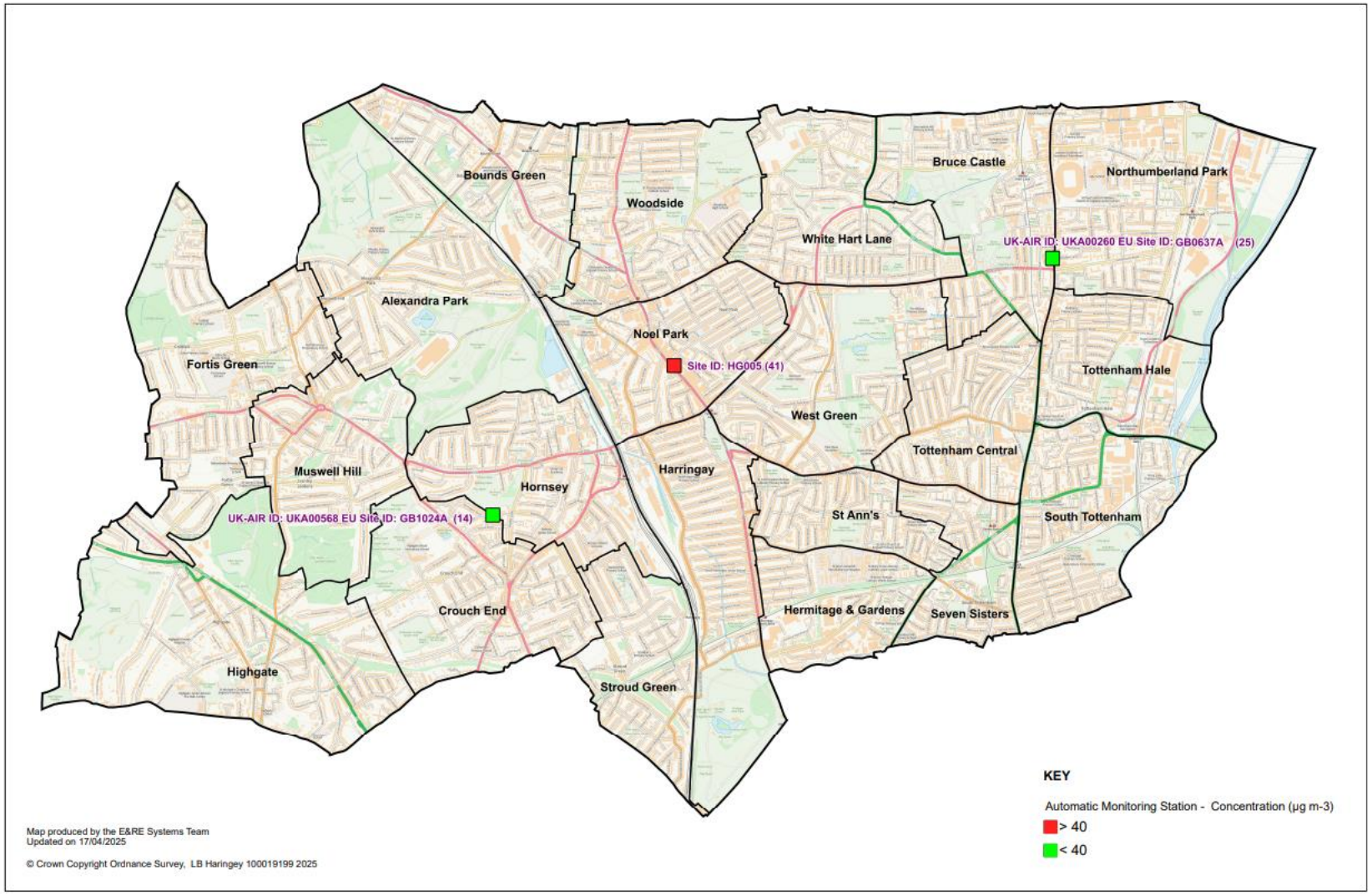


Figure B. Map of Automatic Monitoring Site(s)

