

London Borough of Havering

Air Quality Annual Status Report for 2024

Date of publication: 22 May 2025



Photo: a man walking through grass with trees in a park in Havering

This report provides a detailed overview of air quality in the London Borough of Havering during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process¹.

Contact details:

[REDACTED]

Senior Public Protection Officer

Email: [REDACTED] [@haverling.gov.uk](mailto:[REDACTED]@haverling.gov.uk)

Environmental.health@haverling.gov.uk

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

Contents

Abbreviations	6
1. Air Quality Monitoring	8
1.1 Locations.....	8
1.2 Comparison of Monitoring Results with AQOs	12
2. Action to Improve Air Quality	23
2.1 Air Quality Management Areas	23
2.2 Air Quality Action Plan Progress	25
3. Planning Update and Other New Sources of Emissions	57
3.1 New or significantly changed industrial or other sources	58
4. Additional Activities to Improve Air Quality	59
4.1 London Borough of Havering Fleet	59
4.3 Pan-London NRMM Auditing Project	59
The London Borough of Havering will continue to support the NRMM scheme in 2025-2026.....	59
4.4 Air Quality Alerts	60
Appendix A Details of Monitoring Site Quality QA/QC	61
A.1 Automatic Monitoring Sites	61
A.2 Diffusion Tubes	61
A.3 Adjustments to the Ratified Monitoring Data	63
Appendix B Full Monthly Diffusion Tube Results for 2024	69
Appendix C Map(s) of Monitoring Locations and AQMAs	73

Tables

Table A. Summary of National Air Quality and International Standards, Objectives and Guidelines	7
Table B. Details of Automatic Monitoring Sites for 2024	8
Table C. Details of Non-Automatic Monitoring Sites for 2024	8
Table D. Annual Mean NO ₂ Monitoring Results: Automatic Monitoring (µg m ⁻³)	12
Table E. Annual Mean NO ₂ Monitoring Results: Non-Automatic Monitoring (µg m ⁻³)	14
Table F. NO ₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg m ⁻³	18
Table G. Annual Mean PM ₁₀ Automatic Monitoring Results (µg m ⁻³)	19
Table H. PM ₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM ₁₀ 24-Hour Means > 50 µg m ⁻³	20
Table I. Annual Mean PM _{2.5} Automatic Monitoring Results (µg m ⁻³)	21
Table J. 2024 SO ₂ Automatic Monitoring Results: Comparison with Objectives	22
Table K. Other Pollutants	22
Table L. Declared Air Quality Management Areas	23
Table M. Delivery of Air Quality Action Plan Measures	25
Table N. Planning requirements met by planning applications in Havering in 2024 .	57
Table O. Bias Adjustment Factor	62
Table P. Non-Automatic Monitoring Data Adjustment	64
Table Q. Automatic NO ₂ Monitoring Data Adjustment	65
Table R. Automatic PM ₁₀ Monitoring Data Adjustment	66
Table S. Automatic PM _{2.5} Monitoring Data Adjustment	67
Table T. NO ₂ Fall off With Distance Calculations	68
Table U. NO ₂ 2024 Diffusion Tube Results (µg m ⁻³)	69

Figures

Figure A. Map of Non-Automatic Monitoring Site(s)	73

Figure B. Map of Automatic Monitoring Site(s)	75

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	Annual mean	2040
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 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 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)
HV1	Rainham	Roadside	553127	182506	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	LB Havering	Chemiluminescent; TEOM, FDMS	3	10	3
HV3	Romford	Roadside	551108	188257	NO ₂ , PM ₁₀	Yes LB Havering	LB Havering	Chemiluminescent; FDMS	3	8	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

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)
HAV2, 5, 6	Mercury Gardens	Urban Centre	551488	188993	NO ₂	Y (LB Havering)	1.0	3.0	No	2.0
HAV1, 7, 8	Waterloo Road	Urban Centre	551108	188257	NO ₂	Y (LB Havering)	3.0	8.0	Yes	2.0
HAV3	Nelson Road	Urban Background	551726	183462	NO ₂	Y (LB Havering)	3.0	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)
HAV4	Langtons	Urban Background	553724	187560	NO2	Y (LB Havering)	1.0	NA	No	2.0
HAV9, 10, 11	Alexandra Road	Urban Centre	551629	188296	NO2	Y (LB Havering)	3.0	1.0	No	2.0
HAV12	Main Road GPPS	Roadside	552096	189619	NO2	Y (LB Havering)	4.0	1.0	No	2.0
HAV13, 14, 15	A12 Junction with North Street	Roadside	550607	189685	NO2	Y (LB Havering)	5.0	5.0	No	2.0
HAV16, 17, 18	Rom Valley Way	Roadside	551414	187802	NO2	Y (LB Havering)	1.0	1.0	No	2.0
HAV19, 20, 21	Collier Row	Kerbside	549837	191109	NO2	Y (LB Havering)	3.0	0.5	No	2.0
HAV22, 23, 24	Ravensbourne School	Urban Background	553707	190817	NO2	Y (LB Havering)	1.0	1.0	No	2.0
HAV25	Wincanton Road	Urban Background	553727	193161	NO2	Y (LB Havering)	1.0	3.0	No	2.0
HAV26	Adj. 109 Cross Road	Urban Background	549532	189777	NO2	Y (LB Havering)	3.0	1.0	No	2.0
HAV27, 28, 29	Rush Green Road	Kerbside	550942	187420	NO2	Y (LB Havering)	5.0	0.5	No	2.0
HAV30	Marlborough Road	Urban Background	549318	189384	NO2	Y (LB Havering)	3.0	1.0	No	2.0
HAV31	Danes Road	Industrial	550197	187908	NO2	Y (LB Havering)	4.0	1.0	No	2.0
HAV32, 33, 34	Gallows Corner	Kerbside	553410	190558	NO2	Y (LB Havering)	4.0	0.5	No	2.0
HAV35	Church Road	Urban Background	554204	193795	NO2	Y (LB Havering)	3.0	1.0	No	2.0
HAV36	Bedford Park Entrance	Rural	551755	193022	NO2	Y (LB Havering)	1.0	NA	No	2.0
HAV37	Colchester Road	Kerbside	555723	191750	NO2	Y (LB Havering)	3.0	0.5	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)
HAV38	Myrtle Road	Roadside	553434	191656	NO2	Y (LB Havering)	1.0	1.0	No	2.0
HAV39	Rise Park Boulevard	Roadside	551616	190622	NO2	Y (LB Havering)	3.0	1.0	No	2.0
HAV40	Main Road	Roadside	553174	190306	NO2	Y (LB Havering)	9.0	1.0	No	2.0
HAV41	Main Road	Roadside	552517	189826	NO2	Y (LB Havering)	8.0	1.0	No	2.0
HAV42	Mawney Road	Kerbside	550623	188890	NO2	Y (LB Havering)	2.0	1.0	No	2.0
HAV43	Upminster School	Roadside	556072	186539	NO2	Y (LB Havering)	2.0	2.0	No	2.0
HAV44	Ardleigh Green School	Kerbside	553952	189731	NO2	Y (LB Havering)	5.0	1.0	No	2.0
HAV45	St. Marys School RC	Kerbside	552327	187422	NO2	Y (LB Havering)	10.0	1.0	No	2.0
HAV46	Rainham Village School	Kerbside	552441	182337	NO2	Y (LB Havering)	1.0	1.0	No	2.0
HAV47	Campion School off A127	Roadside	554730	189487	NO2	Y (LB Havering)	7.0	2.0	No	2.0
HAV48	Parklands School	Urban Background	550602	189990	NO2	Y (LB Havering)	1.0	1.0	No	2.0
HAV49	Newton's Primary	Roadside	550722	183294	NO2	Y (LB Havering)	2.0	1.0	No	2.0
HAV50	Blewitts Cottages	Kerbside	551526	182672	NO2	Y (LB Havering)	12.0	0.5	No	2.0
HAV51	St. Edwards School	Urban Background	551180	189432	NO2	Y (LB Havering)	1.0	1.0	No	2.0
HAV52	Opp. Harold Wood Stn.	Roadside	554741	190626	NO2	Y (LB Havering)	0.0	2.0	No	2.0
HAV53	R.J. Mitchel School	Roadside	552841	184966	NO2	Y (LB Havering)	15.0	2.0	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)
HAV54	Hilldene Infant School	Roadside	553135	191674	NO2	Y (LB Havering)	5.0	1.0	No	2.0
HAV55	Butts Green Road	Kerbside	553830	188314	NO2	Y (LB Havering)	1.0	0.5	No	2.0
HAV56	Rainham Broadway	Kerbside	552045	182222	NO2	Y (LB Havering)	1.0	0.5	No	2.0
HAV57	Romford Taxi Rank	Urban Centre	551420	188526	NO2	Y (LB Havering)	1.0	0.2	No	2.0
HAV58, 59, 60	Romford Battis	Urban Centre	551397	188509	NO2	Y (LB Havering)	1.0	0.2	No	2.0
HAV61	Wennington Road	Urban Background	553719	180987	NO2	Y (LB Havering)	1.0	1.0	No	2.0
HAV62	New Road Junction with South Street	Kerbside	550462	183013	NO2	Y (LB Havering)	10.0	0.5	No	2.0
HAV63	New Road Junction with Spencer Road	Kerbside	550888	182884	NO2	Y (LB Havering)	10.0	0.5	No	2.0
HAV64	New Road Junction with Betterton Road	Kerbside	551112	182811	NO2	Y (LB Havering)	10.0	0.5	No	2.0
HAV65	Front Lane/Jnct Brunswick Ave LP40	Urban Centre	557323	187932	NO2	Y (LB Havering)	1.0	0.2	No	2.0
HAV66	Station Lane LP6	Urban Centre	554013	187001	NO2	Y (LB Havering)	1.0	0.5	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 NO₂ 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
HV3	551108	188257	Roadside	99.5	99.5	30	29.1	23	23	23	20.5	22.1
HV1	553127	182506	Roadside	99.7	99.7	38	35.8	29	28	30.4	24.6	19

Notes:

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

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

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

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%).

Since the 2020 pandemic the annual average NO₂ concentration has maintained at approximately half the legal limit value. The extension of the ULEZ has had a positive impact on concentrations.

Table E. Annual Mean NO₂ 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
HAV6, HAV5, HAV2	551488	188993	Urban Centre	100	100	47.9	42	38.2	38.8	44.0	40.0	41.8
HAV7, HAV1, HAV8	551108	188257	Urban Centre	100	100	39.6	36.7	38.6	32.8	32.0	30.6	30.4
HAV3	551726	183462	Urban Background	100	100	26.5	26	25.1	19.8	21.4	19.2	16.9
HAV4	553724	187560	Urban Background	100	100	17.3	19.7	16.7	14.7	15.3	14.2	11.7
HAV9, HAV10, HAV11	551629	188296	Urban Centre	100	100	29	26.1	26.7	23	25.8	21.3	20.0
HAV12	552096	189619	Roadside	100	100	36.6	32.4	28.3	29.1	26.0	24.4	17.8
HAV13, HAV14, HAV15	550607	189685	Roadside	100	100	38.7	35.4	32.2	31.1	31.8	27.3	23.5
HAV16, HAV17, HAV18	551414	187802	Roadside	100	100	34.8	33.6	29.1	28.8	32.6	26.8	23.5
HAV19, HAV20, HAV21	549837	191109	Kerbside	100	100	40.4	37.2	35.7	33.7	38.6	39.3	34.5
HAV22, HAV23, HAV24	553707	190817	Urban Background	100	100	25.3	24.5	16.6	19.9	19.3	17.0	14.2

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
HAV25	553727	193161	Urban Background	92.3	92.3	22.1	20.8	19.7	18.4	18.3	15.7	12.0
HAV26	549532	189777	Urban Background	100	100	21.4	21.3	19.5	17.1	16.7	15.1	14.6
HAV27, HAV28, HAV29	550942	187420	Kerbside	100	100	51.4	47.3	44.4	40.4	42.3	36.3	32.0
HAV30	549318	189384	Urban Background	75	75	21.6	21.9	21.3	18.6	15.7	13.5	11.4
HAV31	550197	187908	Industrial	100	100	26.4	25.2	22	20.3	20.6	17.6	15.0
HAV32, HAV33, HAV34	553410	190558	Kerbside	100	100	50.3	49.4	45.2	40.6	39.6	34.6	25.7
HAV35	554204	193795	Urban Background	100	100	26.2	23	19.8	20.1	18.4	15.9	14.1
HAV36	551979	192220	Rural	100	100	18.3	18.9	20.9	13.8	14.5	12.0	12.7
HAV37	555723	191750	Kerbside	100	100	48	41.6	34.5	36.1	36.8	32.3	26.1
HAV38	553434	191656	Roadside	100	100	22.2	21	20.5	16.4	19.2	14.9	13.5
HAV39	551616	190622	Roadside	100	100	29	28.9	30.9	23.5	22.0	20.0	18.0
HAV40	552517	189826	Roadside	100	100	49.2	44.4	36.8	31.7	33.8	29.7	25.7
HAV41	553174	190306	Roadside	100	100	40.9	39.3	32.2	32.4	32.2	26.1	21.4
HAV42	550623	188890	Kerbside	100	100	30.8	29.7	26.5	23.9	26.8	24.8	22.1
HAV43	556072	186539	Roadside	100	100	32.2	34.3	27.2	25.7	25.7	22.2	17.8
HAV44	553952	189731	Kerbside	100	100	34.4	31.6	30.1	28.5	30.1	26.1	25.1
HAV45	552327	187422	Kerbside	84.6	84.6	35.6	31.8	26.5	26.7	28.0	25.6	21.7
HAV46	552425	182334	Kerbside	100	100	32.2	30	27.8	24.4	25.3	23.7	22.3
HAV47	554730	189487	Roadside	100	100	36.8	41	35.6	36.5	35.8	32.9	25.4
HAV48	550602	189990	Urban Background	100	100	25	26.4	21.4	19.8	19.9	26.8	14.6

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
HAV49	550722	183294	Roadside	100	100	34.3	26.6	23.6	22	22.9	24.6	22.5
HAV50	551526	182672	Kerbside	100	100	39.8	36.6	32.5	30.5	30.4	33.1	30.5
HAV51	551180	189432	Urban Background	100	100	23.4	21.6	20.7	17.9	18.2	17.3	13.7
HAV52	554741	190626	Roadside	100	100	41.1	32.2	26.1	29.5	30.9	30.1	27.9
HAV53	552835	184978	Roadside	100	100			29.1	24.6	26.4	24.9	22.3
HAV54	553141	191657	Roadside	90.4	90.4			21.4	22	21.9	20.8	25.1
HAV55	553839	188313	Kerbside	100	100			35.9	40.2	42.2	38.8	44.2
HAV56	552047	182357	Kerbside	100	100			35.7	32.7	30.8	28.5	32.4
HAV57	551420	188526	Urban Centre	100	100	64.7	53.1	52.9	53.4	65.5	58.4	65.3
HAV58, HAV59, HAV60	551397	188509	Urban Centre	100	100	71.4	71.3	66.9	71.3	82.7	76.0	70.7
HAV61	553719	180987	Urban Background	100	100	27.5	26.2	22.8	20.9	20.3	18.5	17.7
HAV62	550462	183013	Kerbside	100	100			34.1	28.8	31.2	29.3	24.2
HAV63	550888	182884	Kerbside	100	100			30.5	31	32.3	28.0	27.8
HAV64	551112	182811	Kerbside	100	100			30.9	29.3	30.3	26.8	22.9
HAV65	557323	187932	Urban Centre	92.3	92.3			28.8	26.4	27.6	22.9	18.7

☒ 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 $\mu\text{g m}^{-3}$.

Exceedances of the NO_2 annual mean objective of $40\mu\text{g m}^{-3}$ are shown in **bold**.

NO_2 annual means exceeding $60\mu\text{g m}^{-3}$, 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%).

The general trend for diffusion tube annual average concentrations is downwards. Five locations have slight increases. Four locations exceed the limit value, three of which are located in Romford town centre and one location on Butts Green Road. One diffusion tube location had less than 75% data and was annualised.

Table F. NO₂ 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
HV1	553127	182506	Roadside	99.5	99.5	0	0	0	0	0	0	0
HV3	551108	188257	Roadside	99.7	99.7	0	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 NO₂ 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%)

The Rainham and Romford locations continue to have zero exceedances of the 1-hour Mean Objective for NO₂.

Table G. Annual Mean PM₁₀ 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
HV1	553127	182506	Roadside	99.5	99.5	17	17.4	15	13.6	17	13.5	18.4
HV3	551108	188257	Roadside	99.5	99.5	20	20.5	21	18.9	17.8	17.5	18.4

Notes

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

Exceedances of the PM₁₀ 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%).

The AQMA was declared on PM₁₀ concentrations, which have clearly been met for the last seven years. The concentrations of PM₁₀ were declining at both monitoring sites until 2024 and have now increased. The 2024 annual mean concentrations are still less than half of the limit value.

Table H. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 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
HV1	553127	182506	Roadside	99.5	99.5	1	4	1	0 (23.8)	4	0	0
HV3	551108	188257	Roadside	99.5	99.5	2	9	5	0 (29.6)	4	4	0

Notes

Exceedances of the PM₁₀ 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%).

Error! Reference source not found. shows that both monitoring sites have been substantially compliant with the 24 hour mean objective for at least the last seven years, although there is no clear trend in the data. It is unlikely that concentrations exceed the current objective value for PM₁₀.

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
HV1	553127	182506	Roadside	N/A	N/A	11	11.1	9	8.8	10.2	7.4	-

Notes

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

Exceedances of the PM_{2.5} annual mean AQO 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%).

The data for 2024 could not be ratified due to instrumentation problems. Since 2018 the concentration measured has been below the 2028 target value of 12 µg m⁻³, until 2023 not below the WHO guideline value of 10 µg m⁻³.

Table J. 2024 SO₂ Automatic Monitoring Results: Comparison with Objectives

Not measured.

Table K. Other Pollutants

Not measured.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMA) 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 the London Borough of Havering can be found in Table L. The table presents a description of the AQMA that is currently designated within Havering. 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:

- NO₂ annual mean;
- PM₁₀ annual 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

Havering AQMA	11 th September 2006	NO ₂ annual mean	Whole borough AQMA due to widespread exceedances	Yes	Not known	70.7 µg m ⁻³	Non-compliant in 3 locations	London Borough of Havering Air Quality Action Plan 2018-2023	Visit the AQAP
Havering AQMA	11 th September 2006	PM ₁₀ 24h limit	Whole borough AQMA due to widespread exceedances	Yes	No known	Compliant	Compliant >8 years 2009 HV3 2014 HV1	London Borough of Havering Air Quality Action Plan 2018-2023	Visit the AQAP

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

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

2.2 Air Quality Action Plan Progress

Havering's AQAP has been updated and is currently being consulted on. Due to be adopted in Autumn 2025. PM10 has not breached limit values for 8 years. NO₂ breaches 40 ug/m³ in Romford town centre and one location outside of the town centre.

Table M provides a brief summary of Havering's 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 M. Delivery of Air Quality Action Plan Measures

Note: the top three measures are listed first. A new AQAP has been written and is due to be adopted in 2025.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
1.1	Undertake PM2.5 monitoring of fires surrounding Arnold's Field, Launders Lane using air quality nodes.	Public Protection	2028	Local Authority Environmental Health	This is a new action and is high priority. Ongoing fires at an unlicensed landfill have been causing localised PM2.5 concentration spikes in the Rainham area. The burning will be dealt with under statutory nuisance. https://www.havering.gov.uk/public-health/multi-agency-response-fires-arnolds-field-launders-lane
3.7	Emissions from developments and buildings	Promote and enforce the Smoke Control Areas to reduce the amount of unlicensed burning.	Ongoing no completion date	Local Authority Environmental Health	Action ongoing. Havering provides information to residents about Smoke Control Areas on its website. Chimney smoke complaints are investigated to determine if authorised fuels are being used by the resident. If non-authorised fuels are being used, our enforcement officers educate the residents and for a first time complaint, provide details from the DEFRA website. If further complaints are made and substantiated, then

					enforcement action is taken. https://www.havering.gov.uk/airquality
2.4	Public health and awareness raising	Public Health input into delivery of AQAP.	Ongoing no completion date	Local Authority Public Health Department	<i>Action ongoing.</i> The Public Health Service supports the Council to achieve its aims to improve air quality. This has included (a) contributing to the evidence base for the local strategy; (b) actively participating in the Havering's JSNA includes a recommendation that using the Healthy Streets Scorecard as a starting point, LBH should continue to bring forward proposals to implement and expand recommended measures and other complementary activities to improve road safety, increase active travel/modal shift and improve air quality;.and (c) providing financial contributions to air quality monitoring.
1.1	Monitoring and other core statutory duties	Undertake detailed computer modelling of air quality in Havering.	Completed	Local Authority Environmental Health	<i>Action completed</i> , reported in 2021.
1.2	Monitoring and other core statutory duties	Use AQ Mesh Pods to provide real time air quality measurements for schools to use as part of air quality publicity campaigns and to encourage walking to school.	Completed	Local Authority Environmental Health	<i>Action completed 2024.</i> Meshpods have been superseded by AQ monitoring Nodes.
1.3	Monitoring and other core statutory duties	Undertake feasibility study into the location and start-up of a new permanent continuous monitoring location.	Completed	Local Authority Environmental Health	<i>Action completed</i> , reported in 2021.
1.4	Monitoring and other core statutory duties	Expand the current Diffusion Tube Network.	Ongoing Statutory Requirement	Local Authority Environmental Health	<i>Action ongoing</i> , the diffusion tube network was expanded. It is essential that the locations are maintained.
1.5	Monitoring and other core statutory duties	Model likely air quality impact of planned major strategic schemes.	Ongoing no completion date	Local Authority Environmental Health	<i>Action ongoing.</i> All major strategic developments required to do air quality modelling (part of a detailed Air Quality Assessment at the planning application stage).
2.1	Public health and awareness raising	Promote walking and cycling. Engage with over 50's forum to form	2024	Local Authority Transportation Dept.	<i>Action ongoing.</i> The over 50s programme is run by trained volunteers with support from the Council's Sports Development Service. In 2021, no face to face sessions and events were held. Once TfL funding is available to organise led rides, they

		a walking club and organised led rides			could be arranged again for the Over 50's Forum and other groups in the borough.
2.2	Public health and awareness raising	Continue to use Miles the Mole as an air quality champion and educational prop.	2030	Local Authority Environmental Health	<i>Action ongoing.</i> Miles the Mole continues visiting schools as part of the Council's Air Quality Campaign. Active travel and air quality themed Theatre in Education production is an interactive programme aimed at year 6 pupils. Miles the Mole is still burrowing his way around the borough. The campaign increases awareness and knowledge of children/staff/parents around air quality and promotes small changes people can make to reduce their contribution to air pollution and reduce their exposure to poor air quality.
2.3	Public health and awareness raising	Support Transport for London led initiative to commission a cross borough bus rapid transit study which would include looking at options for improving access to the London Riverside bid.	2030	Local Authority Transportation Department	<i>Action on hold.</i> No progress has made due to financial constraints. The continuation of the project will depend on the ability of TfL to support it.
2.4	Public health and awareness raising	Public Health input into delivery of AQAP.	Ongoing no completion date	Local Authority Public Health Department	<i>Action ongoing.</i> The Public Health Service supports the Council to achieve its aims to improve air quality. This has included (a) contributing to the evidence base for the local strategy; (b) actively participating in the Havering's JSNA includes a recommendation that using the Healthy Streets Scorecard as a starting point, LBH should continue to bring forward proposals to implement and expand recommended measures and other complementary activities to improve road safety, increase active travel/modal shift and improve air quality;.and (c) providing financial contributions to air quality monitoring.
2.5	Public health and awareness raising	Continue to promote the TfL STARS (Sustainable Travel: Active, Responsible, Safe) accredited travel planning programme with schools to reduce car use on school run.	Ongoing no completion date	Local Authority Transportation Department	<i>Action ongoing.</i> All schools in Havering are encouraged to maintain active School Travel Plans (STP) and report their activities annually via the Transport for London Travel for Life Accreditation Programme website. 55 schools out of 84 participated in the TfL Travel for Life Accreditation scheme. Of these, 35 were accredited at the highest Gold level, four at Silver and 13 at Bronze. Promotion of the TfL Travel for Life From 2022 to 2023, nearly £30k worth of Small and Cycle

					Grants were offered to 10 schools which included bikes, balanced bikes, scooters, safety equipment, EY road safety role play equipment and storage programme is ongoing facilities. From 2022 to 2023, over £100k was spent on cycle parking facilities at 13 schools providing over 148 cycle parking spaces and 314 scooter parking spaces.
2.6	Public health and awareness raising	Promote Smarter Travel initiatives with businesses and encourage local business to adopt workplace travel plans.			<i>Action partly on hold.</i> The lack of funding from TfL to support business engagement in recent years has put activities on hold. If funding is available then meaningful engagement can resume. Without funding it makes progress significantly harder to achieve. Contact with CEME and the NHS has resumed though progress is again hindered by a lack of funding. Talks with CEME about a site wide Travel Plan will resume in 2022.
2.7	Public health and awareness raising	Continue to promote airTEXT to make sure vulnerable residents are aware of the tool and how to use it.	As long as airTEXT is operating	Local Authority Environmental Health Team	<i>Action ongoing.</i> Havering has signed up to provide information via SMS on air pollution episodes through the AirTEXT software. We promote AirTEXT through the Council's social media platforms a few times per year, particularly in winter, as well as on Havering's website. Havering's Communication team puts out alerts on social media when we get notified of pollution episodes by Imperial College.
2.8	Public health and awareness raising	Investigate the feasibility of introducing Car Clubs and associated facilities in Havering.	Cancelled	Local Authority Transportation Team	<i>Action on hold.</i> Havering is not taking forward the plan for a Council run Car Club programme, as it has not been considered a priority right now. There are currently a few car clubs operating around new developments, sourced by the developers.
2.9	Public health and awareness raising	Support the LIP cycle training budget to promote "bike ability" in schools and also to adults and families.	2028	Local Authority Transportation Team	<i>Action ongoing.</i> Despite low levels of funding from TfL the borough was still able to deliver bikeability training to a large number of residents (pupils and adults). In total, bikeability training was carried out for 932 pupils and cycle skills training for 392 adults.
2.10	Public health and awareness raising	Encourage greater use of the Council's staff travelling to work sustainably through adequate provision of cycle infrastructure at Council buildings.	Completed	Local Authority Asset Management	<i>Action completed,</i> as reported in 2021.

2.11	Public health and awareness raising	Successful delivery of annual Local Implementation Plan (LIP) programme to deliver schemes that support the Healthy Streets agenda and provide options for people to travel sustainably.	Completed	Local Authority Transportation	<i>Action ongoing.</i> Two walking zone maps for two schools (Drapers Pyrgo and Harold Wood primary) were developed and successfully launched in 2021, encouraging pupils to travel to school actively. Cycle Parking has been delivered at Hall Mead school to support this secondary school working towards Bronze STARS Accreditation.
2.12	Public health and awareness raising	Offer workplace grants to businesses for infrastructure (e.g. cycle parking, lockers and showering facilities)	Action Cancelled?	Local Authority Transportation	<i>Action on hold.</i> Active travel grants were put on hold because of the limited LIP funding from TfL. The continuation of the scheme will depend on financial resources available.
3.1	Emissions from developments and buildings	Creation of an Air Quality Supplementary Planning Guidance (SPG).	2028	Local Authority Environmental Health	<i>Action partly on hold.</i> A Draft SPG has been created, but it will not be progressed until Havering's Local Plan is adopted.
3.2	Emissions from developments and buildings	Review current planning conditions, in relation to air quality, to ensure they are fit for purpose.	Completed	Local Authority Planning	<i>Action completed.</i> Planning conditions have been reviewed and are in line with the requirements set out in the New London Plan.
3.3	Emissions from developments and buildings	Adopt and implement planning controls on combined heat and power (CHP) or biomass systems	Ongoing no completion date	Local Authority Environmental Health	<i>Action ongoing.</i> Havering uses a condition requiring the emissions limits for CHP and Biomass set out in Appendix 7 of the GLA Sustainable Design and Construction SPG. For all new developments Havering requires ultra-low NOx boilers to be installed, if alternative heating strategies are not employed.
3.4	Emissions from developments and buildings	Adopt and implement planning controls on air quality neutral development.	Ongoing no completion date	Local Authority Environmental Health	<i>Action ongoing.</i> Havering requires all new developments to undertake an air quality neutral assessment, in line with the New London Plan and the Draft Air Quality Neutral London Plan Guidance.
3.5	Emissions from developments and buildings	To ensure that new Housing Estate Regeneration Programme for LBH housing developments obtain the commitment	Ongoing no completion date	Local Authority Planning	<i>Action ongoing.</i> Havering's regeneration team is committed to reduced carbon foot print and air quality neutral development. Public Protection, Regeneration Services and the appointed consultants and contractors collaborate and are aware that an air quality assessment is required on validation of any regeneration planning applications.

		from developers to a strategy of future reduction of reduced carbon foot print and minimal impact on air quality			
3.6	Emissions from developments and buildings	Adopt and implement planning controls for innovative and recognised green space and planting in new developments. Planning to work with grounds maintenance and parks at design stage for advice on greening and planting	Ongoing no completion date	Local Authority Planning	<i>Action ongoing</i> , through inter-departmental work with Havering's Strategic Development and Public Realm. Both the London Plan 2021 and Local Plan 2021 have policies relating to green infrastructure. London Plan policy now requires minimum achievement against the Urban Greening Factor (UGF). The Council tries to strike a balance between decent green infrastructure on sites and their associated maintenance costs.
3.7	Emissions from developments and buildings	Promote and enforce the Smoke Control Areas to reduce the amount of unlicensed burning.	Ongoing no completion date	Local Authority Environmental Health	Action ongoing. Havering provides information to residents about Smoke Control Areas on its website. Chimney smoke complaints are investigated to determine if authorised fuels are being used by the resident. If non-authorised fuels are being used, our enforcement officers educate the residents and for a first time complaint, provide details from the DEFRA website. If further complaints are made and substantiated, then enforcement action is taken. https://www.havering.gov.uk/airquality
3.8	Emissions from developments and buildings	Monitoring and implementation of Non Road Mobile Machinery (NRMM)	Ongoing no completion date	Local Authority Environmental Health	<i>Action ongoing</i> . A planning condition with the NRMM requirements is applied to all major developments in Havering. As part of the London-wide NRMM scheme, 17 audits were undertaken in 2023. 11 sites were compliant (36% self-compliant, 43% compliant following engagement with inspectors).
3.9	Emissions from developments and buildings	Promote public sector landlords (homes and public buildings) to take air quality and energy efficiency advice before refits, via the GLA	2030	Local Authority Asset Management	<i>Action ongoing</i> . The Council's Asset Management Strategy 2021-26, was adopted in November 2021. 2,620 homes have been found below the standard required by 2030 (based on a SAP - Standard Assessment Procedure - rating below 69). The solutions for these properties will vary based on different

		RE:NEW and RE:FIT Programmes.			property types. An Energy Management Plan is expected to be finalised in 2022.
3.1	Emissions from developments and buildings	Deliver infrastructure to ensure that Romford, Rainham and Beam Park Housing Zones are accessible by means other than the car and that residents are provided with options to travel sustainably (Including the Beam Parkway Major scheme and Beam Park station)	Completed	Local Authority Planning	<i>Action completed.</i> The design for the proposed A1306 has been completed. Beam Park Station is going ahead. Whilst some design work has been undertaken on Romford Ring Road, the pace of progress has lessened due to TfL not being able to provide further funding to support the scheme because of its wider financial situation.
3.11	Emissions from developments and buildings	Identify previously unknown and new premises that require permitting under PPC. Determine these properties that require permitting for Pollution Prevention Control (PPC).	Completed 2024	Local Authority Environmental Health	<i>Action completed.</i> The industrial area surrounding the A1306 towards Rainham was surveyed and no unpermitted premises were found here or across the borough. The whole borough has now been surveyed.
3.12	Emissions from developments and buildings	Signpost business contact and residents to the appropriate boiler scrappage schemes and energy efficiency grants; Promote businesses and residents to take air quality and energy efficiency advice; embed this practice as part of business as usual activity of the department	Completed 2024	Local Authority Sustainability	Action completed. The LB Havering website https://www.havering.gov.uk/info/20013/environment/137/energy currently signposts businesses and residents to the following schemes: Big London Energy Switch; Warm Home Discount; Solar Together; Green Homes Grant; There is no capacity at present within the Energy Management service to provide advice to businesses and residents on air quality and energy efficiency advice. The focus of the service is on the delivery of Havering's corporate energy contract.
4.1	Emissions from transport (covers	Include requirement for suppliers of large council	Completed	Local Authority Procurement	<i>Action completed,</i> in 2021.

	the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	contracts that they have attained silver or gold FORS accreditation for their organisation and vehicles			
4.2	Emissions from transport (covers the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	Investigate the feasibility of introducing dedicated drop off zones outside all schools for buses & coaches.	Cancelled	Local Authority Transportation	<i>Action cancelled</i> , in 2021.
4.3	Emissions from transport (covers the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	Renewal of Taxi Framework, with suppliers complying to the Ultra Low Emission Zone (ULEZ) & exploring ZEC (Zero Emission Capable) Standards	Completed	Local Authority Environmental Health	<i>Action completed</i> . The ULEZ has now been implemented and TfL was liaising with organisations such as taxi companies prior to the ULEZ being enforced to make sure vehicles are compliant.
4.4	Emissions from transport (covers the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	Provide Smarter Driver Training for all vocational drivers of the Council's fleet vehicles. Delivered by CPC training and FTA Van excellence accreditation	2030	Local Authority Asset Management	<i>Action ongoing</i> . The Council recommended driver Certificate of Professional Competence (CPC) and LoCity training in 2022-23. It is also intending to investigate investment in fleet vehicles which can use electric power. The Council's current fleet uses fuel Gas-to-liquid fuel (GTL) and this is not expected to change in the short-term, as (Green) Hydrogen and Hydrogen powered vehicles are not yet widely available for fleet use. The Mayoral Diesel Car has now been replaced with a full Battery Electric Vehicle (BEV).
4.5	Emissions from transport (covers the Matrix themes: Delivery servicing	Investigate the feasibility on the delivery of Electric Vehicle Charging Point (EVCP)	2024	Local Authority Transportation	<i>Action ongoing</i> . Since the survey went out Havering Council has received £346k of Government funding from the Office of Zero Emission Vehicles (OZEV) to deliver 68 Charge Points in Council operated car parks and up to 80 on street charging

	and freight, borough fleet actions, localised solutions and cleaner transport)	infrastructure across the borough.			points across the borough in 2023. The Council will soon begin a procurement exercise to appoint a Charge Point Operator and the intention is to begin delivery of the charging infrastructure in 2023.
4.6	Emissions from transport (covers the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	Review parking charges policy (controlled parking zones)	Cancelled	Local Authority Highways	<i>Action cancelled</i> , as reported in 2021.
4.7	Emissions from transport (covers the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	Engage with businesses in the borough through business forums to discuss the options for upgrading/retrofitting to accommodate ULEZ requirements.	Completed	Local Authority Economic Development	<i>Action completed</i> . The ULEZ has been implemented.
4.8	Emissions from transport (covers the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	Plant greenery and trees (e.g. hedgerows and trees such as ash, common alder, field maple, larch, Norway maple, scots pine and silver birch) along main roads and town centres, which can lead to an improvement in air quality based on available evidence.	Completed	Local Authority Waste & Contracts Department	<i>Action completed</i> , in 2020.
4.9	Emissions from transport (covers the Matrix themes:	Develop Local Implementation Plan to support improvements in	Completed	Local Authority Transportation	<i>Action completed</i> , as reported in 2021.

	Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	local air quality; together with working with TfL to ensure pollution sources outside of local control i.e. buses and commuter traffic are dealt with.			
4.1	Emissions from transport (covers the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	Undertake feasibility work to examine the air quality implications of re-routing of bus services away from Romford town centre and look options for improving sustainable travel access into Romford town centre.	Completed	Local Authority Transportation	<i>Action on hold.</i> This is an action that was tied to the Romford Masterplan. Since the ULEZ expansion all buses must be ULEZ compliant.
4.11	Emissions from transport (covers the Matrix themes: Delivery servicing and freight, borough fleet actions, localised solutions and cleaner transport)	Continue to routinely check the weighbridges used commercially by (usually large) vehicles	Ongoing	Local Authority Environmental Health	<i>Action ongoing.</i> This action aims to reduce the number of overloaded vehicles and is expected to lead to a reduction in emissions.

Table K.2 The London Borough of Havering Climate Change Action Plan (2024-27)

No.	Theme	Measure	Update
B7b	New developments achieve best practice standards to minimise their	Explore options and draft a Climate Change Checklist for developers to submit with major planning applications.	Draft checklist created

No.	Theme	Measure	Update
B7c	whole life carbon and air quality impact.	Embed zero carbon negotiations in the Pre-App process (applying Policy S1 2 of the London Plan) including sustainability focused meetings for referable schemes.	80% of new strategic applications to include sustainability focused pre-app meeting
B14		Review major planning applications with LBH Energy and Sustainability Consultant to ensure that zero carbon policies set out in the London Plan and LBH Local Plan are enforced and exceeded where feasible.	80% of major planning applications reviewed
B15		Develop, seek funding and evaluate the feasibility of introducing a local heat network within Havering.	East Havering Datacentre is expected to present if consent a good source of high-grade heat which is though could be used to supply local district heating network. Initial scoping works have been commissioned by the investor to the project but next steps are yet to be agreed.
B7f		Consider feasibility of including a Net Zero Carbon policy in the next Local Plan.	Work is ongoing on the local plan, its evidence base and policy development. Long term project. When completed, evidence is published here: https://www.havering.gov.uk/planning-3/local-plan-updates/2 Recent government changes to national planning policy are being considered and addressed with work on a local plan consultation document being started. Reflecting these changes and priorities for the Council. New designation of grey belt and assessment methodology now being considered.

No.	Theme	Measure	Update
B8c	The Council takes clear and ambitious action to reduce the carbon emissions associated with their buildings and activities.	Promote Green Infrastructure through Urban Green Factor (London Plan Policy G5), SUDS (London Plan Policy SI 13) and min 10% improvement to Biodiversity Net Gain applied to all major developments. Further Greening of the Borough to be promoted through relevant projects including tree planting to Romford Ring Road and greening of central Romford. Feasibilities to be developed for funding other schemes including Rom Valley Way.	Urban Greening Factor and Biodiversity Net Gain policy requirements are being enforced in all new major planning applications. Traffic Modelling and design for greening of Romford Ring Road (starting at North Street) is taking place and liaison is on-going with developers around the ring road. Rainham Gateway S106 contributions have been received and consultants will be procured to develop the design. A project to create additional greening to pedestrian areas of North Street is being progressed
B9a		Lobby to improve funding and resourcing for Local Planning Authorities to fully verify developer adherence to sustainability, energy efficiency, urban greening factor, SUDS and biodiversity net gain commitments in planning applications.	Lobbying efforts to begin
B16		Explore potential and review funding options for a River Strategy.	CIL funding for an initial study has been secured. Water engineering consultants Binny have been procured to lead the initial study. This builds on flooding review work undertaken by the Highways team.
B17		Develop a plan to record and monitor Energy Performance Certificate (EPC) ratings for licensable properties, such as Houses in Multiple Occupation (HMO).	Work to begin
B18		Implement actions in Surface Water Management Plan (SWMP).	New SWMP to be finalised before 31st December 2024
B19		Establish Sustainable Urban Drainage Systems (SUDS) approval body and carry out responsibilities.	Governance in place
B20		Formally extend the Thames Chase Trust Community Forest so that it includes urban areas.	Anticipated to be implemented by January 2025.
E1		Review contract with energy supplier.	The Renewal of Energy Award Contract 24-28 has been approved. The energy contracts are valued at

No.	Theme	Measure	Update
	Harness opportunities for the corporate estate to use energy from low and zero carbon sources.		an estimated £5.3 million per year for corporate, housing, streetlights, and schools/direct sites.
E3		Develop Energy Management Plan for Corporate Estate.	We are in the process of developing a comprehensive trees Plan for our corporate estate. This plan aims to identify strategies for improving energy efficiency, reducing costs, and minimising our environmental impact. The initial draft has been completed and will soon be shared with management for their review. We invite their feedback and suggestions to ensure the plan aligns with our overall corporate sustainability goals and effectively addresses our energy needs.
E4		Improve energy efficiency of corporate estate.	Energy Consumption Analysis. We have begun analysing the current energy consumption data across our facilities. This analysis will help us understand our baseline energy usage and identify areas for improvement. Identifying High Usage Area: We are in the process of pinpointing key areas where energy consumption is particularly high, specifically focusing on both gas and electric usage. This will allow us to prioritise our efforts. Research on Energy-Efficient Technologies: Our team is actively researching energy-efficient technologies and practices that can be integrated into our corporate estate operations. We aim to adopt solutions that align with our sustainability goals. Feasibility Assessment of Renewables: We're evaluating the feasibility of implementing renewable energy sources, such as solar, to diversify our energy supply and reduce our reliance on non-renewable sources.

No.	Theme	Measure	Update
			Exploring Financial Incentives: We are also investigating various incentives, grants, and funding options available for energy efficiency projects. This will help offset costs and enhance our investment in sustainable practices. Energy Efficiency Plan Development: Our goal is to develop a comprehensive energy efficiency plan with the target of achieving a 10% reduction in gas and electric consumption. This plan will outline our strategies and overall vision We are currently in the process of gathering electric and gas consumption data from our corporate sites with the aim of implementing a set of strategies to reduce overall consumption. The next step involves the installation of solar PV. We will proceed by obtaining quotations and seeking advice from relevant companies .
E5		Measure and report annual carbon emissions for the borough and for the corporate estate.	Borough emissions reported up to 2022 (published in June 2024). No later figures available. Corporate emissions published for gas, electricity and transport up to March 2024.
E8		Reduce energy use by IT.	We are on target to move all our physical servers to cloud based servers by Nov 2025. We are currently working out when we will be in the position to shut down our data centre at Havering Town Hall. To date we have successfully migrate 3 service into the public cloud. The previous update from Glyn mentioned that the figure of 90% would not be a true reflection of our carbon footprint reduction because they will still be consuming electricity in the Microsoft Data Centres. But on average their servers use approximately 33% of our own prem servers.

No.	Theme	Measure	Update
E9		Install smart meters in corporate buildings managed by the Council to provide better monitoring of energy consumption.	Electric: 80% to 82% of the installation has been completed and the rest is currently being processed with the cooperation of Npower, who has taken charge of the AMR installation. Gas: 90% to 92% of the installation has been completed, and the remaining work is being carried out with the cooperation of Corona Energy. We will update you as soon as we finalize the plan for the remaining AMR installation with the suppliers. To fulfill the remaining target for installing the smart meters, we are collaborating with the supplier to arrange the installation schedule. Note: We have initiated the process and are currently in the process of scheduling the installation of AMR meters with the supplier's electric deployment team. Rest assured, we will provide you with timely updates as soon as new information becomes available.
E10		Conduct water, electric and gas meter audits and reviews with the aim of reducing water, gas and electricity usage and consolidating and reducing bills in the corporate estate.	Water Corporate Contract: We are actively collaborating with the procurement team to explore various options that align with our strategic goals. At this stage, we are reviewing different options and contract terms to ensure that we secure the best possible agreement. We aim to finalise our selection soon and will keep you informed of any significant developments. We are conducting audits to assess our current usage and identify areas for improvement. This process involves: Data Collection: We are gathering detailed consumption data from all our meter readings to establish baseline usage levels for gas, and electricity across our facilities.