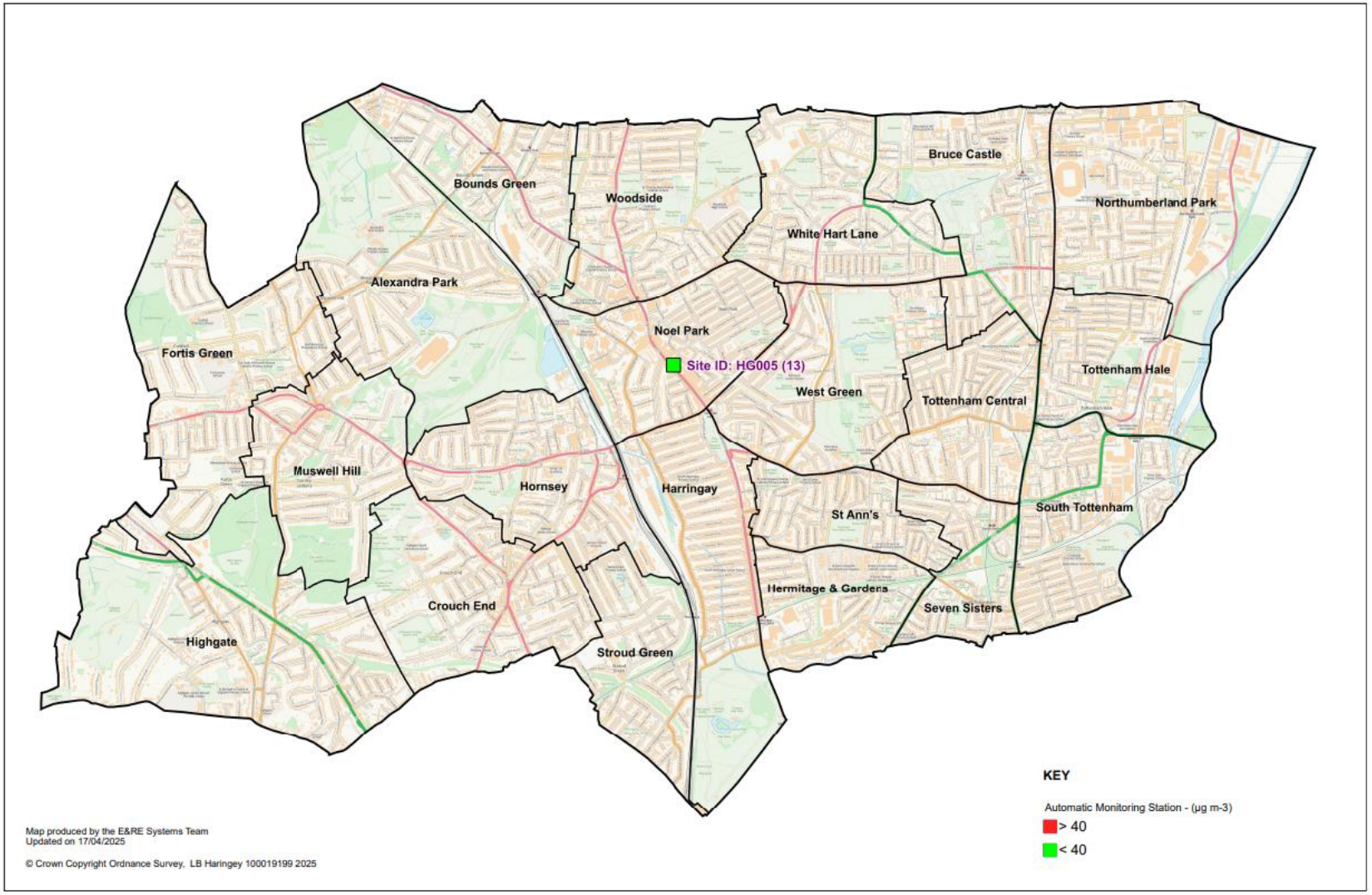
Haringey LONDON

Borough Map of Automatic Monitoring Stations - 2004 NO2 Concentrations



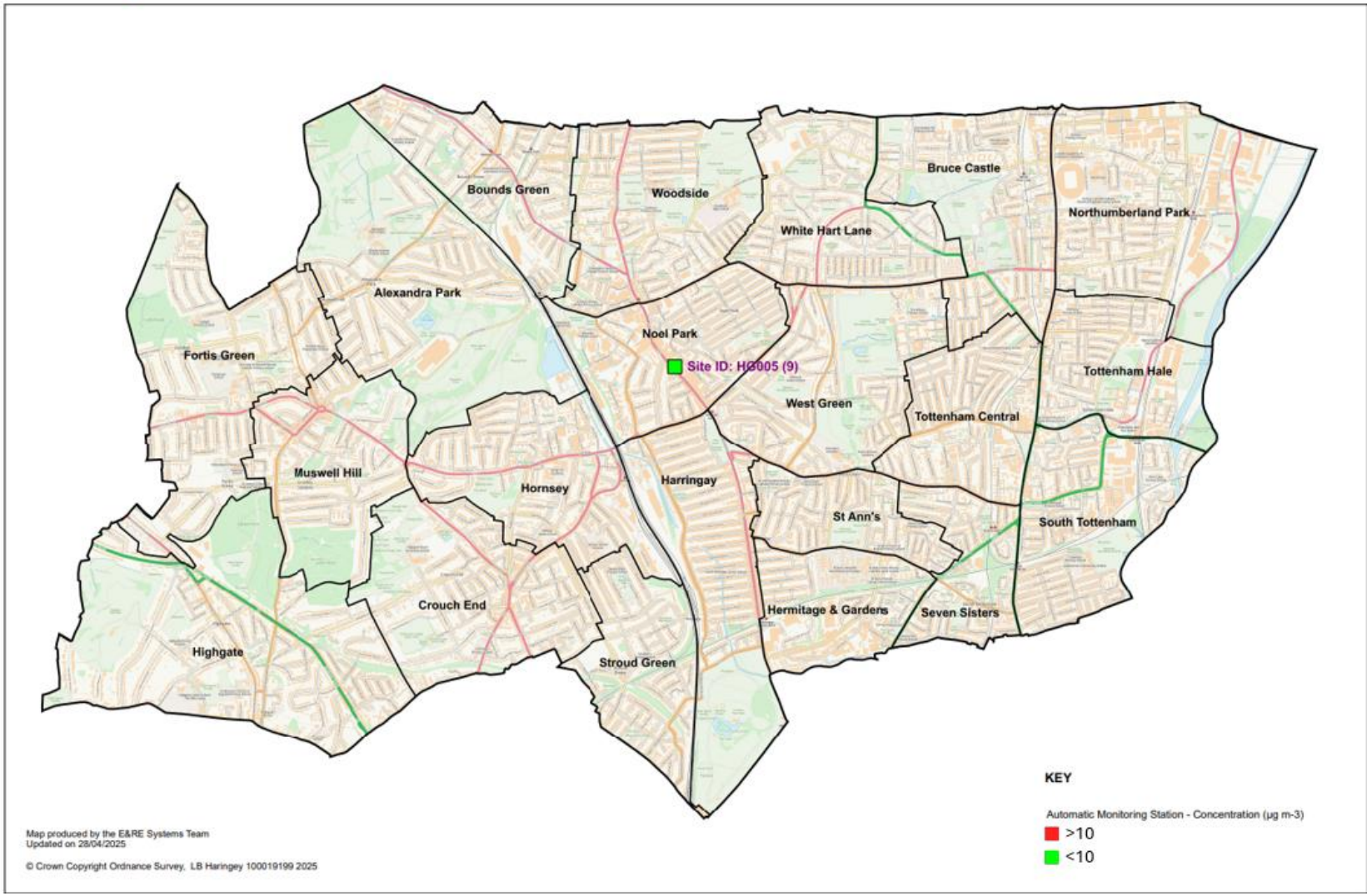
Haringey LONDON

Borough Map of Automatic Monitoring Stations - 2024 PM10 Concentrations



Haringey LONDON

Borough Map of Automatic Monitoring Stations - 2024 PM2.5 Concentrations



Harrow Air Quality Annual Status Report for 2024

Date of publication: 23rd May 2025

This report provides a detailed overview of air quality in Harrow during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process[1].

Contact details:

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[1] LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19))

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Figures

Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQP	Air Quality Positive
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
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 and International Standards, Objectives and Guidelines

Pollutant	Standard / Objective / Guideline	Averaging Period	Date[1]
Nitrogen dioxide (NO_2)	200 µg m^{-3} not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO_2)	40 µg m^{-3}	Annual mean	31 Dec 2005
Nitrogen dioxide (NO_2)	WHO AQG[2]: 10 µg m^{-3}	Annual mean	
Particles (PM_{10})	50 µg m^{-3} not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 45 µg m^{-3} not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM_{10})	40 µg m^{-3}	Annual mean	31 Dec 2004
Particles (PM_{10})	WHO AQG[2]: 15 µg m^{-3}	Annual mean	
Particles ($PM_{2.5}$)	20 µg m^{-3}	Annual mean	2020
Particles ($PM_{2.5}$)	London Mayoral Objective[3]: 10 µg m^{-3}	Annual mean	2030
Particles ($PM_{2.5}$)	WHO AQG[2]: 5 µg m^{-3}	Annual mean	
Particles ($PM_{2.5}$)	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Particles ($PM_{2.5}$)	WHO AQG[2]: 15 µg m^{-3}	24-hour mean	
Sulphur dioxide (SO_2)	266 µg m^{-3} not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO_2)	350 µg m^{-3} not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	125 µg m^{-3} mot to be exceeded more than 3 times a year	24-hour mean	31 Dec 2004
Sulphur dioxide (SO_2)	WHO AQG[2]: 40 µg m^{-3} not to be exceeded more than 3-4 times a year	24-hour mean	

Notes:

(1) Date by which to be achieved by and maintained thereafter

(2) 2021 World Health Organisation Air Quality Guidelines

(3) London Mayoral Objective

1. Air Quality Monitoring

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Inlet Height (m)
HR01	Harrow Stanmore	Urban Background	517877	192314	NO_2, PM_{10}	Yes Harrow	Chemiluminescence, TEOM	50	N/A	2.85
HR02	Harrow Pinner Road	Roadside	513504	188998	NO_2, PM_{10}	Yes harrow	Chemiluminescence, TEOM	10	0.5	2.85

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable

Table C. Details of Non-Automatic Monitoring Sites for 2024

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
HA01	Imperial Drive (Rayners Lane)	Roadside	513025	187610	NO2	Yes Harrow	0	7	No	2.2
HA02	Cottrell Cottages (Stanmore)	Roadside	517182	192346	NO2	Yes Harrow	0	2	No	2.2
HA03	Harrow Arts Centre (Hatch End)	Urban Background	513385	191225	NO2	Yes Harrow	N/A	N/A	No	5
HA04	Roxeth School (South Harrow)	Urban Background	514895	186874	NO2	Yes Harrow	0	N/A	No	2.2

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

(2) N/A if not applicable.

Table D Details of Breathe London Sensors for 2024

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Inlet Height (m)
CLDP0187	High Street Wealdstone	Roadside	515390	189926	NO_2, $PM_{2.5}$	Yes Harrow	Electrochemical Cell with Remote Calibration Laser Light Scattering with Remote Calibration	10.0	1.0	Approx 2.5
CLDP0188	St Jerome Bilingual School	Roadside	515652	188704	NO_2, $PM_{2.5}$	Yes Harrow	Electrochemical Cell with Remote Calibration Laser Light Scattering with Remote Calibration	7.0	2.0	Approx 2.5

"The Breathe London Network[2] was established in 2020, a partnership between the Mayor of London, Imperial College London and Bloomberg Philanthropies, aimed at making reliable air quality monitoring data more accessible to local communities in London. Its network of low cost, easy to install and maintain air quality sensors complements London's network of high accuracy reference analysers, helping to monitor and map air pollution across the city. Community groups, charities, businesses, individuals, academics and boroughs are able to "buy in" at a substantially reduced cost to the Breathe London network to source air pollution data for local projects or schemes."

Harrow provides two such locations as detailed above.

[2] https://www.breathelondon.org/

1.2 Comparison of Monitoring Results with AQOs

Table E. Annual Mean NO_2 Monitoring Results: Automatic Monitoring (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
HR01	517877	192314	Urban Background	88.4	88.4	21.9	20.3	15.4	16.4	17.3	12.4	10.1
HR02	513504	188998	Roadside	0	0	30.0	27.9	24.2	-	-	-	

Notes:

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the NO_2 annual mean AQO of 40 µg m^{-3} are shown in **bold**.

NO_2 annual means in excess of 60 µg m^{-3}, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias.

All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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%).

During 2024 funding was secured for the replacement of both HR01 and HR02 along with the introduction of a third automatic monitor at College Road. They will be installed in 2025/26 following consultation with the local community, ward councillors and the Mayor of London.

Table F. Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg m^{-3})

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2024 (%) (2)	2018	2019	2020	2021	2022	2023	2024
HA01	513025	187610	Roadside	98.1	98.1	-	-	-	-	22.6	21.0	17.9
HA02	517182	192346	Roadside	98.1	98.1	-	-	-	-	30.5	28.3	20.5
HA03	513385	191225	Urban Background	98.1	98.1	-	-	-	-	15.0	13.7	11.3
HA04	514895	186874	Urban Background	90.3	90.3	-	-	-	-	13.1	12.6	11.9

☐ **Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19.**

☒ **Diffusion tube data has been bias adjusted.**

☒ **Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.**

Notes:

The annual mean concentrations are presented as µg m^{-3}. Exceedances of the NO_2 annual mean objective of 40µg m^{-3} are shown in **bold**. NO_2 annual means exceeding 60µg m^{-3}, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been "annualised" in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Table G Annual Mean NO_2 Monitoring Results: Breathe London Sensors (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
CLDP0187	515390	189926	Roadside	90	90					43	41	36
CLDP0188	515652	188704	Roadside	95	95					28	25	24

These results are indicative only.

The annual mean concentrations are presented as µg m-3.

These instruments carry a higher level of uncertainty than reference-equivalent analysers (such as HR01), and concentrations cannot be used for strict comparison with the air quality NO_2 objectives.

Table H. NO_2 Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means >200µgm^{-3}

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	Valid data capture for monitoring period %([a])	Valid data capture 2024 %([b])	2018	2019	2020	2021	2022	2023	2024
HR01	517877	192314	Urban Background	88.4	88.4	0	0	0	0	0	0 (65.2 µgm^{-3})	0
HR02	513504	188998	Roadside	0	0	0	0	0	0	-	-	-

Notes

Results are presented as the number of 1-hour periods where concentrations greater than 200 µg m^{-3} have been recorded.