No.	Theme	Measure	Update
			Analysis: We are analysing the data to pinpoint inefficiencies and areas where we can reduce consumption. This includes comparing usage patterns and identifying peak consumption times. Meter Inspection: We are planning to inspect all meters to ensure accurate readings and proper functioning and any signs of damage, tampering, or inefficiencies. Meter Readings and Analysis; Take current meter readings and compare them with historical data to identify consumption trends and anomalies. Analyse usage patterns across different facilities and departments. Monitoring: We will establish a monitoring system to track progress and ensure that our initiatives lead to tangible reductions in our utilities bills. Our goal is not only to reduce overall consumption but also to consolidate our utilities services where possible to streamline costs further. We believe that these efforts will significantly impact our sustainability initiatives and operational efficiency.
E11		Review criteria for constructions standards applicable to Council developments to increase environmental standards beyond those required by Building Regulations.	Research on this matter is underway. There is a pilot scheme for a UK net zero building standard which is going to be reviewed for suitability and adaptability to LBH purposes for new developments.
E13		Install web portal to monitor energy consumption in the Corporate Estate.	We are currently in the process of developing a web portal, which will serve as a platform for our esteemed users to monitor their consumption. However, we have encountered some technical issues with our supplier, which have unfortunately

No.	Theme	Measure	Update
			delayed our launch. We will keep you updated on our progress, and endeavour to share the portal with you as soon as it is fully ready.
E14		Promote energy efficiency within schools newsletter.	Since taking this action on, we have been able to include climate change to feature in all the School newsletter.
E17		Sustainability Action Plans to be adopted and maintained for all Corporate Landlord sites.	Template is under development.
E19		Publish a reduced IT carbon and ecological footprint, based on the services consumed, on the corporate estate and with suppliers, encompassing embodied / embedded carbon.	Action has been incorporated into E8.
E29		Dim street lights on main roads from midnight to 5am.	Work to start later in the year. Works programmed to start in 2025/26
E31		Introduce environmental savings through the use of Acrobat Sign across Council departments.	With 3,377 completed agreements using Adobe Sign from Jun 23 to Dec 24 we have saved: 572kg of wood (4 trees); 90kg of waste; 1,441kg of Co2; 13.6k litres of water and 4.3M BTU hours of energy. Looking to increase usage across the council e.g. Building Control, who have shown recent interest
E32		PV installation to roof of a new SEMH ARP Facility at Suttons Primary School.	Construction underway, building mostly water tight, PVs have been installed, Bores for GSHP complete. Fitout and internal decoratiosn underway, external landscaping is to be completed. Building due for completion May 2025 (delay due to roof cappings not available)
E33		School Energy Efficiency and Decarbonisation (SEED) project to develop an estate-wide heat decarbonisation plan for maintained schools estate. This is funded by an LCSF5 grant from SALIX. (Low Carbon Skills Fund)	Initial client briefing meeting with external architects, RAFT, took place on 22/10/24 to establish what the Council wants from the project.
E20		Develop a programme to upgrade communal lighting in Community Housing to LED lighting.	A programme will be developed. Asset details are being requested from the Asset Team. New Heating

No.	Theme	Measure	Update
	Harness opportunities for Housing to use energy from low and zero carbon sources.		and Hot Water contract which commenced in August 24 includes replacement of all domestic light bulbs with LED bulbs during the annual gas safety checks. A new Electrical Services contract is being procured (report to September Cabinet) and this will be the delivery vehicle for new Communal LED lighting. Tenders for the new Electrical contract are now out and the contract will be live in late Summer 2025. Take up by individual residents has been very low but we will increase publicity and mail out to leaseholders as well.
E21		Apply for grant funding from Wave 3 of the Social Housing Decarbonisation Fund to deliver fabric retrofits to properties over the next two years, helping to cut fuel bills for social housing tenants, increase their EPC rating to a C or above and reduce carbon emissions. Funding and Application timelines to be confirmed.	All properties within proj Guidance on grants has now been released but applications are not yet invited. We are identifying a suitable property list and have appointed the necessary consultants working to PAS2035. The bid window is open with bids due in by 25th November. We will apply through a consortium with London Councils for works to approximately 400 homes. We are currently collating our data and providing case studies and evidence for the bid submission. Our bid to fund works to bring 400 properties up to EPC C, plus a further 40 properties to have low carbon heating, is now in through London Councils. The bid results are due February/March 2025ect to reach EPC C
E22		To continue with fabric led retrofit project work to bring properties up to an EPC C rating working on a self delivery approach with no government funding.	This programme is retrofit delivery without the benefit of grant funding and will continue on an annual basis as budgets allow. Current programme of fabric retrofit is almost complete and part of the strategy will now focus on measures necessary to achieve EPC C by 2030 with no detriment to future improvements

No.	Theme	Measure	Update
E23		Install a heat pump as the primary source of heating and hot water in the new Family Welcome Centre in Harold Hill, plus in two new supported accommodation schemes for Social Services at Mawney Close and Mowbrays Close.	Bugler have been appointed and started works recently on the Family Welcome Centre. Marfleet and Blyth have been awarded the contracts for the schemes at Mawney Close and Mowbray Close and work is progressing on site. All contracts are on programme, with Mawney & Mowbray due to complete in February and April 2025, and Family Welcome Centre in May 2026
E24	Harness opportunities for residents to use energy from low and zero carbon sources.	Development of a zero carbon visitor centre at Raphaels Park Lodge. Engage with the Havering Volunteer Centre to develop the capacity to manage the facility.	Building works are nearly complete. The design of the exhibition is progressing internally. Recruitment issue to be resolved.
E30		Encourage green energy solutions with residents and businesses and point to any funding incentives available via the zero carbon visitor centre. Where we know of businesses who promote such generation reach out and encourage them to promote those initiatives in Havering.	Content for the exhibition space for the Low Energy Visitor Centre is in development.
E25		To publish the impacts of the Energy Doctors Programme on matters pertaining to climate change.	612 home visits. Energy saving measures included radiator foils, LED lightbulbs, draft excluders, timers.
E26		Use the HUG2 grant to tackle fuel poverty in 30 low-income households, improve the energy efficiency of these homes and cut energy costs.	The application window for HUG2 has now closed. Work continues on finishing those homes that were eligible.
E27	Harness opportunities for partners and local businesses to use energy from low and zero carbon sources.	Monitor Phase 2 (capital) of the Swimming Pool Support Fund. Reduce carbon emissions and make swimming pools more energy efficient.	Phase II funding award for part of our application to the swimming pool support fund. An award of £700k has been offered to install car ports with Photo voltaic (PV) panels on at Central Park Leisure Centre. Planning has been granted and a contractor appointed via a framework agreement. Fabrication has commenced and further ground tests carried out, with the construction of the car ports commencing at the end of February and the project completed by end of March 2025. Fabrication of the car ports is commissioned, with a start on site

No.	Theme	Measure	Update
			date of 10 March for installation, slightly later than envisaged. The scheme is likely to run in to April, but should be completed before end of April. Contract being signed and sealed currently. A successful Carbon Offset Fund application was made to fund the installation of additional PV panels at Sapphire Ice and Leisure. SLM will be managing this project with installation, subject to planning permission, being installed in the 2nd or 3rd quarter of 2025. Planning permission submitted for CPLC PV panel scheme on 30/9/2024.
E28		Submit bid to Carbon Offset Fund to support community halls with implementing energy efficiency measures.	CIL money re energy efficiency & green maintenance within Community Associations - Cranham CA was been identified mid 2024. Currently no further action has taken place. Energy efficiency & Green external grants are emailed out to Community Association committees on a regular basis.
P4	Prepare businesses for skills needed in a net zero economy and borough.	Create a 'Business' page on the website – a "Trusted site"	Unable to deliver this action due to service capacity
P12		Identify high-tech environmental companies who might wish to establish a presence within Havering.	Expected to be delivered as a consequence of East Havering datacentre investment
P20		Use UK Shared Prosperity Fund (UKSPF) Skills Funding to provide training for local business in fundamentals of sustainability with the objective of the businesses adopting greener processes within their ways of working.	Business Support, Start Up training and Supply Chain training continues into February. 108 businesses engaged with so far. 13 entrepreneurs registered on the business start up programme.
P21		Establish a Best Sustainable Business Award.	The Havering Small Business Awards opened for nominations on 28/03/24. The Award Ceremony is in Sep 24.
P23		Create a Directory of Green Services - providing businesses with a resource from which they can identify services to support the business to implement tackling climate change activities.	Final version recieved from Eunomia. Directory added to website. Will be promoted as part of Greener Futures initiative

No.	Theme	Measure	Update
P8	Prepare residents for skills needed in a net zero economy and borough.	Explore the feasibility of setting up a Local Housing Skills Centre to deliver practical green actions within the borough.	Potential to explore this action pending funding announcement from the GLA.
P11		Undertake sector focussed research on key sectors in Havering's economy to identify green skills gaps and support the development of solutions.	Potential to explore this action pending funding announcement from the GLA.
P13		Joint ventures with local colleges on research and development of green strategies.	LSIP Funding has equipped Colleges to deliver training on green tech installation, activity is at a sub-regional level in conversation with LAs through the economic growth and skills and employment meetings. LSEC is holding events across the 9 Local London Boroughs to engage businesses and learners and send out bulletins. Action at borough level is to promote engagement.
P14	Prepare workforce for skills needed in a climate active council and net zero economy.	Design and develop a culture change programme to include climate issues for officers and a review of all HR policies.	Think before you print will be added to policies as they are reviewed
P24		Work with London Councils to develop and integrate regional learning into the everyday practice of the Council and brief Members on the outcomes.	Work to start later in 2025.
P25		Hold a Member Workshop on climate change issues to establish consensus around the climate change agenda.	Introduced as part of 2024-25 appraisal cycle
P26		Incorporate climate change PDR actions into the top three tiers of Council management and analyse their effectiveness.	Introduced as part of 2024-25 appraisal cycle
P27		Incorporate an optional climate change PDR action for all staff and analyse take up and effectiveness. Consider making this mandatory for all staff in the new PDR cycle.	Optional PDR objective in PDR library
P28		Introduce a climate action toolkit to provide practical guidance on considerations for reducing the Council's carbon footprint across all decisions and projects.	Toolkit is available on intranet

No.	Theme	Measure	Update
P29		Secure, access and make available climate change training for all staff and categorise courses by awareness raising and/or professional skills development.	Climate change courses part of new LXP. Tackling climate change part of Corporate Welcome slide deck. Let's Talk session planned for 20/05/24
P30		Promote actions for tackling climate change to staff not on the computer network.	Climate change courses part of new LXP. Tackling climate change part of Corporate Welcome slide deck. Let's Talk session planned for 20/05/24
P31		Introduce a salary sacrifice electric car benefit scheme for staff.	Discussions taking place with Tusker to implement in 2025
PR2	Adopt sustainable purchasing practices and products.	Agree a vision statement for sustainable procurement that aligns with national and Havering targets.	To be drafted by end March 25
PR3		Establish a framework to identify current spending against associated carbon emissions and agree a target for reduction. Investigate opportunities for divesting from fossil fuel.	Scope 3 emissions will form part of the new procurement e-tool, this will be developed and will enable a view that can be turned into an informed strategic direction This has been pushed back to phase 2 in the implementation of the e-procurement tool, Phase 1 is expected to commence by the end of April 2025
PR4		Include sections in revised Contract Standing Orders to ensure sustainability issues are incorporated into the procurement of goods, services and works.	The Councils CPR's will be redrafted with a target of the end of February 25, and will be supported by a more detailed procurement handbook This has been delayed due to delays in resourcing backfill to release resource. This has now been recruited to and drafting has commenced.
PR6		Identify and prioritise local supply chains and work with them to ensure they understand, disclose and cut carbon emissions.	Scope 3 emissions will form part of the new procurement e-tool, this will be developed and will enable a view that can be turned into an informed strategic direction

No.	Theme	Measure	Update
			This has been pushed back to phase 2 in the implementation of the e-procurement tool, Phase 1 is expected.
PR7		Reduce pensions investment in environmentally unsustainable companies.	35% of the Pension Fund has already moved into more 'climate friendly' products
PR8		Evaluate funding strategy for tackling climate change, including green bonds and grant availability.	Unable to progress in current financial situation
PR9		Develop a bespoke framework for IT to evaluate the impact of IT developments and purchases on the environment and measure carbon emissions.	Environmental and climate change implications considered as part of Gateway Review Group and EDs Representation on Gateway Review has commenced and the staff actively contribute to the meeting and challenge
PR14		Only procure with IT suppliers who have committed to, or are in the process of, setting science-based targets that match the Council's sustainability aims.	Environmental and climate change implications considered as part of Gateway Review Group and EDs
PR15		Write a Procurement Plan / Strategy to include a climate change and procurement 'road map' that actively encourages suppliers to operate and provide goods and services that offer maximum social, environmental and health benefits to Havering residents and community (e.g. eliminate, substitute and reduce emissions, measuring and monitoring, reporting emissions).	The Procurement Act 23 requires all above threshold procurements to consider wider environmental and outcomes that impact our residents, this will be reflected in the new CPR's and Procurement handbook
PR16		Monitor the delivery of measures against grant schemes and record outcomes.	The Procurement Act 23 requires all above threshold procurements to consider wider environmental and outcomes that impact our residents, this will be reflected in the new CPR's and Procurement handbook
PR5	Prepare Havering Council workforce for skills needed in a climate active council and net zero economy.	Deliver staff training on sustainability procurement to ensure that Havering has a low carbon procurement framework, so that staff can advise and support companies with whom they do business.	Funding bid submissions are being recorded via Newly Published Decisions and the Climate Action Group

No.	Theme	Measure	Update
PR17		Contract managers are trained to evaluate and act on the environmental provisions made as part of the contract process.	A wider training package that supports the sustainability agenda will be developed
PR18		Share knowledge of sustainable suppliers and promote good practice case studies.	Sustainable Procurement page published on intranet with 1 case study
PP2	Residents live in comfortable, affordably heated and well-adapted homes that are cost-efficient with low or zero greenhouse gas emissions	Explore how the Private Sector Housing licensing process can help promote energy efficiency measures in rental properties by signposting advice and guidance to landlords	Upon renewal of the Selective Licensing Scheme a discount can be offered for those landlords who have higher EPC ratings, to encourage landlords to improve their properties. Energy Doctor scheme to be signposted to Landlords
PP5		Promote energy efficiency schemes to landlords.	Incorporated into PP2
PP7		Identify new premises for Pollution Prevention and Control Permitting.	Beam Park/New Road area surveyed and no unpermitted businesses were found. We have identified a further 2 sites (1 company, operating without a permit, and dry cleaner which has applied for a permit). This action is part of business as usual for Public Protection so has been completed on the action plan.
PP10		Promote ideas for tackling climate change to social housing tenants.	Climate change information is under Financial Help and Advice in the Private Sector Housing Tenants Handbook and available on the Council website.
PP3	Protect and improve the environmental health of the borough	Update Air Quality Action Plan.	There is a draft available of the new Air Quality Action Plan. This will go for a second round of internal consultation before briefing the Environment Lead Member, sharing with the GLA and a completed ED before going out for a 12 week public consultation April/May 202
PP11		Explore how food and trading standards inspections can help promote climate change activity in the business sector and leave advice and guidance for business owners.	This is still to begin. Due to significantly reduced capacity in Food Team, it has not be possible to progress this action further

No.	Theme	Measure	Update
PP12		Investigate options to increase public access to drinking water to reduce single use plastic bottles.	Reducing the use of single use plastic bottles has been factored into the Healthy Weight Strategy and will be promoted on the Well Havering website.
SC8	Continue to develop initiatives to protect Havering's green heritage and natural environment.	Publish new Parks Strategy.	2nd draft being produced
SC12		Produce an updated Havering Nature Conservation and Biodiversity Plan following production of the GLA's Local Nature Recovery Plan.	On hold until GLA publish their Nature Recovery Strategy (likely to be in late 2025)
SC13		Management of nature conservation areas within Council owned land and encouragement of private land owners to manage biodiversity.	Conservation/ meadow areas in parks have been increased. Comms to promote No Mow May campaign to residents with private gardens
SC14		Re-design planting schemes to include drought tolerant species.	Removed all seasonal bedding including 5 Crowns & carpet bed from displays & replaced with permanent planting.
SC15		Adopt deer management plan to improve biodiversity in parks.	TB agreed to undertake census and then produce management plan which will be presented to TB in 25. Census completed and drafting management plan.
SC16		Review the use of herbicides across all Council services, including those containing glyphosate.	In the UK, the current expiry date is December 2025, following a three-year extension as the UK's post-Brexit pesticides regulatory regime is developed
SC17		Create a walking trail for ancient and veteran trees across the north of the borough.	Links to the tree map and feedback survey have been added to the Low Energy Visitor Centre webpage and Havering Council website.
SC35		Creation of a community garden as part of the Waterloo Estate regeneration.	Community garden has been set up and is in use. Community groups and schools visit to learn and garden
SC36		Take part in surveys by Natural England and RSPB to record data on vegetation, habitats, soils, landscape and butterflies and compare how these are changing over time.	Initial permissions being sought

No.	Theme	Measure	Update
SC18	Foster effective partnerships with community groups and the voluntary sector to raise community awareness about the role everyone has to play in tackling climate change.	Develop programme for Climate Change Champions and continue to seek funding to maintain the scheme.	NL Climate Change grant is being researched. The programme continues in a reduced plan focused on litter picking & community clean ups by the voluntary sector. Kim promoting the scheme at the APSE (Southern Region) Renewables & Energy Efficiency Advisory Group on 03/10/24.
SC19		Meet and engage with the Faith sector to agree a set of actions to spread the message of climate action within their communities. This will include establishing measures of impact of the activities, new faith material communications and inter-faith activities.	Climate change will be part of the Community Engagement Strategy 2024-27 that is now agreed. Leader meeting Faith Leaders in January. Partnership with London Faith Forum. Partnership meetings with Faith Leaders taking place late January and Early February focussing on community resilience.
SC20		Explore possibility of establishing a community fridge/s.	No information available currently.
SC21		Identify, secure and promote grant funding opportunities.	Awaiting to hear if there will be a Warm Place budget for 25/26.
SC22	Increase engagement and communications about sustainability with residents, schools, businesses, visitors and other stakeholders.	Work with 2 schools to raise awareness of tackling climate change.	Site visits to Low Energy Visitor Centre to be organised. Potential schools are Squirrels Heath Infants and Juniors; St Edwards Primary; and Drapers Mayland Primary School.
SC11		Continue Healthy Schools programme as a mode of engaging with schools.	There are some proposed changes to the Healthy Schools and Healthy Early Years Programmes. We can use this as an opportunity to re-launch the new revised programmes- celebrating schools / settings who have gained awards, but also call on them to remain engaged by following the new awards pathway- whilst at the same time trying to encourage schools / settings who are not yet engaged to participate in the new programmes. Link with Healthy Weight Strategy
SC23		Develop and implement a 2 year programme of media activity in respect of climate change.	Plan shared with the Green Forum in October 24 and signed off.
SC24		Redesign webpages so that the climate offer is prominent and distinct on the Havering Council website.	Content has been developed for the new Live Well Havering website and will continue to be updated as the website grows.

No.	Theme	Measure	Update
SC25		Utilise smart technology to provide help and advice on climate activities.	Work to start later in the year.
SC26		Create a knowledge hub on the website on transport, housing, circular economy for staff and public so that ideas can be shared.	This has been included in the climate change communications plan. Useful information will be shared via the new Live Well Havering website and the Council's social media pages.
SC27		Create an environmental dashboard to share headline information about environmental change and track progress towards sustainability goals.	Internal dashboard for reporting on HCCAP action progress is completed. Design for external dashboard being worked on.
SC29		Establish Green Information Hubs at each library in the borough.	Books have started to arrive at the libraries and the display stands are with us and are being set up, displays should be up by the end of this month. Chasing up local green organisations to respond to request for information for the leaflets and then will liaise with marketing of organisations with comms in Aug.
SC30		Establish a Green Reading Group in libraries.	Several meetings of the Green Reading Group have now taken place and membership continues to grow.
SC31		Promotion of water harvesting to residents and businesses where practical as part of our comms strategy. Investigate initiatives in other local authorities to identify best practice.	Added to comms plan
SC32		Provide residents with a choice of environmental activities to get involved in and information to be more engaged with green issues.	Monthly Clothes Swops have started at New City College hosted by the Big Smile Collective. Havering Changing programme have been undertaking various recycling, reuse, upcycle activities and workshops on a weekly basis for residents to engage with, within Harold Hill, Collier Row, Romford & Rainham areas. Where we Live Campaign supporting the Great British Spring Clean 21.3. - 6.4.25 with resident/group litter picks and community clean ups.

No.	Theme	Measure	Update
SC33	Accelerate the transition to electric vehicles across the borough.	'Seeds of Change' programme of wellbeing activities, exploring healthy food ecologies, placing physical and environmental activism within the programme. Part of A Good Life Cultural Strategy.	A Good Life Culture Strategy has been drafted
SC34		Promote the adoption of balanced diets (and the associated reduced meat consumption), maintain freedom of choice, while still delivering health co-benefits, and increase consumption of local and seasonal food.	Added to comms plan and will be featured during January to coincide with Veganuary and new year health kicks. Waste & Recycling performing Love Food Hate Waste events which promotes vegetarian meals.
SC37		Communicate how the Council is meeting its actions through the dedicated climate emergency page on Well Havering, the climate pages on the Council's website and in Living, the Council's e-newsletter.	Initial content ideas have been submitted to the Programme Manager.
T2		Replacement of pool cars with electric vehicles and associated infrastructure.	Currently on hold.
T13		Deliver an Electric Vehicle Charging Strategy.	Draft strategy to be discussed at ELT on 6th August and Theme Board on 19th August, to seek approval to go out to public consultation.
T16		Delivery of 68 electric vehicle charging points in 9 Council owned car parks, and up to 80 on street charging points connected to lamp columns across the borough.	Connected Kerb Ltd have been formally appointed to deliver the EV Charging Points across Council car parks and on-street locations. Contract with Connected Kerb was signed and sealed in June. Target is for car park EV Charge Pointed to be installed by the end of the calendar year. Discussions currently taking place with Connected Kerb to agree on the on street locations. aiming to installed on street charging points by end of financial year.
T31		Trial of GTL (Gas to Liquid) / HVO (Hydrotreated Vegetable Oil) 50/50 mix to reduce CO ₂ across the fleet.	10month trial completed. Resulting in Key ED being prepared to switch to HVO fuel via framework. HVO will reduce ICE vehicles CO2 emissions by up to 90%

No.	Theme	Measure	Update
T32	Cut 'dirty' fuel vehicle trips and increase sustainable and active travel.	Replacement of 17 diesel Parks vehicles with Battery Electric Vehicles.	Vehicles are on order and are expected in November/December /January / Feb.. on going
T33		Switch from petrol to electric mowing equipment.	Grounds Maintenance teams are using commercial electric InfiniCut mowers, which are fully electric with an operating life of 10 years.
T6		Work with schools in the borough to set travel plans which deliver modal shift away from single occupancy car use.	Data from 51 accredited schools showed that walking is at 41%, scooting at 11%, cycling at 5%, park and stride at 14%, public transport at 10%, school bus at 1%, car share at 2% and car use at 16% down from 19% the year before.
T8		Awareness campaign to promote sustainable travel to our staff and contractors.	To be factored into Climate Change Comms Plan.
T10		Deliver an Active Travel Strategy for Havering.	Draft strategy is now out to public consultation.
T14		Produce a feasibility assessment and produce a paper to Cabinet on a Last Mile Delivery proposal.	Briefing Note on last mile delivery has been prepared. Currently being reviewed by Officers.
T17		Review feasibility study and develop next steps for a new north / south public transport link providing a link between Rainham and Beam Park and the Romford housing zone with a further connection to Collier Row.	Jacobs have been commissioned to undertake a review of the work done to date and the assumptions made in the work that was done pre-covid. Jacobs will also be making recommendations to Havering on next steps for taking the project forward. A first draft of this review has been sent to Havering Officers for review. Once this review has been completed, a report will be going to Theme Board summarising the work done to date and recommending next steps should Members wish to take the study further forward.
T18		Delivery of Walking Zone maps in two schools (locations to be decided) across the borough. The model will be one which can be used as a template for other schools.	Since 2021 we have delivered this initiative across five schools in the Borough. Two of these are being relaunched – Clockhouse and Drapers Pyrgo Priory. For 2024 to 2025 a further eleven Breathe Clean Walking Maps will be delivered using DEFRA funding. These are in the process of delivering walking maps to the following schools Ardleigh Green Junior, Benhurst, Branfil, Concordia, Crownfield Infant, Engayne, Gidea Park, Harold

No.	Theme	Measure	Update
			Court, Hilldene, Mawney, Newtons, Towers Junior. Additionally, four Walking maps have been already been delivered in Q1 of 2024/25 at four schools in Rainham as part of the GLA funded School Superzone project.
T19		Promote and lead an active travel conference for schools. Each school to develop an active travel plan.	We are organising the 2025 School Travel Plan Conference. An agenda is being prepared. The conference will be held at the Myplace Centre in Harold Hill. We are currently working with over 65 schools across the Borough to submit accredited travel plans for the TfL Travel for Life Programme.. In 2023 to 2024, 60 schools participated in the programme, 55 were accredited - 10 Bronze, 4 Silver and 41 Gold plus 5 Engaged. We also received three Top School Awards of Excellence.
T20		London Riverside Bid - public transport access as none currently/pedestrian crossings.	"A Travel Survey is currently being conducted in the London Riverside BID area to better understand travel behaviour and aspirations for employers and employees of the Riverside Bid. The emerging findings for the employer survey include: • 40-60% drive • 20-40% public transport • 10-20% active travel • Distance from nearest transport hub and lack of local bus routes affect ability to recruit/maintain staff • Believe a shuttle bus or new local bus connection would have a positive impact • Specifically mentioned that a new station at Beam Park would also help to alleviate transport issues Further enagement is being carried out in order to get a representative sample, after which time formal analysis of the survey responses will be undertaken.
T21		Integrate need to reduce car use in Local Plan through restrictive car parking, extensive walking and cycling routes etc.	This is covered in the Local Plan.

No.	Theme	Measure	Update
T22		Work with and advise the local NHS partners on their Active Travel Plans and monitor and report effectiveness.	Quarterly meetings take place with the sustainable travel representative of the BHURT. A staff Travel Plan has been produced which Havering Officers have reviewed and commented on. This is now going through the internal approval process at the Trust. Walking and Cycling counts at Hospital entrances are being commissioned to better understand the entrance usages. This data will be analysed and used to inform a signage strategy for the site.
T34		Implementation of new cycle routes to improve connectivity between minor and district centres	The Active Travel Strategy (currently out to public consultation) sets out the long term plans for improving walking and cycling connectivity between minor and district centres. The strategic cycle routes accessing Romford, Queens Hospital and Rianham have been submitted as part of the TfL LIP 3-year programme, we will find out the result of the funding proposal in Feb 25. Feasibility is ongoing for Quietway routes connecting district centres across the borough, with delivery factored in within the LIP funding proposal. A scheme is being prepared looking at delivering a cycle track along Marsh Way to provide access into the London Riverside BID from the A1306. The Council is applying for up to £1m of Active Travel Funding from the Thames Freeport to deliver the scheme by March 2026. An OBC was approved by the Thames Freeport in summer 24 with a detailed design and FBC currently being prepared with the aim to submit early in 2025.
T23	Reduce vehicle emissions across the borough.	Continue to work with National Highways to secure mitigation measures for Havering and its residents to reduce the impact of the Lower Thames Crossing project.	The Lower Thames Crossing Examination finalised on 20th December 2023. Expecting a decision by the Secretary of State on the scheme, and the mitigation measures that were argued for in the summer 2024. This includes the need for a NMU Bridge over the A127 between Folkes Lane and

No.	Theme	Measure	Update
			Moor Lane and a new NMU routes from the A127 to Folkes Lane Woodland.
T25		Upcoming highways procurement, e.g. Highways to review carbon benefits such as recycling targets, sustainable materials etc. options through procurement process.	Contract has been awarded and environmental measures have been built into the contract
T27		Bring together the transport actions into a strategic high level action statement which shows what is being progressed, what is aspirational and what the Council would like to do when funding becomes available. The purpose is to coordinate actions, measure progress and publicly explain what is being achieved.	This is covered in the Local Plan.
T28		Monitor and manage carbon emissions from transport across the borough which will model the impacts of actions taken.	Further enagement is being carried out in order to get a representative sample, after which time formal analysis of the survey responses will be undertaken. "
T29		Prepare a regular report on car anti-idling activity to evidence action, improvement and enforcement of the Council Policy.	This is covered in the Local Plan.
T30	Adopt responsible and social values measures into large scale contracts.	Work with the highways contractors to explore how their social value offer can benefit the residents of Havering by addressing climate issues.	Quarterly meetings take place with the sustainable travel representative of the BHURT. A staff Travel Plan has been produced which Havering Officers have reviewed and commented on. This is now going through the internal approval process at the Trust. Walking and Cycling counts at Hospital entrances are being commissioned to better understand the entrance usages. This data will be analysed and used to inform a signage strategy for the site.

3. Planning Update and Other New Sources of Emissions

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

The number of major planning applications has decreased significantly in 2024 and into 2025. This has been attributed to an increase in developments with less than 10 townhouses. There has been a significant increase in subdividing residential sites with gardens large enough to construct an additional house. Air quality neutral requirements are still applied to these developments.

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	6
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)	0
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	45
Number of developments where an AQ Neutral building and/or transport assessments undertaken	6
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	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.	
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 .	25 conditions included 18 registered

Condition	Number
Number of audits (based on the pan-London project report and / or inhouse auditing programme)% of sites unregistered prior to audit	25 audits
% of sites compliant with Stage IIIB of the Directive and/or exemptions to the policy.	28% sites unregistered prior to audit
	100% sites compliant after audit

3.1 New or significantly changed industrial or other sources

No new sources identified or significant changes to existing sources.

4. Additional Activities to Improve Air Quality

4.1 London Borough of Havering Fleet

The Havering fleet includes a total of 18 zero emission vehicles and 18 zero emission capable vehicles. This accounts for a total of just over 10% of the Borough's fleet. However, the rest of the fleet run on a green alternative fuel to Diesel.

4.2 Planning Enforcement

The wording provided in 4.3

The planning department consult public protection:

- AQN all major and minor applications which involve additional building emissions or transport emissions.
- AQA all major planning applications.
- Construction dust all major planning applications.
- Any planning application which proposes the use of a generator.

An officer manually reviews the consultation, submitted planning documents, PTAL mapping and advises the planning department if a condition is required. A service level agreement has been adopted between both departments. The planner contacts public protection if they have any concerns.

The condition is included in the decision notice, if the application is approved.

4.3 Pan-London NRMM Auditing Project

The London Borough of Havering will continue to support the NRMM scheme in 2025-2026.

The standard planning condition used by Havering to secure compliance with the Mayor's LEZ for NRMM reads as follows:

- a) *Prior to the commencement of the development hereby approved, the developer or contractor must be signed up to the Non Road Mobile Machinery (NRMM) register.*
- b) *The development site must be entered onto the register alongside all the NRMM equipment details.*
- c) *The register must be kept up-to-date for the duration of the construction of development.*
- d) *All NRMM used during the course of the development that is within the scope of the Greater London Authority 'Control of Dust and Emissions during Construction and Demolition' Supplementary Planning Guidance (SPG) dated July 2014, or any subsequent amendment or guidance, shall comply with the emission requirements therein.*
- e) *An inventory of all NRMM to be kept on-site stating the emission limits for all equipment.*

Reason: To reduce emissions from construction and demolition activities and comply with current NRMM emission standards, in accordance with the Greater London Authority 'Control of Dust and Emissions during Construction and Demolition' Supplementary Planning Guidance (SPG) and any subsequent amendment or guidance.

4.4 Air Quality Alerts

Havering is an active supporter of the AirTEXT air quality alert system. To prevent duplication of alerts and therefore confusion, we do not directly cascade the Mayor's air quality alerts.

4.5 Air Quality Positive

No innovative mitigation measures were proposed for planning applications which triggered Air Quality Positive in Havering in 2024.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

HV1 and HV3 are representative of roadside exposure within the Borough. All the sites are part of the London Air Quality Network and therefore the standards of QA/QC are similar to those of the government's AURN sites. Regular monthly calibrations are carried out, with subsequent data ratification undertaken by ERG at Imperial College London. The data for 2024 have been ratified.

Data capture from the NO_x analysers at HV1 and HV3 in 2024 were 99.7% and 99.5% respectively.

PM₁₀ Monitoring Adjustment

PM₁₀ at HV3, and PM₁₀ and PM_{2.5} at HV1 are measured by FDMS, consequently correction is not necessary.

An ongoing issue at HV1 has not been resolved and therefore ERG have not been able to ratify PM_{2.5} data for 2024.

A.2 Diffusion Tubes

Diffusion Tubes are supplied and analysed by Socotec, Didcot. For 2024 tubes were prepared by spiking acetone: triethanolamine (50:50) onto grids prior to the tubes being assembled. The tubes are desorbed with distilled water and the extract analysed using a segmented flow autoanalyser with ultraviolet detection. The tubes were 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'. As set out in the practical guidance, the results were 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. As set out in the current Precision Summary Table, Socotec Didcot is listed in the table of laboratories with Good Precision.

The bias adjustment factor for Socotec, for the 50% TEA in Acetone preparation method in 2024, taken from the National Bias Adjustment Factor Spread sheet (v04_25) is **0.78**.

The London Borough of Havering has a triplicate diffusion tube co-location study at one of the roadside automatic monitoring sites, operational since 2015. Due to Waterloo Road being a high concentration site (roadside site) any bias adjustment factors derived should not be used for any low concentration monitoring sites.

Factor from Local Co-location Studies the 2 co-location sites are busy roadside locations and their use is not appropriate.

Discussion of Choice of Factor to Use

The national bias adjustment factor was used for bias adjustment of Havering's 2024 diffusion tube results to ensure consistency with previous years.

Table O. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	03/25	0.78
2023	National	03/24	0.77
2022	National	03/24	0.76
2021	National	03/22	0.78
2020	National	06/21	0.77
2019	National	09/20	0.77
2018	National	06/19	0.76
2017	National	03/18	0.77

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Both monitoring stations had sufficient monitoring data and the adjustment was not required.

Distance Adjustment

Distance adjustment for four locations was calculated using the Diffusion Tube Data Processing Tool v5.4 (Table T). After making the distance adjustment one location is within 10% of the limit value and two locations exceed the limit value:

Mercury Gardens distance adjusted concentration is $38.6 \mu\text{g m}^{-3}$ it is an urban centre location, near to commercial units.

Romford Taxi Rank distance adjusted concentration is $65.0 \mu\text{g m}^{-3}$ it is an urban centre location, next to commercial units

Romford Battis distance adjusted concentration is $53.8 \mu\text{g m}^{-3}$ it is an urban centre location outside Romford train station, next to commercial units.

Butts Green Road distance adjusted concentration is $34.9 \mu\text{g m}^{-3}$ it is a roadside location and 9.5m from the nearest residential building.

Table P. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor HV1 Rainham	Annualisation Factor HV3 Romford	Annualisation Factor Thurrock AURN	Annualisation Factor CW3 LBTH Jubilee Park	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g m}^{-3}$)	Annualised Annual Mean ($\mu\text{g m}^{-3}$)	Comments
HAVER/21 A/NA1S49	1.0016	1.0151	1.0283	1.0527	1.0244	28.1	28.8	

Annualisation was completed through the Diffusion Tube Data Processing Tool v5.4 was used for one location at Newton's School.

Table Q. Automatic NO₂ Monitoring Data Adjustment

HV1 and HV3 automatic monitoring stations did not require annualisation.

Table R. Automatic PM₁₀ Monitoring Data Adjustment

HV1 and HV3 automatic monitoring stations did not require annualisation.

Table S. Automatic PM_{2.5} Monitoring Data Adjustment

The PM_{2.5} parts are at end of life and data for 2024 could not be ratified. This monitoring station is commissioned by a third party and we are sourcing new parts for the monitoring station.

Table T. NO₂ Fall off With Distance Calculations

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted ($\mu\text{g m}^{-3}$))	Background Concentration ($\mu\text{g m}^{-3}$)	Concentration Predicted at Receptor ($\mu\text{g m}^{-3}$)	Comments
HAVER/21 A/NA1S1, HAVER/21 A/NA1S2, HAVER/21 A/NA1S3	2.0	4.0	41.8	22.2	38.6	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
HAVER/14 B/NB4S5	0.1	1.1	44.2	16.0	34.9	
HAVER/14 B/NB4S7	4.0	4.1	65.3	19.6	<u>65.0</u>	<i>Predicted concentration at Receptor above AQS objective.</i>
HAVER/14 B/NB4S8, HAVER/14 B/NB4S9, HAVER/14 B/NB4S10	0.1	1.1	70.7	19.6	53.8	<i>Predicted concentration at Receptor above AQS objective.</i>

Appendix B Full Monthly Diffusion Tube Results for 2024

Table U. NO₂ 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
HAV6	551488	188993	58.9	58.7	60.1	45.9	54.3	47.2	52.4	38.5	59.1	52.5			-	-	-	Triplicate Site with HAV6, HAV5 and HAV2 - Annual data provided for HAV2 only
HAV5	551488	188993	57.2	63.9		37.5	59.1	51.5	49.4	45.5	55.4	57.5			-	-	-	Triplicate Site with HAV6, HAV5 and HAV2 - Annual data provided for HAV2 only
HAV2	551488	188993		57.1	60.4	46.5	57.4	47.8	52.5	43.8	61.7	57.7			53.6	41.8	38.6	Triplicate Site with HAV6, HAV5 and HAV2 - Annual data provided for HAV2 only
HAV7	551108	188257	49.1	52.0		34.4	36.3	32.8	37.5	33.3	32.1	46.7			-	-	-	Triplicate Site with HAV7, HAV1 and HAV8 - Annual data provided for HAV8 only
HAV1	551108	188257	41.3	50.5		31.0	37.5	33.5	38.1	34.6	33.6	47.4			-	-	-	Triplicate Site with HAV7, HAV1 and HAV8 - Annual data provided for HAV8 only
HAV8	551108	188257	40.6	55.0		32.8	37.3	32.9	38.2	36.9	30.3	47.2			39.0	30.4	-	Triplicate Site with HAV7, HAV1 and HAV8 - Annual data provided for HAV8 only
HAV3	551726	183462	33.7	30.4	23.1	17.6	18.4	18.1	17.6	18.2	17.4	22.0			21.7	16.9	-	
HAV4	553724	187560	25.7	17.6	18.1	11.4	12.4	11.6	11.6	11.2	12.0	18.9			15.1	11.7	-	
HAV9	551629	188296	44.6	39.4	36.7	22.8	20.1	24.7	21.2	18.9	23.9	27.4			-	-	-	Triplicate Site with HAV9, HAV10 and HAV11 - Annual data provided for HAV11 only
HAV10	551629	188296	7.4	42.7	34.1	19.0	19.9	23.7	21.4	18.3	22.8	30.9			-	-	-	Triplicate Site with HAV9, HAV10 and HAV11 - Annual data provided for HAV11 only
HAV11	551629	188296	7.9	49.5	31.7	22.1	21.5	24.2	22.3	20.5	21.6	29.7			25.7	20.0	-	Triplicate Site with HAV9, HAV10 and HAV11 - Annual data provided for HAV11 only
HAV12	552096	189619	7.6	26.0	29.9	21.1	26.3	24.9	19.9	18.5	27.0	26.4			22.8	17.8	-	

HAV13	550607	189685	8.1	27.7	38.8	30.9	36.8	33.2	30.8	25.7	33.3	37.2			-	-	-	Triplicate Site with HAV13, HAV14 and HAV15 - Annual data provided for HAV15 only
HAV14	550607	189685	8.6	42.2	37.1	28.0	34.6	28.2	29.0	24.3	33.6	34.0			-	-	-	Triplicate Site with HAV13, HAV14 and HAV15 - Annual data provided for HAV15 only
HAV15	550607	189685	9.1	41.2	35.9	26.1	36.5	30.1	29.0	22.3	32.6	40.1			30.2	23.5	-	Triplicate Site with HAV13, HAV14 and HAV15 - Annual data provided for HAV15 only
HAV16	551414	187802	9.1	37.5	37.4	25.9	33.4	28.6	29.3	28.8	33.1	39.8			-	-	-	Triplicate Site with HAV16, HAV17 and HAV19 - Annual data provided for HAV19 only
HAV17	551414	187802	8.9	36.9	35.5	26.1	30.7	29.1	28.3	28.7	32.7	41.1			-	-	-	Triplicate Site with HAV16, HAV17 and HAV19 - Annual data provided for HAV19 only
HAV19	551414	187802	8.7	39.1	37.1	26.2	32.4	27.1	31.2	26.6	32.0	42.0			30.1	23.5	-	Triplicate Site with HAV16, HAV17 and HAV19 - Annual data provided for HAV19 only
HAV19	551414	187802	8.7	39.1	37.1	26.2	32.4	27.1	31.2	26.6	32.0	42.0			30.1	23.5	-	Triplicate Site with HAV16, HAV17 and HAV19 - Annual data provided for HAV19 only
HAV20	549837	191109	3.8	40.5	64.6	43.0	46.6	31.4	54.0	54.4	40.5	54.0			-	-	-	Triplicate Site with HAV19, HAV20 and HAV21 - Annual data provided for HAV21 only
HAV21	549837	191109	11.3	90.0	62.1	44.2		49.7	48.5	55.1	42.9	54.3			44.2	34.5	-	Triplicate Site with HAV19, HAV20 and HAV21 - Annual data provided for HAV21 only
HAV22	553707	190817	22.9	15.2	23.1	13.8	13.5	14.8	15.9	12.3	16.0	25.0			-	-	-	Triplicate Site with HAV22, HAV23 and HAV24 - Annual data provided for HAV24 only
HAV23	553707	190817	26.2	26.8	20.9	10.5	16.0	13.7	14.8	14.8	17.9	23.2			-	-	-	Triplicate Site with HAV22, HAV23 and HAV24 - Annual data provided for HAV24 only
HAV24	553707	190817	24.8	25.1	22.1	15.2	14.5	13.8	16.5	13.5	15.8	26.1			18.2	14.2	-	Triplicate Site with HAV22, HAV23 and HAV24 - Annual data provided for HAV24 only
HAV25	553727	193161	13.0	22.6	20.0	10.3	14.0	14.4	11.5	13.0	14.9	20.5			15.4	12.0	-	
HAV26	549532	189777	23.7	23.9	22.4	34.9	14.0	11.8	12.8	12.8	13.3	18.2			18.8	14.6	-	
HAV27	550942	187420	51.3	44.2	48.4	41.1	47.7	43.5	40.7	43.1	42.6	41.7			-	-	-	Triplicate Site with HAV27, HAV28 and HAV29 - Annual data provided for HAV29 only
HAV28	550942	187420	12.6	54.6	42.7	41.4	46.3	44.1	39.0	39.0	47.1	43.8			-	-	-	Triplicate Site with HAV27, HAV28 and HAV29 - Annual data provided for HAV29 only