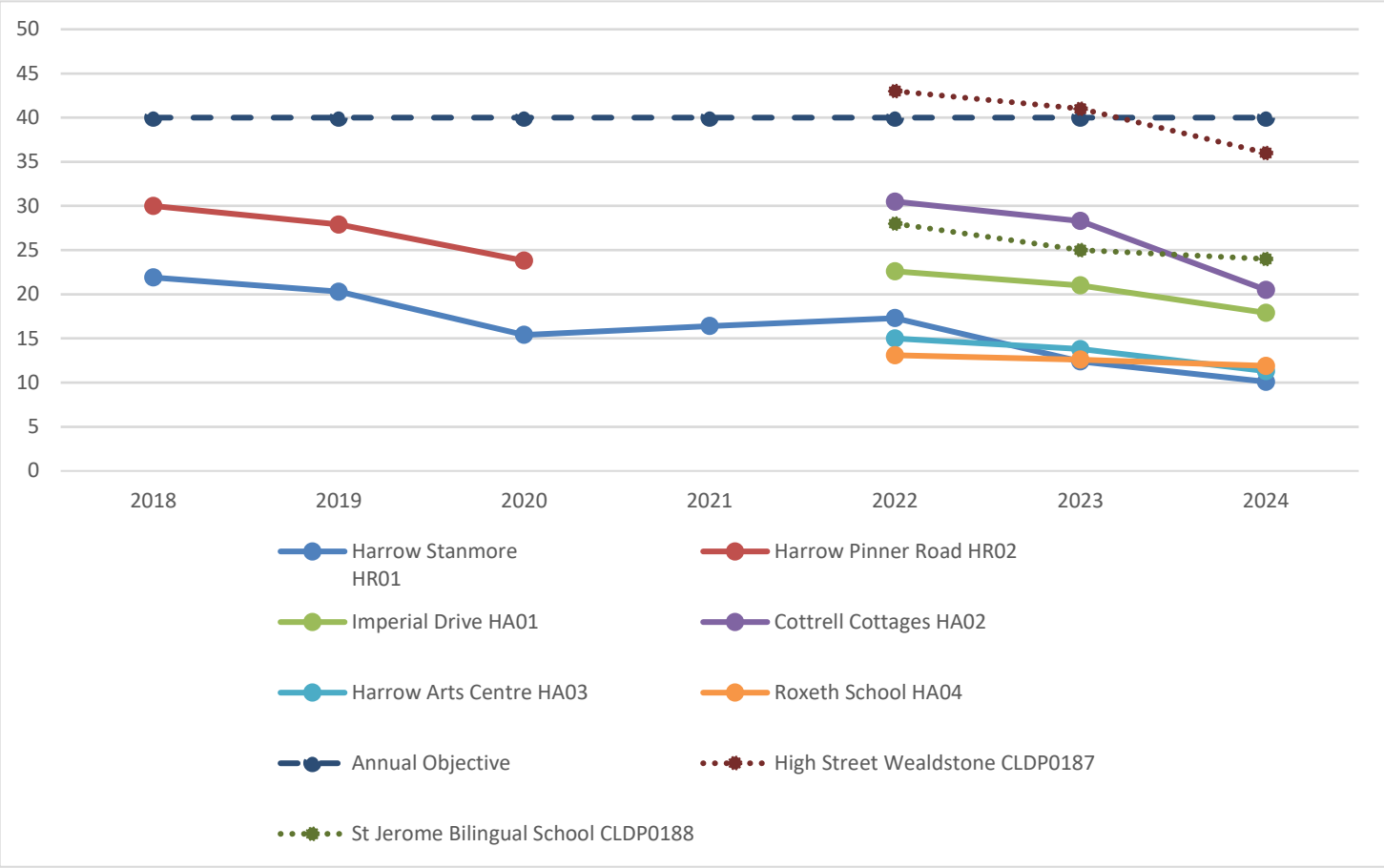
Exceedance of the NO_2 short term AQO of 200 µg m^{-3} over the permitted 18 hours per year are shown in **bold**.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

(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%)

Figure 1 Annual Mean NO_2 Monitoring Results, 2018- 2024



The seven year trend above shows steadily reducing levels of $N0_2$ in Harrow at both background and roadside locations. The 2024 concentrations are all below the AQO (40µg m^{-3})

Note: The Breathe London Sensors' concentrations cannot be used for strict comparison with the air quality NO_2 AQO.

Table I. Annual Mean PM_{10} Automatic Monitoring Results (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	Valid data capture for monitoring period %([a])	Valid data capture 2023 %([b])	2018	2019	2020	2021	2022	2023	2024
HR01	517877	192314	Urban Background	50.9	50.9	15	15	14	15	14	12	13
HR02	513504	188998	Roadside	0	0	19	18	16	18	-	-	

Notes

The annual mean concentrations are presented as µg m^{-3}.

Exceedances of the PM_{10} annual mean AQO of 40 µg m^{-3} are shown in **bold**.

All means have been "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

Table J. PM_{10} Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM_{10} 24-Hour Means >50 µg m^{-3}

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	Valid data capture for monitoring period %[(a)]	Valid data capture 2023 %[(b)]	2018	2019	2020	2021	2022	2023	2024
HR01	517877	192314	Urban Background	50.9	50.9	0	2	0	0	0	0 (19.4µgm^{-3})	0 (19.0 µgm^{-3})
HR02	513504	188998	Roadside	0	0	1	2 (30 µgm^{-3})	1	0 (26 µgm^{-3})	-	-	-

Notes

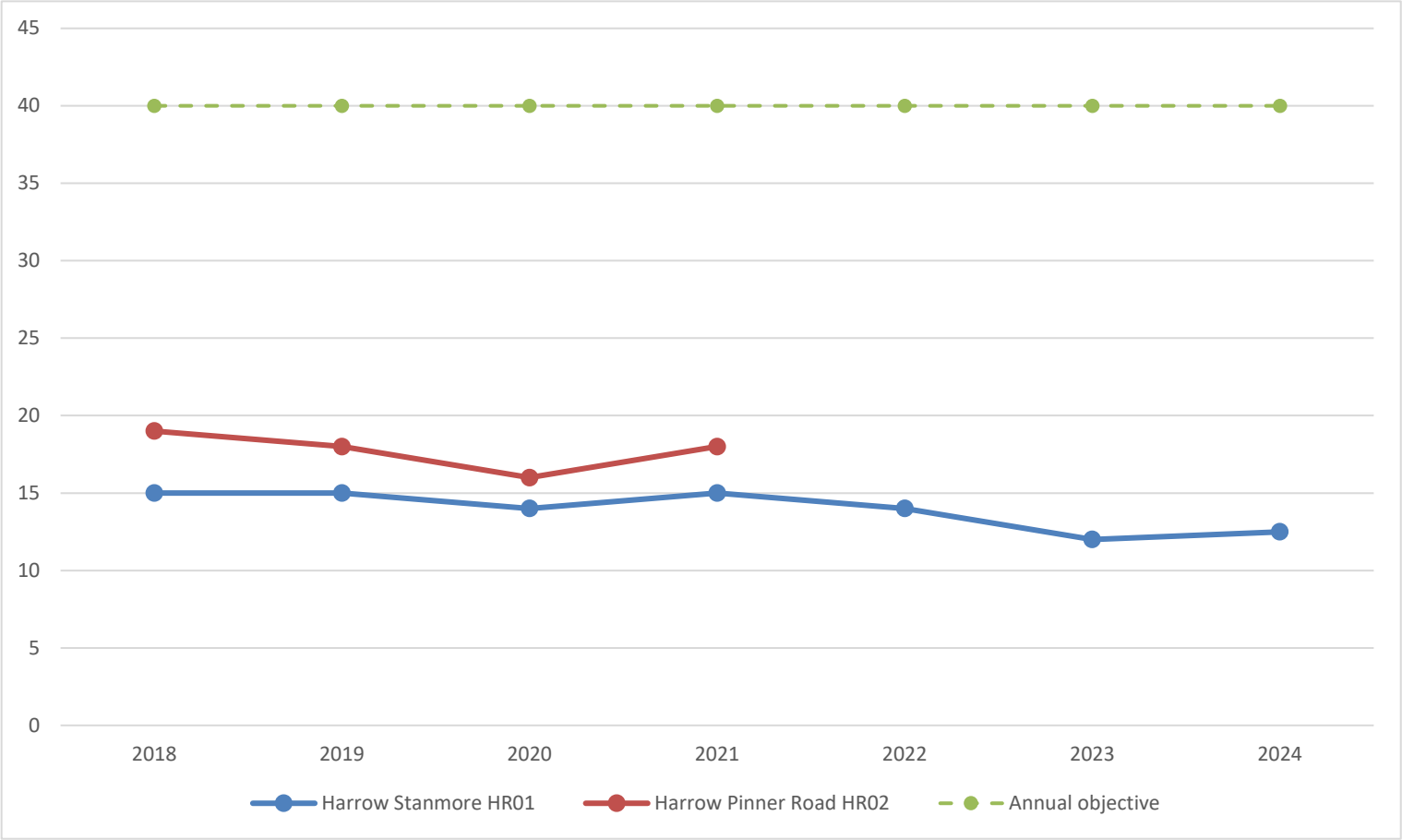
Exceedances of the PM_{10} 24-hour mean objective (50 µg m^{-3} over the permitted 35 days per year) are shown in **bold.**

Where the period of valid data is less than 85% of a full year, the 90.4th percentile is provided in brackets.

(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%).

Figure 2 Annual Mean PM10 Monitoring Results 2018 - 2024



The seven year trend above shows a marginally reducing levels of PM10 at the background site, HR01 and the 2024 concentration is well below the AQO (40µg m-3) Given the absence of reported data from the Pinner Road monitor, HR02, interpretation of the roadside trend in recent years is limited.

Table K. Annual Mean $PM_{2.5}$ Monitoring Results, Breathe London Sensors (µg m^{-3})

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
CLDP0187	515390	189926	Roadside	90	90					43	41	36
CLDP0188	515652	188704	Roadside	95	95					28	25	24

Notes

These results are indicative only.

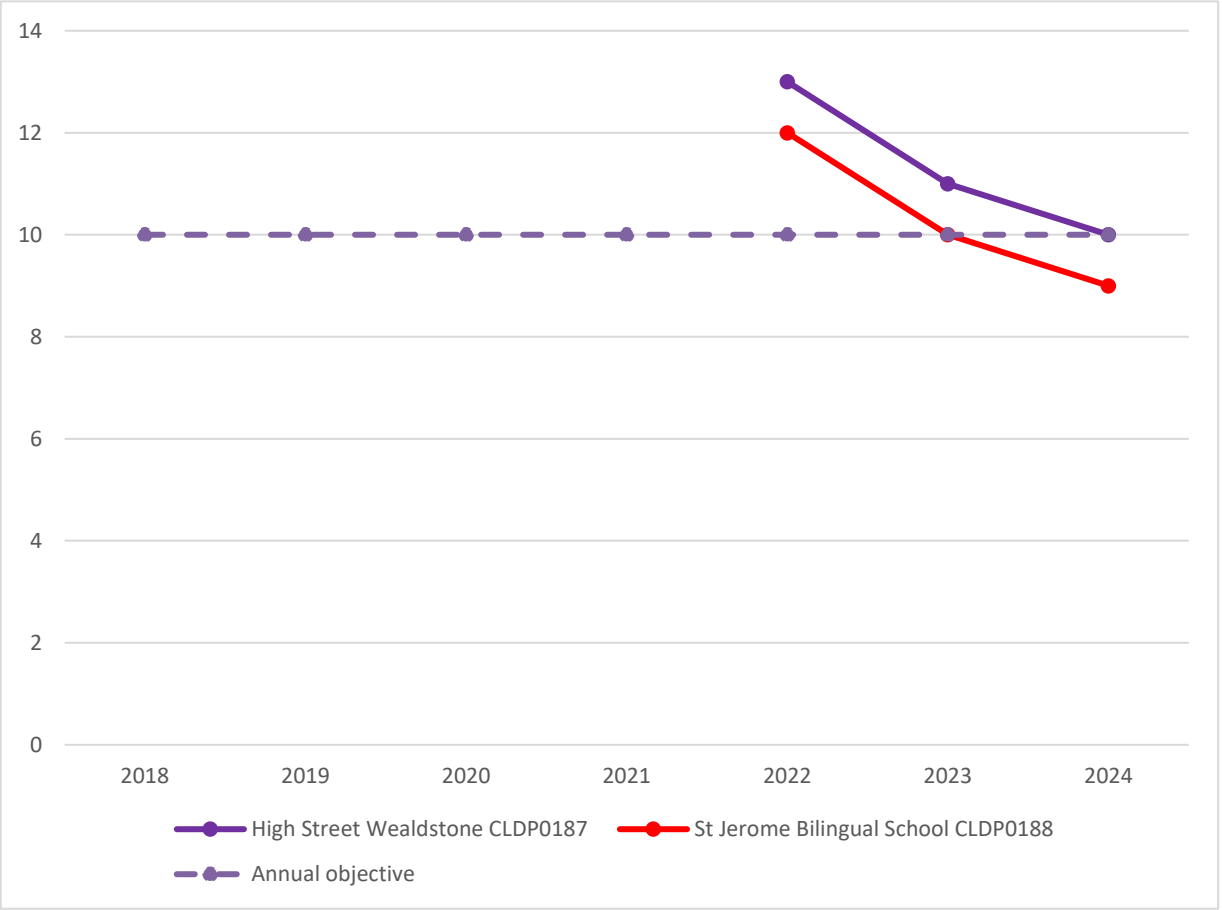
The annual mean concentrations are presented as µg m^{-3}.