HAV29	550942	187420	3.8	21.9	46.6	37.8	46.0	42.8	42.7	39.6	45.1	50.1			41.0	32.0	-	Triplicate Site with HAV27, HAV28 and HAV29 - Annual data provided for HAV29 only
HAV30	549318	189384	11.3	20.8	21.0	11.9	14.1	12.0	12.7	10.5	12.1	19.8			14.6	11.4	-	
HAV31	550197	187908	22.9	27.9	23.7	15.2	17.9	14.4	16.3	15.0	16.6	22.0			19.2	15.0	-	
HAV32	553410	190558	26.2	27.8	50.4	34.8	29.1	29.3	34.8	33.2		38.4			-	-	-	Triplicate Site with HAV32, HAV33 and HAV34 - Annual data provided for HAV34 only
HAV33	553410	190558	24.8	37.3	50.0		37.2	37.9	35.7			28.8			-	-	-	Triplicate Site with HAV32, HAV33 and HAV34 - Annual data provided for HAV34 only
HAV34	553410	190558	13.0	40.9	52.2	31.9	36.3				16.7	41.3			33.0	25.7	-	Triplicate Site with HAV32, HAV33 and HAV34 - Annual data provided for HAV34 only
HAV35	554204	193795	23.7	23.8	20.0	14.2	16.8	15.1	15.6	13.5	18.3	19.6			18.1	14.1	-	
HAV36	551755	193022	51.3	18.2	15.6	9.8	12.5	9.1	11.7	9.3	12.3	13.0			16.3	12.7	-	
HAV37	555723	191750	39.7	38.3	34.1	30.0	31.5	33.0	32.6	33.1	28.5				33.4	26.1	-	
HAV38	553434	191656	27.6	20.9	20.8	12.8	14.7	11.2	15.1	13.0	16.0	21.5			17.4	13.5	-	
HAV39	551616	190622	32.2	32.8	27.8	18.7	18.0	17.9	20.2	20.7	17.8	25.0			23.1	18.0	-	
HAV40	553174	190306	35.2	44.7	37.7	29.6	32.7	33.0	25.5	25.6	28.6	36.7			32.9	25.7	-	
HAV41	552517	189826	10.9	36.1	34.8	22.5	31.9	25.9	23.7	23.6	28.0	36.7			27.4	21.4	-	
HAV42	550623	188890	36.1	36.1	32.3	21.6	24.8	25.2	21.5	25.2	25.5	34.6			28.3	22.1	-	
HAV43	556072	186539	15.1	30.6	23.5	21.8	22.2	22.5	20.6	19.9	24.8	27.8			22.9	17.8	-	
HAV44	553952	189731	39.0	37.8	28.3	26.7		27.0	28.7	29.8	33.8	39.0			32.2	25.1	-	
HAV45	552327	187422	35.2	30.0	26.6	23.8	27.9	24.7	23.4	22.3	32.6	31.6			27.8	21.7	-	
HAV46	552441	182337	36.8	34.9	31.1	23.5	26.6	22.2	23.5	28.1	20.0	39.5			28.6	22.3	-	
HAV47	554730	189487	37.9	40.1	36.7	23.9	31.3	26.8	31.0	20.7	40.5	36.1			32.5	25.4	-	
HAV48	550602	189990	21.5	20.5	25.3	12.7	16.5	15.9	18.2	16.0	13.6	26.5			18.7	14.6	-	
HAV49	550722	183294	23.8	26.1		44.2			20.9	20.0	33.2	28.7			28.1	22.5	-	
HAV50	551526	182672	47.4	46.1	39.3	35.4	39.1	36.8	35.9	40.5	24.2	46.9			39.2	30.5	-	
HAV51	551180	189432	25.2	24.1	19.9	13.0	14.7	14.1	16.7	13.6	15.6	18.9			17.6	13.7	-	
HAV52	554741	190626	24.1	42.7	44.8	28.6	34.8	30.9	37.3	33.2	46.2	35.7			35.8	27.9	-	
HAV53	552841	184966	37.7	34.4	32.1	25.7	22.2	26.3	25.3	24.2	27.8	30.3			28.6	22.3	-	
HAV54	553135	191674	24.2	31.0	26.4	17.5	22.9	18.0	18.4	15.6	116.4	31.2			32.2	25.1	-	
HAV55	553830	188314	57.7	34.9	52.1	41.5	52.4	47.2	47.1	46.2	111.8	75.8			56.7	44.2	34.9	
HAV56	552045	182222	40.5	40.1	37.9	26.7	32.8	32.1	30.2	27.8	104.0	43.6			41.6	32.4	-	
HAV57	551420	188526	83.9	20.5	68.7	73.5	83.8	106.7	111.6	116.4	106.3	66.4			83.8	65.3	65.0	
HAV58	551397	188509	92.5	26.1	83.0	94.3	111.2	118.3	114.2	111.8	17.0	106.7			-	-	-	Triplicate Site with HAV58, HAV59 and HAV60 - Annual data provided for HAV60 only

HAV59	551397	188509	109.3	46.1	88.2	94.9	119.5	117.8	110.6	104.0	31.0	125.5			-	-	-	Triplicate Site with HAV58, HAV59 and HAV60 - Annual data provided for HAV60 only
HAV60	551397	188509	77.7	24.1	92.1	99.6	112.3	117.8	119.3	106.3	30.8	116.8			90.6	<u>70.7</u>	53.8	Triplicate Site with HAV58, HAV59 and HAV60 - Annual data provided for HAV60 only
HAV61	553719	180987	24.4	42.7	22.0	17.0	17.7	15.7	17.2	17.0	28.8	24.9			22.7	17.7	-	
HAV62	550462	183013	38.6	34.4	31.8	31.3	32.9	32.8	16.6	31.0	21.3	39.3			31.0	24.2	-	
HAV63	550888	182884	43.4	31.0	33.0	33.9	36.5	34.3	33.4	30.8	34.5	46.0			35.7	27.8	-	
HAV64	551112	182811	51.5	16.9	35.6	30.7	35.5	31.3	32.8	28.8		0.9			29.3	22.9	-	
HAV65	557323	187932	24.8	21.5	28.5	23.1	21.3	24.5	23.7	21.3		27.6			24.0	18.7	-	
HAV66	554013	187001	44.8	48.1	37.3	29.2	35.8	43.0	35.6	34.5		46.2			39.4	30.7	-	

- ☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table U.
- ☒ 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.
- ☒ LB Havering confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

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

NO₂ annual means exceeding 60µg m⁻³, indicating a potential exceedance of the NO₂ 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

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

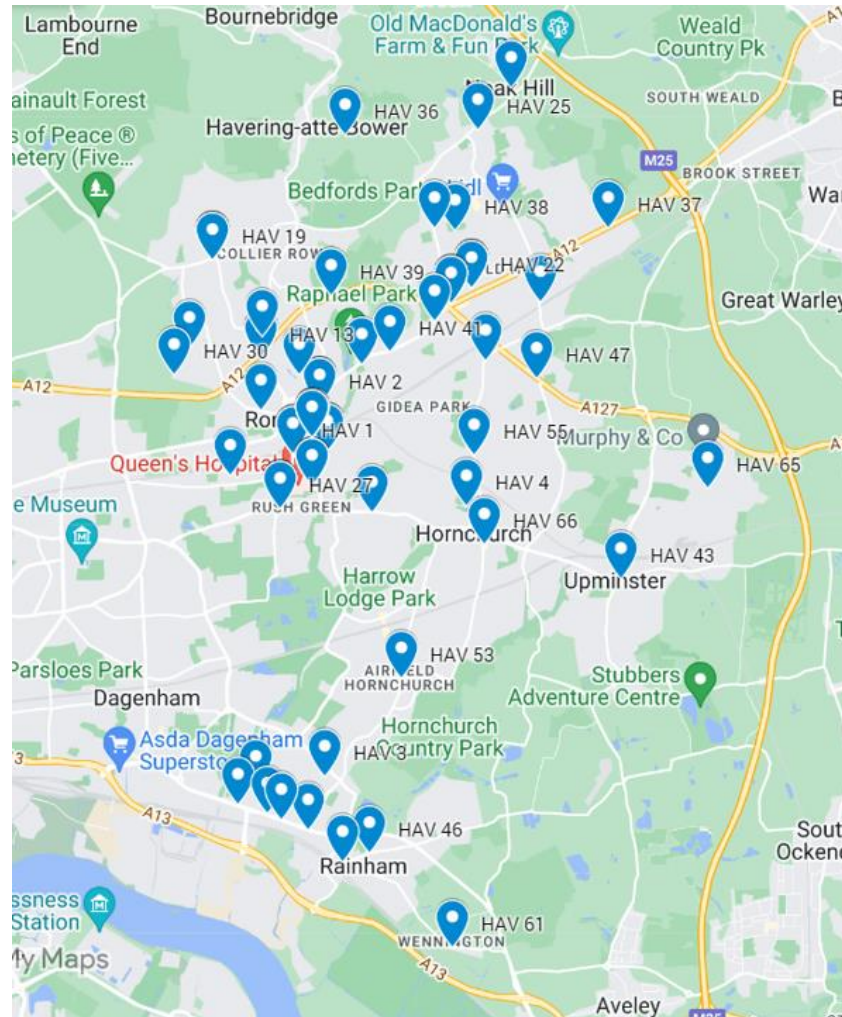


Figure A: is a map which shows 46 locations across Havering.

Figure B. Map of Automatic Monitoring Site(s)

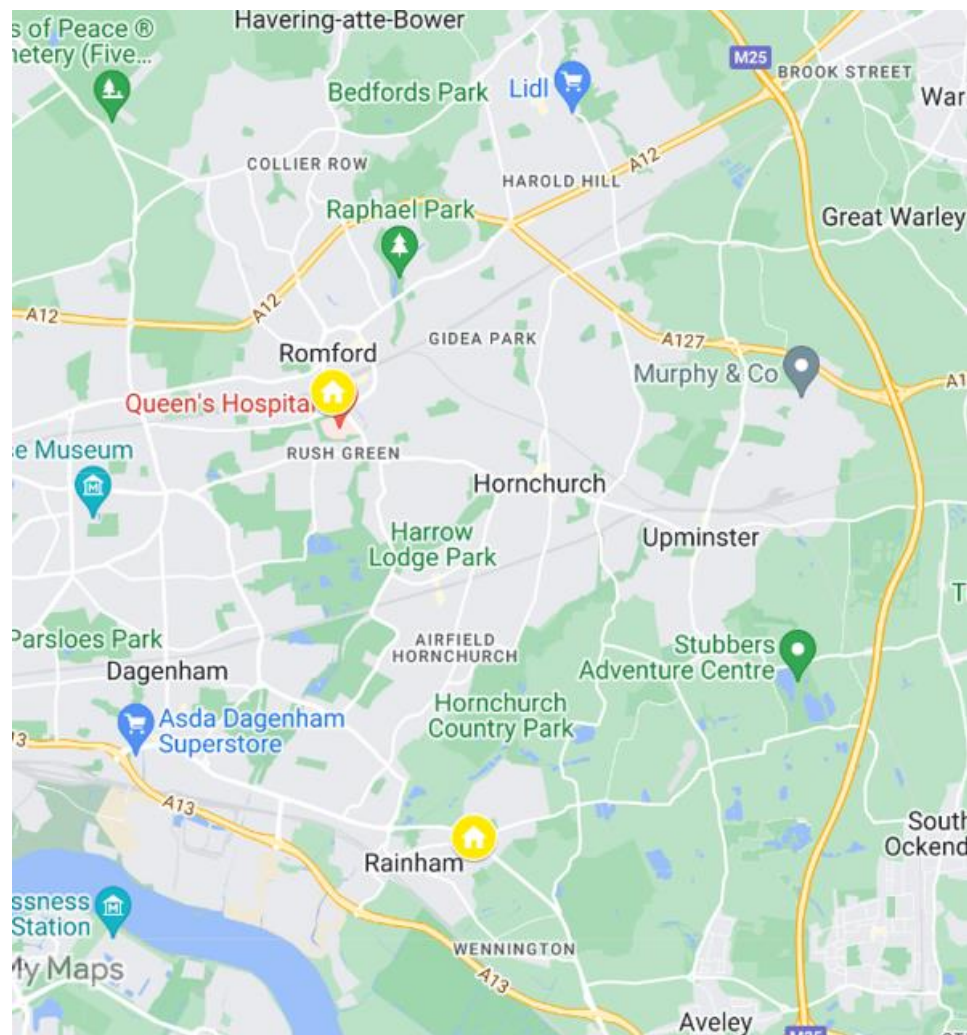
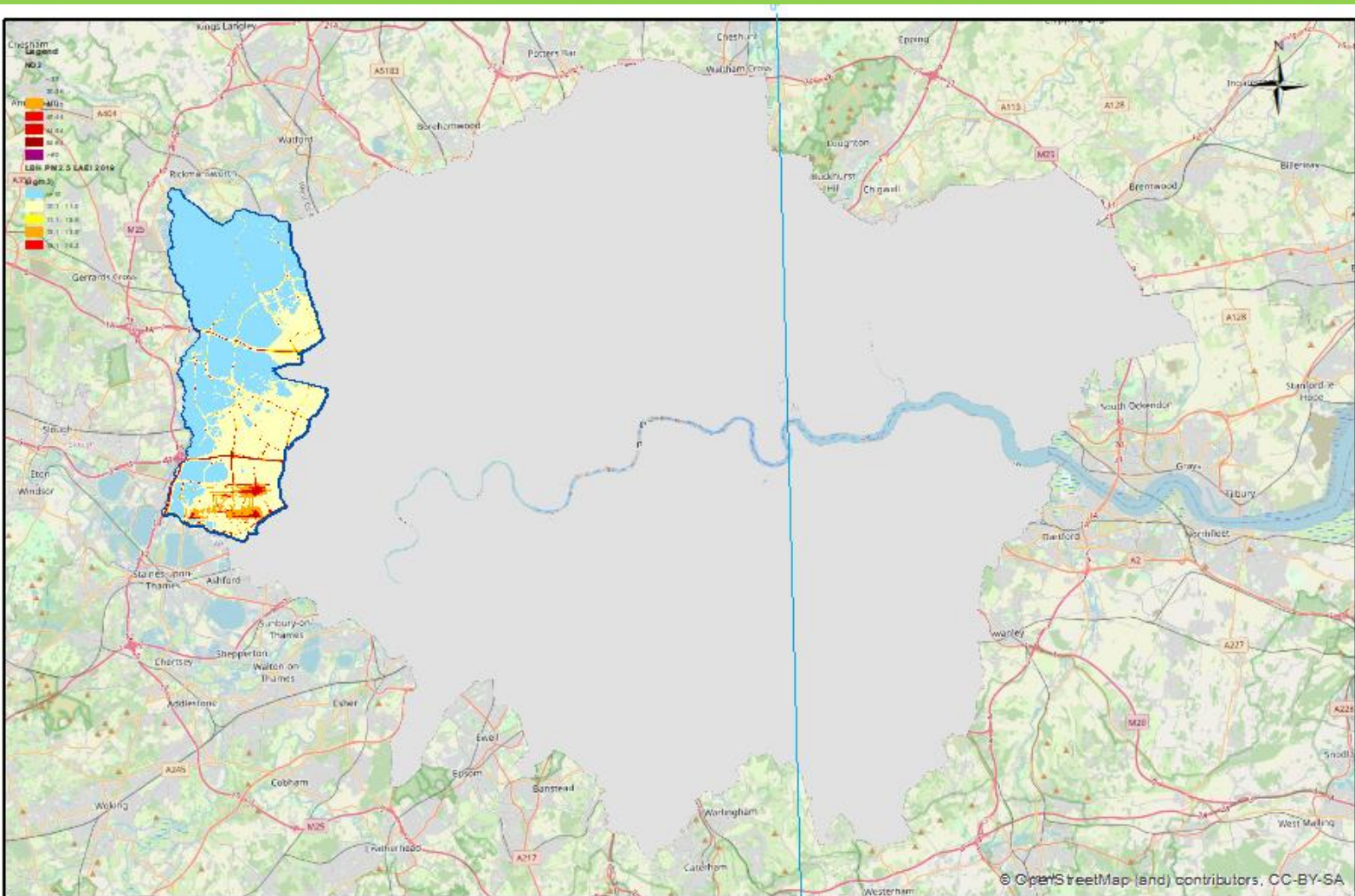


Figure B: is a map that shows 2 monitoring locations: Romford in the centre of the borough and Rainham towards the south.

The London Borough of Hillingdon



HILLINGDON
LONDON



Air Quality Annual Status Report, May 2025

London Borough of Hillingdon 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 Hillingdon during 2024. It has been produced to meet the requirements of the London Local Air Quality Management statutory (LLAQM) process¹. It also updates on the progress of the Council's Air Quality Action Plan since its adoption in May 2019 to the end of March 2025.

Contact details

██████████
Air Quality Expert Advisor
London Borough of Hillingdon
██████████ [@hillingsdon.gov.uk](mailto:██████████@hillingsdon.gov.uk)

This report has been produced by:

██████████, Air Quality Experts Global
██████████ EMRC

¹ LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19)). <https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-Boroughs>

CONTENTS

CONTACT DETAILS	2
SUMMARY.....	7
1 INTRODUCTION.....	10
1.1 THE PURPOSE OF THIS REPORT	10
1.2 DESCRIPTION OF THE LOCAL AUTHORITY AREA	11
1.3 HILLINGDON'S AIR QUALITY MANAGEMENT AREA (AQMA)	11
2 AIR QUALITY MONITORING IN HILLINGDON	14
2.1 AUTOMATIC MONITORING SITES.....	14
2.2 NON-AUTOMATIC MONITORING SITES	14
2.3 LOW-COST SENSOR MONITORING SITES	15
2.4 COMPARISON OF MONITORING RESULTS WITH AIR QUALITY OBJECTIVES	28
2.5 HS2 MONITORING DATA	48
3 ACTIONS TO IMPROVE AIR QUALITY.....	51
3.1 AIR QUALITY MANAGEMENT AREAS.....	51
3.2 ASR HIGHLIGHTS.....	52
3.2.1 <i>Idling Vehicles</i>	52
3.2.2 <i>Fleet replacement</i>	52
3.2.3 <i>Electric vehicle charging</i>	52
3.2.4 <i>Schools and play areas</i>	53
3.2.5 <i>Emissions from buildings</i>	54
3.2.6 <i>Provision of infrastructure to promote walking and cycling</i>	55
3.2.7 <i>Local Improvements</i>	56
3.3 CHALLENGES	56
3.4 OPPORTUNITIES	57
3.5 AIR QUALITY ACTION PLAN PROGRESS.....	57
4 PLANNING UPDATE AND OTHER NEW SOURCES OF EMISSIONS.....	68
4.1 PLANNING UPDATE	68
4.1.1 <i>Clean by design, Air Quality Neutral, Air Quality Positive and Air Quality Focus Areas</i>	68
4.1.2 <i>Damage Cost Calculations</i>	68
4.1.3 <i>London Atmospheric Emissions Inventory 2019 (published in 2021)</i>	69
4.2 NEW OR SIGNIFICANTLY CHANGED INDUSTRIAL OR OTHER SOURCES	69
5 ADDITIONAL ACTIVITIES TO IMPROVE AIR QUALITY.....	72
5.1 LONDON BOROUGH OF HILLINGDON FLEET.....	72
5.2 PLANNING ENFORCEMENT	72
5.3 PAN-LONDON NRMM AUDITING PROJECT	72
5.4 AIR QUALITY ALERTS	73
5.5 AIR QUALITY POSITIVE	73
APPENDIX A DETAILS OF MONITORING SITE QA/QC.....	75
A.1 AUTOMATIC MONITORING SITES	75
A.2 DIFFUSION TUBE QUALITY ASSURANCE / QUALITY CONTROL.....	75
A.3 ADJUSTMENTS TO THE RATIFIED MONITORING DATA	80
APPENDIX B FULL MONTHLY DIFFUSION TUBE RESULTS FOR 2024.....	81

Tables

TABLE A. SUMMARY OF NATIONAL AIR QUALITY AND INTERNATIONAL STANDARDS, OBJECTIVES AND GUIDELINES FOR THE POLLUTANTS OF RELEVANCE TO LONDON BOROUGH OF HILLINGDON.....	10
TABLE B. DETAILS OF AUTOMATIC MONITORING SITES IN HILLINGDON FOR 2024.....	19
TABLE C. DETAILS OF NON-AUTOMATIC MONITORING SITES IN HILLINGDON IN 2024.....	21
TABLE D. DETAILS OF AUTOMATIC LOW-COST MONITORING SITES IN HILLINGDON IN 2024.....	26
TABLE E. ANNUAL MEAN NO ₂ RATIFIED MONITORING RESULTS (µG M ⁻³) FOR THE AUTOMATIC MONITORING SITES IN HILLINGDON FOR THE PERIOD 2018-2024.	38
TABLE F. ANNUAL MEAN NO ₂ RATIFIED AND ADJUSTED MONITORING RESULTS (µG M ⁻³) DIFFUSION TUBES FOR DIFFUSION TUBES IN HILLINGDON FOR THE PERIOD 2018-2024.....	39
TABLE G. LOW-COST SENSORS: ANNUAL MEAN NO ₂ RATIFIED MONITORING RESULTS (µG.M ⁻³) FOR THE PERIOD 2021-2024.	40
TABLE H. NO ₂ AUTOMATIC MONITORING RESULTS FOR HILLINGDON FOR THE PERIOD 2018-2024: COMPARISON WITH 1-HOUR MEAN OBJECTIVE, SHOWING THE NUMBER OF 1-HOUR MEANS WHERE NO ₂ > 200 MG.M ⁻³	42
TABLE I. ANNUAL MEAN PM ₁₀ AUTOMATIC MONITORING RESULTS (µG.M ⁻³) FOR THE PERIOD 2018-2024.....	44
TABLE J. PM ₁₀ AUTOMATIC MONITORING RESULTS: COMPARISON WITH 24-HOUR MEAN OBJECTIVE, NUMBER OF PM ₁₀ 24-HOUR MEANS > 50 MG M ⁻³ FOR THE PERIOD 2018-2024.....	45
TABLE K. ANNUAL MEAN PM _{2.5} AUTOMATIC MONITORING RESULTS (µG.M ⁻³) FOR THE PERIOD 2018-2024	46
TABLE L. LOW-COST SENSORS: ANNUAL MEAN PM _{2.5} RATIFIED MONITORING RESULTS (µG M ⁻³) FOR THE PERIOD 2021-2024.	47
TABLE M. DETAILS OF HS2 DIFFUSION TUBES IN HILLINGDON IN 2024.	48
TABLE N. DIFFUSION TUBE RESULTS FOR NO ₂ FROM THE HS2 STUDY IN 2024, BIAS ADJUSTED. UNITS: UG.M ⁻³	49
TABLE O. DECLARED AIR QUALITY MANAGEMENT AREA FOR LBH	51
TABLE P. DELIVERY OF AIR QUALITY ACTION PLAN MEASURES	58
TABLE Q. PLANNING REQUIREMENTS MET BY PLANNING APPLICATIONS IN LONDON BOROUGH OF HILLINGDON IN 2024.....	71

APPENDICES

TABLE A1.....	MOST RECENT AIR-PT RESULTS FOR GRADKO.	75
TABLE A2.....	DETAILS OF THE CO-LOCATION SITES AND ANNUAL MEANS (MG M-3) FOR EACH SITE FOR 2023.	77
TABLE A3.....	LOCAL BIAS ADJUSTMENT FACTOR CALCULATION FOR 2024 - HILL01 & HIL.	78
TABLE A4.....	LOCAL BIAS ADJUSTMENT FACTOR CALCULATION FOR 2024 - HILL03 & HI1.	79
TABLE A5.....	2024 BIAS ADJUSTMENT FACTOR AND HISTORICAL COMPARISON.	80
TABLE B1.....	NO2 DIFFUSION TUBE RESULTS 2024 – LONDON BOROUGH OF HILLINGDON.	81

Figures

FIGURE 1. HILLINGDON'S AQMA	12
FIGURE 2. LOCATION OF THE AUTOMATIC MONITORING SITES IN HILLINGDON, NITROGEN DIOXIDE ANNUAL MEAN CONCENTRATIONS, NO ₂ (UG/M ³) 2024	16
FIGURE 3. LOCATION OF NON-AUTOMATIC MONITORING SITES IN HILLINGDON, NITROGEN DIOXIDE ANNUAL MEAN CONCENTRATIONS, NO ₂ (UG/M ³) 2024.	17
FIGURE 4. LOCATION OF LOW-COST SENSOR MONITORING SITES IN HILLINGDON COVERING BOTH PM _{2.5} AND NO ₂ , WITH 2024 NO ₂ CONCENTRATIONS SHOWN (UG/M ³).....	18
FIGURE 5. ANNUAL MEAN NO ₂ CONCENTRATIONS MEASURED AT THE AUTOMATIC MONITORING STATIONS, 2019-2024, SHOWING DATA FOR EACH SITE IN THE BOROUGH. UNITS: µG.M ⁻³	29
FIGURE 6. ANNUAL MEAN NO ₂ CONCENTRATIONS MEASURED AT THE DIFFUSION TUBE LOCATIONS, 2019-2024, SHOWING DATA FOR EACH SITE IN THE BOROUGH. UNITS: µG.M ⁻³	30
FIGURE 7. ANNUAL MEAN PM ₁₀ CONCENTRATIONS MEASURED AT THE AUTOMATIC MONITORING STATIONS, 2019-2024, SHOWING DATA FOR EACH SITE IN THE BOROUGH. UNITS: µG.M ⁻³	31
FIGURE 8. ANNUAL MEAN PM _{2.5} CONCENTRATIONS MEASURED AT THE AUTOMATIC MONITORING STATIONS, 2019-2024, SHOWING DATA FOR EACH SITE IN THE BOROUGH. UNITS: µG.M ⁻³	32
FIGURE 9. HOURLY MEAN NO ₂ CONCENTRATIONS MEASURED AT THE LOW-COST SENSOR AT TAVISTOCK ROAD, 1 ST JANUARY TO 31 ST DECEMBER 2024. UNITS: µG.M ⁻³	33
FIGURE 10. HOURLY MEAN PM _{2.5} CONCENTRATIONS MEASURED AT THE LOW-COST SENSOR AT TAVISTOCK ROAD, 1 ST JANUARY TO 31 ST DECEMBER 2024. UNITS: µG.M ⁻³	33
FIGURE 11. HOURLY MEAN NO ₂ CONCENTRATIONS MEASURED AT THE LOW-COST SENSOR AT HARLINGTON HIGH STREET, 1 ST JANUARY TO 31 ST DECEMBER 2024. UNITS: µG.M ⁻³	34
FIGURE 12. HOURLY MEAN PM _{2.5} CONCENTRATIONS MEASURED AT THE LOW-COST SENSOR AT HARLINGTON HIGH STREET, 1 ST JANUARY TO 31 ST DECEMBER 2024. UNITS: µG.M ⁻³	34
FIGURE 13. HOURLY MEAN NO ₂ CONCENTRATIONS MEASURED AT THE LOW-COST SENSOR AT HAREFIELD HOSPITAL, 1 ST JANUARY TO 31 ST DECEMBER 2024. UNITS: µG.M ⁻³	35
FIGURE 14. HOURLY MEAN PM _{2.5} CONCENTRATIONS MEASURED AT THE LOW-COST SENSOR AT HAREFIELD HOSPITAL, 1 ST JANUARY TO 31 ST DECEMBER 2024. UNITS: µG.M ⁻³	35
FIGURE 15. HOURLY MEAN NO ₂ CONCENTRATIONS MEASURED AT THE LOW-COST SENSOR AT GREEN LANE (NORTHWOOD), 8 TH JUNE TO 31 ST DECEMBER 2024. UNITS: µG.M ⁻³	36
FIGURE 16. HOURLY MEAN PM _{2.5} CONCENTRATIONS MEASURED AT THE LOW-COST SENSOR AT GREEN LANE (NORTHWOOD), 8 TH JANUARY TO 31 ST DECEMBER 2024. UNITS: µG.M ⁻³	36
FIGURE 17. ANNUAL MEAN NO ₂ CONCENTRATIONS MEASURED AT HS2 DIFFUSION TUBE LOCATIONS, 2024, SHOWING DATA FOR EACH SITE IN THE BOROUGH. UNITS: µG.M ⁻³	50

Abbreviations

$\mu\text{g m}^{-3}$	Micro-grammes per cubic metre of air (standard unit for air pollutants)
AQ	Air quality
AQAP	Air Quality Action Plan
AQFA	Air Quality Focus Area
AQG	Air Quality Guidelines (from WHO)
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQSPG	Air Quality Supplementary Planning Guidance
ASR	Annual Status Report
AURN	Automatic Urban and Rural Network
BAM	Beta attenuation monitoring
CAB	Cleaner Air Borough
CHP	Combined Heat and Power
CIL	Community Infrastructure Levy
CO	Carbon monoxide
CO₂	Carbon dioxide
DEFRA	Department for Environment, Food and Rural Affairs
EV	Electric Vehicle
EVCP	Electric Vehicle Charging Point
FDMS	Filter Dynamics Measurement System
FIDAS	Fine Dust Analysis System
FORS	Fleet Operator Recognition System
FPN	Fixed Penalty Notice
GLA	Greater London Authority
HAL	Heathrow Airport Limited
HE	Highways England
HS2	High Speed 2 (rail line from London to Birmingham)
HVO	Hydrogenated Vegetable Oil
LAEI	London Atmospheric Emissions Inventory
LBH	London Borough of Hillingdon
LIP	Local Implementation Plan (for Borough transport)
LLAQM	London Local Air Quality Management
MAQF	Mayor's Air Quality Fund
N/A	Not applicable
NO_x	Oxides of nitrogen (NO ₂ + NO)
NO₂	Nitrogen dioxide
NRMM	Non-Road Mobile Machinery
O₃	Ozone
ONS	Office of National Statistics
PH	Public Health
PM₁	Particulate matter less than 1 micron in diameter
PM₁₀	Particulate matter less than 10 microns in diameter
PM_{2.5}	Particulate matter less than 2.5 microns in diameter
PSDS	Public Sector Decarbonisation Scheme
QA/QC	Quality Assurance / Quality Control
RE:FIT, RE:NEW	GLA programmes for energy efficiency and local generation projects in homes and public bodies
SCR	Selective Catalytic Reduction
SO₂	Sulphur dioxide
SPG	Sustainable Planning Guidance
STARS	TfL Community Project to reduce car usage
t	Tonnes (=1,000 kg)
TEOM	Tapered Element Oscillating Microbalance (for PM measurement)
TfL	Transport for London
TOR	Terms of Reference
TSP	Total Suspended Particulate Matter
VCM	Volatile Correction Model
WHO	World Health Organization

Summary

This report provides information on:

- Air quality levels and trends in the London Borough of Hillingdon in 2024 using monitoring data;
- Progress with the Borough's Air Quality Action Plan (AQAP) from March 2024 to March 2025;
- The role of the Planning System on Local Air Quality Management March 2024 to March 2025;
- Temporary emission sources (North Hyde Gardens fire)
- Lessons learnt and opportunities and challenges.

The management of local air quality in the UK is driven by a series of limit values applied to various pollutants. Whereas the Borough's Air Quality Management Area (AQMA) was declared because of non-compliance with the annual limit value for nitrogen dioxide (NO₂), in parts of the Borough, fine particulate matter (reflecting different size fractions, including PM₁, PM_{2.5} or PM₁₀) is also a focus for pollutant emission reductions in Hillingdon given that this pollutant is associated with high health impacts and for which there is no evidence of a threshold concentration for damage.

With the scientifically proven evidence gathered by WHO on the health impacts of fine particulate matter, the Mayor of London, in the London Environment Strategy, adopted a figure of 10 µg.m⁻³ PM_{2.5} to be met by 2030. The Environment Act 2021 requires at least one long term target to be set for four key priority areas, one of these is air pollution. The Environmental Targets (Fine Particulate Matter) Regulations 2023 has also adopted the 10 µg.m⁻³ target but with a less stretching compliance date of 2040, along with a population exposure reduction target designed to ensure that reductions in exposure are not limited to the sites of highest concentration but benefit the wider population. It is noted that the WHO guideline value to safeguard human health is 5 µg m⁻³ which is half of the UK Regulations 2023. Given the overwhelming epidemiological evidence underpinning the WHO guidelines set to safeguard human health, the Borough has pledged to reach the WHO guidelines in the shortest period of time and will continue to be using the planning system to reduce pollutant emissions to the maximum possible extent, driving a zero emission benchmark approach for development particularly within (or affecting) Focus Areas and where the most vulnerable group of the population exist. The Environment Act also includes a requirement to reduce population exposure to PM_{2.5} by 35% by 2040 compared to a 2018 baseline.

Data collected in the reporting year (2024) are compliant with the air quality objectives throughout the Borough. It is important to recognise that concentration data are dependent not only on emissions, but also on weather conditions, meaning that compliance for a single year (or a period of only a few years) is not a guarantee of compliance in future years. For individual monitoring stations, local factors, such as temporary road closures or building works can also influence results for specific years. Accepting these caveats, however, it is clear that local and national action on air quality has caused a significant reduction in pollutant concentrations.

Whilst compliance with national objectives was achieved, there was widespread exceedance of the WHO Air Quality Guidelines that were published in 2021 and defined considering available evidence on the existence of health impacts at much lower concentrations. Bearing in mind also that results for a single year (or a period of only a few years) can be influenced by meteorological conditions and other factors, and the population exposure reduction target from the Environment Act of 35% by 2040, continued monitoring and action on air quality in the Borough is necessary. The continuation of air quality monitoring across the Borough, and especially in areas of

accelerated development such as Hayes, and on congested routes as in Focus Areas, is essential to assess whether the air quality improves and London Borough of Hillingdon will continue striving to meet the regional, national and WHO limits and guidelines to safeguard public health.

The Borough has, in conjunction with GLA, defined Air Quality Focus Areas, which are densely populated zones with poor air quality. Whilst the Council seeks to improve air quality across the Borough, these areas continue to require stricter measures and actions to reduce emissions to zero and prevent potential hazardous effects on public health, remaining areas of concern to Hillingdon.

Hillingdon continues to take action under its AQAP to address problems across the Borough to:

- understand and tackle the pollution hot spots in the Borough;
- reduce emissions to the maximum possible extent where it has direct influence, for example on Council-controlled roads and from the Council fleet;
- work with other entities such as TfL, Highways England, HS2 and Heathrow to control emissions where Hillingdon does not have direct influence by requiring emission minimising and offsetting for their polluting activities; and
- make efficient use of the planning system to improve air quality and reduce citizens exposure to hazardous levels; this is achieved through:
 - a) ensuring that new developments do not introduce unmitigated sources of emission to the Borough
 - b) applying air quality neutral requirement to all development, with no exceptions, including all fleet vehicle types and activities, with benchmarks set to zero within Focus Areas (or to development that may not be geographically within but that will affect the Focus Areas), and
 - c) making sure proposals in Focus Areas demonstrate an air quality positive approach achieving significant/substantial emission reductions, in alignment with the London Plan and LBH Local Action Plan 2019-2024, working towards achieving zero emissions through appropriate mitigation or offsetting.

Highlights of the Council's work on air quality in the reporting year include:

- Continued action on idling vehicles, with fines across the Borough given to 3579 vehicles in 2024
- Continued work to upgrade the Council's vehicle fleet to cleaner vehicles with plans to achieve the inclusion of 32 electric vehicles in a replacement plan of 96 vans.
- Completion of energy efficiency and renewable energy projects at the Civic Centre, Highgrove Pool, Hillingdon and Uxbridge Lido and Winston Churchill Hall. These 4 sites have the highest energy use across the LBH corporate estate.
- Continued work with schools:
 - Increased levels of STaRS accreditation.
 - Bikeability, pedestrian and scooter training sessions for over 16,000 pupils.
 - Use of proceeds from Dragon's Den events for road safety and sustainable travel projects.
- Launch of the Hillingdon Cycling Strategy.
- Provision and upgrading of infrastructure for cycling and walking on the Grand Union Canal towpath and North Hyde Road in Hayes. Further plans are in development to promote

cycling, notably through Brunel University and along the Celandine Route, whilst discussions with National Highways for improving active travel around High Street Harlington are underway.

- Further local improvements including:
 - Use of green infrastructure.
 - Design work for North Hyde Road moving westward extension from Cranford Park Road.
 - Completion of upgrades to Mulberry Shopping Parade in West Drayton including measures to increase active travel and use of green infrastructure.
- Recruitment of an electric vehicle charging point project engineer and introduction of contact for advice on charging.

The council continues to face a number of other challenges with its air quality work, ranging from additional sources of pollution such as data centres and increased use of wood-burning for heating, to the need to adopt and implement the new action plan that addresses tightened air quality standards for the period 2025 to 2030. Ultrafine particulate matter is also being closely considered with plans to expand existing monitoring locations being designed by the Borough.

Some infrastructure issues have been identified as problematic, for example, the power supply to the Harlington Road depot requiring significant investment if further electric vehicles are to be purchased beyond current plans.

There are also opportunities. Since the first AQAP was developed for the Borough the planning system has played an increasingly important role in the Borough's local air quality management. The potential for improved efficiency in council actions has also been exploited through links between the Council's AQAP and other policy areas including Public Health and Climate Change. The new London Borough of Hillingdon AQAP is currently under consultation being expected to be published in the Summer of 2025. This will cover the period to 2030 and will allow the Council to help ensure actions are taken to provide evidence that the PM_{2.5} target will be met by 2030.

1 Introduction

1.1 The purpose of this report

This report provides an overview of air quality in the London Borough of Hillingdon during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LAQM) statutory process¹.

National Air Quality and International Standards, Objectives and Guidelines for the pollutants of relevance to London Borough of Hillingdon are given in Table A. The World Health Organisation (WHO) 2021 air quality guidelines (AQGs) (also included in Table A) will continue to act as guiding targets to improve air quality within the Borough and safeguard human health. The Borough has pledged to achieve the WHO guidelines in the shortest possible time and will continue to use the planning regime to tighten pollutant emission levels into the atmosphere requiring full mitigation within sensitive areas.

Whereas there are no exceedances in the Borough either of the NO₂ limit values and national objectives or exceedances for other pollutants for which national standards exist, the WHO air quality guidelines are exceeded throughout the Borough's area of jurisdiction.

Table A. Summary of National Air Quality and International Standards, Objectives and Guidelines for the pollutants of relevance to London Borough of Hillingdon

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 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 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 LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19)). <https://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/working-Boroughs>

1.2 Description of the Local Authority Area

Hillingdon is, geographically, the second largest local authority in London and has approximately 304,800 residents according to January 2025² population figures published by the ONS. Hillingdon covers an area of 116 square kilometres (45 square miles) and has a population density of 10, 980.5 people per square kilometre (km²), based on the latest population estimates taken in January 2025. Parts of the Borough to the north of the A40 are semi- rural, with Ruislip as the district centre. The south of the Borough is more densely populated, urban in character, and contains the metropolitan centre of Uxbridge and the towns of Hayes and West Drayton.

It also contains numerous important transport links. As well as being home to Heathrow Airport the Borough is crossed by the M4 and the A40 and bordered to the west by the M25 and to the east by the A312, attracting traffic into the Borough and encouraging traffic to pass through it. These roads generate a significant air pollution burden on the people of the Borough.

1.3 Hillingdon's Air Quality Management Area (AQMA)

An AQMA was declared in Hillingdon due to exceedance of the annual mean objective of NO₂ in 2003 (Figure 1). Air quality problems in the Borough continue to be most severe around Heathrow Airport and the major road network that goes through the Borough, reflecting the largest sources of nitrogen oxide (NO_x) emissions within the AQMA which covers the southern half of the Borough. The possible inclusion of areas in the north of the Borough has been kept, and will continue to be, under review.

² <https://totalpopulation.co.uk/authority/hillingdon>



Figure 1. Hillingdon's AQMA

An Action Plan, showing how Hillingdon Borough Council intended to tackle these problems, was first issued in 2004. The plan was updated in June 2019 (Air Quality Action Plan 2019-2024)³ and its replacement (Air Quality Action Plan 2025-2030) is currently under consultation. Both versions of the plan focus on delivering improvements in certain areas of the Borough that are most adversely affected by pollutant emissions, namely Focus Areas as well as other sensitive locations where poor air quality is observed with relevant public exposure. The updated Action Plan builds on the successful measures of the previous period and reflects both London policy changes and associated guidance as well as national policy updates.

³ http://www.hillingdon-air.info/pdf/Hillingdon_AQAP_2019_2024_finalversion.pdf

In addition to providing data on air quality in the Borough in 2024, this report also provides:

- i) A review of the achievements made to date through the implementation of the 2019-2024 air quality action plan,
- ii) The role of the planning system on Local Air Quality Management, and
- iii) A summary of opportunities and challenges to Hillingdon's local air quality management for future years.

2 Air Quality Monitoring in Hillingdon

2.1 Automatic monitoring sites

There were 12 operational automatic continuous monitoring sites in the London Borough of Hillingdon in 2024 (Table B). Hillingdon 1 in South Ruislip (HI1), Hillingdon 3 in Oxford Avenue (HI3), Hillingdon Sipson (SIPS), London Harmondsworth (HIL1), Hillingdon Hayes (HIL5), and London Harmondsworth Osiris (HIL4) are all part of the Borough's monitoring network. London Hillingdon (HIL) is part of the Defra - owned Automatic Urban and Rural Network (AURN). London Heathrow (LHR2), Heathrow Oaks Road (T54), Heathrow Green Gates (T55), London Harlington (HRL) and London Heathrow Bath Road (LHRBR) are all part of the Heathrow Airport's monitoring network. A map showing the location of the LBH

automatic stations is shown in

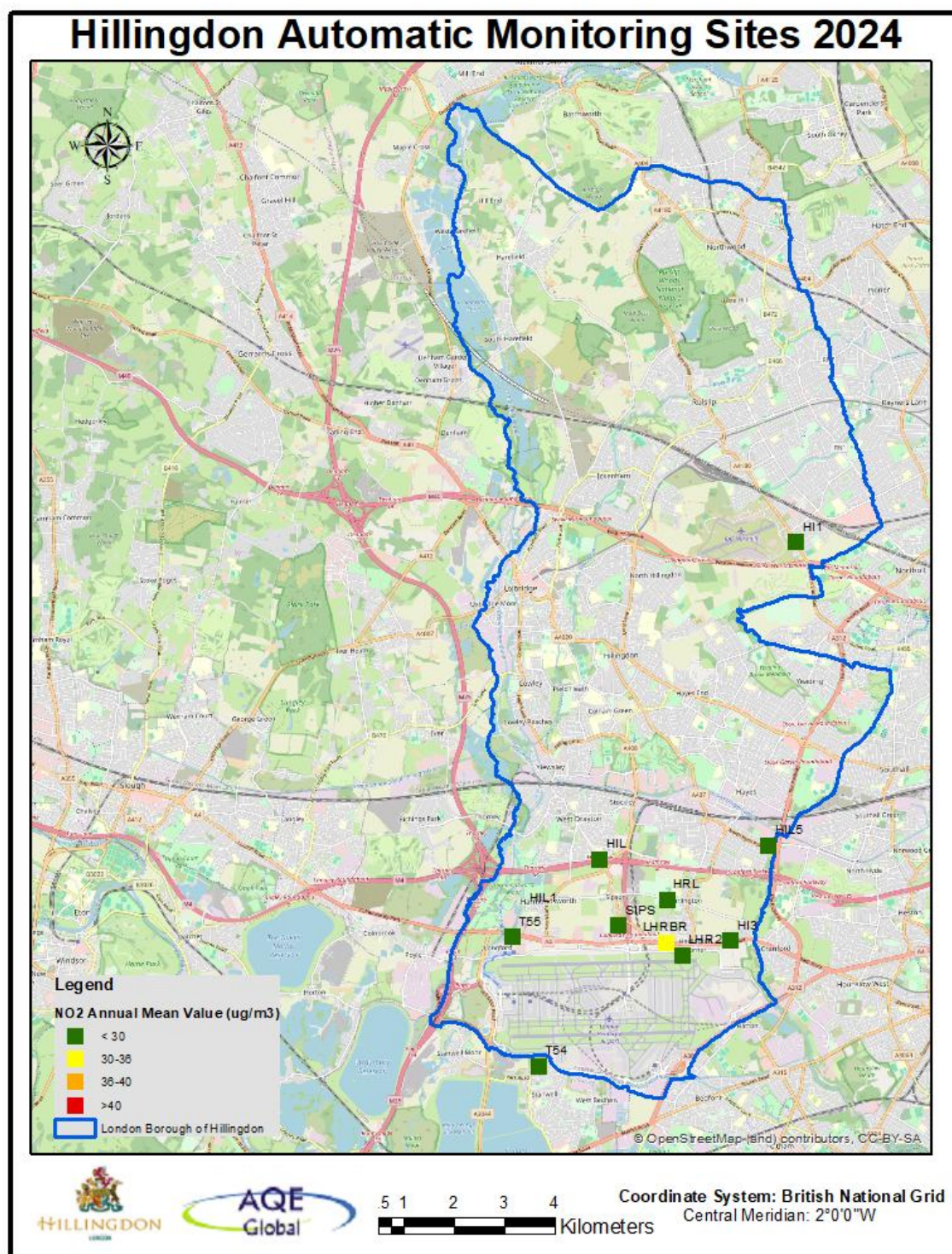


Figure 2.

The method used by the Osiris monitoring system at HIL4 (Hillingdon Harmondsworth) has been validated for the UK monitoring network and results for the site are included in this report.

2.2 Non-automatic monitoring sites

Passive diffusion tube monitoring of NO₂ was carried out at 44 sites in the Borough in 2024 (Figure 3), covering both background and roadside locations (Table C), supplementing the information generated by the automatic network. Two of the diffusion tube sites are co-located with continuous monitoring sites to derive local bias adjustment factors: HILL01 (using triplicate tubes since August 2023) is co-located with London Hillingdon automatic monitoring site (HIL) and HILL03 (using triplicate tubes) is co-located with Hillingdon 1 in South Ruislip automatic monitoring site (HI1).