These instruments carry a higher level of uncertainty than reference-equivalent analysers (such as HR01), and concentrations cannot be used for strict comparison with the air quality NO_2 objectives.

(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%).

Figure 3 Annual Mean PM2.5 Monitoring Results, Breathe London Sensors 2022 -2024



With limited number of years monitoring it is not currently possible to establish any general trend in $PM_{2.5}$ concentrations from the Breathe London sensors in Harrow. In addition, the Breathe London Sensors' concentrations cannot be used for strict comparison with the air quality $PM_{2.5}$ AQO (10µg m^{-3}).

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority should prepare an Air Quality Action Plan (AQAP) within 12 months. The AQAP should specify how air quality targets will be achieved and maintained, and provide dates by which measures will be carried out.

A summary of AQMA declared by Harrow can be found in **Table L**. The table presents a description of the Harrow AQMA that is currently designated. The air quality objectives pertinent to the current AQMA designation are as follows:

- Nitrogen dioxide NO_2 - Annual Mean;
- Particulate Matter PM_{10} - 24-Hour Mean

Table L. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Harrow	14/01/2002	Nitrogen dioxide NO_2 - Annual Mean Particulate Matter PM_{10} - 24-Hour Mean	Whole Borough	YES	NO_2 +52µgm-3 PM_{10} +35 exceedances	No current exceedances monitored Highest monitored concentrations: NO_2 20.5µgm^{-3} PM_{10} 10µgm^{-3}	3 years based on results from the Automatic Reference monitor (HR01) and Diffusion Tubes	Harrow Air Quality Action Plan 2025 – 2029 formally adopted on 10th April 2025	n/a

☒ **Harrow confirm the information on UK-Air regarding their AQMA(s) is up to date.**

☒ **Harrow confirm that all current AQAPs have been submitted to GLA.**

2.2 Air Quality Action Plan Progress

In September 2024 Cabinet approved the draft Air Quality Action Plan (AQAP) for public consultation. The consultation started on the 4th November 2024 and closed on 25 January 2025. Overall, survey respondents supported the proposed AQAP and recognised the importance of improving air quality in the borough. Therefore, it was recommended that the AQAP should be formally adopted and this was agreed by Cabinet on the 10th April 2025.

Table M provides a brief summary of Harrow progress against the Air Quality Action Plan, showing progress made in 2024.

Table M. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
HAQ04	Air Quality Monitoring and Core Statutory Duties	We will seek opportunities to increase/enhance the automatic monitoring network within the borough, including the reintroduction of PM2.5 monitors. We will continue to support, as we have since 2022, the GLA Breathe London monitoring network.	Installation 2025/26	Environmental Health	Harrow has secured funding to: 1. reinvest in the Automatic Monitoring Stations at both Pinner Road and Stanmore for NO_2, $PM_{2.5}$ and PM_{10}; and 2. locate a new Roadside Automatic Monitoring Station on College Road NO2, PM2.5 and PM_{10}. The new monitors will installed following consultation with the local community, ward councillors and the Mayor of London.
HAQ05	Air Quality Monitoring and Core Statutory Duties	We will prepare Annual Status Reports (ASRs) detailing progress against each of the AQAP measures and ensure Harrow's AQAP is formally	2030	Environmental Health Parking Management Traffic & Transport, Planning, Fleet Management,	During 2024/25 Harrow publicly consulted on the new Draft Air Quality Action Plan (AQAP) 2025 -2029 Overall, survey respondents

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		reviewed and updated, as a minimum, every five years.			supported the proposed AQAP and recognised the importance of improving air quality in the borough. The AQAP was formally adopted by Cabinet on the 10th April 2025
HAQ027	Emissions from Developments and Buildings	We will raise awareness with our residents about the Smoke Control Area requirements and highlight the 'Ready to Burn' scheme and 'Eco Design' stoves, through campaigns and promotion on the Council's website; and through active engagement at the point of sale with local suppliers of fuels and appliances.	2026	Environmental Health	During 2024/25 Harrow publicly consulted on the Implementation of a new borough-wide Smoke Control Order. Most survey respondents supported the SCO as they recognised the link between the Order and improving air quality in the borough. Respondents highlighted the negative impacts of smoke on human health and how it can be a nuisance. The Order was formally approved by Cabinet on the 10th April 2025.
HAQ048	Cleaner Transport	We will review the lessons learnt from the School Streets trials and explore their continuation and expansion to other schools in the borough.	Implementation estimated 2025/26	Transport	Harrow publicly consulted on proposals for new School Streets at: • Bentley Wood High School, • St Anselm's Primary School, and

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					• Earlsmead Primary School. The consultation was running for the 1st quarter of 2025.
HA055	Cleaner Transport	We will develop an electric vehicle charging infrastructure network across the borough in residential areas, town centres, workplaces and other key destinations	2024 / ongoing	Transportation	At the beginning of 2024 Harrow approved plans to install rapid charging points for electric vehicles (EVs) across council car parks and on-street parking spaces in the borough. 225 chargers were installed on residential lamp post during 2024. The initiative was supported by funding from the government's On-Street Residential Chargepoint Scheme (ORCS)
HAQ056	Cleaner Transport	We will explore funding opportunities such as the 'On-Street Residential Chargepoint Scheme' and LEVI Fund, to increase the number of on street charging points in Harrow	Initial 100 installations completed by end of 2025	Harrow/Trojan Energy	Harrow has partnered with Trojan Energy to install 100 - new EV chargers to streets across Harrow. The charge points are hidden when not in use, so there's no pavement clutter or trip hazards, with fast charging of up to 22kW. The project is supported by funding from the government's On-Street

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					Residential Chargepoint Scheme (ORCS).

3. Planning Update and Other New Sources of Emissions

Table N. Planning requirements met by planning applications in Harrow in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	5
Number of planning applications required to monitor for construction dust	0 The LPA currently apply standard conditions for control of dust only (no monitoring)
Number of CHPs/Biomass boilers refused on air quality grounds	0
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	0
Number of developments required to install Ultra-Low NO_X boilers	0
Number of developments where an AQ Neutral building and/or transport assessments undertaken	5
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	0
Number of planning applications with S106 agreements including other requirements to improve air quality	0
Number of planning applications with CIL payments that include a contribution to improve air quality	1 Please note CIL income from a specific development is normally associated with a specific infrastructure item / spend (CIL not be site / infrastructure specific, whereas S106 is). However, we have allocated (through the agreed capital programme) £176k for replacement of Air Quality Monitoring stations for 2025/26, to be funded from CIL. £176k could be from multiple small CIL payments / applications, or just one big one.
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas Number of conditions related to NRMM included. Number of developments registered and compliant. Number of audits % of sites unregistered prior to audit Please include confirmation that you have checked that the development has been registered with the GLA through the relevant	Currently 0 conditions relating to NRMM 1 compliance audit undertaken in Harrow & Wealdstone Opportunity Area, 1 Non-compliant. 5 sites registered on NRMM online and operating in 2024

Condition	Number
NRMM website and that all NRMM used on-site is compliant with Stage IV of the Directive and/or exemptions to the policy.	
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas) Number of conditions related to NRMM included. Number of developments registered and compliant. Number of audits % of sites unregistered prior to audit 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.	Currently 0 conditions relating to NRMM. 15 Compliance audits undertaken of sites in Harrow outside of the H&W Opportunity Area (1 site compliant, 5 sites non-compliant, 4 sites with No NRMM, 4 sites complete, 1 site self-compliant) 5 sites registered on NRMM online and operating in 2024

3.1 New or significantly changed industrial or other sources

No new sources identified

4. Additional Activities to Improve Air Quality

4.1 London Borough of Harrow Fleet

In 2019 Harrow upgraded the entire council vehicle fleet, all Heavy Goods Vehicles (HGVs) and LDVs (Diesel) a minimum of Euro VI and Euro 6 respectively. As part of that investment, electric vehicles and 7.5t hybrid/ diesel vehicles were introduced.

Harrow council currently owns 275 fleet vehicles which are all kept at the Harrow Council Hub on Forward Drive. 7% of the fleet (18 vehicles) are already fully electric. Another 20 could be replaced with electric vehicles at the next renewal cycle with vehicles currently available on the market. 40 vehicles can be electrified but the cost differential is significant, Harrow staff are actively pursuing these options.

4.2 Pan-London NRMM Auditing Project

Harrow joined the Pan-London NRMM initiative to collaboratively enforce the provisions of the Mayor of London's NRMM Low Emission Zone and is continuing to support the NRMM Enforcement project in 2025 – 2026.

4.3 Air Quality Alerts

AirTEXT (https://www.airtext.info/) is a free service for members of the public providing air quality alerts by text message, email and voicemail and 3-day forecasts of air quality, pollen, UV and temperature across Greater London. Harrow has supported the service along with other London boroughs and public bodies for many years and will continue to do so.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

The automatic NO_2 and PM_{10} monitors at HR01 are Chemiluminescence and TEOMs. The Local Site Operator services are contracted to ESU1 Limited including maintenance and calibration. Data ratification is undertaken by Air Quality Data Management and has been completed to the LAQM TG22 standards using the AURN methodology and subject to the required QA/QC requirements.

PM_{10} Monitoring Adjustment

The elevated temperature that the TEOM monitors employ to eliminate water from the sample also leads to the loss of volatile PM. For the assessment of the EU Limit Values, PM10 needs to be measured using the reference method or one shown to be equivalent to the reference method. During trials carried out by DEFRA between 2004 -2006, the TEOM was demonstrated as not being equivalent to the reference method due to the loss of volatile PM.

The Volatile Correction Model (VCM) was developed for Defra at King's College to allow measurements of PM10 from TEOM instruments to be converted to reference equivalent and is now the recommended method for correcting TEOM measurements. The Volatile Correction Model (VCM) is applied to the PM10 data from TEOM analysers

All PM10 statistics on the LAQN web site report PM10 results as reference equivalent.

A.2 Diffusion Tubes

Laboratory supplying and analysing the diffusion tubes:

SOCOTEC, Unit 12, Moorbrook', Southmead Industrial Park, Didcot, Oxfordshire, OX11 7HP

The samples are analysed in accordance with SOCOTEC's standard operating procedure ANU/SOP/1015. This method meets the guidelines set out in DEFRA's 'Diffusion Tubes for Ambient NO2 Monitoring: Practical Guidance.'

The tubes are prepared by spiking acetone: triethanolamine (50:50) onto the grids prior to the tubes being assembled. The tubes were desorbed with distilled water and the extract analysed using a segmented flow auto analyser with ultraviolet detection.

As set out in the practical guidance, the results are initially calculated assuming an ambient temperature of 11°C, the reported values have been adjusted to 20°C to allow for direct comparison with EU limits.

This analysis of diffusion tube samples to determine the amount of nitrogen dioxide present on the tube is within the scope of our UKAS schedule. Any further calculations and assessments requiring exposure details and conditions fall outside the scope of our accreditation. In the AIR PT intercomparison scheme for comparing spiked Nitrogen Dioxide diffusion tubes, SOCOTEC currently holds the highest rank of a **Satisfactory** laboratory, https://laqm.defra.gov.uk/air-quality/air-quality-assessment/qa-qc-framework/ for AIR-PT results.

The summary results of the laboratory precision, https://laqm.defra.gov.uk/air-quality/air-quality-assessment/precision-and-accuracy/ are as follows:

Diffusion Tube Preparation Method	2022 Good	2022 Bad	2023 Good	2023 Bad	2024 Good	2024 Bad
ESG Didcot / SOCOTEC, 50% TEA in Acetone	29	0	33	2	30	3

Factor from Local Co-location Studies

There are no co-location studies in the London Borough of Harrow in 2024

Discussion of Choice of Factor to Use

The National Bias Adjustment Factor for 2024 has been used

Table O. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.78
2023	National	03/24	0.77
2022	National	03/23	0.77
2021	National	06/22	n/a
2020	National	09/21	n/a
2019	National	06/20	n/a
2018	National	03/19	n/a
2017	Local	-	0.77

A.3 Breathe London Sensors

Details of the QA/QC procedures for Breathe London sensors can be obtained from Imperial College. The website for the network states the following “Every Breathe London Node is co-located at London Air reference sites and checked by researchers at Imperial before deployment. Once deployed, the data is continually cross-checked against reference sites on the London Network in realtime to ensure the data from every sensor is as good as it can be”

A.4 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Where data capture is less than 75% and greater than 25% of a full calendar year (between 3 and 9 months), the mean should be “annualised” – i.e. adjusted using the methodology outlined in LLAQM.TG(19) before being compared to annual mean objectives. **Table P** details the result of annualisation exercise in accordance with the LAQM requirements

Distance Adjustment

Diffusion tube locations H01-H04 are located at sites of relevant exposure and no distance correction is required.