A local bias adjustment factor of 0.84 was derived from the colocation exercise in 2024, using data from both collocated sites. The factor was calculated using recommended technical guidance procedures in accordance with the Mayor's London Local Air Quality Management Technical Guidance 2021 (LLAQM.TG(19)). Given that the National bias adjustment for good precision sites for Gradko 20% Tea/Water is 0.85; to secure a conservative approach a decision was made to use the national factor instead of the locally derived one. Therefore, the local bias adjustment factor of 0.85 has been used to correct the diffusion tube results.

Full details of diffusion tube QA/QC, including justification for the choice of bias adjustment factors are presented in Appendix A. Monthly NO₂ diffusion tube data are provided in Appendix B.

2.3 Low-cost sensor monitoring sites

Four low-cost sensor monitoring sites (Table D) were gathering data on both NO₂ and PM_{2.5} during 2024 capturing local conditions at Tavistock Road, Harlington Road, Green Lane (Northwood), and Harefield Hospital (Figure 4).

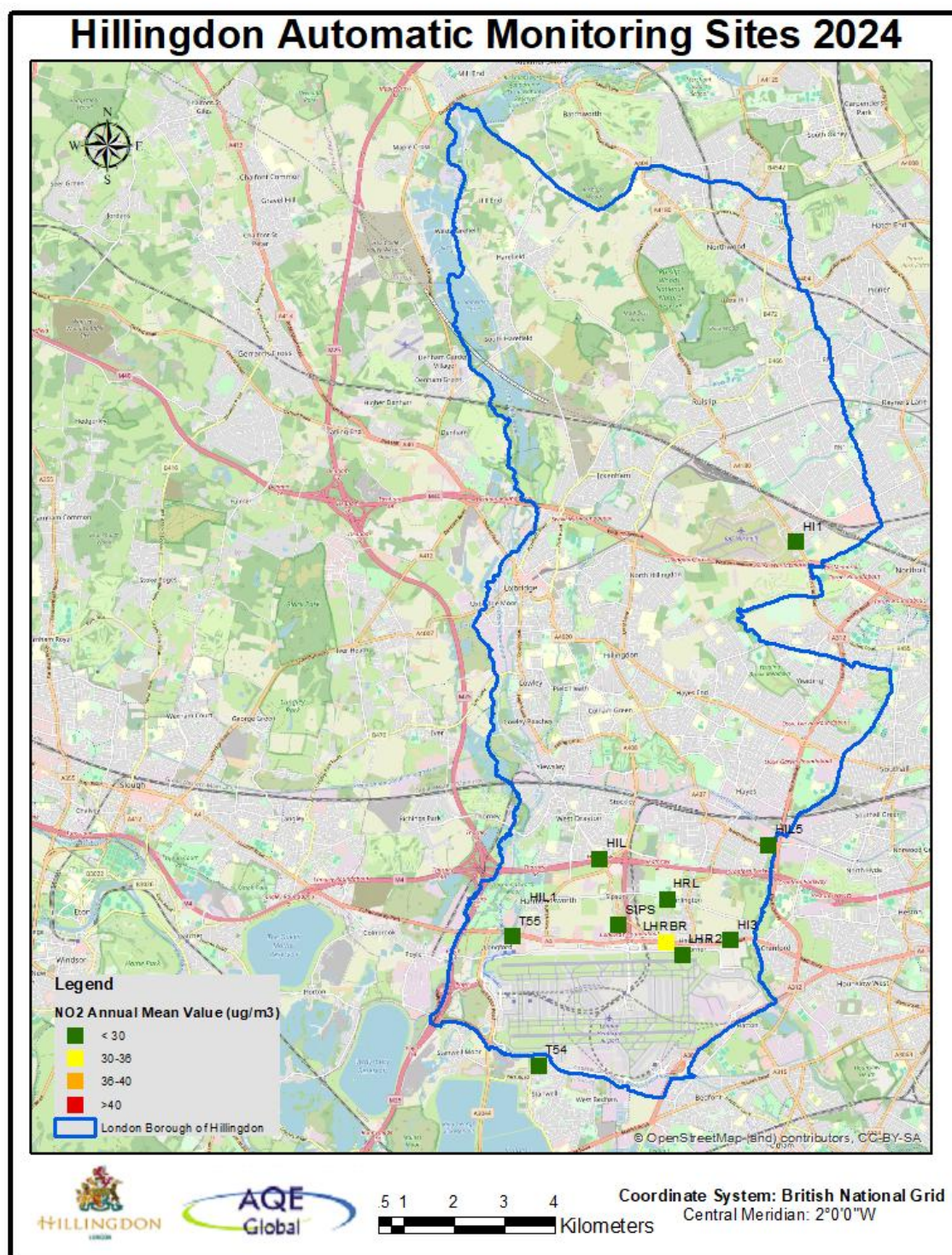


Figure 2. Location of the automatic monitoring sites in Hillingdon, nitrogen dioxide annual mean concentrations, NO₂ (ug/m³) 2024

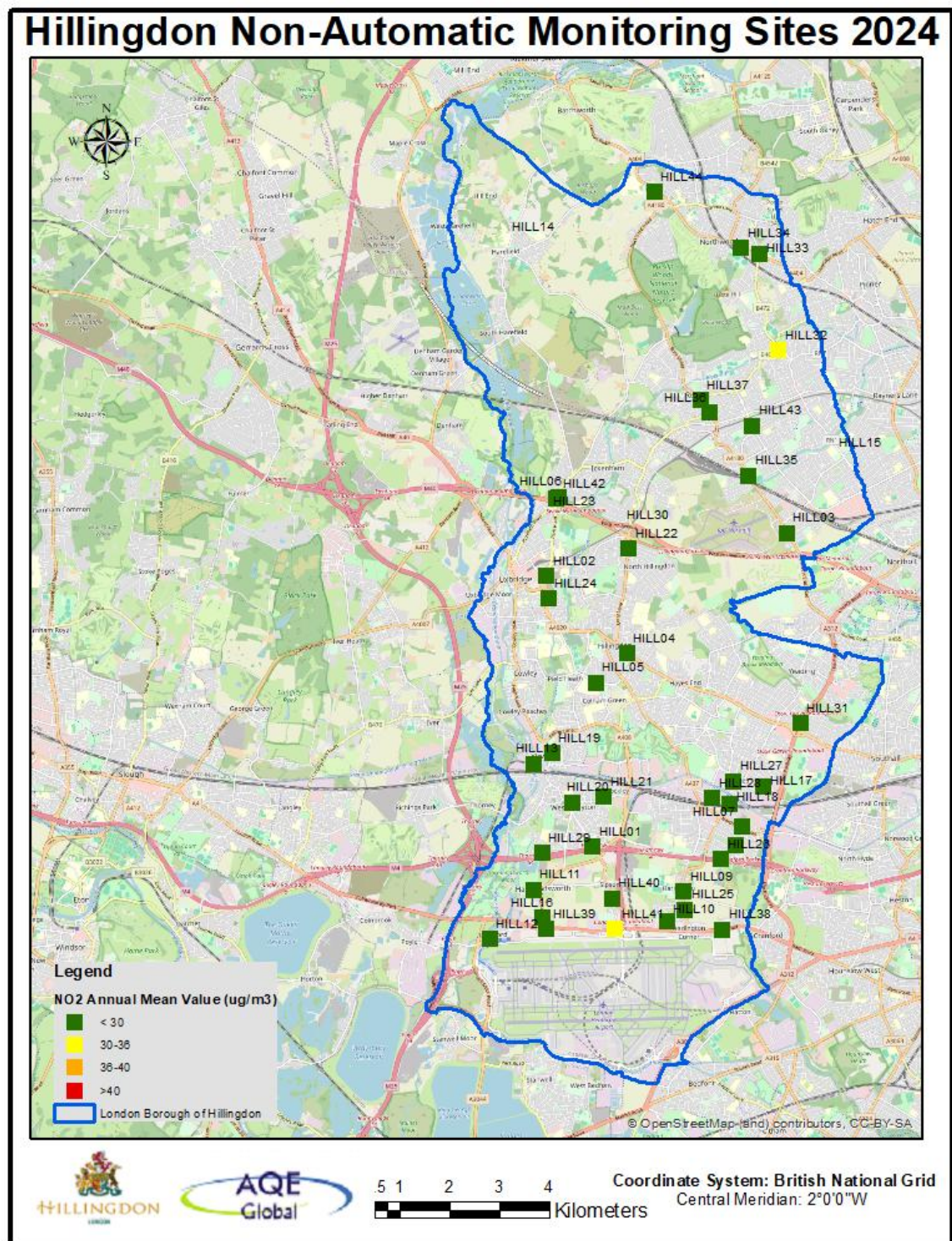


Figure 3. Location of non-automatic monitoring sites in Hillingdon, nitrogen dioxide annual mean concentrations, NO₂ (ug/m³) 2024.

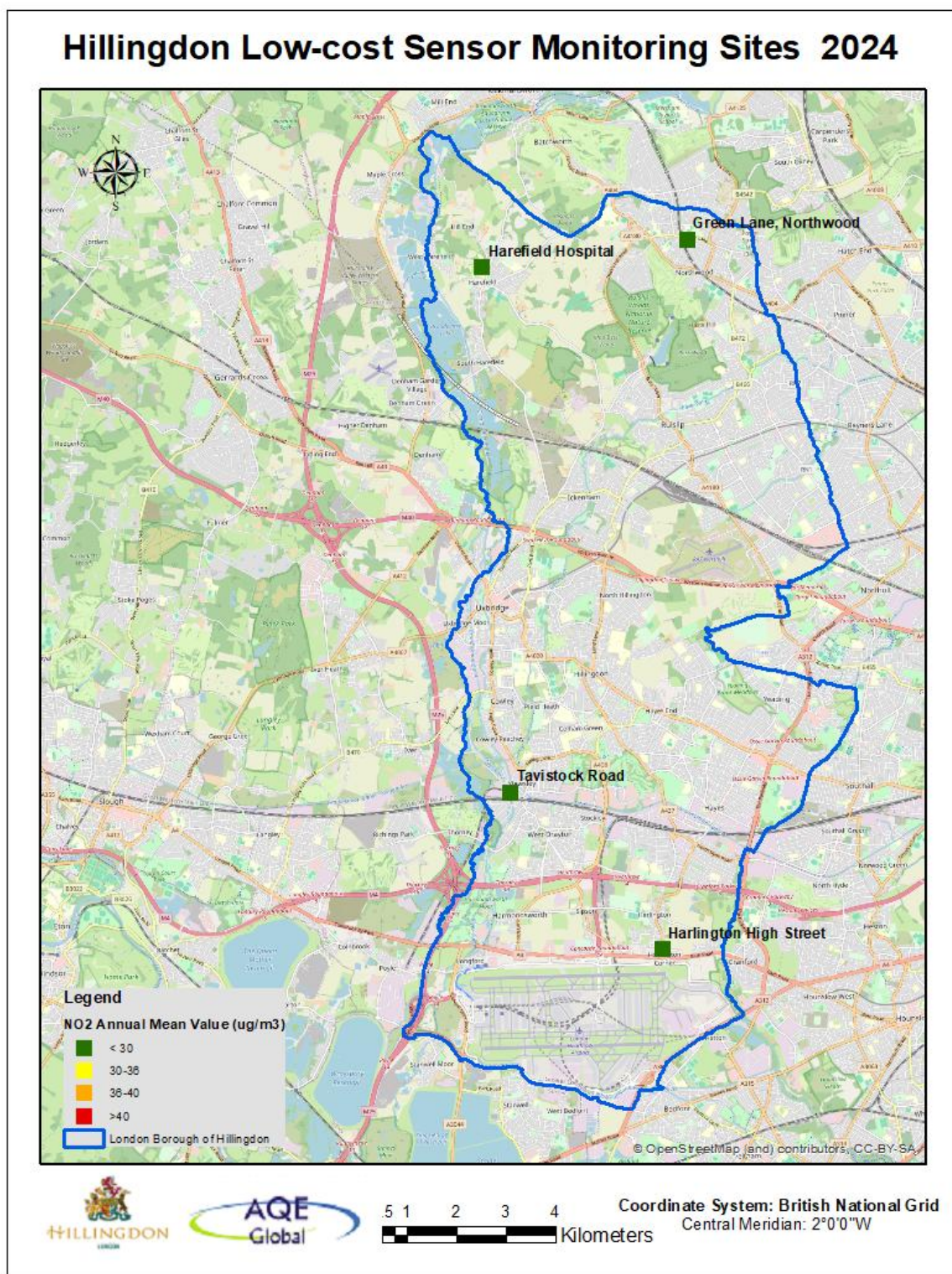


Figure 4. Location of low-cost sensor monitoring sites in Hillingdon covering both PM_{2.5} and NO₂, with 2024 NO₂ concentrations shown (ug/m³).

Table B. Details of automatic monitoring sites in Hillingdon for 2024

Site ID	Site Name	Site Type	X OS Grid Ref Easting (m)	Y OS Grid Ref Northing (m)	Pollutants monitored	In AQMA? (Y/N) Which AQMA?	Monitoring technique	Distance from monitoring site to relevant exposure ⁽¹⁾ (m)	Distance to kerb of nearest road ⁽²⁾ (m)	Inlet height (m)
LHR2	London Heathrow	Airport	508600	176700	NO ₂ , PM ₁₀ , PM _{2.5} , PM ₁	YES, LBH	Chemiluminescence FIDAS	N/A	N/A (inside airport)	1.5
HIL	London Hillingdon	Urban background	506951	178605	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃	YES, LBH	Chemiluminescence FIDAS	16m	2.5m (30m to M4)	1.5
HI1	Hillingdon 1 - South Ruislip	Roadside	510857	184917	NO ₂ , PM ₁₀	YES, LBH	Chemiluminescence TEOM	11m	2.5m	1.5
HI3	Hillingdon 3 - Oxford Avenue	Roadside	509557	176994	NO ₂ , PM ₁₀	YES, LBH	Chemiluminescence TEOM	8m and 17m	33m to A4 Bath Road (2m to Oxford Avenue)	1.5
HRL	London Harlington	Airport	508295	177800	CO, NO ₂ , O ₃ , PM ₁₀ , PM _{2.5}	YES, LBH	Chemiluminescence TEOM FDMS	N/A	3m	1.5
SIPS	Hillingdon Sipson	Urban background	507325	177282	NO ₂	YES, LBH	Chemiluminescence	9m	2.5m	1.5
HIL1	London Harmondsworth	Roadside	505561	177661	NO ₂ , PM ₁₀	YES, LBH	Chemiluminescence BAM	20m	1m	1.5
HIL4	London Harmondsworth Osiris	Urban background	505671	177605	TSP, PM ₁₀ , PM _{2.5} , PM ₁	YES, LBH	Optical	1m	13m	1.5
T55	Heathrow Green Gates	Airport	505207	177072	NO ₂ , PM ₁₀ , PM _{2.5} , PM ₁	YES, LBH	Chemiluminescence FIDAS	32m	N/A (background for the airport) (62m to airport boundary)	1.5

Site ID	Site Name	Site Type	X OS Grid Ref Easting (m)	Y OS Grid Ref Northing (m)	Pollutants monitored	In AQMA? (Y/N) Which AQMA?	Monitoring technique	Distance from monitoring site to relevant exposure ⁽¹⁾ (m)	Distance to kerb of nearest road ⁽²⁾ (m)	Inlet height (m)
<i>T54</i>	Heathrow Oaks	Airport	505729	174496	NO ₂ , PM ₁₀ , PM _{2.5}	YES, LBH	Chemiluminescence FIDAS	N/A	5m	1.5
<i>HIL5</i>	Hillingdon Hayes	Roadside	510303	178882	NO ₂ , PM ₁₀	YES, LBH	Chemiluminescence BAM	15m	1m	1.5
<i>LHRBR</i>	Heathrow Bath Road	Roadside	508279	176949	NO ₂ , PM ₁₀ , PM _{2.5}	YES, LBH	Chemiluminescence FIDAS	140m	6m	1.5

(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 in Hillingdon in 2024

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref Easting (m)	Y OS Grid Ref Northing (m)	Pollutants monitored	In AQMA? (Y/N) Which AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Tube co-located with an automatic monitor? (Y/N)	Inlet height (m)
HILL01	AURN Site, Keats Way, West Drayton	Roadside	506926	178614	NO ₂	YES, LBH	0	30m from M4	Y	1.5
HILL02	Uxbridge Day Nursery Park Road Uxbridge (on wire Fence)	Roadside	505996	184058	NO ₂	YES, LBH	0	4	N	1.5
HILL03	South Ruislip Monitoring Station West End Road	Roadside	510821	184923	NO ₂	YES, LBH	14	2.5	Y	1.5
HILL04	Hillingdon Primary School Uxbridge Road Hillingdon (on wire fence)	Roadside	507617	182506	NO ₂	YES, LBH	0	5	N	1.5
HILL05	Hillingdon Hospital Monitoring Station Colham Road (Near John Rich House on former junction to Pield Heath Road)	Roadside	506989	181920	NO ₂	YES, LBH	7	2	N	1.5
HILL06	Warren Road Ickenham Uxbridge (1st lamp post on left)	Roadside	506243	185653	NO ₂	YES, LBH	1	23	N	1.5
HILL07	Harold Avenue (first lamp post on left)	Roadside	509918	179015	NO ₂	YES, LBH	4	30	N	1.5
HILL08	15 Phelps Way Hayes (lamp post outside of)	Roadside	509798	178654	NO ₂	YES, LBH	7	1.5	N	1.5
HILL09	25 Cranford Lane Harlington (lamp post on the left after car park)	Roadside	508758	177718	NO ₂	YES, LBH	7	1	N	1.5
HILL10	Brendan Close Harlington (1st lamp post on the left)	Roadside	508414	177125	NO ₂	YES, LBH	0	1	N	1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref Easting (m)	Y OS Grid Ref Northing (m)	Pollutants monitored	In AQMA? (Y/N) Which AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Tube co-located with an automatic monitor? (Y/N)	Inlet height (m)
HILL11	Harmondsworth Green Harmondsworth (lamp post outside nursery)	Roadside	505736	177752	NO ₂	YES, LBH	0	1	N	1.5
HILL12	Heathrow Close Longford (1st lamp post on the right)	Roadside	504851	176770	NO ₂	YES, LBH	0	2	N	1.5
HILL13	31 Tavistock Road (on lamp-post outside house)	Roadside	505731	180288	NO ₂	YES, LBH	3	1	N	1.5
HILL14	Harefield Hospital Hill End Road (lamp-post outside entrance)	Background	505299	190923	NO ₂	NO	0	5	N	1.5
HILL15	Field End Road/Field End School S.Ruislip 3rd Lamp-post south of school entrance (outside AQMA)	Roadside	511889	186563	NO ₂	NO	8	1	N	1.5
HILL16	49 Zealand Avenue Lamp Post	Roadside	505920	177188	NO ₂	YES, LBH	8	13	N	1.5
HILL17	49 Silverdale Gardens, Hayes Lamp Post (8)	Background	510361	179820	NO ₂	YES, LBH	9	14	N	1.5
HILL18	Blyth Road, Hayes Lamp Post (4)	Roadside	509683	179486	NO ₂	YES, LBH	6	2	N	1.5
HILL19	Side of 104 Yiewsley High Street (front of 1A Fairfield Road) Lamp Post (2)	Background	506108	180493	NO ₂	YES, LBH	9	37	N	1.5
HILL20	1 Porters Way (corner with Kingston Lane) Lamp Post (1)	Background	506503	179510	NO ₂	YES, LBH	12	9	N	1.5
HILL21	5-7 Mulberry Crescent, West Drayton Lamp Post (18)	Background	507141	179628	NO ₂	YES, LBH	10	2	N	1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref Easting (m)	Y OS Grid Ref Northing (m)	Pollutants monitored	In AQMA? (Y/N) Which AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Tube co-located with an automatic monitor? (Y/N)	Inlet height (m)
HILL22	340 Long Lane, Uxbridge Lamp Post (71)	Roadside	507649	184611	NO ₂	YES, LBH	18	2	N	1.5
HILL23	198 Harefield Road, Uxbridge Lamp Post (2)	Background	506143	185395	NO ₂	YES, LBH	9	33	N	1.5
HILL24	59 Hillingdon Road, Uxbridge Lamp Post (56)	Roadside	506035	183611	NO ₂	YES, LBH	12	1.5	N	1.5
HILL25	10 West End Lane, Harlington Lamp Post (2)	Background	508773	177352	NO ₂	YES, LBH	11	33	N	1.5
HILL26	R/O 130 Cleave Avenue, Hayes Lamp Post (33)	Roadside	509499	178370	NO ₂	YES, LBH	18	27	N	1.5
HILL27	Botwell House RC Primary School (Side-fence)	Roadside	509755	179934	NO ₂	YES, LBH	5	12	N	1.5
HILL28	Blyth Road 2nd Tube, Hayes Lamp Post (17) (western most lamp post in front of 133 Enterprise House)	Roadside	509328	179603	NO ₂	YES, LBH	5	2	N	1.5
HILL29	Little Benty, Road name sign corner of The Brambles and Little Benty. UB7 7UJ	Background	505906	178497	NO ₂	YES, LBH	5	1.5	N	1.9
HILL30	Lamp-post down alley next to No 60a The Chase, Ickenham. Red garage door, set back from road. UB10 8ST	Background	507612	185118	NO ₂	YES, LBH	4	25	N	2.5
HILL31	On white lamp-post at end of Dorchester Waye that runs parallel with A312, side of houses	Background	511103	181097	NO ₂	YES, LBH	18	10	N	2.2

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref Easting (m)	Y OS Grid Ref Northing (m)	Pollutants monitored	In AQMA? (Y/N) Which AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Tube co-located with an automatic monitor? (Y/N)	Inlet height (m)
HILL32	Roadside lamp-post, outside Georgian Lodge flats, Field End Road, Eastcote. HA52QL.	Background	510664	188599	NO ₂	NO	8.9	0.6	N	2.0
HILL33	Kerbside lamppost outside Roundabout House, 34 Pinner Road. HA6 1BZ	Roadside	510284	190524	NO ₂	NO	7.0	0.5	N	2.2
HILL34	Roadside lamp-post, pavement outside 177/179 Pinner Road. HA6 1DB.	Roadside	509900	190648	NO ₂	NO	4	2	N	2.2
HILL35	Grey Lamp-post, West End Road, to the south of Sidmouth Drive, outside Aroma House Chinese. HA4 6LR	Roadside	510055	186080	NO ₂	NO	7	0.4	N	2.3
HILL36	Lamp-post outside Vodafone, 69 High Street Ruislip. HA4 8JB	Roadside	509275	187340	NO ₂	NO	4	3	N	2.4
HILL37	2/6 High St. Ruislip Lamp-post with Parking and church sign. HA4 7AW	Roadside	509097	187597	NO ₂	NO	3	1	N	2.0
HILL38	Blue street light neat speed camera markings to west of Oxford Ave, Near AQMS. UB3 5HU	Roadside	509525	176949	NO ₂	YES, LBH	6	1.2	N	2.2
HILL39	Pinglestone Close/Bath Road A4. On cycle lane sign post. Park up Pinglestone close. UB7 0DJ.	Roadside	506000	176969	NO ₂	YES, LBH	10	1.5	N	2.2
HILL40	On zone sign at corner of Sipson Close/Sipson Rd. UB7 0JX.	Roadside	507316	177576	NO ₂	YES, LBH	4	1.8	N	1.9

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref Easting (m)	Y OS Grid Ref Northing (m)	Pollutants monitored	In AQMA? (Y/N) Which AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Tube co-located with an automatic monitor? (Y/N)	Inlet height (m)
HILL41	<i>On the north side of the A4 near the houses by the junction with Sipson Way</i>	<i>Roadside</i>	<i>507369</i>	<i>176966</i>	<i>NO₂</i>	<i>YES, LBH</i>	<i>6</i>	<i>0.7</i>	<i>N</i>	<i>2.0</i>
HILL42	<i>Telegraph pole next to big house/field on South corner of The Drive. UB10 8DA</i>	<i>Roadside</i>	<i>506192</i>	<i>185614</i>	<i>NO₂</i>	<i>YES, LBH</i>	<i>5</i>	<i>4.5</i>	<i>N</i>	<i>2.3</i>
HILL43	<i>Lamp-post outside tattoo and Five star nail parlours, No 60, Victoria Road. HA4 0AH</i>	<i>Roadside</i>	<i>510134</i>	<i>187086</i>	<i>NO₂</i>	<i>YES, LBH</i>	<i>3.5</i>	<i>1.5</i>	<i>N</i>	<i>2.4</i>
HILL44	<i>Hillingdon NorthWood Focus Area On a lamppost on Ducks Hill Road Corner of Rising Hill Close HA6 2NP</i>	<i>Roadside</i>	<i>508162</i>	<i>191784</i>	<i>NO₂</i>	<i>NO</i>	<i>10</i>	<i>1.5</i>	<i>N</i>	<i>2.2</i>

(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 Automatic Low-Cost Monitoring Sites in Hillingdon in 2024.

Site Name	Site Location	X (m)	Y (m)	Site Type	In AQMA? (Y/N)	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Monitoring technique
<i>Tavistock Road (a)</i>	in front of 69 Tavistock Rd, West Drayton UB7 7QT	505739	180258	Roadside	Y	6.5m	0.4m	2.5	NO ₂ , PM _{2.5}	laser scattering (PM _{2.5})
<i>Harlington High Street b)</i>	485A High Street, Harlington, UB3 5DL	508824	177081	Roadside	Y	3.3m	1.3	2.5	NO ₂ , PM _{2.5}	laser scattering (PM _{2.5})
<i>Harefield Hospital</i>	<i>Harefield Hospital UB9</i>	505164	190882	Roadside	N	18 m	1.3	2.5	NO ₂ , PM _{2.5}	laser scattering (PM _{2.5})
<i>Green Lane, Northwood</i>	<i>In lamppost in front of 68A Green Lane, Northwood, HA6 2XS</i>	509310	191450	Roadside	N	10 m	1.3	2.5	NO ₂ , PM _{2.5}	laser scattering (PM _{2.5})

(a) This Node was located on Tavistock Road because the local community had raised concerns over the impact of traffic associated with nearby industrial uses. Installed: Thursday, June 3rd 2021

(b) Installed: Tuesday, November 23rd 2021

Small low-cost sensors are not as accurate as reference-grade analysers, but by combining their data with the reference networks, acceptable data quality standards may be achieved.

2.4 Comparison of Monitoring Results with Air Quality Objectives

Trends in the monitored pollution data for the Borough are presented in the following summary Figures:

- Figure 5. Annual mean NO₂ concentrations measured at the automatic monitoring stations, 2019-2024, showing data for each site in the Borough. No sites exceed the annual mean objective (40 µg.m⁻³). All sites exceed the WHO guideline (10 µg.m⁻³).
- Figure 6. Annual mean NO₂ concentrations measured at diffusion tube locations, 2019-2024, showing data for each site in the Borough. Units: µg.m⁻³. No sites exceed the annual mean objective (40 µg.m⁻³). All sites exceed the WHO guideline (10 µg.m⁻³).
- Figure 7. Annual mean PM₁₀ concentrations measured at the automatic monitoring stations, 2019-2024. No sites exceed the annual mean objective (40 µg.m⁻³). All sites exceed the WHO guideline (15 µg.m⁻³).
- Figure 8. Annual mean PM_{2.5} concentrations measured at the automatic monitoring stations, 2019-2024. No sites exceed the annual mean objective of 10 µg.m⁻³, nor the London annual mean target of 10 µg.m⁻³. However, the WHO guideline of 5 µg.m⁻³ is exceeded at all locations.
- Figures 9. Hourly mean NO₂ concentrations measured at the low-cost sensor at Tavistock Road, 1st January to 31st December 2024. Units: µg.m⁻³
- Figures 10. Hourly mean PM_{2.5} concentrations measured at the low-cost sensor at Tavistock Road, 1st January to 31st December 2024. Units: µg.m⁻³
- Figures 11. Hourly mean NO₂ concentrations measured at the low-cost sensor at Harlington High Street, 1st January to 31st December 2024. Units: µg.m⁻³
- Figures 12. Hourly mean PM_{2.5} concentrations measured at the low-cost sensor at Harlington High Street, 1st January to 31st December 2024. Units: µg.m⁻³
- Figures 13. Hourly mean NO₂ concentrations measured at the low-cost sensor at Harefield Hospital, 1st January to 31st December 2024. Units: µg.m⁻³
- Figures 14. Hourly mean PM_{2.5} concentrations measured at the low-cost sensor at the Harefield Hospital, 1st January to 31st December 2024. Units: µg.m⁻³
- Figures 15. Hourly mean NO₂ concentrations measured at the low-cost sensor at Green Lane (Northwood), 8th June to 31st December 2024. Units: µg.m⁻³
- Figures 16. Hourly mean PM_{2.5} concentrations measured at the low-cost sensor at Green Lane (Northwood), 8th June to 31st December 2024. Units: µg.m⁻³

For annual reporting, the results presented are after adjustments for ‘annualisation’ and for distance to a location of relevant public exposure (wherever applicable).

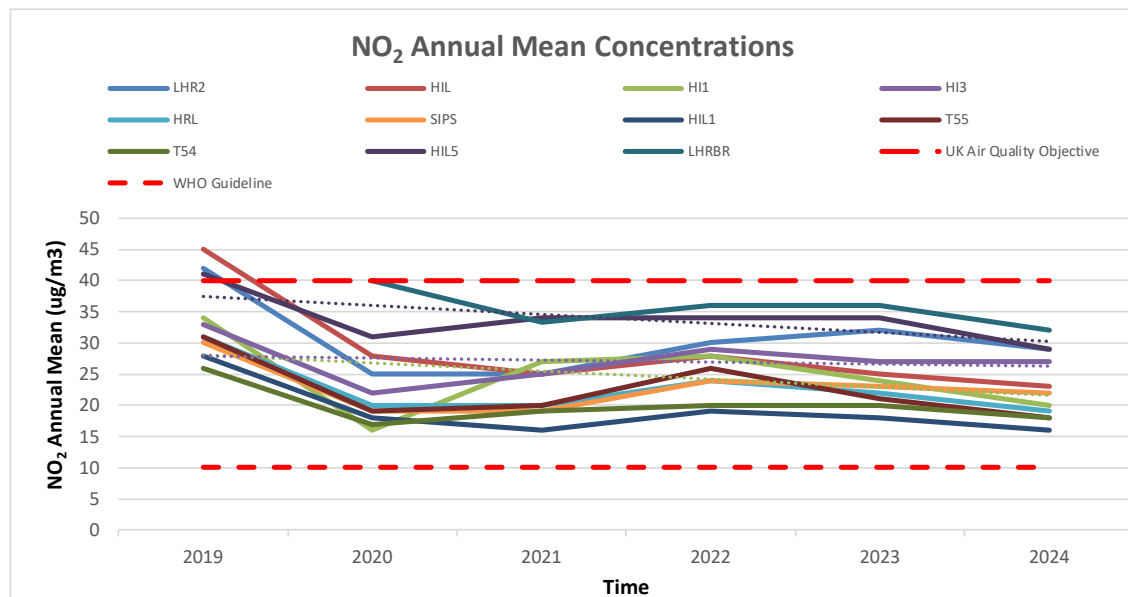


Figure 5. Annual mean NO₂ concentrations measured at the automatic monitoring stations, 2019-2024, showing data for each site in the Borough. Units: µg.m⁻³.

Figure 5 indicates that NO₂ annual mean concentrations observed in 2024 have decreased at all of the continuous monitoring sites (with the exception of one monitoring location where no decrease was observed - Hillingdon 3 - Oxford Avenue), with decreases ranging from 1.0 (Hillingdon Sipson) to 5.0 µg/m³ (Hillingdon Hayes) from 2023 to 2024 across the Borough. [Exact values for NO₂, PM_{2.5} and PM₁₀ are shown in Tables E to K below, that follow this series of graphs.]

From the continuous monitoring stations, it was observed that the continuous monitoring site Hillingdon Hayes (HIL5) was the location with the highest decrease registering a reduction of 5 µg.m⁻³ from 2023 to 2024. This is attributed to the stringent planning requirements having been imposed within this sensitive area (Hayes Focus Area) where benchmarks zero apply to air quality neutral calculations to all development with total pollutant emissions required to be mitigated (Local Action Plan 2019-2024, Measure 5). Similar results have been observed at all Focus Areas managed by LBH through the planning regime.

Figure 6 indicates that NO₂ annual mean concentrations observed in 2024 have decreased at all of the diffusion tube monitoring sites, with the highest decrease observed of 6.6 µg.m⁻³ from 2023 to 2024 being noted at the diffusion tube site HILL41 located on the north side of the A4 near the houses by the junction with Sipson Way, and the smallest decrease of 0.1 µg.m⁻³ from 2023 to 2024 being registered at the

diffusion tube site HILL23 located at 198 Harefield Road, Uxbridge Lamp Post (2). All sites are located within the AQMA.

It is noted that all monitoring sites from the standard LBH network exceed the WHO NO₂ target value of 10 µg.m⁻³ (Figures 5 and 6) set to safeguard human health. This is of concern to LBH who will continue to strive to attain the WHO guidelines to protect citizens' health in the shortest period of time. On the other hand, all sites meet the NO₂ UK air quality annual mean objective (40 µg.m⁻³).

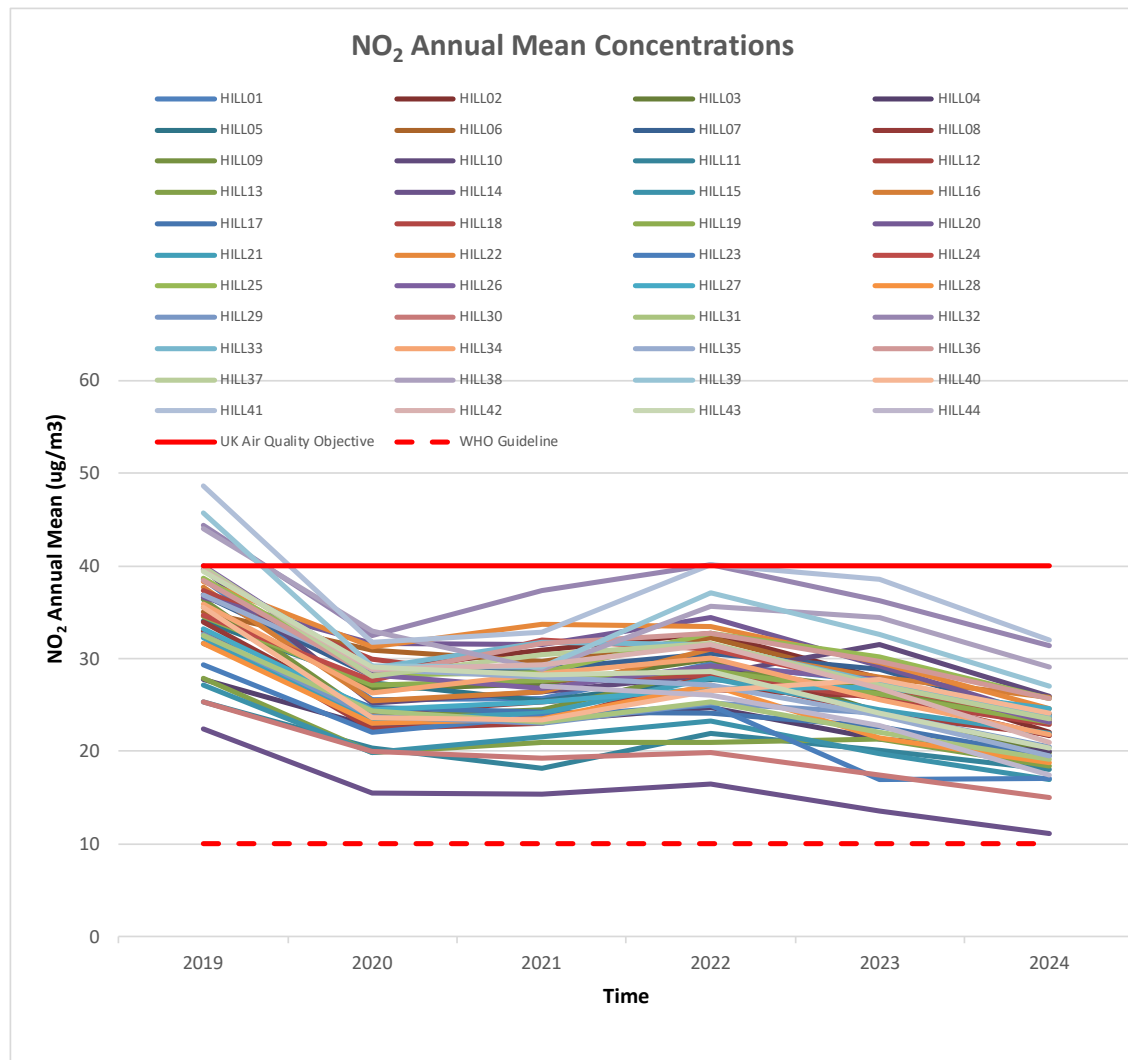


Figure 6. Annual mean NO₂ concentrations measured at the diffusion tube locations, 2019-2024, showing data for each site in the Borough. Units: µg.m⁻³.

Regarding particulate matter concentrations (PM₁₀ and PM_{2.5}), no increases were observed for either fraction, with decreases of PM₁₀ (Figure 7) ranging from 1 to 8 µg.m⁻³ (Hillingdon Oxford Avenue HI3), and decreases of PM_{2.5} of 1 µg.m⁻³ being observed only at sites Heathrow (LHR2) and London Hillingdon (HIL) in 2024, with the remaining locations maintaining 2023 levels. Hillingdon Oxford Avenue (HI3) has registered the highest decrease of PM₁₀ of 8 µg.m⁻³ in relation to 2023 levels,

reflecting improvements within the A4 corridor Focus Area, followed by a decrease of $5 \mu\text{g.m}^{-3}$ observed at Hillingdon Hayes (HIL5) in relation to 2023 levels reflecting improvements within the Hayes Focus Area; both achieved through the application of the Local Action Plan , Measure 5, which requires benchmarks zero applied through the planning system within Focus Areas.

It is noted that three continuous monitoring sites from the standard LBH network exceed the WHO PM_{10} guideline of $15 \mu\text{g.m}^{-3}$: Hillingdon 1 - South Ruislip (HI1), Hillingdon 3, Oxford Avenue (HI3), and Hillingdon Hayes (HIL5) and no sites exceed the London Mayoral Objective $\text{PM}_{2.5}$ target value of $10 \mu\text{g.m}^{-3}$ across the Borough (Figures 7 and 8). On the other hand, all sites exceed the $\text{PM}_{2.5}$ WHO annual mean guideline of $5 \mu\text{g m}^{-3}$.

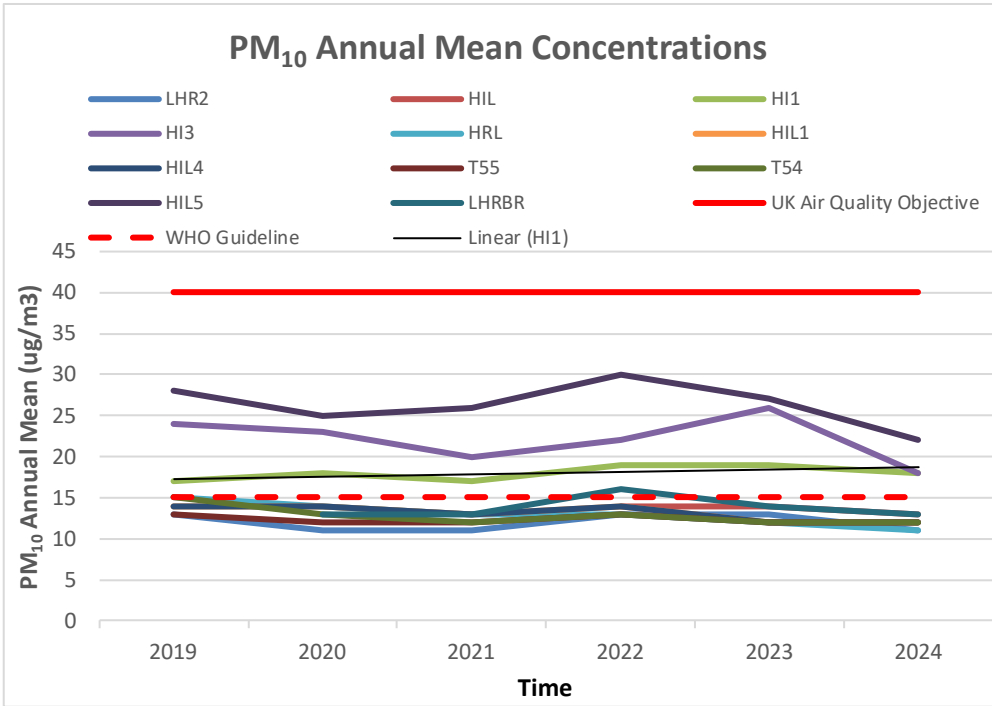


Figure 7. Annual mean PM_{10} concentrations measured at the automatic monitoring stations, 2019-2024, showing data for each site in the Borough. Units: $\mu\text{g.m}^{-3}$.

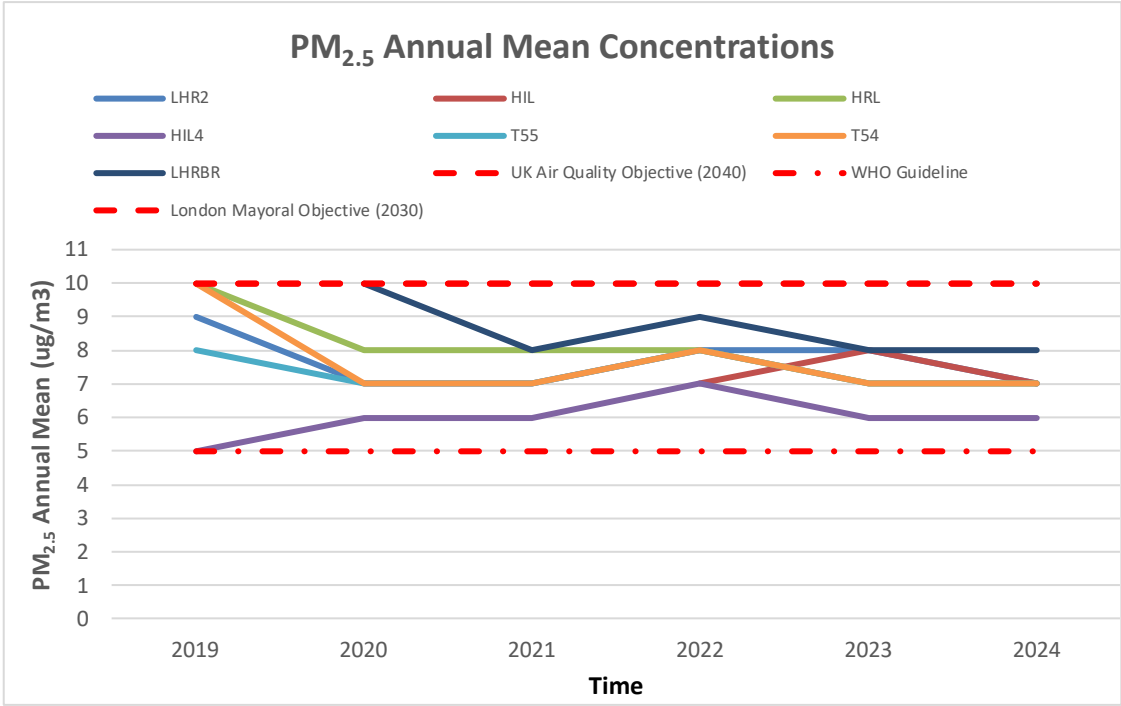


Figure 8. Annual mean PM_{2.5} concentrations measured at the automatic monitoring stations, 2019-2024, showing data for each site in the Borough. Units: $\mu\text{g}.\text{m}^{-3}$.

Figures 9, 11, 13, and 15 indicate hourly mean NO₂ concentrations measured at the low-cost sensors at Tavistock Road, Harlington High Street, Harefield Hospital and Green Lane (Northwood) for 2024. All Figures indicate that there are peaks of concentrations throughout the year. However, as reported on Table G, the annual mean value is below the national objective of 40 $\mu\text{g}.\text{m}^{-3}$ at each location.

Figures 10, 12, 14 and 16 present the hourly mean PM_{2.5} concentrations measured at the low-cost sensors at Tavistock Road, Harlington High Street, Harefield Hospital and Green Lane (Northwood) for 2024. All Figures indicate that there are peaks in concentration throughout the year. Results show that the annual mean in relation to the WHO guideline of 5 $\mu\text{g}.\text{m}^{-3}$ is being exceeded at each location (See Table L).

It is noted that all of the low cost sensor sites exceed the WHO NO₂ daily guideline value of 25 $\mu\text{g}.\text{m}^{-3}$ and the WHO PM_{2.5} daily guideline value of 15 $\mu\text{g}.\text{m}^{-3}$.

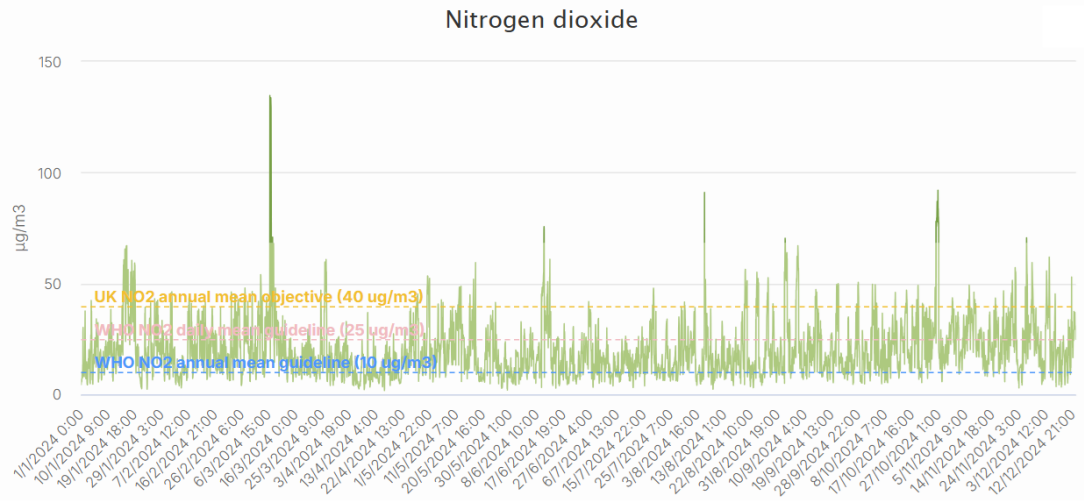


Figure 9. Hourly mean NO₂ concentrations measured at the low-cost sensor at Tavistock Road, 1st January to 31st December 2024. Units: µg.m⁻³.

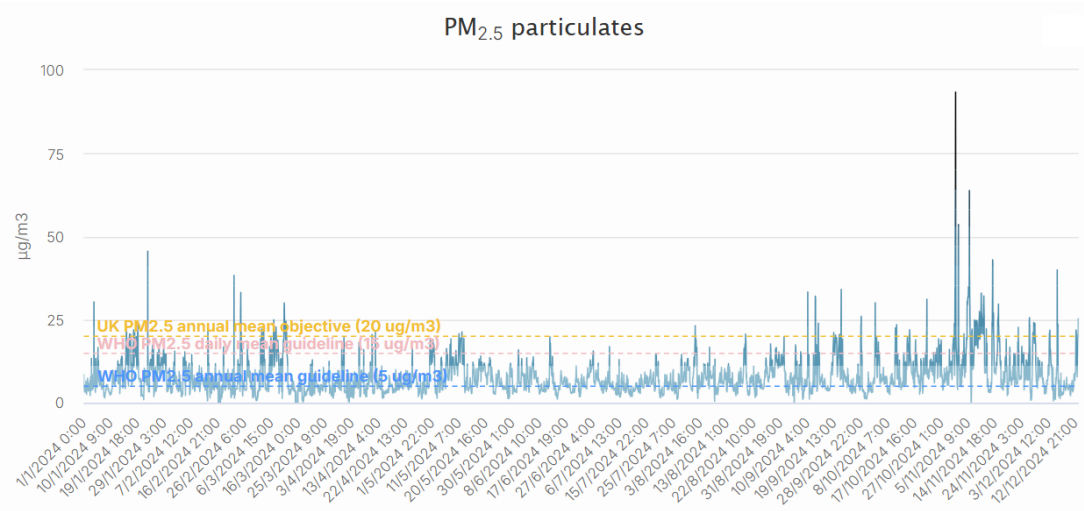


Figure 10. Hourly mean PM_{2.5} concentrations measured at the low-cost sensor at Tavistock Road, 1st January to 31st December 2024. Units: µg.m⁻³.

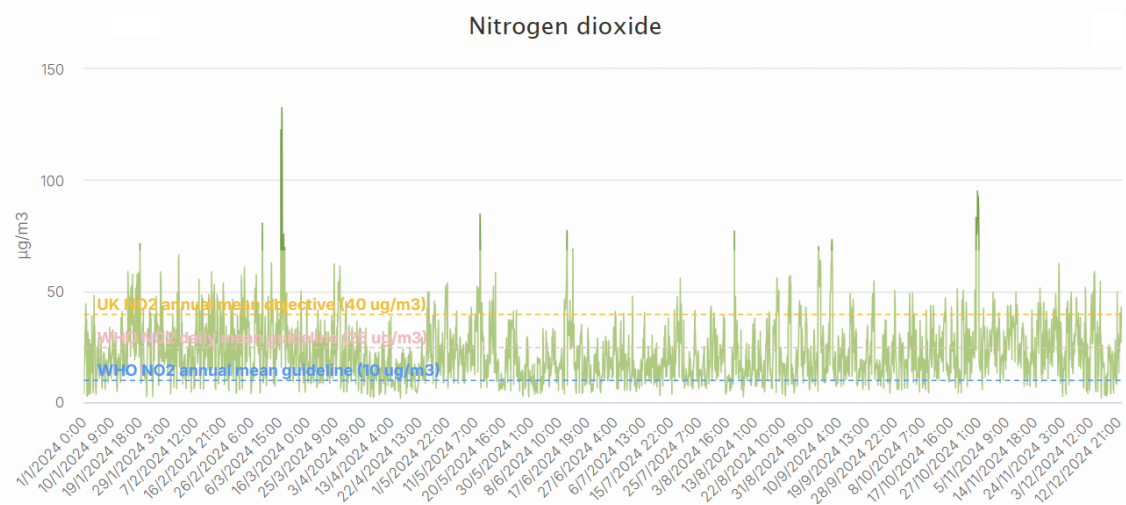


Figure 11. Hourly mean NO₂ concentrations measured at the low-cost sensor at Harlington High Street, 1st January to 31st December 2024.
Units: $\mu\text{g}.\text{m}^{-3}$.

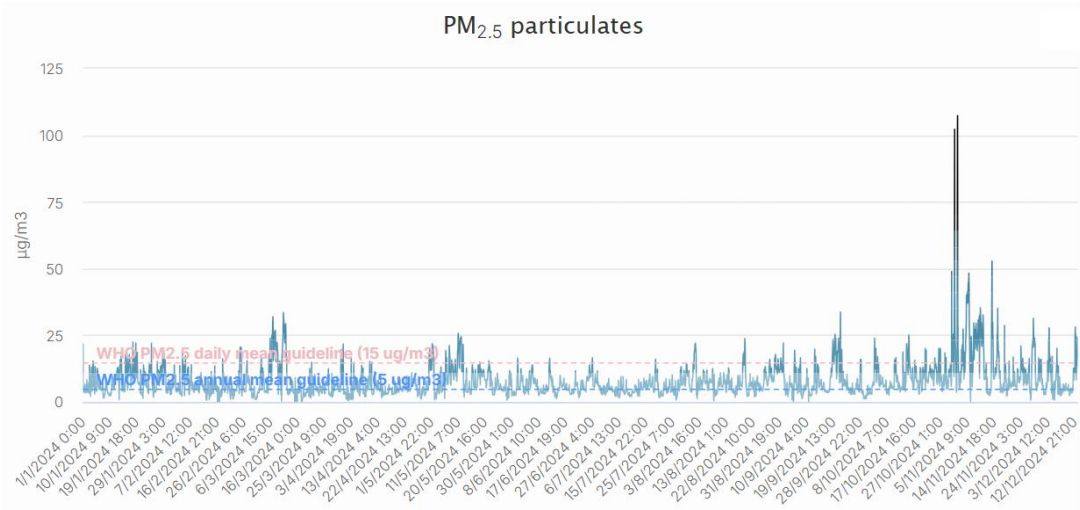


Figure 12. Hourly mean PM_{2.5} concentrations measured at the low-cost sensor at Harlington High Street, 1st January to 31st December 2024.
Units: $\mu\text{g}.\text{m}^{-3}$.

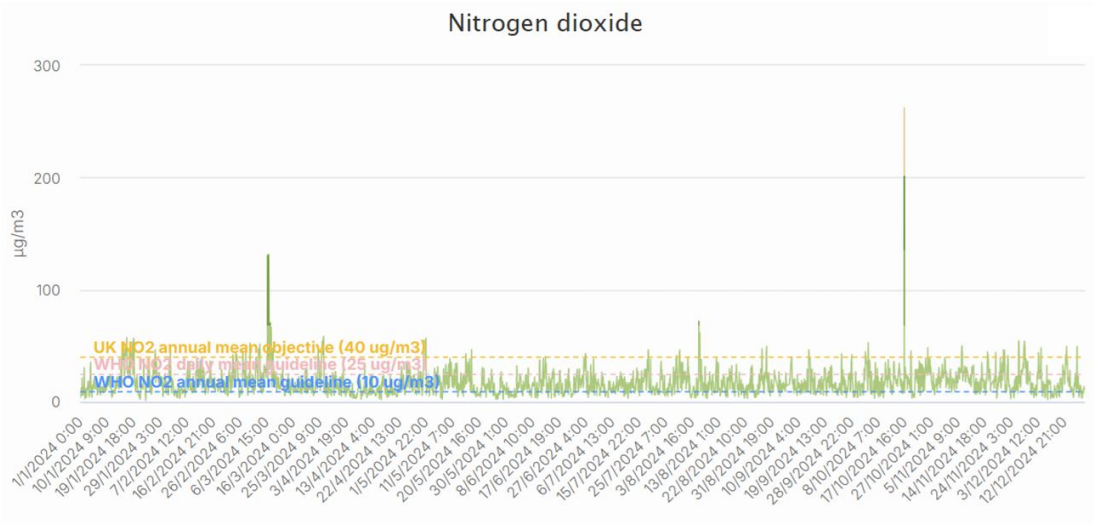


Figure 13. Hourly mean NO₂ concentrations measured at the low-cost sensor at Harefield Hospital, 1st January to 31st December 2024. Units: µg.m⁻³.

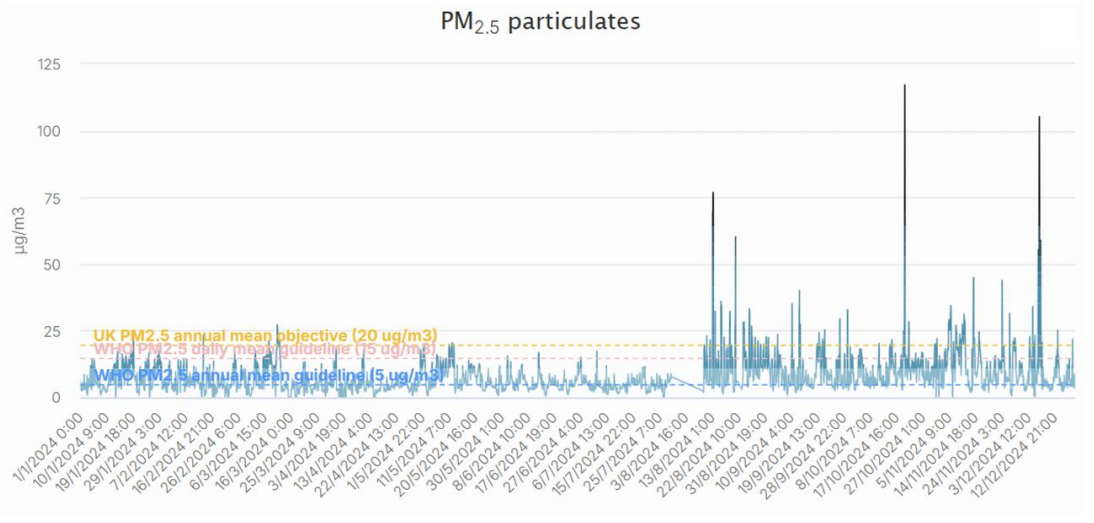


Figure 14. Hourly mean PM_{2.5} concentrations measured at the low-cost sensor at Harefield Hospital, 1st January to 31st December 2024. Units: µg.m⁻³.

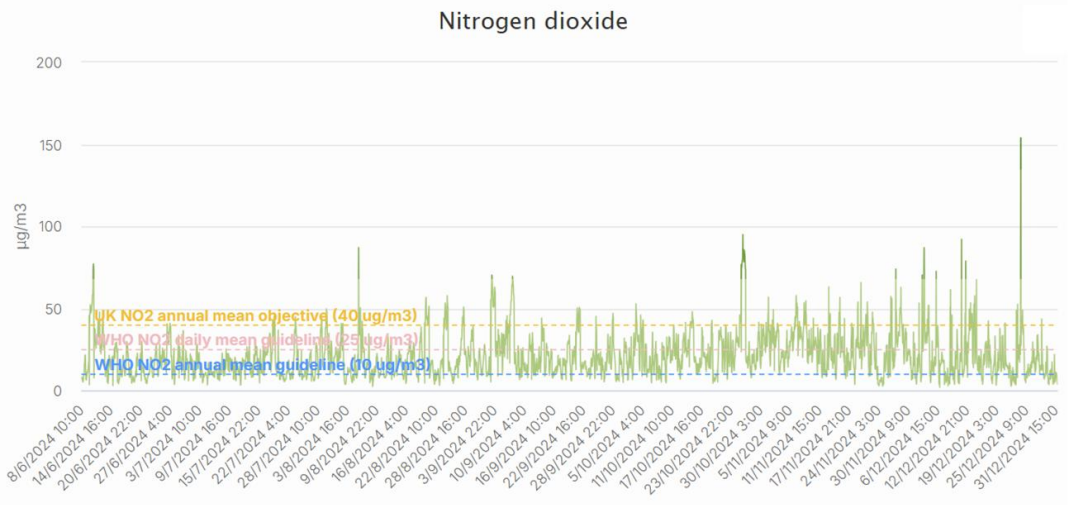


Figure 15. Hourly mean NO₂ concentrations measured at the low-cost sensor at Green Lane (Northwood), 8th June to 31st December 2024. Units: µg.m⁻³.

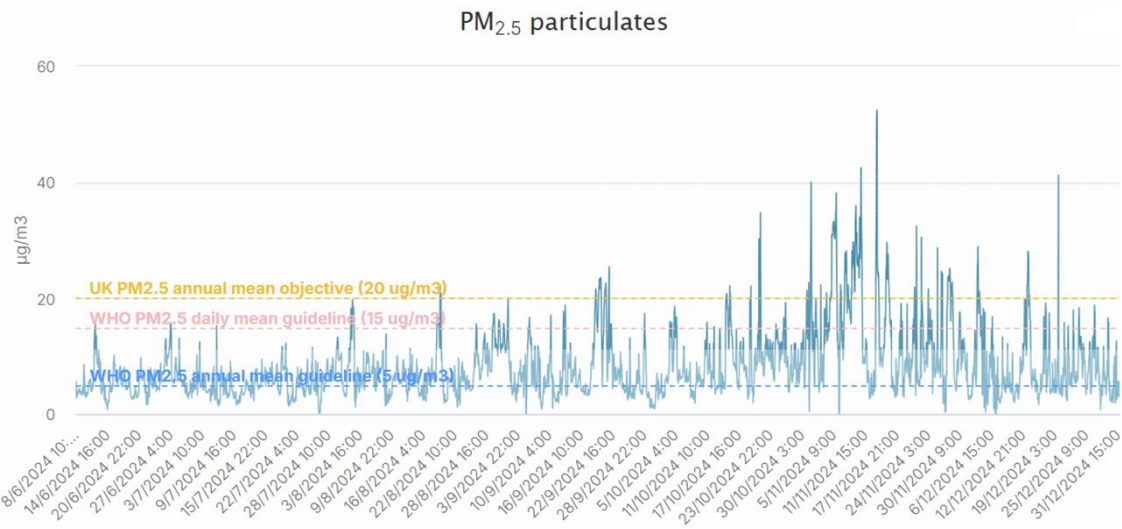


Figure 16. Hourly mean PM_{2.5} concentrations measured at the low-cost sensor at Green Lane (Northwood), 8th January to 31st December 2024. Units: µg.m⁻³.

The figures above are supplemented by the following tables that provide data for the last seven years for each monitoring site:

- Table E. Annual Mean NO₂ Ratified Monitoring Concentrations (µg.m⁻³) at automatic monitoring sites.
- Table F. Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Concentrations (µg.m⁻³) at diffusion tube sites.
- Table H. NO₂ Automatic Monitor Results: Comparison with 1-hour Mean Objective.
- Table I. Annual Mean PM₁₀ Automatic Monitoring Results (µg.m⁻³).

- Table J. PM₁₀ Automatic Monitor Results: Comparison with 24-Hour Mean Objective.
- Table K. Annual Mean PM_{2.5} Automatic Monitoring Results ($\mu\text{g.m}^{-3}$).

In addition, Tables G and L present data for 2024 at the four locations (Tavistock Road, Harlington High Street, Harefield Hospital, and Green Lane - Northwood) where Low-Cost Sensors were deployed:

- Table G. Annual Mean NO₂ Monitoring Concentrations at Low-Cost Sensor sites ($\mu\text{g.m}^{-3}$).
- Table L. Annual Mean PM_{2.5} Monitoring Concentrations at Low-Cost Sensor sites ($\mu\text{g.m}^{-3}$).

Analysis of all Tables (E to L) indicates there are no locations in the Borough where the national limit values and objectives for pollutants NO₂ and PM were exceeded in 2024 according to monitoring data. However, the WHO Air Quality Guidelines were exceeded at all locations for both pollutants.

Table E. Annual mean NO₂ ratified monitoring results (µg m⁻³) for the automatic monitoring sites in Hillingdon for the period 2018-2024.

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	Annual Mean Concentration (µg.m ⁻³)						
						2018	2019	2020	2021	2022	2023	2024
LHR2	508600	176700	Airport	99.67	99.67	43	42	25	25	30	32	29
HIL ^c	506951	178605	Urban background	99.12	99.12	46	45	28	25	28	25	23
HI1 ^d	510857	184917	Roadside	99.59	99.59	<u>36</u> ^d	34	16	27	28	24	20
HI3	509557	176994	Roadside	76.47	76.47	35	33	22	25	29	27	27
HRL	508295	177800	Airport	96.14	96.14	30	31	20	20	24	22	19
SIPS	507325	177282	Urban background	98.47	98.47	30	30	19	19	24	23	22
HIL1	505561	177661	Roadside	93.4	93.4	25	28	18	16	19	18	16
T55	505207	177072	Urban background	83.06	84.06	30	31	19	20	26	21	18
T54	505729	174496	Airport	99.61	99.61	28	26	17	19	20	20	18
HIL5	510303	178882	Roadside	99.81	99.81	43	41	31	34	34	34	29
LHRBR	508279	176949	Roadside	98.19	99.19	-	-	44.5 (39.5)	34	<u>36</u>	<u>36</u>	32

Notes:

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

Exceedance of the NO₂ annual mean AQO of 40 µg m⁻³ are shown in **bold**. (no such cases are present in 2024)

Equal and above 36 µg m⁻³ are shown underlined. (no such cases are present in 2024).

NO₂ annual means in excess of 60 µg m⁻³, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in **bold** and underlined (no such cases are present in 2024).

Results have been distance corrected where applicable (no such cases are present in 2024).

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%. No such cases are present in 2024.

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%)

^c this site is collocated with HILL01

^d this site is collocated with HILL03

Table F. Annual mean NO₂ ratified and adjusted monitoring results (µg m⁻³) diffusion tubes for diffusion tubes in Hillingdon for the period 2018-2024.

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	Annual Mean Concentration (µg.m ⁻³)						
						2018	2019	2020	2021	2022	2023	2024
HILL01 (c)	506926	178614	Roadside	100.0	100.0	42	38.6	25.6	25.7	29.4	27.5	24.0
HILL02	505996	184058	Roadside	83.3	83.3	40.7	36.9	28.9	30.9	32.8	27.9	22.1
HILL03 (c)	510821	184923	Roadside	100.0	100.0	43.4	35.5	26.7 _d	27.3	30.0	24.2	19.8
HILL04	507617	182506	Roadside	100.0	100.0	28.5	27.8	22.6	23.3	24.7	21.3	20.0
HILL05	506989	181920	Roadside	100.0	100.0	33.4	34.1	27.4	25.4	27.8	26.7	24.0
HILL06	506243	185653	Roadside	100.0	100.0	37.6	35.0	30.9	29.7	32.2	27.6	23.2
HILL07	509918	179015	Roadside	100.0	100.0	37.7	36.9	28.1	28.8	30.5	28.8	23.7
HILL08	509798	178654	Roadside	100.0	100.0	33.9	33.9	24.1	25.3	26.7	25.9	21.7
HILL09	508758	177718	Roadside	100.0	100.0	37.2	36.4	23.8	24.5	28.8	26.7	23.5
HILL10	508414	177125	Roadside	100.0	100.0	39.6	39.7	25.2	26.4	28.3	31.5	26.0
HILL11	505736	177752	Roadside	83.3	83.3	28.5	25.3	20.3	18.2	21.9	20.1	18.0
HILL12	504851	176770	Roadside	100.0	100.0	36	33.0	22.4	23.0	28.2	24.0	21.8
HILL13	505731	180288	Roadside	91.7	91.7	29.5	27.9	19.9	21.0	21.0	21.3	18.4
HILL14	505299	190923	Background	100.0	100.0	20.5	22.4	15.5	15.4	16.5	13.6	11.1
HILL15	511889	186563	Roadside	100.0	100.0	26.9	27.2	19.9	21.6	23.3	19.7	16.9
HILL16	505920	177188	Roadside	100.0	100.0	38.6	37.7	25.4	26.4	31.0	28.0	25.8
HILL17	510361	179820	Background	100.0	100.0	31	31.6	24.7	24.2	24.1	22.6	19.6
HILL18	509683	179486	Roadside	91.7	91.7	38.5	37.4	29.9	27.6	28.3	25.7	22.9
HILL19	506108	180493	Background	100.0	100.0	35	34.6	27.1	27.6	28.7	26.2	23.1
HILL20	506503	179510	Background	100.0	100.0	36.6	36.6	31.6	31.5	34.5	29.2	23.6
HILL21	507141	179628	Background	100.0	100.0	34.9	32.3	23.4	24.1	27.9	24.5	21.9
HILL22	507649	184611	Roadside	100.0	100.0	42.4	38.3	31.3	33.7	33.5	29.6	24.6
HILL23	506143	185395	Background	91.7	91.7	35.1	29.3	22.1	23.8	25.0	17.0	17.1
HILL24	506035	183611	Roadside	100.0	100.0	36.9	34.7	27.6	32.0	31.1	27.0	23.5
HILL25	508773	177352	Background	100.0	100.0	39.3	38.7	28.3	28.5	32.8	30.2	25.7
HILL26	509499	178370	Roadside	100.0	100.0	42	40.0	28.2	26.8	29.2	27.7	23.1
HILL27	509755	179934	Roadside	100.0	100.0	32.5	33.2	24.5	25.3	26.8	26.9	24.6
HILL28	509328	179603	Roadside	83.3	83.3	31.7	31.7	23.0	23.5	27.1	21.4	18.8
HILL29	505906	178497	Background	100.0	100.0	-	32.6	23.7	23.0	25.2	24.1	20.4
HILL30	507612	185118	Background	91.7	91.7	-	25.3	20.0	19.2	19.9	17.4	15.0
HILL31	511103	181097	Background	100.0	100.0	-	32.5	24.3	23.2	25.3	22.0	19.2
HILL32	510664	188599	Background	100.0	100.0	-	44.4	32.5	37.4	40.1	<u>36.3</u>	31.4

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	Annual Mean Concentration (µg.m ⁻³)						
						2018	2019	2020	2021	2022	2023	2024
HILL33	510284	190524	Roadside	100.0	100.0	-	39.5	29.0	31.8	31.5	27.4	23.7
HILL34	509900	190648	Roadside	100.0	100.0	-	35.9	26.3	28.4	30.1	25.6	21.9
HILL35	510055	186080	Roadside	100.0	100.0	-	36.9	28.9	28.0	27.2	23.9	19.5
HILL36	509275	187340	Roadside	91.7	91.7	-	38.5	28.1	31.6	32.7	29.7	25.7
HILL37	509097	187597	Roadside	91.7	91.7	-	39.9	28.1	30.4	31.7	27.1	23.5
HILL38	509525	176949	Roadside	100.0	100.0	-	44.0	33.0	28.9	35.6	34.4	29.1
HILL39	506000	176969	Roadside	100.0	100.0	-	45.7	29.2	29.1	37.1	32.6	27.0
HILL40	507316	177576	Roadside	91.7	91.7	-	35.5	23.6	23.4	26.6	27.8	24.1
HILL41	507369	176966	Roadside	100.0	100.0	-	48.7	31.8	32.9	40.1	<u>38.6</u>	32.0
HILL42	506192	185614	Roadside	91.7	91.7	-	39.6	28.9	29.3	31.5	26.8	21.0
HILL43	510134	187086	Roadside	100	100	-	39.4	29.1	28.2	28.6	24.1	20.3
HILL44	508162	191784	Roadside	100	100	-	-	-	27.0	26.1	22.8	17.4

Notes:

☑ Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19. (no such cases are present in 2024)

☑ 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.

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

Exceedances of the NO₂ annual mean objective of 40 µg.m⁻³ are shown in **bold**. (no such cases are present in 2024). Exceedance of 36 µg m⁻³ is shown underlined. (no such cases are present in 2024)

NO₂ annual means in excess of 60 µg m⁻³, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in **bold** and underlined (no such cases are present in 2024)

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

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

^c This is a triplicate measurement.

Table G. Low-Cost Sensors: Annual mean NO₂ ratified monitoring results (µg.m⁻³) for the period 2021-2024.

Site Name	Location	Valid data capture for monitoring period % ^a	Valid data capture, 2024, % ^b	Annual Mean Concentration (µg.m ⁻³)			
				2021	2022	2023	2024
Tavistock Road	in front of 69 Tavistock Rd, West Drayton UB7 7QT	100	100	24.1	23.1	20.7	20.0
Harlington High Street	485A High Street, Harlington, UB3 5DL	97.0	97.0	-	26.7	24.4	22.2

Site Name	Location	Valid data capture for monitoring period % ^a	Valid data capture, 2024, % ^b	Annual Mean Concentration (µg.m ⁻³)			
				2021	2022	2023	2024
Harefield Hospital		95.3	95.3	-	-	-	17.2
Green Lane, Northwood		94.4	50.0	-	-	-	20.9

Notes

- (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. NO₂ automatic monitoring results for Hillingdon for the period 2018-2024: Comparison with 1-hour mean objective, showing the number of 1-hour means where NO₂ > 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	Number of Hourly Means > 200 µg.m ⁻³						
						2018	2019	2020	2021	2022	2023	2024
LHR2	508600	176700	Airport	99.67	99.67	0	1	0	0	0	0	0
HIL	506951	178605	Urban background	99.12	99.12	0	0	0	0	0	0	0
HI1	510857	184917	Roadside	99.59	99.59	0	0	0	0	0	0	0
HI3	509557	176994	Roadside	76.47	76.47	0	0	0	0	0	2	0
HRL	508295	177800	Airport	96.14	96.14	0	0	0	0	0	0	0
SIPS	507325	177282	Urban background	98.47	98.47	0	0	0	0	0	0	0
HIL1	505561	177661	Roadside	93.4	93.4	0	0	0	0	0	0	0
T55	505207	177072	Urban background	83.06	84.06	0	0	0	0	0	0	0

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	Number of Hourly Means > 200 µg.m ⁻³						
						2018	2019	2020	2021	2022	2023	2024
<i>T54</i>	<i>505729</i>	<i>174496</i>	<i>Airport</i>	<i>99.61</i>	<i>99.61</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>HIL5</i>	<i>510303</i>	<i>178882</i>	<i>Roadside</i>	<i>99.81</i>	<i>99.81</i>	<i>12</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>LHRBR</i>	<i>508279</i>	<i>176949</i>	<i>Roadside</i>	<i>98.19</i>	<i>99.19</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

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 NO₂ short term AQO of 200 µg m⁻³ over the permitted 18 hours per year are shown in **bold**. (no instances)

Where valid data are available for less than 85% of a full year, the 99.8th percentile of 1-hour means is provided in brackets after the number of exceedances.

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 PM₁₀ Automatic Monitoring Results (µg.m⁻³) for the period 2018-2024.

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	Annual Mean Concentration (µg.m ⁻³)						
						2018	2019	2020	2021	2022	2023	2024
LHR2	508600	176700	Airport	92.28	92.28	15	14	13	11	11	13	11
HIL	506951	178605	Urban background	99.7	99.7	N/A	N/A	N/A	N/A	N/A	14	13
HI1	510857	184917	Roadside	91.61	91.61	17	17	17	18	17	19	18
HI3	509557	176994	Roadside	95.98	95.98	19	24	24	23	20	22	18
HRL	508295	177800	Airport	99.68	99.68	15	15	15	14	13	13	11
HIL1	505561	177661	Roadside	99.52	99.52	23	18	15	16	14	16	13
HIL4	505671	177605	Urban background	92.49	92.49	14	16	14	15	13	14	12
T55	505207	177072	Urban background	98.44	98.44	13	14	13	12	12	13	12
T54	505729	174496	Airport	99.67	99.67	14	15	15	13	12	13	12
HIL5	510303	178882	Roadside	95.98	95.98	27	30	28	25	26	30	22
LHRBR	508279	176949	Roadside	98.19	98.19	-	-	-	14	14	16	13

Notes:

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

Exceedance of the PM₁₀ annual mean AQO of 40 µg m⁻³ are shown in **bold** (no instances).

All means have been “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.(no instances).

^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. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 24-Hour Means > 50 µg m⁻³ for the period 2018-2024

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	Number of Daily Means > 50 µgm ⁻³						
						2018	2019	2020	2021	2022	2023	2024
LHR2	508600	176700	Airport	92.28	92.28	1	6	0	0	2	1	0
HIL	506951	178605	Urban background	99.7	99.7	N/A	N/A	N/A	N/A	0	3	0
HI1	510857	184917	Roadside	91.61	91.61	1	3	1	0	4	1	0
HI3	509557	176994	Roadside	95.98	95.98	2	4	6	0	1	4	3
HRL	508295	177800	Airport	99.68	99.68	1	6	1	0	2	0	0
HIL1	505561	177661	Roadside	99.52	99.52	1	0	0	0	0	0	0
HIL4	505671	177605	Urban background	92.49	92.49	0	1	0	0	0	0	0
T55	505207	177072	Urban background	98.44	98.44	1	4	0	0	2	0	0
T54	505729	174496	Airport	99.67	99.67	1	4	0	0	2	0	0
HIL5	510303	178882	Roadside	95.98	95.98	22	25	16	25	23	16	6
LHRBR	508279	176949	Roadside	98.19	98.19	-	-	0	0	4	1	0

Notes:

Exceedance of the PM₁₀ 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 shown in brackets after the number of exceedances.

^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. Annual Mean PM_{2.5} Automatic Monitoring Results (µg.m⁻³) for the period 2018-2024

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	Annual Mean Concentration (µgm ⁻³)						
						2018	2019	2020	2021	2022	2023	2024
LHR2	508600	176700	Airport	92.28	92.28	9	8	9	7	7	8	7
HIL	506951	178605	Urban background	99.7	99.7	N/A	N/A	N/A	N/A	N/A	7	7
HRL	508295	177800	Airport	99.68	99.68	9	9	10	8	8	8	7
HIL4	505671	177605	Urban background	92.49	92.49	7	6	5	7	6	7	6
T55	505207	177072	Urban background	98.44	98.44	8	7	8	7	7	8	7
T54	505729	174496	Airport	99.67	99.67	9	10	10	7	7	8	7
LHRBR	508279	176949	Roadside	98.19	98.19	-	-	-	11	8	9	8

Notes:

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

Exceedance of the PM_{2.5} annual mean AQO of 25 µgm⁻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 L. Low-Cost Sensors: Annual mean PM_{2.5} ratified monitoring results (µg m⁻³) for the period 2021-2024.

Site Name	Location	Valid data capture for monitoring period % ^a	Valid data capture, 2024, % ^b	Annual Mean Concentration (µg.m ⁻³)			
				2021	2022	2023	2024
<i>Tavistock Road</i>	in front of 69 Tavistock Rd, West Drayton UB7 7QT	100	100	<u>12.2</u>	<u>10.6</u>	8.5	7.9
<i>Harlington High Street</i>	485A High Street, Harlington, UB3 5DL	97.0	97.0	-	-	<u>10.5</u>	7.7
<i>Harefield Hospital</i>	Harefield Hospital UB9	95.3	95.3	-	-	-	7.6
<i>Green Lane, Northwood</i>	In lamppost in front of 68A Green Lane, Northwood, HA6 2XS	94.4	50.0	-	-	-	8.1

Notes:

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

Exceedance of the PM_{2.5} annual mean AQO of 25 µgm⁻³ are shown in **bold**.

Exceedance of the PM_{2.5} annual mean target of 10 µgm⁻³ are shown in *italics underlined*.

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

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

2.5 HS2 Monitoring Data

Construction work on HS2 has continued in 2024 within Hillingdon. According to the master plan of works, the route starts at London Euston and tunnels for 13 miles to surface into Hillingdon at South Ruislip.

HS2 has established several diffusion tubes for NO₂ in the Borough. Six of these are along the lorry routes serving the construction activities, one is a co-location tube with a continuous monitor and four are on roads not impacted by the HS2 construction activities to act as controls. Details for these sites are shown in Table M and bias adjusted (using 2024 national bias adjustment for 20% TEA in water for roadside locations, 0.75, Socotec, Didcot) monitoring results for 2024 are presented in Table N.

Table M. Details of HS2 Diffusion Tubes in Hillingdon in 2024.

Site ID	Site location	Location type	X coordinate	Y coordinate	Height (m)	Site purpose
HS2-000020BNT	Lamp post on Pembroke Road	Background	509678	187214	2.5	Background not affected by scheme
HS2-000020BNU	Cowley Road sign post at junction with Hillingdon Road	Roadside	505492	183926	2.5	Roadside not affected by scheme
HS2-000020BNV	High Street sign post at junction with Pembroke Road	Roadside	509439	187117	2.3	Roadside not affected by scheme
HS2-000020BNW	Signpost on A4020 Uxbridge Road at junction with Long Lane	Roadside	507365	182687	2.5	Roadside not affected by scheme
HS2-000020BP8	Triplicate site at South Ruislip roadside automatic monitoring station	Roadside	510858	184916	2.5	Colocation roadside
HS2-000020BPK	Lamp post in crescent off Swakeleys Road	Roadside	506542	186037	2.2	Predicted significant effect
HS2-000020BPL	Warren Road sign post on corner of Swakeleys Road and Warren Road	Roadside	506240	185660	2.3	Predicted significant effect
HS2-000020BPN	Lamp post on B467	Roadside	506767	186224	2.3	Predicted significant effect
HS2-000020BQH	Lamp post on High Road Ickenham	Roadside	508451	186879	2.4	Predicted significant effect
HS2-000020BQN	Lamp post on Park Road	Roadside	506176	185444	2.4	Predicted significant effect
HS2-000020BQP	Sign post on Long Lane	Roadside	507614	184663	2.1	Predicted significant effect

Table N. Diffusion tube results for NO₂ from the HS2 study in 2024, bias adjusted. Units: $\mu\text{g.m}^{-3}$.

Site ID	Site location	Location type	2018	2019	2020	2021	2022	2023	2024 raw	2024 adjusted
HS2-000020BNT	Lamp post on Pembroke Road	Background	25.3	23.4	20.3	23.4	20.8	13.5	18	14
HS2-000020BNU	Cowley Road sign post at junction with Hillingdon Road	Roadside	45.8	41.1	33.7	<u>38.7</u>	<u>37.4</u>	27.8	35	26
HS2-000020BNV	High Street sign post at junction with Pembroke Road	Roadside	43	<u>37.7</u>	30.5	33.3	32.4	23.5	30	23
HS2-000020BNW	Signpost on A4020 Uxbridge Road at junction with Long Lane	Roadside	46.4	40.9	31.9	<u>37.8</u>	<u>35.7</u>	26.1	30	23
HS2-000020BPK	Lamp post in crescent off Swakeleys Road	Roadside	35.8	34.9	27.8	31.5	28.2	21.3	27	20
HS2-000020BPL	Warren Road sign post on corner of Swakeleys Road and Warren Road	Roadside	41.3	<u>37.6</u>	31.4	32.4	30.7	21.5	27	20
HS2-000020BPN	Lamp post on B467	Roadside	31	31	25	29.7	29.1	21.7	30	23
HS2-000020BQH	Lamp post on High Road Ickenham	Roadside	42	<u>38</u>	30	35.1	<u>36.5</u>	27.8	35	26
HS2-000020BQN	Lamp post on Park Road	Roadside	50	45	33	<u>37.8</u>	34.9	24.3	31	23
HS2-000020BQP	Sign post on Long Lane	Roadside	42	41	31	33.3	34.0	22.8	28	21
HS2-000020BP8	Triplicate site at South Ruislip roadside automatic monitoring station	Roadside	<u>37.8</u>	<u>36.4</u>	27.5	30.6	28.2	21.8	24	18

Note: Values exceeding the NO₂ Annual Mean Objective $40\mu\text{g.m}^{-3}$ are in **bold** and values above $36\mu\text{g.m}^{-3}$ are underlined.

Analysis of results indicates that after bias adjustment using national 0.75 value, no locations register annual mean values equal or above $36\mu\text{g.m}^{-3}$ with site HS2-000020BQH (a location predicted to be impacted by the HS2 scheme) as well as HS2-000020BNU registering the highest concentrations. It is noted that an extremely low national bias adjustment factor has been used. HS2 has reported to LBH that they will be processing the raw data using their local bias adjustment factor (to be released in the following months) and therefore results could be significantly higher than those reported in Table N above.

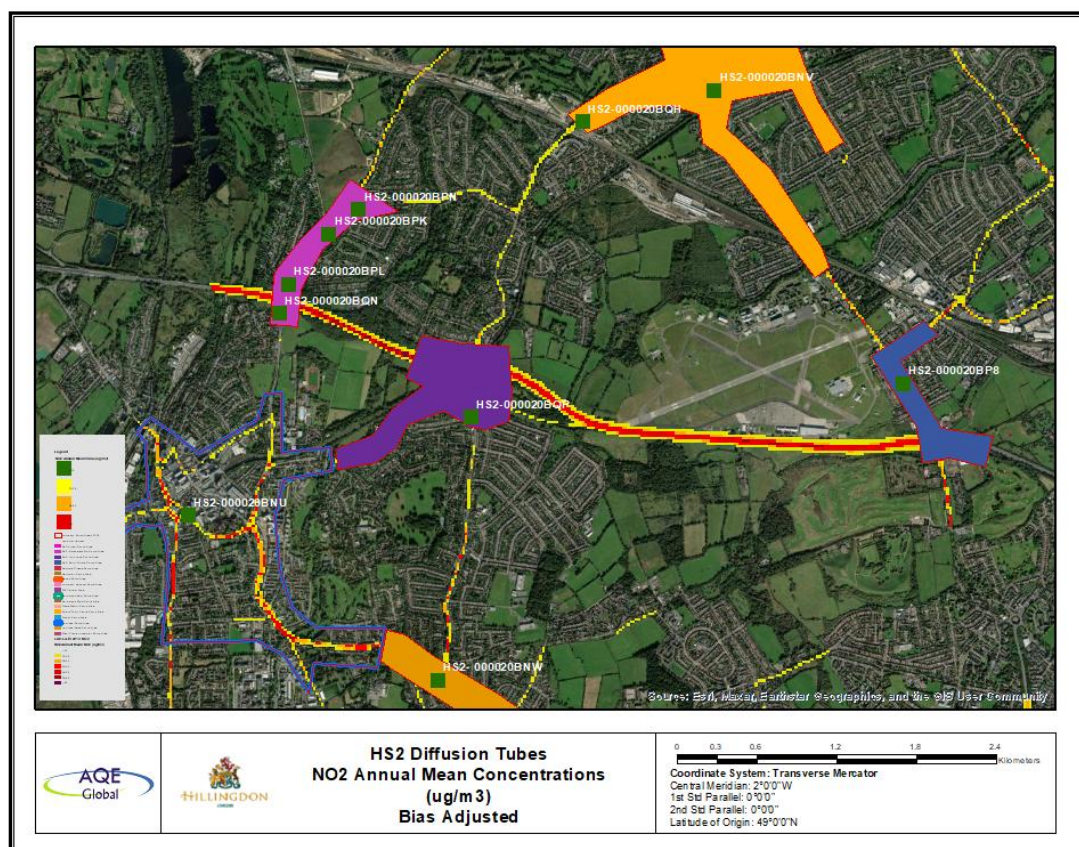


Figure 17. Annual mean NO₂ concentrations measured at HS2 diffusion tube locations, 2024, showing data for each site in the Borough. Units: $\mu\text{g} \cdot \text{m}^{-3}$.

3 Actions to Improve Air Quality

3.1 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 the AQMA declared by London Borough of Hillingdon can be found in Table O. The table presents a description of the designated AQMA that is currently designated within London Borough of Hillingdon. Section 1.3 above provided a map of the AQMA (Figure 1) and the air quality monitoring locations in relation to the AQMA are presented in Figures 2, 3 and 4 in section 2 of this report. The air quality objectives pertinent to the current AQMA designation is the NO₂ annual mean.

Table O. Declared Air Quality Management Area for LBH

AQMA Name	London Borough of Hillingdon AQMA
Date of Declaration	May 2003
Pollutants and Air Quality Objectives	NO ₂ Annual Mean Value
One Line Description	An area encompassing the area to the south of the railway, covering the southern half of the Borough – please see Figure 1
Is air quality in the AQMA influenced by roads controlled by Highways England?	YES
Level of Exceedance: Declaration	36µgm ⁻³
Level of Exceedance: Current Year	No exceedances
Number of Years Compliant with Air Quality Objective	2 years
Name and Date of AQAP Publication	London Borough of Hillingdon LAP 2019-2024, May 2019
Web Link to AQAP	Visit the AQAP for LBH AQMA at https://modgov.hillingdon.gov.uk/documents/s45069/Air%20Quality%20Action%20Plan%202019-2024.pdf

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

☒ London Borough of Hillingdon confirm that all current AQAPs have been submitted to GLA.

3.2 ASR Highlights

3.2.1 Idling Vehicles

The Council continues to take an active participation in the issue of idling vehicles. In the calendar year 2024 there were 3,579 fines for idling vehicles were issued across the Borough. This is an increase from 1,244 reported last year.

There are currently ongoing Joint operations planned with TFL and Police for period 2024-2025 to tackle Anti-Social Behaviour (including idling) caused by private hire vehicle (PHV) drivers.

3.2.2 Fleet replacement

The Council has committed in its Climate Change Action Plan to replace all diesel powered vehicles weighing 3.5t or less before 2030 and that action is being successfully implemented. Pool cars and fully electric vans are now part of the fleet. Every fleet replacement tender must provide costs for diesel-powered and electric to support procurement processes. For 2024/25 there were three electric vehicles and five 5 hybrid pool cars in the Council's fleet, as well as 5 fully electric small size vans. It is noted that the power supply to Harlington Road Depot will require significant investment to facilitate uptake of a larger number of electric vehicles and is still a implementation constraint which the Borough is analysing how best to be solved.