Table P. Automatic PM_{10} Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A_m)	HR01		<Site ID>		<Site ID>		<Site ID>	
			Period Mean (P_m)	Ratio (A_m / P_m)	Period Mean (P_m)	Ratio (A_m / P_m)	Period Mean (P_m)	Ratio (A_m / P_m)	Period Mean (P_m)	Ratio (A_m / P_m)
London Hillingdon	99.7	12.9	12.8	1.005						
Borehamwood Meadow Park	95.8	10.7	10.4	1.036						
-										
-										
Average (R_a)			1.020							
Raw Data Annual Mean (M)			12.3							
Annualised Annual Mean (M x R_a)			12.5							

Table Q. NO_2 Fall off With Distance Calculations

Not applicable

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted (µg m^{-3})	Background Concentration (µg m^{-3})	Concentration Predicted at Receptor (µg m^{-3})	Comments

Appendix B Full Monthly Diffusion Tube Results for 2024

Table R. NO_2 2024 Diffusion Tube Results (µg m^{-3})

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
HA01	513025	187610	37.2	28.7	22.8	19.3	20.4	18.2	18.3	18.7	21.6	29.9	28.6	15.8	23.0	17.9		
HA02	517182	192346	25.7	18.3	33.1	28.3	28.5	26.4	26.9	29.0	28.7	23.2	32.7	18.9	26.3	20.5		
HA03	513385	191225	23.7	9.5	15.5	12.5	13.0	10.6	10.9	12.2	15.5	23.0	18.5	11.9	14.4	11.3		
HA04	514895	186874	24.8	17.0	23.7		11.1	10.0	10.1	8.4	12.6	19.9	18.7	16.1	15.3	11.9		

☒ **All erroneous data has been removed from the NO_2 diffusion tube dataset presented in Table R.**

☐ **Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19.**

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

☐ **Where applicable, data has been distance corrected for relevant exposure in the final column.**

☒ **Harrow confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

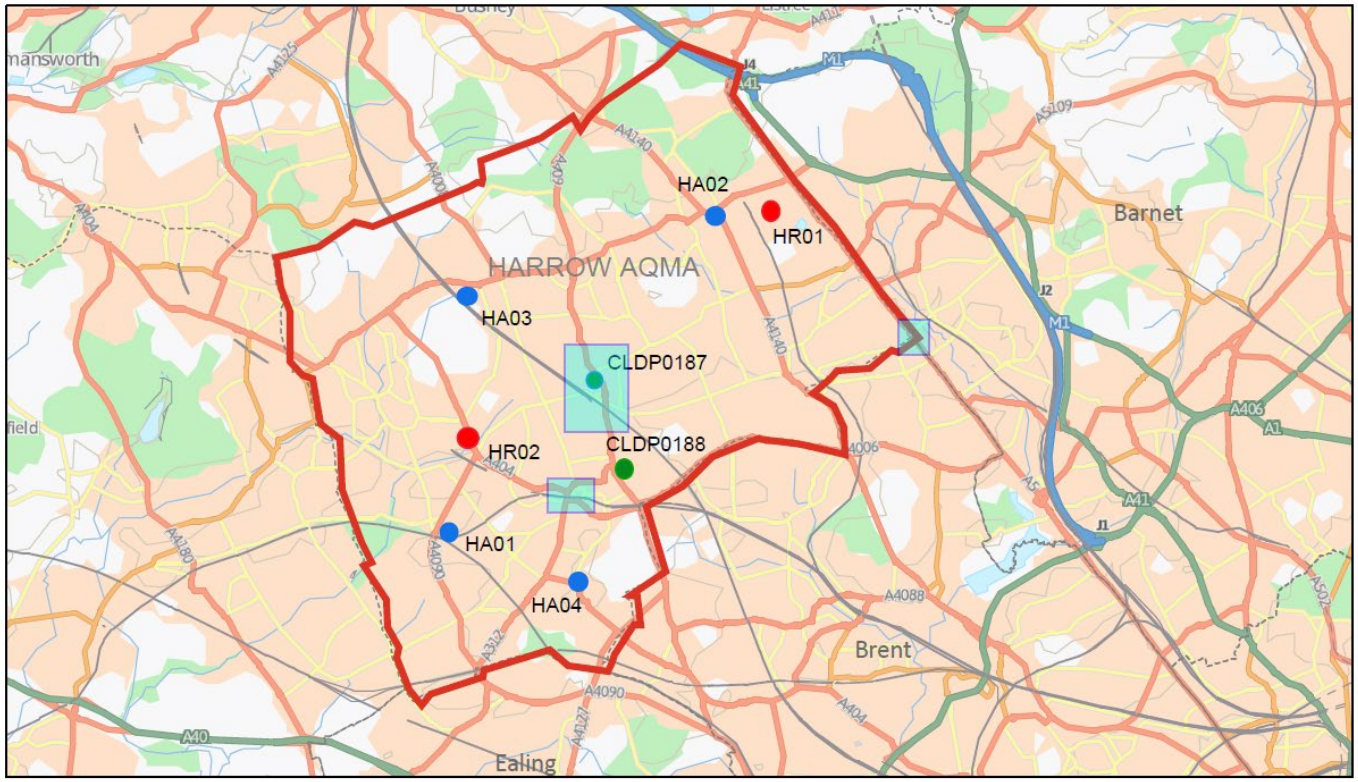
Exceedances of the NO_2 annual mean objective of 40µg m^{-3} are shown in **bold**.

NO_2 annual means exceeding 60µg m^{-3}, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

Appendix C Map of Monitoring Locations and AQMAs

Figure D. Map of Monitoring Sites, Air Quality Management Area Boundary and Air Quality Focus Areas (AQFAs)



Automatic Monitor

Diffusion Tube

Breathe London Sensor

Air Quality Focus Area.

Air Quality Management Area Boundary