This and other measures demonstrate strong linkage across policy areas, for fleet replacement between air quality and climate, but for other measures also with public health.

3.2.3 Electric vehicle charging

The Borough has recruited an EVCP (Electric Vehicle Charging Point) Project Engineer on a 3-year contract to oversee funding obtained for the upgrade and development of the charging network in Hillingdon.

There were forty-six new electric vehicle chargers going live in 2024 establishing Hillingdon's commitment to tackling climate change and creating a green and sustainable Borough. The new chargers are part of the council's new partnership with providers, APCOA, as part of its pledge to deliver a full, accessible electric vehicle (EV) charging network across the Borough by 2030.

The total of 46 new chargers includes 24 in completely new locations as well as 22 which have replaced existing EV charging points which had reached end of life.

The network of 7-kilowatt chargers will soon be complemented by a further 14 rapid charging points (22-kilowatt), to make it even more convenient for residents to charge and get back on the road.

Funding has also been sourced to provide an additional 36 charging points in a second phase of delivery, to be installed once the electrical supplies have been confirmed. Feasibility and planning work is already underway to determine and finalise these locations.

The rollout is great news for Hillingdon residents who own, or are thinking of getting an EV, and even better for HillingdonFirstcardholders who will get a discounted rate when using the chargers, of 60p p/kwh, rather than 65p p/kwh.

The new charging points are located at:

Botwell Green Car Park, Hayes (x4)
Brandville Road Car Park, West Drayton (x4)
Fairfield Road Car Park, Yiewsley (x4)
Green Lane Car Park, Northwood (x4)
Highgrove Pool Car Park, Ruislip (x2)
Hillingdon Sports and Leisure Complex Car Park, Uxbridge (x2)
Pump Lane Car Park, Hayes (x4)
Ruislip Lido Willow Lawn Car Park, Ruislip, (x8)
Civic Centre Car Park, Uxbridge (x6)
Pembroke Gardens Car Park, Ruislip (x5)
St Martin's Approach Car Park, Rusilip x3)

Rapid charging points:

Green Lane Car Park, Northwood (x4)
Ruislip Lido Willow Lawn Car Park, Ruislip (x4)
Devonshire Lodge, Eastcote (x6)

The new network of EV charging points uses the very latest technology to make them simple and easy to use and helps the Borough future-proof their facilities to meet growing demand as more residents make the switch.

The new chargers mark the council's commitment to its Electric Vehicle Infrastructure Strategy, which was announced in August 2023 and forms part of the council's strategic objectives, delivered as part of its Climate Action Plan.

3.2.4 Schools and play areas

A number of activities continue to be carried out with schools. Projects have focused particularly on active travel to school and links to the TfL STARS programme with an increased number of schools gaining higher levels of accreditation under the scheme, with anticipated status in 2024/25 being 28 Gold, 5 Silver and 4 Bronze awards. Cycle and scooter training in the Borough is continuing.

All schools continue to be alerted to No Idling webinars and other air quality related resources.

All schools have been alerted to the London Schools Pollution helpdesk. The Travel team have encouraged the use of the site in linking the activities to the individual school travel plans to help towards STARS accreditation.

All schools now have Walking Maps at school entrances and new footpaths are put in place where possible to encourage active travel and interest in air quality matters continues to increase with more schools getting engaged. All schools are encouraged to promote the school walking maps termly to parents.

The Active Travel Movement project for 23/24 which consisted of various different projects to highlight road safety and active travel within in schools has now been completed. All schools that took part have received an Active Travel Movement poster to display in their school which is a compilation of photos taken within the challenge of sustainably travelling in their school community.

Bikeability took place in 46 schools throughout 24/25 and trained 1103 pupils.

15,189 Pupils in primary education received Pedestrian Training in 24/25.

Our Dragons Den events continue to fund primary and secondary schools to set up numerous projects and events within their school communities to enhance safety and sustainable travel choices. In 24/25, Dragons Den funded another 16-school road safety and sustainable travel projects.

Schools continue to take part in practical scooter training with plans to offer to more schools in the next academic year. Another 10 schools received scooter training in 24/25.

40 schools received Theatre in Education performances based around road safety and sustainable travel issues in 24/25.

An increased number of schools continue to request air quality monitoring and improvements, and the council is discussing internally the specification of future possible projects.

3.2.5 Emissions from buildings

Significant funding has been obtained via the Public Sector Decarbonisation Scheme to provide carbon-free (and hence air pollution free) energy systems, covering the Civic Centre, Highgrove Pool, Hillingdon and Uxbridge Lido and Winston Churchill Hall.

The Borough continues to run the Boiler Repair Scheme setup to support families and individuals with repairs to boilers and other heating systems.

The Borough has approved a capital release request of £1,811k from the Gas Boilers workstream within the Housing Revenue Account Works to Stock Programme 2022/23 for the planned replacement of 735 domestic boilers. Due to the need to replace older boilers in the

Council's housing stock, a planned replacement programme over a five-year period to replace them with new energy efficient boilers is currently under way. The Property, Highways & Transport department continues to support the Council's energy efficiency drive and also more cost-efficient heating systems for residents.

3.2.6 Provision of infrastructure to promote walking and cycling

A Cycling Strategy⁴ has been developed and published in 2024. A review of existing cycle infrastructure and missing links has been undertaken to form a programme of upgrade works going forward.

The council's new Cycling Strategy presents bold plans for making cycling safer and more accessible to all, through measures including new and upgraded cycle routes and by working to future-proof active travel in the Borough.

The strategy was formally launched at an event in the Closes Park, West Drayton, on Friday 27 September 2024, where local school pupils enjoyed some free cycling training and residents were invited to bring their bikes along for a free health check from Dr Bike.

Central to the council's plans is the creation of eight new dedicated cycle routes, some of which use the Borough's green spaces and towpaths so riders can avoid busy roads, which can often be daunting to new or inexperienced cyclists.

The strategy was updated to include residents' feedback following a public consultation early 2024. The consultation showed most respondents supported the draft document, with more than 70 per cent saying that they would consider cycling more and just under 90 per cent supporting the overall aims of the strategy.

Over the next 10 years the Strategy target is to see more people, of all backgrounds and abilities, confidently and safely using the Borough's cycle network and highways.

The strategy's approach will be to try and bring existing and new cyclists along for the journey by creating facilities that make them choose to ride instead of driving, but with the realism we can't have the same expectation of all motorists.

In recent years, the council has already made good ground on cycling provision, including the delivery of more and better cycle parking, improvements to towpaths to make them suitable for cycles and use in all weathers and the continuation of the council's highly popular free cycle training for children and adults. Specific improvements for cycling and walking have been made on the Grand Union Canal towpath and North Hyde Road in Hayes. Further plans are in development to promote cycling, notably through Brunel University and along the Celandine Route, whilst discussions with National Highways for improving active travel around High Street Harlington are underway.

⁴ <https://www.hillingdon.gov.uk/cycling>

3.2.7 Local Improvements

A range of local improvements have been introduced in 2024 including:

- The continued use of green infrastructure
- North Hyde Lane phase 2, traffic calming and pedestrian accessibility project to promote active travel.

Currently the Borough is delineating several projects to be implemented within selected zones within Focus Areas to improve air quality which will support the delivery of the new Air Quality Action Plan 2025-2030, once approved.

The Town Centre team use the Healthy Streets assessment tool as part of the scoping for future projects. The inclusion of screen planting from roadside sources and increasing green infrastructure such as street trees is included wherever it is viable.

3.3 Challenges

LBH is committed to continue improving air quality in its area of jurisdiction to safeguard its citizen's health. The WHO Air Quality Guidelines will play a central role in future years to continue to improve air quality and protect the most vulnerable groups of the population from poor air quality.

Defra's PM_{2.5} target, together with the one set by the Mayor of London (both set the limit at 10 ug.m⁻³, though London has a deadline of 2030 compared to the national deadline of 2040) will continue to drive actions at local level to reduce emissions of this pollutant. New challenges include how to further refine the planning system to significantly reduce emissions of this pollutant as well as ultrafine particulate matter (PM₁).

However, the main challenge (and opportunity!) is the use of WHO Air Quality guidelines to assess the impact of development on air quality and citizens' health. In going forward LBH will use the planning system to align these evidence-based air quality levels with a in-house impact significance criteria to assess the merit of planning applications in reducing air pollution / improving air quality with the view to protect LBH residents from poor air quality.

New sources need to be taken into account, a good example being data centres, several of which are operating or have recently been proposed for the Borough. It is noted that data centres in some parts of the country have teamed up with swimming pools to harness their waste heat and cut energy bills and emissions for the pool operators⁵. Whilst there is little current CHP use in the Borough, these sources are kept under review. Similarly, biomass burning both in industrial and domestic premises is also kept under review.

One specific challenge identified concerns the need for upgrading of power supplies to the Harlington Road Depot to enable a greater expansion of the council's electric vehicle fleet. This will require significant investment.

⁵ <https://sustainabilitymag.com/articles/swimming-pool-heated-by-data-centre-to-reduce-energy-bills>

3.4 Opportunities

The updated version of the LBH AQAP scheduled to run from Summer of 2025 to end of 2030, has provided an opportunity to consider additional measures targeted at the areas of highest concentration in the Borough. It will focus not only on measures aiming at reducing significantly the emissions of key pollutants (NO₂, PM₁₀ and PM_{2.5}) into the atmosphere but also on measures aimed at changing awareness and behaviour involving schoolchildren and health professionals.

Of central relevance to the new plan to be adopted is the focus on WHO Air Quality Guidelines as a reference to assess the impact of development on citizens' health. These WHO guideline values are underpinned by overwhelming evidence of the much lower levels of pollution determined to impact on health in relation to previously established standards.

Hillingdon's Climate Action Plan represents an opportunity to reduce emissions from the Council's activities, both in relation to the Council's own operations and actions aimed at businesses and communities. There are strong links between air pollutant and greenhouse gas (GHG) emissions as both share, to a significant extent, similar sources through the combustion of fossil fuels. This represents an opportunity to lock in benefits such as the move to cleaner vehicle technology and transport modes. To maximise these benefits the Council will need to consider the effectiveness of air pollution measures on GHG control and vice-versa.

3.5 Air Quality Action Plan Progress

Table P provides a brief summary of London Borough of Hillingdon progress against the Air Quality Action Plan, showing progress made this year.

Many actions are marked as 'ongoing', for example, work on the pollutant monitoring network. These measures are fully in place, but by their nature are never 'complete'. Pollution monitoring for example will continue for as long as there is political need or social demand for it.

No further School Streets have been delivered, the implementation of these are, currently, still paused.

Table P. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
1a	Monitoring and other core statutory duties	Maintaining and where possible expanding monitoring network	Ongoing. Current automatic network is well maintained, with the new contract for the next 4 years having been awarded to Ricardo who will continue to provide robust quality of data and good data capture. The Council has supported the Northwood Air Quality group in the application for a community Breathe London sensor which has been deployed in June 2024 at Green Lane in Northwood. The Council continues to run a local bias adjustment exercise by triplicate diffusion tube sampling collocated at HIL (London Hillingdon, HILL01) and HI1 (South Ruislip, HILL03). As part of the 2025-2030 LAP update, the Council is considering further extending its low-cost sensor network to include coverage of sensitive areas within the Borough.
1b	Monitoring and other core statutory duties	Fulfilling other statutory duties including regulation of industrial sources	Ongoing, the regulation of industrial processes is undertaken by a contractor, any requirement for enforcement action is referred back to the Council. Regulatory duties are fully up to date.
2	Emissions from buildings and development	Ensuring emissions from construction are minimised	Ongoing via the planning system. 100% of all planning applications in 2024/2025 with construction/demolition activities included the construction dust condition.
3	Emissions from buildings and development	Ensuring enforcement of Non-Road Mobile Machinery (NRMM) air quality policies (addresses emissions from e.g. building sites regarding cranes, generators, etc.)	Ongoing, via the planning system, 100% of all planning applications in 2024/2025 included the NRMM condition; Audits continue to be undertaken by Cleaner Construction for London on behalf of the Council (MAQF project). The London Borough of Hillingdon NRMM Pan London Calendar Year Report January 2024 – December 2024 indicated the following: There were 21 sites audited in 2024/25, of which 3 were self-compliant, 10 were compliant, 1 was complete and 5 had no NRMM present. There were 2 non-compliant sites either due to registration

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
			problems or a lack of evidence of compliance. The total number of sites registered on the GLA NRMM website was 21.
4	Emissions from buildings and development	Reducing emissions from CHP	Ongoing and enforced by planning condition where applicable. There is very little CHP in Hillingdon with only one application in the period 2024/2025 including CHP appliances as part of the proposed development.
5	Emissions from buildings and development	Enforce Air Quality Neutral (AQN) policy with more stringent application of mitigation required in the Hillingdon Focus Areas	Ongoing action via the planning system. AQN assessments requested on 100% of all planning applications in 2024/2025; Pollution damage cost calculations have been undertaken where appropriate to determine the appropriate level of mitigation required and s106 sought and secured where relevant, above and beyond the Mayor's AQN guidance to make sure total emissions are mitigated in development that affects sensitive areas. S106 ring fenced in the legal documentation as "towards initiatives to improve air quality in the affected areas and the implementation of the Local Action Plan". Conditions are applied in order to secure the measures for reduction in emissions, pollution damage costs continue to be used as the basis for s106 contributions where mitigation offered is not sufficient or appropriate. The Council will continue to seek a zero emissions approach towards developments when located in sensitive areas such as AQ Focus Areas, near vulnerable receptors such as schools, care homes, hospitals etc. using Defra's Damage Cost Toolkit to ascertain the level of mitigation required, including all sources of emissions (no exclusions of emission sources allowed within Focus Areas).
6	Emissions from buildings and development	Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new developments.	Ongoing via the planning regime, specific green infrastructure barriers and green buffers are sought in areas where residential and amenity spaces are in proximity to busy roads, this is extended to footpaths and cycle pathways in association with the development in relevant cases.

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
			Specific planning condition is being used seeking a green infrastructure scheme designed to protect public exposure. Consideration is given to a 5% reduction in the associated pollution damage cost where bespoke pollution green infrastructure schemes are presented. This has been implemented throughout in the 2024/2025 reporting period.
7	Emissions from buildings and development	Raise awareness that Hillingdon is a declared Smoke Control Zone along with Council enforcement powers for non-compliance through an article in Hillingdon People magazine and distribution of point of sale posters/leaflets to fuel suppliers	On-going - Hillingdon has been a member of the GLA Wood Burning working group and will continue consider the use of comms material to alert businesses and also the training of enforcement officers to raise awareness on the subject. Bonfires are banned on all council allotment sites. Complaints arising from smoke, bonfires and dust emissions continue to be monitored and acted on. Bonfire ban on allotments and other enforcement measures have included in LBH Public Space Protection Order. The T's and C's⁶ have been updated by Green Spaces and they include at para. 4.2, a section on the bonfire ban. The 2023 T's and C's have been communicated to all allotment leaseholders in LBH to ensure that everyone is aware of the ban. The following Parks and Open Spaces prohibitions were enacted in July 2023 when the Public Spaces Protection Order⁷ was introduced: "A person commits an offence if they light or are in control of or responsible for activity involving a fire, barbecue or fireworks without the express consent of the Council -A person commits an offence if they smoke any substance including cigarettes, cigars, electronic cigarettes (vapes), herbal cigarettes or similar

⁶ Allotments - Allotment Garden Terms and Conditions 2023 (1).pdf - <https://www.hillingdon.gov.uk/media/7290/Allotment-garden-w... .pdf>

⁷ Public Spaces Protection Order Appendix 1 - PSPO Parks and Public Places final 2023 UPDATED.docx - <https://www.hillingdon.gov.uk/media/11567/PSPO-Parks-and-P... .PDF>

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
			within the boundary of a children's play area -A person commits an offence if they do not extinguish a fire and/or barbecue or firework (if appropriate and safe to do so), removing all waste and/or associated items for safe disposal." Fixed Penalty Notices up to £100 can be issued for breaches of the prohibition.
8	Emissions from buildings and development	Promoting and delivering energy efficiency and energy supply retrofitting projects in workplaces and homes through EFL retrofit programmes such as RE:NEW and RE:FIT and through Borough carbon offset funds.	On-going - The implementation of the Climate Strategy will continue to ensure reductions in emissions from these sources are prioritised and achieved. Under the Public Sector Decarbonisation Scheme (PSDS) 3b, Hillingdon Council secured a central government grant funding to support the decarbonisation of four sites of which three are grade 2 listed (Civic Centre, Highgrove Pool, Hillingdon and Uxbridge Lido and leisure centre and Winston Churchill Hall) with the highest energy use across LBH Corporate assets. The total grant awarded for these projects is circa £13.5M to be Co-funded by LBH £6M. The Civic Centre will be further supported with £2.6M S106 funding requested to date. We are also requested S106 funding of Circa £2,.4m to support decarbonation works on Highgrove Pool, Hillingdon & Uxbridge lido and Leisure and Winston Churchill Theatre. Works which are being carried out for these sites are: de-commissioning of fossil fuel boilers replacing with Air source Heat pumps, New lower voltage lighting systems, insulation to roofs and walls, window replacements and in-line PV panels on roofs. All these projects were complete by the end of 2024. Following success in 2023/24 when a total of 2,006 domestic boilers were replaced, 2 domestic properties were converted from gas to Air Source Heat Pumps and 5 sites had their commercial heating plant upgraded, work to replace domestic boilers and upgrade commercial plant continued in 2024-25.

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
9	Emissions from buildings and development	Master planning and redevelopment areas aligned with Air Quality Positive and Healthy Streets approaches	On-going - The Council has applied an air quality positive approach to all relevant developments within sensitive locations such as Air Quality Focus Areas, and close to vulnerable receptors such as schools, care homes, hospitals etc. This is above and beyond GLA's AQ positive guidance and seeks to safeguard sensitive locations and make sure total development emissions are mitigated to the maximum possible extent which is not secured by current guidance.
10	Public health and awareness raising	Public Health department taking shared responsibility for Borough air quality issues and implementation of Air Quality Action Plans	On-going - The GLA Air Quality for Public Health document has been disseminated to the Public Health Director and to the Corporate Director.
11a	Public health and awareness raising	Development of promotional tool for use at business engagement opportunities to raise awareness of initiatives to increase active travel and improve air quality	As previous years - Whereas there was no funding available to develop the tool originally envisaged, the council has been using every opportunity to raise awareness of possible ways to increase active travel and improve air quality.
11b	Public health and awareness raising	If MAQF bid unsuccessful, seek funding for development of Hillingdon-specific promotional tool and business engagement action plan	Please see above. Whereas there was no funding available to develop the planned tool and business engagement plan, the Council has been delivering a series of events at community hubs utilising supermarkets and community halls to engage with residents and local businesses. Information on air quality such as no idling and Airtext has been included.
12	Public health and awareness raising	Supporting a direct alerts service such as AirText and promotion and dissemination of high pollution alert services	The Council continues to support and raise awareness of the Airtext services by providing relevant information including the dissemination of a video and air pollution and respiratory health booklet prepared by air quality and public health officers In North West London. The resources are being sent to all GPs in the North West Area.
13	Public health and awareness raising	Encourage schools to join the TfL STARS accredited travel planning programme	All schools continue to be alerted to No Idling webinars and other resources All schools have been alerted to the London Schools Pollution helpdesk. The Travel team have encouraged the use of the site in linking the activities to the individual school travel plans to help towards STARS accreditation.

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
			Anticipated TfL STaRS Accreditation status for 24/25 is: between 4-6 engaged 4 Bronze 5 Silver 28 Gold Another 17 schools are actively engaged with the STaRS team but not submitting for accreditation this year.
14	Public health and awareness raising	Air quality in and around schools - the introduction of a prioritised programme for schools in Focus Areas and/or close to busy roads for exposure reduction measures, active travel promotion and raising awareness education programmes	All schools continue to be alerted to No Idling webinars and other resources All schools have been alerted to the London Schools Pollution helpdesk. The Travel team have encouraged the use of the site in linking the activities to the individual school travel plans to help towards STARS accreditation. All schools now have Walking Maps at school entrances and new footpaths are put in place where possible to encourage active travel and interest in air quality matters continues to increase with more schools getting engaged. Schools are encouraged to promote the school walking maps termly to parents. 13 schools signed up to be a part of the Active Travel Movement project for 24/25 which consists of various different projects to highlight road safety and active travel within in schools. All schools that took part have received an Active Travel Movement poster to display in their school which is a compilation of photos taken within the challenge of sustainably travelling in their school community. Bikeability took place in 46 schools throughout 24/25 and trained 1103 pupils. 15,189 Pupils in primary education received Pedestrian Training in 24/25. In 24/25, Dragons' Den funded another 16 school road safety and sustainable travel projects.

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
			Another 10 schools received scooter training in 24/25. 40 schools received Theatre in Education performances based around road safety and sustainable travel issues in 24/25.
15	Delivery servicing and freight	Council procurement policies to promote use of cleaner vehicle technologies via contract tendering process	Ongoing - The Climate Change Action Plan now has an objective to replace all diesel-powered vehicles 3.5t or less before 2030 and procurement has been adjusted to meet its objectives. All fleet vehicle replacement tenders seek two tenders one for diesel - fuelled and one for electric to foster awareness and competitive in the clean technologies market as well as allow the Council to make clear choices in terms of clean technologies. See also measure 17.
16	Delivery servicing and freight	Inclusion of opportunities in new developments and current town centre and transport improvement workstreams to reduce emissions from deliveries to local businesses and residents	See 11b Planning conditions stipulate the requirement for Delivery and Servicing plans to be a minimum of FORS silver award. This includes the requirement to report on fuel usage and emissions of CO₂, NO_x and PM emissions plus a policy to actively reduce fuel consumption and minimise their environmental impact. The requirement for delivery and servicing plans to aim for achievement of gold award within an agreed timescale is being considered for developments in Air Quality Focus Areas.
17	Borough fleet	Reducing emissions from council fleets	During the course of the current action plan the Council has been active in replacing vehicles with electric or lower emission options. As of 2024/25 the Borough had 3 x Fully electric pool cars and 5 x Hybrid pool cars, as well as 5 fully electric small size vans. The Council has continued its procurement policy to improve the quality of its vehicle fleet, moving to electric and other lower emission vehicles. All purchases continue to seek two tenders – one for diesel and one for electric powered vehicles. The power supply to Harlington Road depot is restricting the purchase of any

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
			further electric vehicles: a large investment is needed to upgrade.
18	Localised solutions	Green Infrastructure	On-going - In 2021 the Council has developed a Tree Strategy for the Borough including actions to meet the Climate Action Plan objectives which includes to increase the tree canopy across the Borough and in particular increase tree coverage in areas of poor air quality.
19	Localised solutions	Implementation of actions to improve air quality in the Hillingdon Air Quality Focus Areas to identify short, medium, long-term solutions for measures to implement to improve air quality	In 2024/2025, design of improvements have begun for the works along North Hyde Road moving from Cranford Park Road westwards.
20	Cleaner transport	Ensuring that Transport and Air Quality policies and projects are integrated via the implementation of the Healthy Streets in LIP projects	In 2024/2025, an upgrade of the local shopping parade at Mulberry Parade, West Drayton was completed. The scheme included parking improvements to encourage active travel to the local parade. The scheme also included tree planting and rain gardens to improve the environment.
21	Cleaner transport	Discouraging unnecessary idling by taxis and other vehicles	Fixed Penalty notices continue to be issued by the Council to address idling. In 2024, 3579 Fixed Penalty Notices were issued. Ongoing Joint operations are planned with TFL and Police for 2025 to tackle ASB (including idling) caused by PHV drivers.
22	Cleaner transport	Regular temporary car free days	No temporary car free days were held. The Council considers that resource is more efficiently used on promoting air quality in the Borough in other ways, for example through participation in local events.
23	Cleaner transport	Using parking policy to reduce pollution emissions	No further action has been taken on this measure.
24a	Cleaner transport	Installation of Ultra-low Emissions Vehicle (ULEV) infrastructure (electric vehicle charging points, rapid electric charging points and hydrogen refuelling stations)	For 2024/2025, LBH has been using a dedicated email for electric vehicle charging enquires (evcp@hillington.gov.uk). The Highways team have now appointed an EVCP Project Engineer on a 36-month fixed term contract to

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
			oversee the implementation of the funds which have been awarded. Regarding the Council's own fleet, it is noted that the power supply to Harlington Road depot is restricting the purchase of any further electric vehicles: a large investment is needed to upgrade. [See also Measure 17] In 2024 a total of 46 new chargers were deployed at Hillingdon which included 24 in completely new locations as well as 22 which have replaced existing EV charging points which had reached end of life.
25a	Cleaner transport	Provision of infrastructure to support walking and cycling	The Hillingdon Cycle Strategy was launched in September 2024 and is now an overarching policy for cycling over the next 10 years. Further work has been undertaken to upgrade sections of the Grand Union Canal towpath and to improve access onto the canal, with level access being provided at Benbow Way and a cycle wheeling channel and dropped kerbs at Packet Boat Lane. Further work was undertaken on North Hyde Road, Hayes where footpaths have been widened and street trees to be provided.
25b	Cleaner transport	Air Quality Focus Area studies, Healthy Neighbourhoods schemes, Town Centre schemes will all include the identification of opportunities for increased walking and cycling	Work continues on designs to improve cycle infrastructure across the Borough most notably through Brunel University and along the Celandine Route. Discussions continue to be undertaken with National Highways over cycling, walking and environment improvements along High Street, Harlington.
26	Hillingdon-specific action: Collaborative working	Continue to work in partnership with TfL to prioritise actions required to improve local air quality in Hillingdon	The Council will continue to work closely with TfL to make sure clean public transport fleets are deployed across sensitive routes of the Borough. This is being achieved primarily through the planning system. In 2024/2025, the TfL LIP budget was used to help development and bring forward active travel schemes.

Measure	LLAQM Action Matrix Theme	Action	March 2024/March 2025 Progress
			Successful bids were made to TfL for LIP funding and also funds from a separate Cycle Network Development fund.
27	Hillingdon-specific action: Collaborative working	Continue to work in partnership with Heathrow Airport Limited (HAL), seeking clear strategy and framework to: Reduce airport related traffic; Mitigate adverse air quality impacts associated with on-airport operations	Ongoing involvement of the Council with the Heathrow AQ Working Group. TORs established and working plan in progress. There is ongoing discussions with HAL in regard to all aspects of surface transport.
28	Hillingdon-specific action: Collaborative working	Continue to work in partnership with Highways England to ensure effective mitigation of arising air quality impacts on the local communities	The Council will continue to work closely with Highways England to ensure effective and appropriate level of mitigation is secured to suitably address arising air quality impacts of motorway schemes on the local communities.
29	Hillingdon-specific action: Collaborative working	Continue to work in partnership with HS2 Ltd to ensure effective mitigation of any arising air quality impacts on the local communities relating to HS2 construction activities	The Council continues to work closely with HS2 Ltd to ensure effective and appropriate level of mitigation is deployed relating to HS2 construction activities. There is a Council working group attending HS2 meetings regularly.
30	Hillingdon-specific action: Collaborative working	Continue to work in partnership with neighbouring authorities to ensure collaboration on air quality where it will benefit the local communities	The West London cluster group continues to meet quarterly, and the Council is an active member of the group. The group continues to work closely with the GLA and the Environment Agency on how best regulate and manage Data Caners which are a rising concern in terms of PM_{2.5} (and NO_x) emissions during the testing and maintenance regimes over a 30 year period, specially where sensitive groups of the population are present. LBH has been sharing their practice with the Greater London Authorities in terms of capping emissions and securing those are not exceeded, as well as the conditions required.

4 Planning Update and Other New Sources of Emissions

4.1 Planning update

4.1.1 Clean by design, Air Quality Neutral, Air Quality Positive and Air Quality Focus Areas

The Council continues with its robust appraisal of planning apps and the continued push for clean by design and zero emission developments specially within LBH Air Quality Focus Areas (AQFAs) catchment regions.

London Plan's Policy SI1 Improving Air Quality continues to give support to the Council's approach to the assessment of planning applications. Whilst the London Plan and Council's Local Plan policies aim for development to be at least air quality neutral it is recognised (paragraph 9.1.9 of the London Plan) that in some cases this is not sufficient, and that further action is needed to mitigate emissions.

This is especially important in the AQFAs where the Council seeks 'better than Air Quality Neutral' and asks for an Air Quality positive approach aiming at total emission mitigation, regardless of the size of the application and the extant use of the site.

London Borough of Hillingdon in agreement with GLA have defined its own AQFAs as reported in its Air Quality Local Action Plan acknowledging that in such sensitive areas there is potential public exposure to pollution levels above the limits set to safeguard human health and where more action is required. The Council applies a pollution damage cost to emissions arising from the potential development and seeks sufficient mitigation from the developer to reduce such emissions being brought into the Focus Area. Where the mitigation measures offered are not sufficient the remaining pollution damage costs form the basis of an s106 negotiation to improve air quality in line with the Council's AQAP Action Plan measure 5.

4.1.2 Damage Cost Calculations

It is extremely important to note that (and in alignment with the London Plan and WHO updated guidelines) that whereas not explicitly stated in the Local Action Plan, the damage cost calculations are to include both NO_x and PM_{2.5} emissions which are the pollutants of most concern in terms of public health.

It is also important to mention that an Air Quality Action Plan is a dynamic document being updated as and when necessary. For avoidance of doubt, the Borough is taking the required steps to amend the Plan to explicitly mention PM_{2.5} emissions in measure 5. Notwithstanding this, the London Plan is quite clear in regard to the management of this air pollutant and suitable mitigation is required if the proposed development emits this pollutant; this is applicable to all sources.

4.1.3 London Atmospheric Emissions Inventory 2019 (published in 2021)

In 2021 GLA has released an updated version of the LAEI, including annual mean concentrations for NO₂ and PM_{2.5}. LBH has processed all the pollution data at postcode level (with centroid of the building being moved to the façade for relevant exposure assessment) to support the review and determination of planning applications for air quality. Please note the Borough uses 36ug/m³ and above to determine areas of poor air quality to account for a root mean square error (RMSE) of 10% in relation to the annual mean limit value for NO₂ (the same principle applies to all other relevant pollutants considered, depending on the sources under scrutiny).

4.2 New or significantly changed industrial or other sources

Of particular relevance were the various planning applications that continue to be received for data centres of considerable size (both within the Borough and within neighbouring Boroughs for which LBH was consulted on); with further two having been approved.

It is important to mention that LBH considers PM_{2.5} emissions, in addition to NO_x emissions, need to be totally mitigated, supporting the Mayor's vision of achieving WHO targets on this pollutant. The data centre applications to date have proposed both Hydrogenated Vegetable Oil (HVO) and diesel as fuels to run the associated emergency backup generators, both emitting significant emissions of PM_{2.5} and NO_x into the atmosphere on an annual basis. Given the sheer number of backup generators required in a couple of submitted planning applications, the total NO_x and PM_{2.5} emissions per area are significant.

To address this issue the Borough have created a system to secure a plan of emission reduction and management over the 20 to 30 years lifetime of the proposals. Contrary to vehicle emissions that are expected to reduce over time, backup generators once approved will emit on an annual basis (even if just for 10 or 20 minutes of testing monthly) significant contributions to both local ambient and background levels of these pollutants in the atmosphere, without declining over time (the contrary is usually true due to aging of the gen sets and or malfunctioning in the SRC / retrofitting devices applied). In many instances, given the short time of monthly testing and or backup activities, the SCR does not operate due to the required temperature to operate only being reached after 20 minutes.

Therefore, such new sources of pollution in the Borough are posing a few challenges to the planning system and the system devised to secure a sustainable management of emissions over time will continue to be refined and improved by LBH. For new submissions applicants are advised to contact the Council in the first instance so that suitable information can be prepared and discussed at pre-app meetings.

A significant (temporary) source of pollution in the Borough was the North Hyde Gardens fire on the 20th March 2025. On the evening of 20 March 2025, a fire began at an electrical substation in Hayes, Hillingdon, London, leading to the closure of Heathrow Airport.

At 23:23 GMT, emergency services were called to a fire at North Hyde electrical substation in Nestles Avenue, Hayes, Hillingdon. Ten fire engines and 70 firefighters were dispatched as a 650-foot cordon was established. London Fire Brigade reported that one transformer

within the substation was alight. As of 13:00 on 21 March, the fire continued to burn at a reduced level, fuelled by 25,000 litres of cooling oil which had been contained within the burning transformer. The London Fire Brigade was contacted by London Borough of Hillingdon to ascertain data from any emergency air quality monitoring undertaken but no response to date has been received. Given the high emission of pollutants into the atmosphere, significant peaks were observed in the 2025 at nearby continuous monitoring sites (e.g. HIL5, Hillingdon Hayes). These data will be analysed and reported in the ASR 2026 (reporting 2025 data).

Table Q. Planning requirements met by planning applications in London Borough of Hillingdon in 2024.

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	45
Number of planning applications required to monitor for construction dust	0
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	45
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	45
Number of planning applications with CIL payments that include a contribution to improve air quality	0
NRMM: Greater London (excluding Central Activity Zone and Canary Wharf) Number of conditions related to NRMM included. Number of developments registered and compliant. Please include confirmation that you have checked that the development has been registered at www.nrmm.london and that all NRMM used on-site is compliant with Stage IIIA of the Directive and/or exemptions to the policy.	45 conditions included. 21 registered ⁸ Total Audits 21 *Self-compliant 2 **Compliant 10 Non-compliant 2 No NRMM 3 Site Complete 1 Pending 0

Notes:

*Compliant – Site was non-compliant before our interaction however met required emission/administration standards by enacting all recommendations made by officers.

**Self-Compliant – Site has met/exceeded emission standards and registered all machinery correctly prior to the audit.

***Cold Engaged – An unregistered site, identified on the ground and subsequently engaged.

'Non-Registration' can include site and/or machinery.

LBH has a peer review process of planning applications in place to ensure that all relevant planning applications are reviewed, and NRMM conditions, are enforced.

NRMM Enforcement is secured via the funded Mayor's scheme run by Cleaner Construction for London.

⁸ 16 up and running construction sites were checked for compliance in 2023.

5 Additional Activities to Improve Air Quality

5.1 London Borough of Hillingdon Fleet

There are 296 vehicles in the Council fleet. This includes 3 fully electric pool cars and 5 fully electric small size vans (2.7% of the total fleet), and 5 self-charging hybrid pool cars (1.7% of the total fleet). As current practice in procurement, there will be two tenders for all purchases of vehicles, one for fully electric options and the other for diesel powered.

The Council has a commitment in the Hillingdon Climate Change Action Plan to replace all diesel-powered vehicles weighing 3.5t or less before 2030.

As of 2024/25 work continues to include 32 electric vehicles in a replacement plan of 96 vans. All other purchases will seek two tenders – one for diesel and one for electric powered vehicles. Further expansion of the Council's electric vehicle fleet is dependent in part on resolution of power supply issues at the Harlington Road Depot.

5.2 Planning Enforcement

London Borough of Hillingdon has a systematic process in place to review all planning applications likely to be significant in terms of air quality. This is judged based on location and size – even if it is a small development, if it falls within a Focus Area, more stringent mitigation requirements apply. This is achieved by training planning officers and using the planning GIS system with a flag for action at sensitive locations, where the planning officer knows what is required and takes the appropriate consultation procedures.

Enforcement actions are delivered through the enforcement team.

5.3 Pan-London NRMM Auditing Project

The Council has been a member of the consortium supporting the NRMM Enforcement project since its inception. At a cost of £4,000 per annum this membership has been value for money for the delivery of the site audits programme and the Council will continue to support the pan-London NRMM auditing project in 2025-2026.

The Cleaner Construction for London NRMM Report for Hillingdon audited 21 sites, 7 of which were 'cold engaged' (unregistered but identified on the ground and subsequently engaged). Of the 21 sites, 3 were identified as self-compliant (not requiring intervention) compared to 10 that were identified as compliant (compliance achieved after intervention). One site was complete and 5 had no NRMM present. However, 2 were identified as non-compliant, either for registration problems or a lack of evidence of compliance. The small number of sites identified as self-compliant highlights the need for monitoring NRMM usage.

All planning applications with construction and demolition activities in 2024/25 included the NRMM condition.

London Borough of Hillingdon has defined a standard wording for the condition applied to all development where constructions and demolition activities take place. This text is applied by default to all relevant planning applications where construction/demolition activities are permitted in the planning Decision notice and, wherever appropriate, in S106 agreements.

The standard text applied is as follows:

Conditions - Reducing Emissions from Demolition and Construction

A No development shall commence until a Plan has been submitted to, and approved in writing by, the LPA. This must demonstrate compliance (drawn up accordance with) the GLA Control of Dust and Emissions from Construction and Demolition SPG (or any successor document).

Reason: Compliance with London Plan Policy SI 1 and in accordance with Mayor of London "The Non-road mobile machinery (standard condition recommended by Mayor of London, London Local Air Quality Management Policy Guidance 2019)

B All Non-Road Mobile Machinery (NRMM) of net power of 37kW and up to and including 560kW used during the course of the demolition, site preparation and construction phases shall comply with the emission standards set out in chapter 7 of the GLA's supplementary planning guidance "Control of Dust and Emissions During Construction and Demolition" dated July 2014 (SPG), or subsequent guidance. Unless it complies with the standards set out in the SPG, 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 developer shall keep an up-to-date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register at <https://nrmm.london/>."

Reason: Compliance with the London's Low Emission Zone for non-road mobile machinery as per requirements of the London Environment Strategy

5.4 Air Quality Alerts

Hillingdon has been a member of the airTEXT consortium (<https://www.airtext.info/>) since its inception and will continue to support the project. The London Borough of Hillingdon cascade the Mayor's air quality alert messaging to all schools and health practices.

5.5 Air Quality Positive

Unfortunately, the Air Quality Positive requirement has not proven successful to date in terms of supporting the LBH planning system to improve air quality by design. None of the planning applications where the submission of an Air Quality Positive Statement was a requirement had either innovative nor quantifiable measures that would be considered to realistically produce tangible improvements on local air quality.

A detailed analysis of the reports provided to date indicates that the Air Quality Positive Matrices produced to support the various planning applications are only a list of best practices which should be delivered by default anyway, in a due diligent approach, to deliver the standard clean by design requirements.

[illegible]

[1] Participant subscribed to two sets of test results (2 x 4 test samples) in each AIR PT round

Diffusion Tube Local Bias Adjustment Factors

The London Borough of Hillingdon has been using its local bias adjustment factor to adjust their diffusion tube monitoring results for several ASR reporting iterations. This practice is favoured by the Borough due to local specific conditions as well as because it has proven to be a more conservative approach which the council is keen to pursue in the treatment of their monitoring data. To derive the Borough's local adjustment bias adjustment factor, co-location results at two continuous monitoring locations using reference method (chemiluminescence) were used: London Hillingdon (HIL) AURN continuous monitoring site and Hillingdon 1 - South Ruislip (HI1) continuous monitoring site. Diffusion tube HILL01 is co-located with the London Hillingdon (HIL) AURN continuous monitoring site and diffusion tube HILL03 is co-located with the Hillingdon 1 - South Ruislip (HI1) continuous monitoring site. Until July 2023, only HILL03 had triplicate diffusion tubes. From August 2023 onwards, both sites had triplicate sampling deployed monthly.

HILL01 diffusion tube co-located with HIL AURN continuous monitoring site as well diffusion tube at HILL03 co-located with HI1 continuous monitoring site results were compared with the reference method (chemiluminescence) in the co-location studies undertaken by the Borough.

Details of the sites are presented in Table A2 below. A local bias adjustment factor of 0.84 has been calculated from the Precision and Bias Adjustment spreadsheet (v04)⁹; the outputs from the spreadsheet are shown in Tables A3 and A4 below.

AEA_DifTPAB_v04.xls spreadsheet designed by Defra to assist in calculating the Precision and Accuracy (Bias) of the co-location studies mentioned above has been used. A feature of this spreadsheet is the introduction of precision and 95% confidence intervals in Bias Adjustment calculations. Precision can be used as a quality check on the diffusion tube data and confidence intervals give an idea of the uncertainty to both the Bias Adjustment Factor and diffusion tube results. Moreover, as the sites have been co-located against a reference method, it was possible to calculate the accuracy of the co- location study by means of the Bias Adjustment Factor A and Diffusion Tube Bias B. All data are expressed in μgm^{-3} and includes 95% confidence intervals. Details of the sites and calculations undertaken are presented in Tables A3 and A4 below.

⁹ <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/local-bias/>

Table A2. Details of the co-location sites and annual means ($\mu\text{g m}^{-3}$) for each site for 2024.

Name and Annual Mean ($\mu\text{g m}^{-3}$) Continuous Monitor	Type	Reference Method	Name and Annual Mean ($\mu\text{g m}^{-3}$) Diffusion Tube(s)
HIL, Hillingdon (23.0)	Background	Chemiluminescence	HILL01 (23.4)
HI1, Hillingdon 1 - South Ruislip (20.0)	Roadside	Chemiluminescence	HILL03 (19.8)

Table A3. Local Bias Adjustment Factor Calculation for 2024 - HILL01 & HIL.

Checking Precision and Accuracy of Triplicate Tubes



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	02/01/2024	30/01/2024	28.3	29.5	29.6	29	0.7	3	1.8
2	30/01/2024	05/03/2024	31.0	33.6	31.7	32	1.3	4	3.3
3	05/03/2024	03/04/2024	33.9	32.8	31.4	33	1.3	4	3.1
4	03/04/2024	01/05/2024	24.5	23.9	23.2	24	0.7	3	1.6
5	01/05/2024	04/06/2024	26.2	26.9	25.1	26	0.9	3	2.2
6	04/06/2024	03/07/2024	20.4	22.8	22.8	22	1.4	6	3.5
7	03/07/2024	31/07/2024	27.5	29.4	28.5	28	0.9	3	2.3
8	31/07/2024	03/09/2024	28.1	29.2	29.2	29	0.6	2	1.6
9	03/09/2024	01/10/2024	26.6	23.5	25.2	25	1.5	6	3.8
10	01/10/2024	05/11/2024	34.7	33.8	31.5	33	1.6	5	4.1
11	05/11/2024	04/12/2024	31.0	31.8	30.6	31	0.6	2	1.6
12	04/12/2024	06/01/2025	25.3	25.6	26.3	26	0.5	2	1.4
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	Tubes Precision Check	Automatic Monitor Data
1	25.6	Good	Good
2	27.8	Good	Good
3	26.7	Good	Good
4	18.8	Good	Good
5	21.8	Good	Good
6	18.4	Good	Good
7	22.1	Good	Good
8	21.2	Good	Good
9	19.2	Good	Good
10	29.0	Good	Good
11	29.1	Good	Good
12	21.2	Good	Good

Overall survey --> Good precision Good Overall DC

(Check average CV & DC from Accuracy calculations)

Site Name/ ID:	HIL, Hillingdon

Accuracy (with 95% confidence interval)	
without periods with CV larger than 20%	
Bias calculated using 12 periods of data	
Bias factor A	0.83 (0.79 - 0.87)
Bias B	21% (15% - 26%)
Diffusion Tubes Mean:	28 μgm^{-3}
Mean CV (Precision):	4
Automatic Mean:	23 μgm^{-3}
Data Capture for periods used:	99%
Adjusted Tubes Mean:	23 (22 - 25) μgm^{-3}

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

Accuracy (with 95% confidence interval)	
WITH ALL DATA	
Bias calculated using 12 periods of data	
Bias factor A	0.83 (0.79 - 0.87)
Bias B	21% (15% - 26%)
Diffusion Tubes Mean:	28 μgm^{-3}
Mean CV (Precision):	4
Automatic Mean:	23 μgm^{-3}
Data Capture for periods used:	99%
Adjusted Tubes Mean:	23 (22 - 25) μgm^{-3}

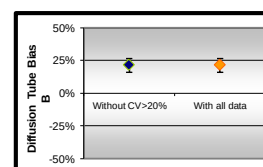
Jaume Targa, for AEA
Version 04 - February 2011

Table A4. Local Bias Adjustment Factor Calculation for 2024 - HILL03 & HI1.

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	03/01/2024	31/01/2024	28.1	28.9	27.3	28	0.8	3	2.0
2	31/01/2024	05/03/2024	23.8	25.4	26.0	25	1.2	5	2.9
3	05/03/2024	02/04/2024	24.7	24.3	24.9	25	0.3	1	0.8
4	02/04/2024	30/04/2024	20.1	19.7	19.5	20	0.3	2	0.8
5	30/04/2024	05/06/2024	21.0	23.0	21.8	22	1.0	5	2.5
6	05/06/2024	02/07/2024	17.9	17.9	18.1	18	0.1	1	0.3
7	02/07/2024	01/08/2024	21.2	20.7	20.9	21	0.2	1	0.6
8	01/08/2024	03/09/2024	19.6	19.8	19.8	20	0.1	1	0.3
9	03/09/2024	30/09/2024	22.3	22.6	21.3	22	0.7	3	1.8
10	30/09/2024	06/11/2024	29.8	28.9	28.1	29	0.8	3	2.1
11	06/11/2024	03/12/2024	27.0	28.8	30.3	29	1.6	6	4.0
12	03/12/2024	07/01/2025	21.9	22.7	22.1	22	0.4	2	1.0
13									

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

Site Name/ ID:	HI1, Hillingdon 1 - South Ruislip	Precision	12 out of 12 periods have a CV smaller than 20%	Overall survey -->	Good precision	Good Overall DC
				(Check average CV & DC from Accuracy calculations)		

Accuracy (with 95% confidence interval)

without periods with CV larger than 20%

Bias calculated using 12 periods of data

Bias factor A0.85 (0.8 - 0.91)

Bias B18% (10% - 25%)

Diffusion Tubes Mean:23 µgm⁻³

Mean CV (Precision):3

Automatic Mean:20 µgm⁻³

Data Capture for periods used: 99%

Adjusted Tubes Mean:20 (19 - 21) µgm⁻³

Accuracy (with 95% confidence interval)

WITH ALL DATA

Bias calculated using 12 periods of data

Bias factor A0.85 (0.8 - 0.91)

Bias B18% (10% - 25%)

Diffusion Tubes Mean:23 µgm⁻³

Mean CV (Precision):3

Automatic Mean:20 µgm⁻³

Data Capture for periods used: 99%

Adjusted Tubes Mean:20 (19 - 21) µgm⁻³

Diffusion Tube Bias

50%

25%

0%

-25%

-50%

Without CV>20%

With all data

Jaume Targa, for AEA

Version 04 - February 2011

Diffusion Tube National Bias Adjustment Factors

The diffusion tubes for the year 2024 were supplied by Gradko International, the tubes were prepared using the 20% Triethanolamine (TEA) in water preparation method. The national bias adjustment for Gradko is 0.85 (based on 26 studies, version 04/25, just considering Good precision results) as derived from the national bias adjustment calculator (National Diffusion Tube Bias Adjustment Factor Spreadsheet, version 04/25 published in April 2024)¹⁰. Only the collocation studies rated as "Good" (tubes are considered to have good precision where the coefficient of variation of duplicate or triplicate diffusion tubes for eight or more periods during the year is less than 20%) were considered to derive the National Bias Adjustment applied in this report.

Discussion of choice of Factor to use

The diffusion tube data have been corrected using a bias adjustment factor, which is an estimate of the difference between diffusion tube concentration and continuous monitoring, the later assumed to be a more accurate method of monitoring. LLAQM.TG(19) guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring was followed. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tubes results with data taken from NO_x/NO₂

¹⁰ <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/national-bias/>

continuous analysers. Alternatively, the national database of diffusion tube co-location studies provides bias factors for the relevant laboratory and preparation method.

Regarding the application of a bias adjustment factor for diffusion tubes, the Technical Guidance LLAQM.TG(19) and the LAQM Helpdesk recommend the use of a local bias adjustment value where available and relevant to diffusion tube sites. However, in 2024, the local bias adjustment factor derived from the co-location studies at the HILL and HI1 automatic monitoring locations was of 0.84, lower by 0.1 in relation to the National bias adjustment factor based on 26 studies of good precision.

The national bias adjustment factor for Gradko in 2024 (as per April 2025 issue, spreadsheet version number: 04/25), obtained from the overall national bias adjustment spreadsheet¹¹ (based on 27 studies) is also 0.84. However, when selecting the studies with good precision only (26 studies), the national bias adjustment value is 0.85. Given that the derived local bias adjustment factor is less conservative than the national bias adjustment for 2024, the National bias adjustment was used in this instance. A summary of historical bias adjustments applied in previous years is presented in Table A5 below.

Table A5. 2024 Bias Adjustment Factor and Historical Comparison.

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.85
2023	Local	-	0.89
2022	Local	-	0.92
2021	Local	-	0.88
2020	National	03/21	0.84
2019	National	03/20	0.89
2018	National	03/19	0.92
2017	National	03/18	1.03
2016	National	03/17	1.03
2015	National	03/16	0.95

A.3 Adjustments to the Ratified Monitoring Data

There were no incidences where data capture was less than 75% of a full calendar year (less than 9 months) and more than 25%, and therefore there was not need to “annualise” any monitoring results using the methodology outlined in LLAQM.TG(19) before being compared to annual mean objectives.

¹¹ <https://laqm.defra.gov.uk/air-quality/air-quality-assessment/national-bias/>

Appendix B Full Monthly Diffusion Tube Results for 2024

Table B1. NO₂ Diffusion Tube Results 2024 – London Borough of Hillingdon.

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2024 % ^b	Annual Mean NO ₂													
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual mean – raw data	Annual mean – bias adjusted ^c
HILL01	506926	178614	28.3	31.0	33.9	24.5	26.2	20.4	27.5	28.1	26.6	34.7	31.0	25.3	28.1	23.9
HILL01	506926	178614	29.5	33.6	32.8	23.9	26.9	22.8	29.4	29.2	23.5	33.8	31.8	25.6	28.6	24.3
HILL01	506926	178614	29.6	31.7	31.4	23.2	25.1	22.8	28.5	29.2	25.2	31.5	30.6	26.3	27.9	23.7
HILL02	505996	184058	30.9	23.0	25.6	24.5	28.9	22.4	24.1	22.8	27.4	28.6	28.2	25.2	26.0	22.1
HILL03	510821	184923	28.1	23.8	24.7	20.1	21.0	17.9	21.2	19.6	22.3	29.8	27.0	21.9	23.1	19.7
HILL03	510821	184923	28.9	25.4	24.3	19.7	23.0	17.9	20.7	19.8	22.6	28.9	28.8	22.7	23.6	20.0
HILL03	510821	184923	27.3	26.0	24.9	19.5	21.8	18.1	20.9	19.8	21.3	28.1	30.3	22.1	23.4	19.8
HILL04	507617	182506	27.5	25.1	26.2	20.8	22.8	18.4	21.3	18.8	25.8	29.6	27.6	18.8	23.5	20.0
HILL05	506989	181920	31.4	32.6	31.7	22.3	25.2	26.1	missing	26.1	24.1	30.3	32.6	28.4	28.3	24.0
HILL06	506243	185653	33.0	30.7	28.7	22.9	23.9	25.4	26.6	26.2	24.5	29.6	30.2	25.7	27.3	23.2
HILL07	509918	179015	32.5	27.9	32.7	23.6	23.5	22.4	25.1	26.2	27.6	32.9	32.3	27.6	27.9	23.7
HILL08	509798	178654	32.0	28.7	30.4	20.4	21.4	18.8	18.5	23.3	23.0	29.5	31.8	28.4	25.5	21.7
HILL09	508758	177718	30.3	31.1	31.1	25.1	23.0	22.6	26.0	26.2	24.7	30.6	33.4	27.4	27.6	23.5
HILL10	508414	177125	29.1	38.8	33.6	26.6	21.5	24.1	28.7	31.9	26.6	34.6	39.2	32.0	30.5	26.0
HILL11	505736	177752	25.6	23.9	24.1	17.2	17.4	15.8	20.5	18.7	20.2	27.5	25.2	18.6	21.2	18.0
HILL12	504851	176770	26.6	26.8	28.3	20.1	20.7	19.6	23.1	22.1	41.8	missing	31.0	22.6	25.7	21.8
HILL13	505731	180288	27.0	24.7	25.0	17.5	19.3	16.3	18.6	18.7	20.1	25.3	26.8	20.8	21.7	18.4
HILL14	505299	190923	15.7	14.9	14.7	9.2	10.7	8.6	10.3	10.3	11.5	19.0	19.0	12.3	13.0	11.1
HILL15	511889	186563	24.7	23.0	20.5	15.6	17.7	14.2	18.7	15.7	19.5	24.9	26.6	17.5	19.9	16.9
HILL16	505920	177188	31.1	31.9	missing	25.3	25.8	missing	28.3	28.9	29.9	36.3	35.9	29.8	30.3	25.8
HILL17	510361	179820	28.6	25.9	26.4	17.4	18.8	16.9	19.8	20.6	20.4	28.4	28.7	24.1	23.0	19.6
HILL18	509683	179486	30.1	29.5	29.5	23.1	22.8	20.9	26.0	24.6	24.4	31.7	33.5	27.2	26.9	22.9
HILL19	506108	180493	33.1	29.6	31.6	23.4	23.5	23.7	26.3	23.7	26.0	missing	32.3	26.2	27.2	23.1
HILL20	506503	179510	32.4	33.7	34.1	27.3	26.7	24.3	26.7	27.4	25.2	31.1	18.2	26.3	27.8	23.6
HILL21	507141	179628	29.3	30.3	29.4	22.4	21.6	20.0	22.6	25.1	22.8	30.2	29.7	26.3	25.8	21.9
HILL22	507649	184611	34.8	29.9	30.9	25.0	28.6	24.7	26.7	23.8	26.2	33.1	36.9	27.1	29.0	24.6

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2024 % ^b	Annual Mean NO ₂													
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual mean – raw data	Annual mean – bias adjusted ^c
HILL23	506143	185395	missing	missing	20.4	14.6	19.7	17.2	18.5	17.6	21.5	25.7	25.8		20.1	17.1
HILL24	506035	183611	33.1	27.8	27.5	22.7	29.8	25.0	25.7	23.0	29.2	30.5	32.6	24.9	27.7	23.5
HILL25	508773	177352	35.4	missing	36.6	27.8	24.6	24.1	30.8	29.1	27.7	32.4	33.3	30.6	30.2	25.7
HILL26	509499	178370	29.5	31.4	31.7	24.9	22.5	23.2	24.5	26.9	23.2	30.2	31.6	26.4	27.2	23.1
HILL27	509755	179934	33.3	29.2	31.0	27.3	31.6	24.1	26.3	23.2	28.5	34.0	32.5	25.9	28.9	24.6
HILL28	509328	179603	27.1	25.4	24.0	17.4	19.2	16.3	18.8	18.7	21.2	27.1	28.4	21.2	22.1	18.8
HILL29	505906	178497	28.1	27.8	27.2	19.4	21.0	18.2	21.7	20.6	missing	27.8	28.5	24.1	24.0	20.4
HILL30	507612	185118	24.0	22.6	21.0	12.9	14.8	11.4	15.6	14.4	16.1	21.4	19.4	18.8	17.7	15.0
HILL31	511103	181097	28.3	28.3	28.1	18.8	17.5	15.2	20.2	20.4	17.8	24.8	28.4	22.6	22.5	19.2
HILL32	510664	188599	42.9	36.9	34.2	37.3	38.6	35.4	35.0	30.8	39.9	39.4	39.7	33.7	37.0	31.4
HILL33	510284	190524	34.3	31.7	28.2	24.2	24.6	24.3	24.5	24.4	27.8	31.4	32.3	27.0	27.9	23.7
HILL34	509900	190648	31.2	28.6	29.3	20.1	22.2	19.5	23.3	20.5	24.1	29.8	36.2	23.9	25.7	21.9
HILL35	510055	186080	missing	26.6	27.8	19.6	21.5	18.3	19.9	17.5	18.6	26.6	32.1	24.6	23.0	19.5
HILL36	509275	187340	34.6	31.3	25.3	26.8	32.1	24.0	29.8	26.0	31.8	36.8	37.6	26.5	30.2	25.7
HILL37	509097	187597	32.4	30.5	30.9	25.2	26.6	24.8	25.8	26.4	26.7	31.1	27.6	24.1	27.7	23.5
HILL38	509525	176949	36.6	39.4	39.8	27.9	28.8	31.6	31.5	31.3	31.5	37.9	40.6	33.8	34.2	29.1
HILL39	506000	176969	36.3	34.2	38.6	25.9	27.8	26.6	31.1	31.9	32.9	36.6	30.3	29.2	31.8	27.0
HILL40	507316	177576	32.2	32.9	33.0	missing	missing	21.2	26.0	26.2	24.4	30.4	30.2	26.7	28.3	24.1
HILL41	507369	176966	40.4	42.8	45.4	34.3	31.4	32.0	38.3	39.4	37.9	missing	36.4	35.8	37.6	32.0
HILL42	506192	185614	32.4	30.9	12.4	22.1	23.9	18.9	24.1	23.0	20.6	31.9	29.8	25.9	24.7	21.0
HILL43	510134	187086	28.2	26.8	24.4	19.3	21.4	19.7	20.2	21.2	missing	27.8	30.5	23.6	23.9	20.3
HILL44	508162	191784	23.1	20.4	18.6	16.2	21.6	18.2	19.2	16.8	22.9	23.8	27.0	17.4	20.4	17.4

Notes

Concentrations are presented as µg m⁻³.

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

Exceedances of the NO₂ annual mean of 36 µg m⁻³ are underlined.

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

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%.

(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%).

N/A = means period outside the monitoring survey

Missing = means diffusion tube deployed but missing = no data

(c) Local bias adjustment of 0.89 was applied to the data



London Borough of Hounslow Air Quality Annual Status Report for 2024

Date of publication: 31st of May 2025



This report provides a detailed overview of air quality in London Borough of Hounslow during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process¹.

Contact details:

██████████, Environmental Strategy Officer

E: ██████████@[hounslow.gov.uk](mailto:██████████@hounslow.gov.uk)

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

Contents

Abbreviations	4
1. Air Quality Monitoring	6
1.1 Locations.....	6
1.2 Comparison of Monitoring Results with AQOs	13
2. Action to Improve Air Quality.....	26
2.1 Air Quality Management Areas	26
2.2 Air Quality Action Plan Progress	26
3. Planning Update and Other New Sources of Emissions	31
3.1 New or significantly changed industrial or other sources	31
4. Additional Activities to Improve Air Quality	32
4.1 London Borough of Hounslow Fleet.....	32
4.3 Pan-London NRMM Auditing Project	32
4.4 Air Quality Alerts	32
Appendix A Details of Monitoring Site Quality QA/QC.....	33
A.1 Automatic Monitoring Sites	33
A.2 Diffusion Tubes	33
A.3 Adjustments to the Ratified Monitoring Data.....	35
Appendix B Full Monthly Diffusion Tube Results for 2024.....	37
Appendix C Map(s) of Monitoring Locations and AQMAs.....	39

Tables

Table A. Summary of National Air Quality and International Standards, Objectives and Guidelines	5
Table B. Details of Automatic Monitoring Sites for 2024	6
Table C. Details of Non-Automatic Monitoring Sites for 2024	7
Table D. Annual Mean NO ₂ Monitoring Results: Automatic Monitoring (µg m ⁻³)	13
Table E. Annual Mean NO ₂ Monitoring Results: Non-Automatic Monitoring (µg m ⁻³)	16
Table F. NO ₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg m ⁻³	20
Table G. Annual Mean PM ₁₀ Automatic Monitoring Results (µg m ⁻³)	21
Table H. PM ₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM ₁₀ 24-Hour Means > 50 µg m ⁻³	23
Table I. Annual Mean PM _{2.5} Automatic Monitoring Results (µg m ⁻³)	24
Table J. Delivery of Air Quality Action Plan Measures	26
Table K. Planning requirements met by planning applications in LB Hounslow in 2024	31
Table L. Bias Adjustment Factor	35
Table N. NO ₂ 2024 Diffusion Tube Results (µg m ⁻³)	37

Figures

Figure A. Seven Year Trend in Annual Mean NO ₂ Concentration, 2018-2024	15
Figure B. Seven Year Trend in Annual Mean PM ₁₀ Concentration, 2018-2024	22
Figure C. Seven Year Trend in Annual Mean PM _{2.5} Concentration, 2018-2024	25
Figure D. Map of Non-Automatic Monitoring Sites	39
Figure E. Map of Automatic Monitoring Sites	40

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 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 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)
HS4	Chiswick	Roadside	521084	178499	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Hounslow	Chemiluminescent TEOM FDMS	1	4	3
HS5	Brentford	Roadside	517425	178071	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Hounslow	Chemiluminescent TEOM FDMS	1	2	3
HS6	Heston	Roadside	513655	176842	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Hounslow	Chemiluminescent TEOM FDMS	1	1.5	1.5
HS7	Hatton Cross	Urban Background	509334	174997	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Hounslow	Chemiluminescent TEOM FDMS	10	11.5	2
HS8	Gunnersbury	Roadside	519180	179338	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Hounslow	Chemiluminescent TEOM FDMS	2	9	2
HS9	Feltham	Roadside	510691	173247	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Hounslow	Chemiluminescent TEOM FDMS	1	3	1.5

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)
BREN A	Brentford, Great West Road	Roadside	517425	178071	NO ₂	Y	1	4	Y	3
BREN B	Brentford, Great West Road	Roadside	517425	178071	NO ₂	Y	1	4	Y	3
BREN C	Brentford, Great West Road	Roadside	517425	178071	NO ₂	Y	1	4	Y	3
CHIS A	Chiswick High Road	Roadside	521084	178499	NO ₂	Y	1	2	Y	3
CHIS B	Chiswick High Road	Roadside	521084	178499	NO ₂	Y	1	2	Y	3
CHIS C	Chiswick High Road	Roadside	521084	178499	NO ₂	Y	1	2	Y	3
CRAN A	Cranford Avenue Park	Background	510373	177199	NO ₂	Y	20	N/A	Y	3
CRAN B	Cranford Avenue Park	Background	510373	177199	NO ₂	Y	20	N/A	Y	3
CRAN C	Cranford Avenue Park	Background	510373	177199	NO ₂	Y	20	N/A	Y	3
FELT A	Feltham High St / Hanworth Rd Jct	Roadside	510691	173247	NO ₂	Y	1	1.5	Y	1.5

London Borough of Hounslow Air Quality Annual Status Report 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)
FELT B	Feltham High St / Hanworth Rd Jct	Roadside	510691	173247	NO ₂	Y	1	1.5	Y	1.5
FELT C	Feltham High St / Hanworth Rd Jct	Roadside	510691	173247	NO ₂	Y	1	1.5	Y	1.5
HAT A	Myrtle Avenue	Background	509334	174997	NO ₂	Y	10	11.5	Y	2
HAT B	Myrtle Avenue	Background	509334	174997	NO ₂	Y	10	11.5	Y	2
HAT C	Myrtle Avenue	Background	509334	174997	NO ₂	Y	10	11.5	Y	2
HEST A	Heston Road	Roadside	513655	176842	NO ₂	Y	1	3	Y	1.5
HEST B	Heston Road	Roadside	513655	176842	NO ₂	Y	1	3	Y	1.5
HEST C	Heston Road	Roadside	513655	176842	NO ₂	Y	1	3	Y	1.5
HS32	24 Adelaide Terrace	Roadside	517551	178186	NO ₂	Y	1	10	N	3
HS33	30 Surrey Crescent	Roadside	519452	178314	NO ₂	Y	3	7	N	2
HS34	Chiswick School	Intermediate	520876	177164	NO ₂	Y	3	15	N	2.5
HS35	Wood Street	Roadside	521220	178069	NO ₂	Y	1	2	N	4

London Borough of Hounslow Air Quality Annual Status Report 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)
HS41	Hanworth Library	Roadside	512103	172506	NO ₂	Y	2.5	5	N	2
HS42	High Street, Hounslow	Background	514090	175812	NO ₂	Y	2	14	N	3
HS43	Glenhurst Road	Roadside	517436	178044	NO ₂	Y	1	0.5	N	2
HS46	Swyncombe Avenue	Roadside	516887	178637	NO ₂	Y	1	1	N	2
HS47	Boston Manor Road	Roadside	516712	178588	NO ₂	Y	1	1	N	2
HS51	Bedfont Sports Club	Intermediate	509249	174683	NO ₂	Y	3	28	N	2
HS52	Bedfont Library	Roadside	508868	173720	NO ₂	Y	2	6	N	3
HS53	Church of the Good Shepherd	Intermediate	510986	176031	NO ₂	Y	4	25	N	2.5
HS54	Cranford Lane / Cranford High Street Jct.	Roadside	510784	177460	NO ₂	Y	2	2	N	2
HS55	Cranford Library	Roadside	510750	176684	NO ₂	Y	3	6	N	3
HS61	Twickenham Road	Roadside	516208	175793	NO ₂	Y	0	18	N	3
HS62	Sutton Road	Roadside	513619	176924	NO ₂	Y	1	1	N	4

London Borough of Hounslow Air Quality Annual Status Report 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)
HS63	Lampton Road	Roadside	513528	175868	NO ₂	Y	1	1	N	2.5
HS64	Junction of Roseheath Road	Roadside	512860	175013	NO ₂	Y	2	2	N	5
HS65	Eastbourne Road, Uxbridge Rd Jct	Roadside	511840	172745	NO ₂	Y	2	3	N	2
HS66	Brainton Avenue	Roadside	510957	173642	NO ₂	Y	1	5	N	2
HS67	Busch Corner	Roadside	516590	176888	NO ₂	Y	0	1	N	2.5
HS68	Junction of Commerce Road	Roadside	517278	177298	NO ₂	Y	0	2	N	2
HS69	Kew Bridge	Roadside	519015	178018	NO ₂	Y	0	0	N	2
HS70	Eastbury Grove (Chiswick Lane)	Roadside	521442	177980	NO ₂	Y	1	1	N	2.5
HS71	Gunnersbury Avenue	Roadside	519180	179338	NO ₂	Y	2	9	N	2
HS72	Heston Crossroads	Roadside	513064	177552	NO ₂	Y	1	2.5	N	3
HS73	Browells Lane, Feltham	Roadside	510567	172857	NO ₂	Y	2	4	N	2
HS74	Swift Road, Hanworth	Roadside	511989	171797	NO ₂	Y	2	13.5	N	2

London Borough of Hounslow Air Quality Annual Status Report 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)
HS76	Clements Court, Hounslow	Background	511572	175015	NO ₂	Y	3	N/A	N	4
HS77	Beaversfield Park	Background	512000	175970	NO ₂	Y	5	N/A	N	2.5
HS78	Staines / Wellington Road	Roadside	512763	175312	NO ₂	Y	1	3	N	4
HS79	Whitton Road	Roadside	513839	175316	NO ₂	Y	2	1	N	3
HS80	Hounslow Bus Station	Roadside	514433	175950	NO ₂	Y	0	3	N	3
HS81	Woodlands	Intermediate	515035	175907	NO ₂	Y	10	2	N	2.5
HS82	Church Street	Roadside	516669	175998	NO ₂	Y	0	1	N	2
HS83	Osterley Park	Background	514848	178068	NO ₂	Y	2	N/A	N	1
HS84	Apex Corner (York Way)	Roadside	512709	172155	NO ₂	Y	1	2	N	3
HS85	Hospital Road	Roadside	513213	175655	NO ₂	Y	1	1	N	4
HS86	Jolly Waggoners	Roadside	510947	176564	NO ₂	Y	2	1	N	4
HS87A	Henlys Roundabout	Roadside	511542	176426	NO ₂	Y	2	1.5	N	4

London Borough of Hounslow Air Quality Annual Status Report 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)
HS88	Thames Path, Duke's Meadows	Background	521483	176692	NO ₂	Y	2	N/A	N	2
HS89	Mogden Sewage Works Gate	Roadside	515424	174719	NO ₂	Y	3	3	N	2
HS90	The Butts	Intermediate	517585	177606	NO ₂	Y	2	3	N	2
HS91	Hogarth Ln / Dukes Av	Roadside	521041	177973	NO ₂	Y	3	8	N	6
HS92	St Mary's School	Intermediate	521110	177970	NO ₂	Y	2	13	N	5
HS93	William Hogarth School	Intermediate	521110	177970	NO ₂	Y	2	13	N	5
HS94	Hogarth Roundabout	Roadside	521490	177920	NO ₂	Y	2	1	N	2
HS95	Bennett Street	Roadside	521525	177953	NO ₂	Y	2	1	N	2
HS96	Acton Lane / Chiswick High Rd	Roadside	520149	178515	NO ₂	Y	2	1	N	2
HS97	Acton Lane	Roadside	520371	178589	NO ₂	Y	2	1	N	2
HS98	Chiswick Park / Bollo Lane	Roadside	520348	178661	NO ₂	Y	2	1	N	2
HS99	Paxton Road jct A316	Roadside	521240	177679	NO ₂	Y	2	1	N	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.

1.2 Comparison of Monitoring Results with AQOs

Table D. Annual Mean NO₂ 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
Chiswick	521084	178499	Roadside	94.40	94.40	47	41.7	32	32.9	31	29	28
Brentford	517425	178071	Roadside	97.09	97.09	48	43.9	33	35.8	34	33	29
Heston	513655	176842	Roadside	93.18	93.18	40	37.7	31	28.8	28	23	22
Hatton Cross	509334	174997	Urban Background	91.29	91.29	28	27.3	17	18.2	20	19	20
Gunnersbury	519180	179338	Roadside	97.47	97.47	45	45	37	35.9	29	31	28
Feltham	510691	173247	Roadside	88.68	88.68	27	27.7	26	27.8	25	23	25

Notes:

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

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

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

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%).

Nitrogen Dioxide: Annual mean NO₂ levels decreased at four of Hounslow's six automatic monitoring stations from the levels recorded in 2023. Increases were recorded at Feltham and Hatton Cross. This marks the first increase at Feltham's station since 2021, and the first increase at Hatton Cross since 2022. For the fifth consecutive year, all automatic monitoring sites registered an annual mean value of less than the UK limit of 40 micrograms (µg). The highest value recorded for the year was 29 µg at Brentford, a reduction of 4 µg from 2023.

Diffusion tubes (Table E): For the second time in a row, no diffusion tube location in Hounslow recorded a bias-adjusted annual mean concentration higher than the 40 µg limit. The highest annual mean concentration recorded in 2024 was 30.9 µg at Busch Corner (site ID HS67). Of 55 diffusion tube sites monitored in both 2023 and 2024, 39 (70.9%) recorded a decrease in 2024 compared to 2023 levels.

Exceedances (Table F): Chiswick recorded 2 exceedances of the 1-hour mean NO₂ limit of 200 µg m⁻³ while all other stations recorded no exceedances for the 7th consecutive year.

Figure A. Seven Year Trend in Annual Mean NO₂ Concentration, 2018-2024

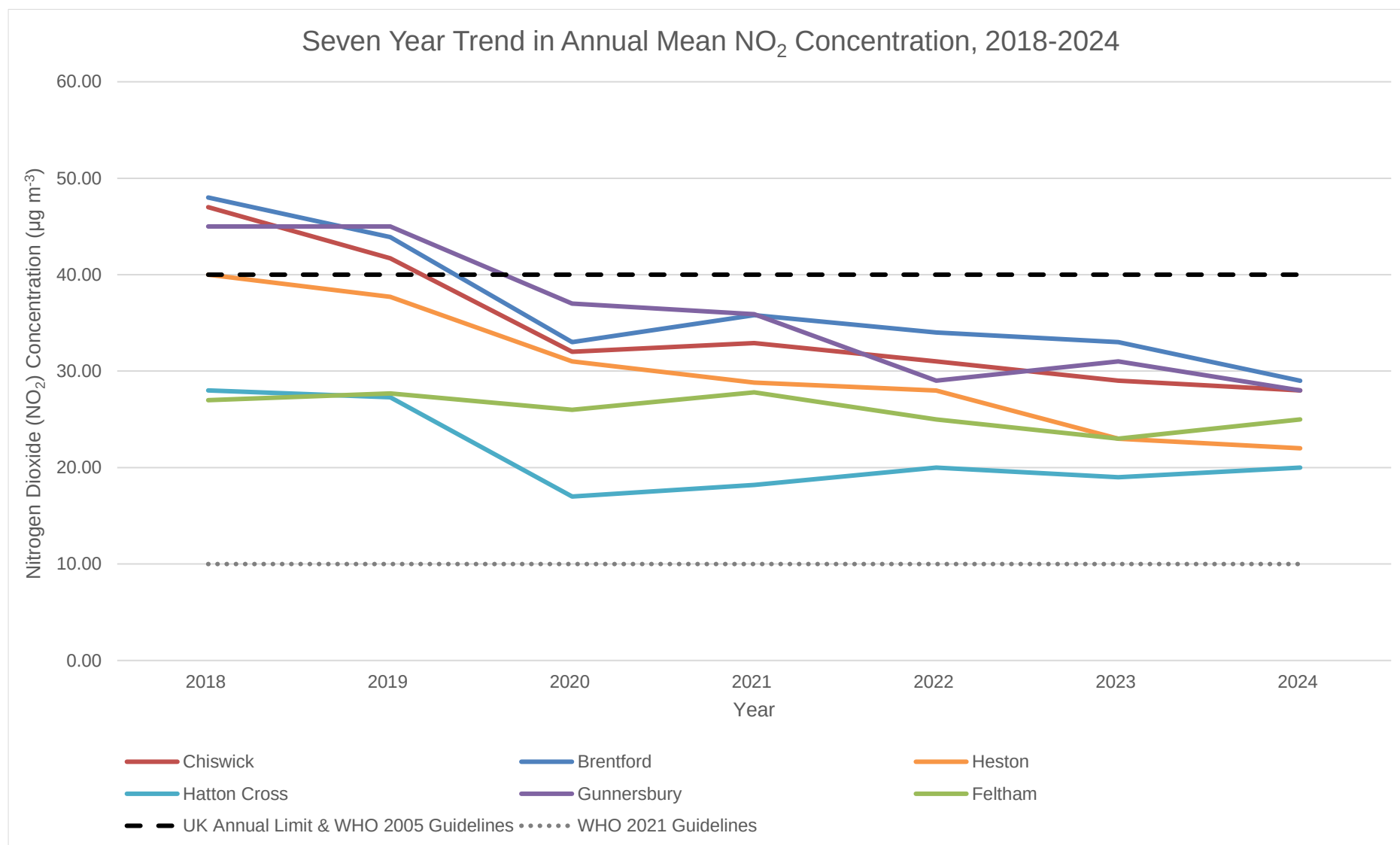


Table E. Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg m⁻³)

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
BREN A, B, C	517425	178071	Roadside	100.0	100.0	48.3	44.1	33.6	38.3	38.9	31.5	27.7
CHIS A, B, C	521084	178499	Roadside	100.0	100.0	43.9	41.8	31.9	32.2	34.6	29.3	25.4
FELT A, B, C	510691	173247	Roadside	90.6	90.6	25.8	27.8	24.6	25.4	28.6	20.7	18.6
HAT A, B, C	509334	174997	Urb Background	90.6	90.6	29.9	27.2	17.5	21.4	27.0	21.5	20.7
HEST A, B, C	513655	176842	Roadside	100.0	100.0	43.6	38.2	29.7	30.0	33.9	23.7	21.2
HS32	517551	178186	Roadside	90.6	90.6	48.3	44.1	33.6	38.3	38.9	31.5	25.4
HS33	519452	178314	Roadside	75.0	75.0	43.9	41.8	31.9	32.2	34.6	29.3	23.0
HS34	520876	177164	Urb Background	92.5	92.5	25.8	27.8	24.6	25.4	28.6	20.7	16.4
HS35	521220	178069	Roadside	84.9	84.9	29.9	27.2	17.5	21.4	27.0	21.5	16.6
HS41	512103	172506	Roadside	92.5	92.5	43.6	38.2	29.7	30.0	33.9	23.7	21.6
HS42	514090	175812	Urban Centre	75.0	75.0	43.2	43.7	35.5	33.0	32.5	29.4	20.2
HS43	517436	178044	Roadside	100.0	100.0	42.5	38.9	30.2	31.1	28.9	26.6	19.0
HS46	516887	178637	Roadside	56.6	56.6	25.8	25.9	20.0	21.3	18.7	17.8	14.9
HS47	516712	178588	Roadside	90.6	90.6	27.3	26.4	19.9	19.3	18.5	16.6	25.3
HS51	509249	174683	Urb Background	90.6	90.6	41.7	40.2	33.9	29.8	31.9	23.9	14.5
HS52	508868	173720	Roadside	100.0	100.0	28.3	27.3	22.8	25.5	27.0	23.3	14.6

London Borough of Hounslow Air Quality Annual Status Report for 2024

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
HS53	510986	176031	Urb Background	100.0	100.0	33.2	30.6	22.8	25.5	23.9	21.3	17.6
HS54	510784	177460	Roadside	92.5	92.5					20.6	19.6	22.9
HS55	510750	176684	Roadside	75.0	75.0				33.1	33.9	24.7	23.2
HS61	516208	175793	Roadside	81.1	81.1	25.5	24.1	16.3	17.1	20.1	16.7	16.7
HS62	513619	176924	Roadside	100.0	100.0	23.3	23.0	16.9	19.2	18.3	15.5	18.3
HS63	513528	175868	Roadside	84.9	84.9	25.6	28.0	18.7	20.5	21.1	18.7	21.5
HS64	512860	175013	Roadside	100.0	100.0	35.0	38.4	28.5	29.5	27.8	25.1	16.1
HS65	511840	172745	Roadside	100.0	100.0	33.7	33.9	23.7	27.3	26.9	23.0	13.9
HS66	510957	173642	Roadside	100.0	100.0	32.1	31.4	21.4	23.4	22.5	19.5	21.7
HS67	516590	176888	Roadside	100.0	100.0	33.5	33.6	23.0	24.9	23.5	20.6	30.9
HS68	517278	177298	Roadside	100.0	100.0	34.1	30.9	24.6	27.1	28.2	22.6	24.6
HS69	519015	178018	Roadside	58.5	58.5	28.7	27.1	20.1	20.6	21.4	17.5	21.3
HS70	521442	177980	Roadside	83.0	83.0	25.0	25.1	18.7	19.2	19.6	16.5	27.2
HS71	519180	179338	Roadside	100.0	100.0	37.9	34.3	26.0	27.4	23.0	21.8	22.4
HS72	513064	177552	Roadside	83.0	83.0	48.4	50.0	40.5	44.1	44.9	38.3	19.0
HS73	510567	172857	Roadside	100.0	100.0	36.5	36.6	30.8	36.3	32.6	28.5	16.7
HS74	511989	171797	Roadside	90.6	90.6	39.0	36.0	26.5	28.8	23.9	24.2	14.5

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
HS78	512763	175312	Roadside	92.5	92.5	47.2	44.1	30.5	36.5	31.5	29.6	23.8
HS79	513839	175316	Roadside	100.0	100.0	37.8	36.6	29.1	28.7	27.7	25.2	16.1
HS80	514433	175950	Roadside	66.0	66.0	36.1	35.0	26.1	25.5	25.5	22.3	28.5
HS81	515035	175907	Urb Background	75.0	75.0	25.3	29.1	21.4	22.6	22.0	18.4	12.5
HS82	516669	175998	Roadside	92.5	92.5	30.9	29.2	21.7	23.2	20.2	17.1	11.6
HS83	514848	178068	Urb Background	83.0	83.0	42.7	40.7	32.7	38.2	32.6	28.0	10.2
HS84	512709	172155	Roadside	83.0	83.0	30.1	30.5	22.0	23.2	23.1	21.3	18.8
HS85	513213	175655	Roadside	100.0	100.0	58.7	46.4	36.7	45.7	40.0	28.9	24.1
HS86	510947	176564	Roadside	100.0	100.0	22.0	20.2	15.4	15.7	15.5	12.8	23.7
HS87A	511542	176426	Roadside	92.5	92.5	22.2	20.2	15.6	16.7	14.4	11.6	24.9
HS88	521483	176692	Urb Background	58.5	58.5	19.9	18.4	14.0	12.7	13.5	11.7	11.6
HS89	515424	174719	Roadside	100.0	100.0	31.6	33.4	24.6	27.3	25.0	21.6	15.1
HS90	517585	177606	Urb Background	92.5	92.5	37.9	37.5	30.4	31.5	29.0	25.4	15.6
HS91	521041	177973	Roadside	60.4	60.4	41.3	43.5	30.1	31.7	30.1	25.3	25.1
HS92	521110	177970	Urb Background	84.9	84.9	44.7	47.3	31.5	33.5	31.9	29.4	21.0
HS93	521110	177970	Urb Background	84.9	84.9	20.7	22.0	16.1	15.6	15.4	14.2	20.1
HS94	521490	177920	Roadside	90.6	90.6	28.8	27.4	22.5	21.9	20.2	17.2	27.0
HS95	521525	177953	Roadside	90.6	90.6	25.3	24.7	20.4	20.6	19.8	17.9	19.4

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
HS96	520149	178515	Roadside	100.0	100.0	45.0	43.7	30.5	32.7	31.0	25.5	24.2
HS97	570371	178589	Roadside	92.5	92.5	56.3	34.8	26.1	26.3	23.4	21.8	20.2
HS98	520348	178661	Roadside	100.0	100.0	56.3	36.2	25.5	25.2	22.2	21.8	19.9
HS99	521240	177679	Roadside	92.5	92.5	-	-	-	41.4	35.6	29.9	21.8

☒ 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 $\mu\text{g m}^{-3}$.

Exceedances of the NO₂ annual mean objective of 40 $\mu\text{g m}^{-3}$ are shown in **bold**.

NO₂ annual means exceeding 60 $\mu\text{g m}^{-3}$, indicating a potential exceedance of the NO₂ 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 F. NO₂ 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
Chiswick	521084	178499	Roadside	94.40	94.40	0	0	0	0	0	0	2
Brentford	517425	178071	Roadside	97.09	97.09	0	0	0	0	0	0	0
Heston	513655	176842	Roadside	93.18	93.18	0	0	0	0	0	0	0
Hatton Cross	509334	174997	Urban Background	91.29	91.29	0	0	0	0	0	0	0
Gunnersbury	519180	179338	Roadside	97.47	97.47	0	0	0	0	0	0	0
Feltham	510691	173247	Roadside	88.68	88.68	0	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 NO₂ 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 PM₁₀ 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
Chiswick	521084	178499	Roadside	92.61	92.61	20	20	21	16	19	20	21
Brentford	517425	178071	Roadside	88.13	88.13	26	22	25	21	23	25	26
Heston	513655	176842	Roadside	84.73	84.73	22	24	23	17	21	20	20
Hatton Cross	509334	174997	Urban Background	81.81	81.81	21	20	18	19	23	20	22
Gunnersbury	519180	179338	Roadside	93.80	93.80	22	20	22	21	22	29	28
Feltham	510691	173247	Roadside	95.82	95.82	20	20	21	16	18	18	18

Notes

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

Exceedances of the PM₁₀ 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%).

Particulate Matter: Three of Hounslow’s automatic monitoring stations recorded an increase in particulate matter (PM₁₀) from 2023 to 2024, two sites remained static, and one site saw a decrease. This represents a slight change from 2023 where two sites saw a decrease from 2022 levels.

Figure B. Seven Year Trend in Annual Mean PM₁₀ Concentration, 2018-2024

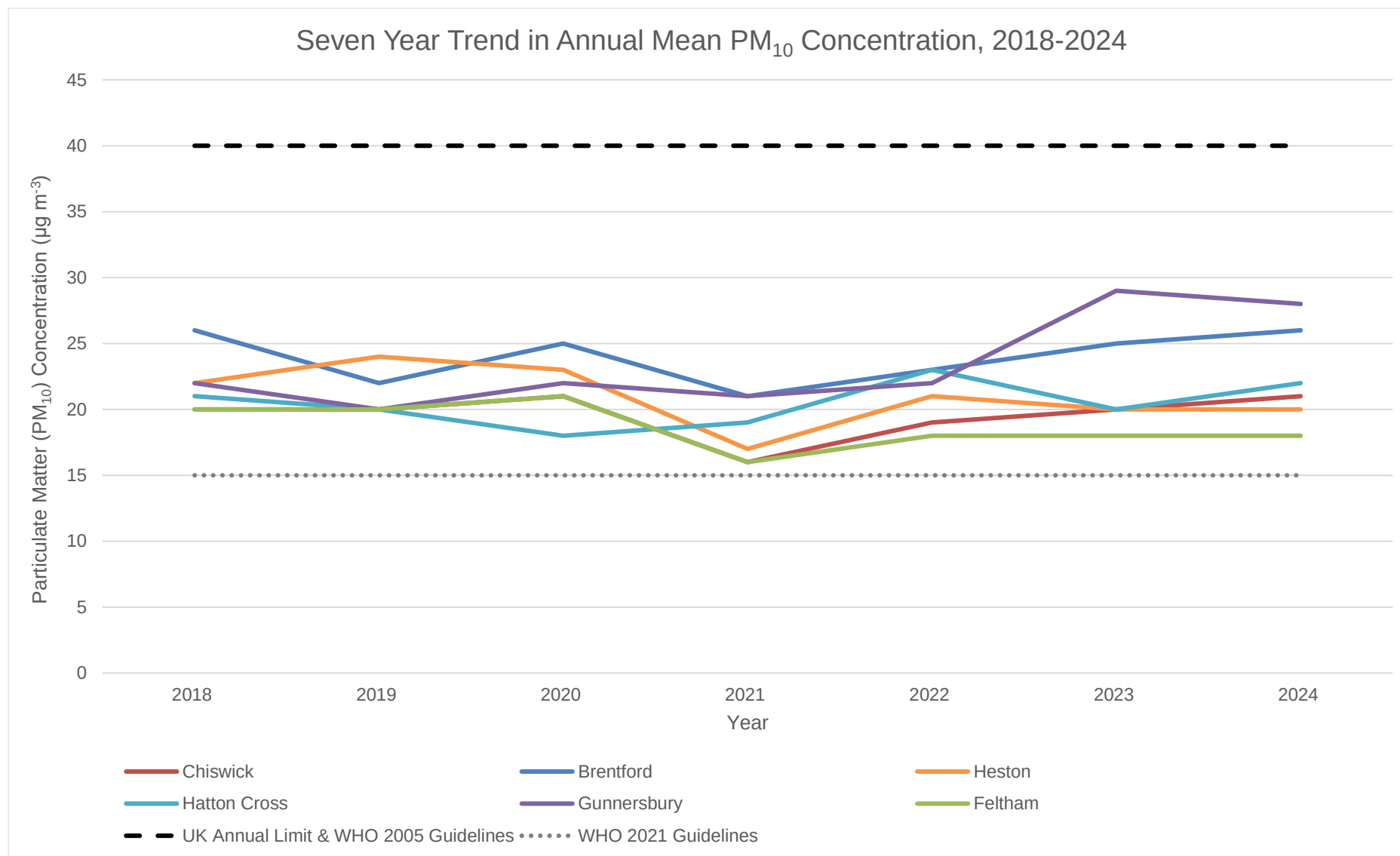


Table H. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 24-Hour Means > 50 µg m⁻³

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
Chiswick	521084	178499	Roadside	92.61	92.61	1	3	3	0	3	5	2
Brentford	517425	178071	Roadside	88.13	88.13	4	8	9	3	5	10	6
Heston	513655	176842	Roadside	84.73	84.73	2	5	4	0	5	2	0
Hatton Cross	509334	174997	Urban Background	81.81	81.81	2	7	4	2	2	1	0
Gunnersbury	519180	179338	Roadside	93.80	93.80	1	5	2	2	5	16	2
Feltham	510691	173247	Roadside	95.82	95.82	4	7	2	0	3	2	0

Notes

Exceedances of the PM₁₀ 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 ($\mu\text{g m}^{-3}$)

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
Chiswick	521084	178499	Roadside	90.60	90.60	14	13	10	10	12	9	13
Brentford	517425	178071	Roadside	88.78	88.78	15	13	12	10	10	9	11
Heston	513655	176842	Roadside	82.39	28.78	0	0	0	0	0	0	18
Hatton Cross	509334	174997	Urban Background	85.15	14.88	0	0	0	0	0	0	19
Gunnersbury	519180	179338	Roadside	93.11	17.37	0	0	0	0	0	0	18
Feltham	510691	173247	Roadside	95.34	32.28	0	0	0	0	0	0	14

Notes

The annual mean concentrations are presented as $\mu\text{g m}^{-3}$.

Exceedances of the PM_{2.5} annual mean AQO of $20 \mu\text{g m}^{-3}$ are shown in **bold**.

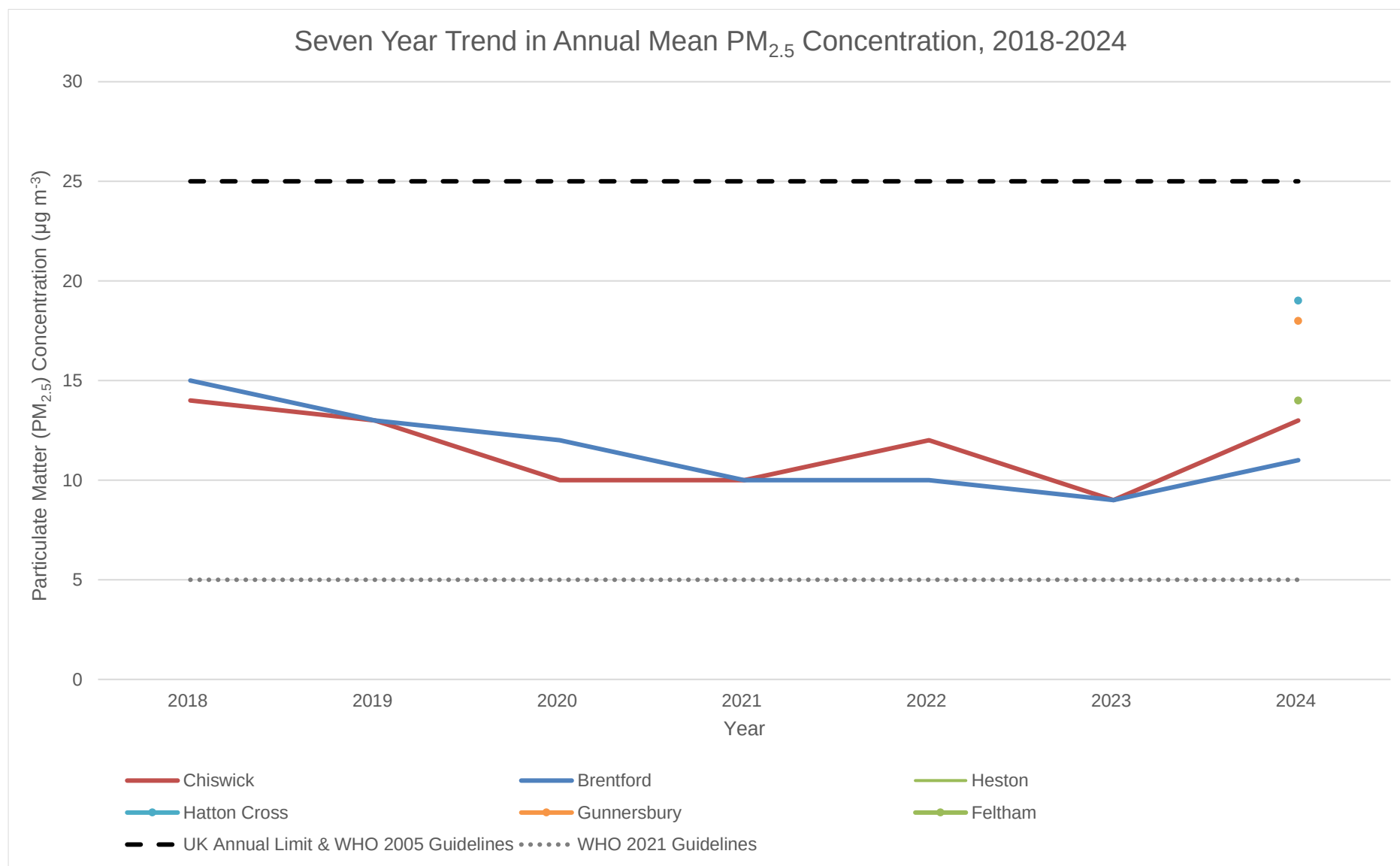
All means have been “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

Particulate Matter (PM_{2.5}): 2024 is the first year PM_{2.5} has been monitored across all six automatic monitoring sites. At Chiswick and Brentford, where PM_{2.5} has been recorded since 2017 we saw an increase in PM_{2.5} for the first time since 2022. All six sites are recording levels under the existing UK annual limit value of $25 \mu\text{g m}^{-3}$. The WHO's guideline figure for PM_{2.5} is $5 \mu\text{g m}^{-3}$.

Figure C. Seven Year Trend in Annual Mean PM_{2.5} Concentration, 2018-2024



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.

London Borough of Hounslow currently does not have any declared AQMAS. A local Air Quality Strategy is in place to prevent and reduce polluting activities. The Hounslow Air Quality Action Plan 2023-2028 is available [here](#).

2.2 Air Quality Action Plan Progress

Table K provides a brief summary of LB Hounslow's 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 J. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
1	Monitoring and core statutory duties	Maintain and upgrade Hounslow's automatic air quality monitoring stations.	Maintenance is ongoing; we have expanded our PM _{2.5} monitoring from 2 to 6 sites, and we have installed new NOX monitors at 4 sites. We have replaced PM ₁₀ monitors at all 6 sites.
2	Monitoring and core statutory duties	Maintain Hounslow's nitrogen dioxide (NO ₂) diffusion tube network in accordance with current guidance.	Maintenance is ongoing and in line with current guidance.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
6	Monitoring and core statutory duties	Review Hounslow's Air Quality Management Area and Air Quality Focus Areas to understand if any changes are necessary.	Both areas have been assessed and there are no plans change either of them. They will continue to be reviewed on an ongoing basis.
8	Monitoring and core statutory duties	Support the introduction of a new or revised Clean Air Act that improves public protection from atmospheric pollution.	We are currently in line with the UK's legal national limit, and we are working towards the WHO's levels.
10	Monitoring and core statutory duties	Implement a new network of low-cost sensors in line with best practice and technical guidance on the use of such units. Information from this monitoring should be easily accessible to the public, and available in real-time.	Over 75 sensors (of a proposed total of 90) have been installed, predominantly at schools, to provide hyper-local real time data to schools and residents.
13	Monitoring and core statutory duties	Work with the relevant teams (Planning, Public Health, Transport) to ensure the council have a robust air quality evidence base which can be easily adapted into future Plans and Strategies in preparation for future policy changes – e.g. future Local Planning policy, Minimum Energy Efficiency Standards, Air Quality Focus Areas.	We engage with teams across the council to ensure air quality is included as a consideration in all emerging strategies. E.g. the walking and wheeling strategy and kerb side strategy.
15	Emissions from developments and buildings	Continue to bid for funding to decarbonise the council's estate through schemes such as Public Sector Decarbonisation Scheme, Social Housing Decarbonisation Fund, as/when funding becomes available.	We are currently pending funding from the Mayoral Renewables Fund.
19	Emissions from developments and buildings	Promoting and delivering energy efficiency and energy supply retrofitting projects in workplaces and homes through EFL retrofit programmes such as RE:FIT and RE:NEW and through Hounslow's carbon offset fund.	Emerging policy approaches being pursued to expand the COF to help promote retrofitting projects.
21	Emissions from developments and buildings	Deliver the actions and objectives set out in the council's Energy Services Plan, detailing	Council is actively replacing gas-fired boilers with air source heat pumps and installing solar P.V./LED lights on council owned assets and state-funded schools. We are on track to meet our Hounslow

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		how the council will reduce its own direct emissions and electrify its energy supply.	Energy Service Plan. We have implemented A.I. technology (provided by Danish company ENTO) to analyse energy waste in corporate assets and state-funded schools to reduce carbon emissions and energy waste.
25	Emissions from developments and buildings	Develop and implement strategies for decentralised energy that convert gas heating to low and zero carbon alternatives including heat networks, and upgrade existing large, combined heat and power communal heating to cleaner technology alternatives. Work with key stakeholders such as Canals & Rivers Trust & Thames Water to capitalise on wasteheat opportunities, reducing dependence on fossil fuels. Reducing emissions from Combined Heat and Power generators (CHP) and enforcing CHP air quality policy in line with London Plan policy SI3. Ensure smaller developments use ultra-low Nox Boilers or other zero carbon low emission options.	Our plan is to introduce stronger requirements for heat networks, subject to examination, helping to increase deployment and reduce carbon.
26	Emissions from developments and buildings	Use planning policy to require residential electric charging points on new developments, in line with Policy EC2 of the Local Plan.	The emerging policy approaches being pursued are trying to align our approach to EV charging point delivery with the London plan.
39	Public health and awareness raising	Encourage schools to join the TfL STARS (Travel for Life) accredited travel planning programme by providing information on the benefits to schools and supporting the implementation of such a programme.	This is an ongoing, yearly deliverable. As of September 2024, 35 schools have been accredited. 26 schools have achieved a gold accreditation, 6 Silver and 3 Bronze.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
42	Public health and awareness raising	Continue to implement new school streets, including camera enforcement and associated green infrastructure initiatives. Link this work to increased uptake of active travel/ school travel planning.	School streets are an ongoing delivery for the team. As of this year there are 38 schools signed on to the program.
45	Public health and awareness raising	Explore options to introduce air quality issues into schools (via curriculum, eco-schools resources etc).	Air Quality audits are available to every school in the borough; we facilitate school visits and decide on what green intervention would best suit that school. We have wider conversations about air quality and its importance. We are also creating an air quality toolkit which we aim to implement this year, helping schools understand and educate on air quality. We are working with the UCL climate ambassadors to help schools create climate action plans as per DFE guidance. 28 audits have been completed in the past 12 months, with 8 intervention measures either completed or in active progress.
58	Borough fleet actions	Continue to promote the 'Try before you bike' scheme aimed at public/business uptake of cargo bike schemes. Secure funding to deliver this over the plan period.	This is an ongoing deliverable for the council. We have an accompanying offer called Our Bike, which aims to provide residence and businesses with cargo bikes for their own use.
70	Localised solutions	Apply for Mayor's Air Quality Funds and Defra Air Quality Grant to deliver air quality projects in Hounslow as/when funding becomes available.	Hounslow are co-leading the mayor's air quality fund. We have co-funded an anti-idling project with LB Camden.
72	Localised solutions	Engage a consultant to facilitate further investigation into reducing council estate reliance on fossil fuels as part of the Climate Emergency Action Plan.	We commissioned the net carbon zero service; it was successfully completed. We now have a roadmap to net zero for all corporate buildings and schools.
75	Cleaner transport	Work with the Transport Team to help deliver the actions and objectives set out in the adopted Transport Strategies that have the co-benefit of improving air quality.	A new transport strategy was adopted by the council in March 2025 with renewed commitments to air quality and reducing the impact from motor traffic.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
77	Cleaner transport	Installation of Ultra-Low Emission Vehicle (ULEV) infrastructure in line with the EV Strategy. The installation of rapid chargers to help enable the take up of electric taxis, cabs and commercial vehicles (in partnership with TfL and/or OLEV94). This action is not related to new development.	This is ongoing. We are working towards installing 2000 charge points by May 2026. Over the next year slow chargers and rapid chargers will be installed with resident priority for usage.
81	Cleaner transport	Work with the transport & traffic teams to co-locate traffic and air quality sensors, to better understand the relationship between traffic and pollution, particularly at key junctions and on strategic roads.	The transport team have recently procured new sensors (approximately 1 per ward) to capture pedestrian and cycle movements as well as car movements.

3. Planning Update and Other New Sources of Emissions

Table K. Planning requirements met by planning applications in LB Hounslow in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	30
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)	0
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.	Unknown
Number of developments required to install Ultra-Low NO _x boilers	Unknown
Number of developments where an AQ Neutral building and/or transport assessments undertaken	Unknown
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	Unknown
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 Stage IIIB of the Directive and/or exemptions to the policy.	Total 14 audits undertaken by Clean Construction for London 2 achieved self-compliance 8 achieved compliance 2 sites recorded non-compliant 0 had no NRMM 2 sites were complete

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 Hounslow Fleet

The London Borough of Hounslow fleet included one owned and one hired zero-emission vehicle, representing 0.6% of the total fleet of 340 vehicles.

4.2 Planning Enforcement

All major planning applications with issues of air quality or noise, including environmental statements and CEMPs, are reviewed on Hounslow's behalf by an external consultant, Tetra Tech Ltd.

4.3 Pan-London NRMM Auditing Project

Hounslow continues to support the NRMM Enforcement Project. Details in Table N. The recommended NRMM condition wording from Cleaner Construction for London is as follows:

All Non-Road Mobile Machinery (NRMM) of net power of 37kW and up to and including 560kW used during the course of the demolition, site preparation and construction phases shall comply with the emission standards as published on the NRMM Website (<https://nrmm.london/>).

Unless it complies with the standards set out on the website, 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 developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register at <https://nrmm.london/>.

Major applications in Hounslow are required to submit either a Construction or Demolition Management Plan or Environmental Management Plan which contains details of on-site NRMM. An LBH NRMM condition isn't used.

4.4 Air Quality Alerts

Hounslow is a member of the CERC airTEXT service (<https://www.airtext.info/>).

Hounslow cascades the mayor's air quality alert messages.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

- Routine calibrations carried out monthly by LSO from Hounslow Council
- Biannual audits completed by Ricardo-AEA
- Servicing and ad hoc repair visits provided by ESU We Care 4 Air

A.2 Diffusion Tubes

- Gradko International supplied and analysed the diffusion tubes used by the London Borough of Hounslow in 2024
- The preparation method used was 50% TEA in acetone
- Gradko is a UKAS accredited laboratory (2187) with ISO 17025
- Laboratory precision results:
 - Precision: Good (<https://laqm.defra.gov.uk/air-quality/air-qualityassessment/precision-and-accuracy/>)
 - AIR-PT: 100% (<https://laqm.defra.gov.uk/air-quality/air-qualityassessment/qa-qc-framework/>)
- National bias adjustment factor from database v03/25: 0.88
- Local bias adjustment factor from five co-location studies: 0.83

Information on QA/QC for diffusion tubes can be found on the LAQM website at <https://laqm.defra.gov.uk/annual-reporting/>.

Factor from Local Co-location Studies

	STEP 3a Local Bias Adjustment Input 1	STEP 3b Local Bias Adjustment Input 2	STEP 3c Local Bias Adjustment Input 3	STEP 3d Local Bias Adjustment Input 4	STEP 3e Local Bias Adjustment Input 5
Periods used to calculate bias	11	11	11	9	9
Bias Adjustment Factor A	0.8 (0.76 - 0.85)	0.85 (0.81 - 0.89)	0.8 (0.74 - 0.87)	0.71 (0.63 - 0.8)	1.04 (0.92 - 1.19)
Diffusion Tube Bias B	24% (17% - 32%)	17% (12% - 23%)	25% (15% - 35%)	42% (25% - 58%)	-4% (-16% - 8%)
Diffusion Tube Mean ($\mu\text{g}/\text{m}^3$)	33.9	30.3	25.1	25.2	23.0
Mean CV (Precision)	3.8%	4.0%	3.8%	6.3%	3.8%
Automatic Mean ($\mu\text{g}/\text{m}^3$) (for periods used to calculate bias)	27.2	25.8	20.1	17.8	23.8
Data Capture (for periods used to calculate bias)	100%	95%	99%	99%	96%
Overall Data Capture	97%	94%	93%	91%	89%
Adjusted Tube Mean ($\mu\text{g}/\text{m}^3$)	27 (26 - 29)	26 (25 - 27)	20 (19 - 22)	18 (16 - 20)	24 (21 - 27)
Overall Diffusion Tube Precision	Good Overall Precision	Good Overall Precision	Good Overall Precision	Good Overall Precision	Good Overall Precision
Overall Continuous Monitor Data Capture	Good Overall Data Capture	Good Overall Data Capture	Good Overall Data Capture	Good Overall Data Capture	Poor Overall Data Capture

Discussion of Choice of Factor to Use

Per section 7.193 of LAQM TG.16:

“If there is more than one local collocation study, then the A factors should not be averaged. Instead, a reasonable approximation can be derived by averaging the B values. For example, if there were 2 studies of 22% and 28%, then the average would be 25%. This is then expressed as a factor, e.g. 25% is 0.25. Next add 1 to this value, e.g. $0.25 + 1.00 = 1.25$. Finally, take the inverse to give the bias adjustment factor, e.g. $1/1.25 = 0.80$.”

The local bias adjustment factor was calculated at five co-location studies at automatic monitoring stations across Hounslow. The BAF was calculated using the LAQM Diffusion Tube Data Processing Tool. The average bias adjustment factor of these five studies (from B factor) was 0.83. Details of each co-location study are listed above. The local bias adjustment factor of 0.83 was applied to all single diffusion tube sites, as is consistent with analysis in previous years. The national BAF for 50% TEA in acetone tubes analysed by Gradko in 2023 is 0.88 (Database v03/25).

Table L. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	Local	03/25 (0.88)	0.83
2023	Local	03/24 (0.83)	0.81
2022	Local	03/23 (0.82)	0.85
2021	Local	03/22 (0.84)	0.87
2020	Local	03/21 (0.81)	0.83
2019	Local	03/20 (0.93)	0.89
2018	Local	Unknown	0.87
2017	Local	Unknown	0.89

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Data from 5 diffusion tube sites in Hounslow have been annualised. Annualisation has been completed using the LAQM Diffusion Tube Data Processing Tool in line with the methodology outlined in LLAQM.TG(19).

Distance Adjustment

No diffusion tube sites were adjusted for distance.

Table M. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor Brentford	Annualisation Factor Gunnersbury	Annualisation Factor Hatton Cross	Annualisation Factor Heston	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g m}^{-3}$)	Annualised Annual Mean ($\mu\text{g m}^{-3}$)	Comments
HS46	0.9346	0.9410	0.8879	0.8950	0.9146	19.6	18.0	
HS69	1.0512	1.0278	1.0468	1.0855	1.0528	24.4	25.7	
HS80	0.9782	0.9758	0.9663	0.9951	0.9788	35.2	34.5	
HS88	1.0273	1.0494	1.0709	1.0372	1.0462	13.4	14.0	
HS91	1.0212	0.9828	1.0748	1.0601	1.0347	29.3	30.4	

Appendix B Full Monthly Diffusion Tube Results for 2024

Table M. NO₂ 2024 Diffusion Tube Results (µg m⁻³)

Tube 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 (0.83)	Comment
BREN A	517425	178071	37.9	35.3	31.3		33.2	33.1	33.8	30.3	34.2	31.5	42.6	29.8	33.5	27.7	Triplicate site
BREN B	517425	178071	34.4	36.0	34.9	24.6	33.9	32.7	31.6	30.0	36.0	32.1	38.2	31.2			Triplicate site
BREN C	517425	178071	34.0	36.0	33.9	32.9	34.7	33.2	34.9	32.1	35.2	34.0	39.3	27.9			Triplicate site
CHIS A	521084	178499		35.0	35.4	28.4	33.2	25.6	28.2	24.7	30.3	32.3	35.7	28.7	30.6	25.4	Triplicate site
CHIS B	521084	178499	34.6	33.7	33.0	30.5	33.0	25.0	28.4	23.5	29.2	33.3	34.8	23.4			Triplicate site
CHIS C	521084	178499		35.2	37.2	28.0	32.5	27.0	28.2	24.9	27.6	31.9	35.8				Triplicate site
FELT A	510691	173247	28.4		23.2	20.7		19.3	19.1		22.4	25.2	29.3	20.8	22.5	18.6	Triplicate site
FELT B	510691	173247	24.7	22.2	22.8	19.4	20.7	18.7	18.7		24.2	24.5	28.1	21.0			Triplicate site
FELT C	510691	173247	27.2	22.0	22.0	17.4	23.3		17.4		22.2		29.6				Triplicate site
HAT A	509334	174997	30.2	23.6	18.0	23.2		18.1	24.0		28.3	25.5	30.1	23.6	25.0	20.7	Triplicate site
HAT B	509334	174997	28.9	25.4	18.9	23.0	24.1	24.8	24.1		26.9	25.2	35.7	24.6			Triplicate site
HAT C	509334	174997	29.4	25.4	20.6	22.2	21.1	23.2	25.0		29.3	23.6	35.2	22.2			Triplicate site
HEST A	513655	176842	30.9	29.5	25.1	23.0	27.1	21.9	18.5	23.1	28.5	31.0	29.6	22.1	25.6	21.2	Triplicate site
HEST B	513655	176842	30.5	30.0	24.5	22.5	27.0	20.3	19.5	23.8	25.8	31.4	31.1	20.6			Triplicate site
HEST C	513655	176842	29.0	30.4	25.1	21.5	24.0	22.3	17.7	21.3	25.6	31.2	32.2	22.2			Triplicate site
HS32	517551	178186	31.6		32.9	27.1	28.2	28.5	31.1	30.4	30.3	36.2	31.2	30.4	30.7	25.4	
HS33	519452	178314	28.8	27.4	24.0	26.6				24.6	29.0	28.1	33.7	27.6	27.8	23.0	
HS34	520876	177164	26.2	21.1	20.6	14.7	17.2	15.1		16.2	19.2	24.7	25.1	17.5	19.8	16.4	
HS35	521220	178069	24.2	22.2	20.2		16.6		15.5	13.1	17.2	23.6	28.4	19.0	20.0	16.6	
HS41	512103	172506	31.9	24.7	27.0		24.6	23.0	23.0	21.1	23.8	30.4	37.3	20.3	26.1	21.6	
HS42	514090	175812	20.0	22.8	27.5	22.7		21.0	28.5		26.9	28.5		21.6	24.4	20.2	
HS43	517436	178044	31.0	24.5	20.5	17.8	20.4	18.6	18.9	17.8	23.7	24.4	32.9	24.8	22.9	19.0	
HS46	516887	178637	22.2	23.5	21.2	12.5					17.4	22.3	18.3		19.6	14.9	
HS47	516712	178588	31.5	29.1	27.4	22.1	29.4	27.6	27.5		36.7	34.6	41.2	29.8	30.6	25.3	
HS51	509249	174683	22.5	17.4	16.1	18.4	19.8	16.7	15.0	16.9	22.6		27.4	0.8	17.6	14.5	
HS52	508868	173720	22.4	16.8	16.1	15.5	17.3	14.5	12.6	12.6	19.1	19.3	26.5	18.3	17.6	14.6	
HS53	510986	176031	26.9	23.6	15.7	16.5	17.1	17.0	16.9	16.7	20.8	29.6	25.4	29.4	21.3	17.6	
HS54	510784	177460	31.8	29.8	30.3	21.8	24.0	27.9	26.2	24.1		26.8	31.9	29.2	27.6	22.9	
HS55	510750	176684	34.0		28.6	21.1		24.2		21.8	28.5	31.6	32.3	29.9	28.0	23.2	
HS61	516208	175793	23.7		16.0	17.9	18.1	17.9	17.5	18.0	19.8		30.3	22.5	20.2	16.7	
HS62	513619	176924	27.2	27.3	21.6	16.4	18.9	17.9	18.9	18.8	20.4	26.1	31.5	20.7	22.2	18.3	
HS63	513528	175868	25.0	28.6	24.0		24.6		24.5	23.9	26.8	32.4	26.2	23.6	25.9	21.5	
HS64	512860	175013	24.7	22.7	20.1	15.8	18.6	13.0	15.8	14.2	19.0	22.0	30.8	16.8	19.5	16.1	
HS65	511840	172745	23.5	19.5	19.2	14.2	15.1	13.0	15.2	13.3	10.1	20.0	22.5	16.1	16.8	13.9	
HS66	510957	173642	34.5	27.3	25.0	23.7	26.5	22.5	18.6	19.8	29.1	27.0	35.6	24.3	26.2	21.7	
HS67	516590	176888	40.6	37.9	37.7	37.6	37.0	38.6	35.9	37.2	35.7	39.1	39.7	31.2	37.4	30.9	
HS68	517278	177298	32.9	33.3	28.3	22.9	25.0	28.3	28.2	26.6	29.3	29.3	36.4	35.8	29.7	24.6	
HS69	519015	178018			24.5	22.5	25.2		19.8	19.0			33.8	25.9	24.4	21.3	

HS70	521442	177980	35.1	34.7	36.7	26.9	34.3	29.0		27.2	31.1	36.7	36.9		32.9	27.2	
HS71	519180	179338	29.9	30.4	28.4	24.3	26.2	26.0	23.4	23.0	27.7	29.0	33.0	23.5	27.1	22.4	
HS72	513064	177552	30.6	29.0		18.4		19.2	20.4	17.5	20.8	25.4	25.3	23.4	23.0	19.0	
HS73	510567	172857	26.4	21.0	18.1	16.1	19.4	16.8	17.3	15.2	20.7	23.3	28.0	19.8	20.2	16.7	
HS74	511989	171797	24.3		18.7	14.6	15.4	13.7	15.2	13.6	15.8	22.5	23.2	16.1	17.6	14.5	
HS78	512763	175312	27.3	33.9	30.3	25.9	29.0		28.5	24.5	29.2	31.3	31.2	24.7	28.7	23.8	
HS79	513839	175316	26.7	21.4	19.8	14.7	15.9	14.6	16.0	14.1	20.5	24.1	25.7	19.6	19.4	16.1	
HS80	514433	175950	39.3	34.7	29.4	32.6	34.3			29.1	38.3		44.0		35.2	28.5	
HS81	515035	175907	20.5	17.6	14.8	11.2	12.0			11.3	13.9		17.8	16.9	15.1	12.5	
HS82	516669	175998	19.3	14.5	12.6	8.5	11.1		10.5	10.5	12.3	15.4	22.4	16.9	14.0	11.6	
HS83	514848	178068	14.9	14.8	11.8	8.5	10.1		11.7	11.3	10.0		18.2	12.6	12.4	10.2	
HS84	512709	172155	27.6			19.7	20.2	18.5	20.3	16.6	26.6	27.3	29.5	20.2	22.7	18.8	
HS85	513213	175655	29.2	32.0	29.8	28.8	27.6	27.4	27.9	29.2	29.4	29.9	32.3	25.2	29.1	24.1	
HS86	510947	176564	29.3	36.6	25.6	28.4	28.4	30.2	26.4	24.2	28.5	21.0	32.2	33.0	28.7	23.7	
HS87A	511542	176426	32.6	38.5	31.7	27.9	30.1		29.0	30.2	27.7	34.4	30.0	18.1	30.0	24.9	
HS88	521483	176692	20.6			12.1		10.5	8.8	11.4		18.4		12.0	13.4	11.6	
HS89	515424	174719	20.7	18.1	18.1	15.3	16.9	15.1	15.7	14.4	16.6	20.7	26.7	20.0	18.2	15.1	
HS90	517585	177606	21.2	22.2	18.7	14.8	17.0	14.5	16.2	17.2	20.5	24.6		20.4	18.9	15.6	
HS91	521041	177973	30.7	26.9		28.7	29.0	35.1		26.7				28.3	29.3	25.1	
HS92	521110	177970	24.1	32.8		21.1	22.8	22.3		22.3	24.5	33.5	33.5	16.7	25.4	21.0	
HS93	521110	177970	24.3	25.6		19.5	27.9	19.1		19.4	20.8	30.4	31.7	23.7	24.3	20.1	
HS94	521490	177920	42.0	12.7	37.0	35.2		40.7	36.2	33.0	43.2	14.5	38.3	25.6	32.6	27.0	
HS95	521525	177953	27.8	26.8	26.4	18.0		21.1	21.9	20.1	21.9	28.3	27.2	19.0	23.5	19.4	
HS96	520149	178515	32.3	27.4	27.4	25.8	31.9	22.0	27.5	26.0	34.0	34.4	36.7	25.6	29.3	24.2	
HS97	570371	178589	29.5	26.5		18.9	23.4	24.5	24.0	20.7	22.6	30.4	31.1	16.8	24.4	20.2	
HS98	520348	178661	29.6	24.0	27.7	19.6	23.9	21.8	23.1	19.9	24.9	26.6	27.3	19.9	24.0	19.9	
HS99	521240	177679	31.0	31.3	29.0	23.5	23.5		22.9	24.3	23.6	29.6	32.1	18.4	26.3	21.8	

☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table M

☒ 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

☒ LB Hounslow confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System

Notes:

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

NO₂ annual means exceeding 60µg m⁻³, indicating a potential exceedance of the NO₂ 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

Figure D. Map of Non-Automatic Monitoring Sites

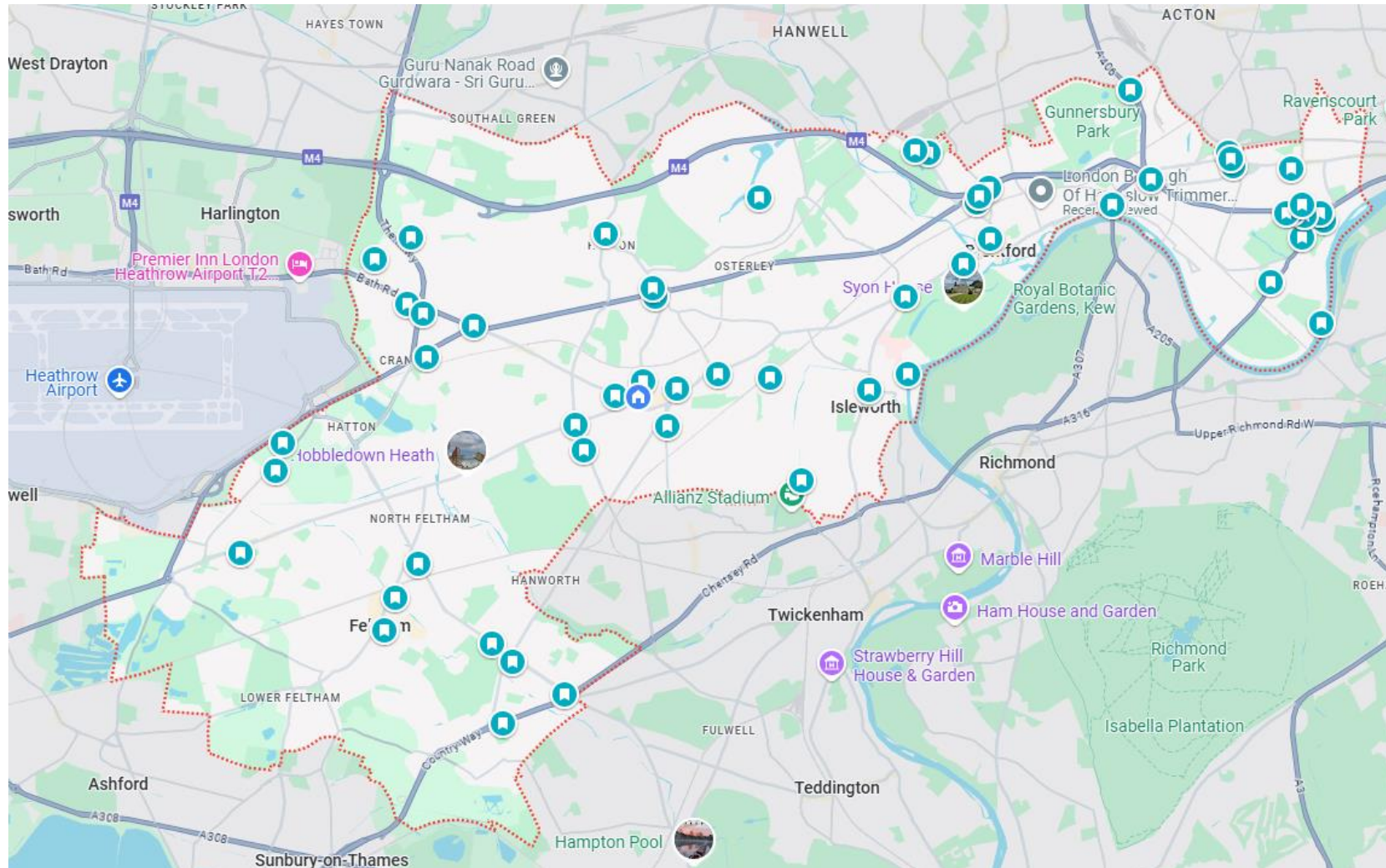
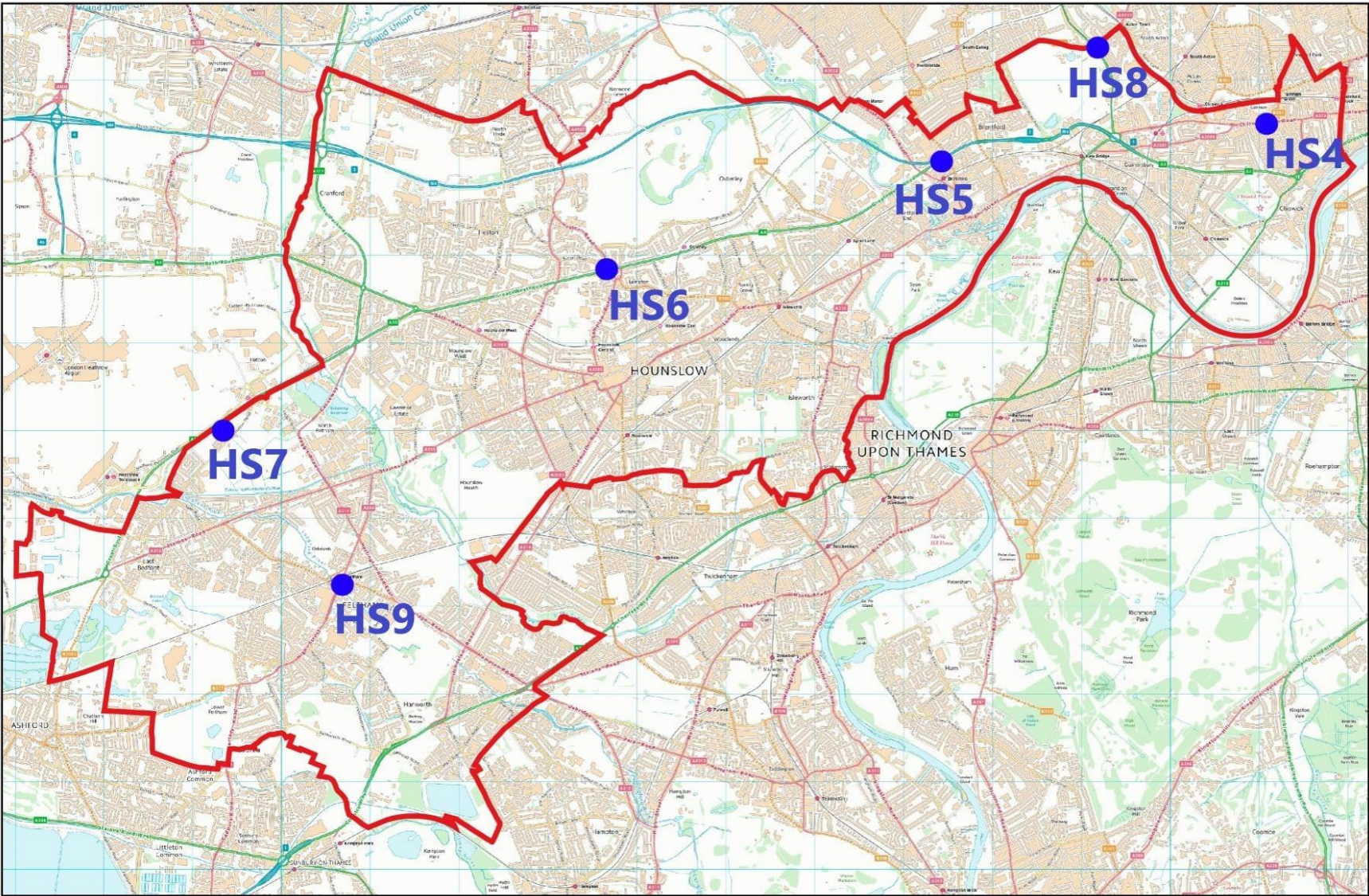


Figure E. Map of Automatic Monitoring Sites



Islington Air Quality Annual Status Report 2024

Contact details

London Borough of Islington
Environmental Pollution, Policy and Projects Team
Waste and Recycling Centre
1 Cottage Road
London
N7 8TP
T: 020 7527 2000
E: pollution@islington.gov.uk

Foreword

As a council we are committed to creating a more equal Islington, where everyone has the same chance to succeed. We firmly believe that to achieve that, we must create a greener, healthier future for everyone. Clean air is vital to this vision, which is why we have implemented an [air quality action plan](#). This annual air quality report shows the strides we've made towards a healthier environment for all as set out in our action plan.

Improving air quality has a multitude of positive effects – it transforms our borough into a more pleasant environment for local people and visitors, improves health and wellbeing for people of all ages, and plays a crucial role in combating climate change.

Air pollution affects us throughout our life, from before birth and all the way into old age¹. By proactively addressing air pollution, we reduce risks for those with heart and respiratory conditions during high pollution episodes, and the risks of chronic diseases due to long-term exposure to air pollution.

Air quality is influenced by a range of factors including emissions from sources within and outside the borough, as well as changes in the weather and urban design. The main sources in Islington are road transport, heating, and commercial cooking. Sources from outside the borough include natural sources (like soil erosion or salt spray) and industrial pollution from northern Europe. Pollution levels fluctuate throughout the day, month and year, influenced by weather conditions and local factors. Identifying the cause of localised or short-term pollution changes can therefore be challenging.

Notwithstanding this, this report highlights our leadership in combating air pollution and making significant steps in reducing air pollution, with long-term data showing pollution levels are about 40% lower than they were seven years ago (the monitoring period covered in this report, as set out by [GLA statutory guidance](#)). In 2024 the average pollution levels were lower than they were in 2023. Looking at individual sites, we saw a range of increases and decreases in pollution. As in 2023 MacDonald Road bus stand measured the highest pollution levels in the borough, with two of the three monitoring sites breaching the annual objective level located on MacDonald Road. We are monitoring the situation and working with stakeholders to come up with sustainable long-term solutions, building on previous efforts.

The report looks at air quality data and actions for 2024, when we took a number of significant, pioneering steps towards creating a greener, healthier borough. These include a number of actions helping to protect the most vulnerable in the borough and encourage a shift towards active travel, including:

¹ [Every breath we take: the lifelong impact of air pollution | RCP London](#)

1. Protecting the most vulnerable people in the borough in care homes and schools.
2. Continuing to deliver cleaner, greener, more welcoming streets for local people through the council's transport infrastructure programme, including the Liveable Neighbourhood programme.
3. Delivering a host of active travel engagement and infrastructure changes, including new programmes specifically for vulnerable local people.
4. Leading by example by making numerous council fleet and facility improvements.

Details of actions can be found in this report in the summary and key findings sections, as well as in Section 4.2 Table K and L.

Our air quality action plan is also pivotal in achieving the broader ambitions of the council, aligning perfectly with the Islington Together Plan 2030 mission of a greener and healthier Islington. Tackling air pollution is not just about environmental stewardship; it's a proactive step towards safeguarding public health. By mitigating air pollution, we can alleviate the burden of a range of respiratory and cardiovascular diseases and reduce health inequality caused by the unequal impacts of air pollution.

Actions detailed in this report, such as reducing wood burning or improving energy efficiency in our homes, are key to fulfilling the Vision 2030: Building a Net Zero Carbon Islington by 2030 strategy. Moreover, our commitment to air quality improvements are supported by the Islington Transport Strategy 2020-2041 which paves the way for the adoption of electric vehicles and promotes a transition towards active travel.

This report highlights our collective progress in improving air quality, reflecting our commitment to community health and wellbeing and climate change mitigation. We are not just meeting the national objectives but some of the tougher World Health Organisation (WHO) interim guideline levels too. To continue meeting national objectives and WHO interim guidelines, and to ultimately achieve WHO guideline levels, further improvements will require collaboration across various sectors.

We look forward to continuing our partnership with Islington's local people to foster a greener, healthier borough, unlocking its full potential for a brighter, more equal future for all.

Summary

This report details the results of our air quality monitoring in 2024, as well as actions taken in 2024 to improve air quality and includes the following sections:

- Results of our long-term air pollution monitoring conducted across the borough.
- Actions taken in 2024 to improve air quality, with progress assessed against our air quality action plan.
- Quality control processes completed to make the data as accurate as possible.
- Results of all other air pollution monitoring conducted across the borough.
- A low traffic neighbourhood data analysis.

Air quality monitoring results 2024

As a result of the actions taken in and around Islington in 2024, supported by the council, significant improvements in air quality have been measured, most notably:

- Over the seven years covered by this report from 2018-2024, our long-term monitors recorded a 40% reduction in nitrogen dioxide (NO₂) pollution. This is slightly lower than the 42% reduction seen from 2017-2023, as noted in last year's report. This is due to better air quality levels in 2018 compared to 2017, rather than any increase in pollution from 2023 to 2024, where air quality actually improved.
- In 2024 the average annual NO₂ level at our long-term sites was 22 µg/m³ compared to 24 µg/m³ from 2020-2023. This is well below the annual objective level of 40 µg/m³.
- Only three sites, at two locations, of our 281 monitoring sites breached the annual objective level for NO₂ demonstrating our continued success in maintaining low pollution levels. This is the same as 2023 which also saw three of the 283 monitoring sites breach the annual objective level for NO₂.
- As in 2023 all schools, care homes and nurseries met the NO₂ annual objective level.
- All LTN areas saw an improvement in air pollution from 2023 to 2024. As in 2023 all LTN areas show improvements in air quality over the longer term, in line with wider borough trends.
- All other pollutant objectives for NO₂ and PM₁₀ continue to be met.

Key air quality actions in 2024

A number of actions were taken to improve air quality in 2024, tackling the main sources of pollution and lowering overall pollution exposure. Key initiatives included targeted actions to protect the most vulnerable local people from the harmful effects of pollution:

- Working with some of those most vulnerable to the impacts of air pollution, including helping Islington's care homes to implement air quality reduction measures, running air quality citizen science workshops with schools, community groups and individuals and creating a website showing real time air quality data.
- Advancing our transport infrastructure programme, by enhancing local streets; making additional School Streets permanent, implementing environmental improvements at schools on main roads, conducting early engagement on School Streets for secondary schools, commencing implementation of Mildmay Liveable Neighbourhood and consultations on further Liveable Neighbourhoods.
- Delivering a host of active travel engagement and infrastructure changes, including improvements to a number of cycle routes, cycle training events, new programmes like cycle taxis and other special programmes for the elderly and those with dementia.
- The council is leading by example by upgrading its fleet and facilities, notably transitioning to electric vehicles and adding infrastructure to further reduce reliance on fossil fuels.

Influences on air pollution levels

Air pollution in Islington comes from various local and external sources. The key local contributors identified by the London Atmospheric Emissions Inventory 2019 include road transport, heating and power, construction, commercial cooking, and wood burning. External sources are similar, but also include sources like sea salt or industrial pollution. For more information on pollution sources refer to Section 1.4.5 in the Introduction.

Pollution levels fluctuate daily, seasonally and from year to year due to changes in weather. Temporary spikes in air pollution, for example such as those seen in rush hour, may not be representative of average pollution levels seen over a longer time period.

Local factors, such as urban design, can lead to very localised changes in air pollution. For more information on factors influencing pollution levels see Section 1.4.6 of the Introduction.

Determining the cause of air pollution changes is challenging due to the many factors that impact pollution levels, including changes in multiple different pollution sources, weather changes, and localised or short-term changes.

However, this report shows decreases in borough-wide air pollution over the long-term, confirming the positive impact air quality policies in Islington and more widely, are having on local air quality.

Wider context of this report

Air pollution transcends borders and has many sources, so as well as the council taking action itself we are committed to working with partners, both internal and external to the council, to reduce pollution levels.

Due to the importance of improving air quality to protect health our air quality action plan is integrated with key borough plans including [Islington Together 2030](#), [Vision 2030: Building a Net Zero Carbon Islington](#) and the [Islington Transport Strategy 2020-2041 to ensure coordinated approach across the council](#). More information on how the air quality action plan, this report, and other council priorities work together, refer to can be found in the introduction in Section 1.4.1.

Contents

Contact details	1
Foreword	2
Summary	4
Contents	7
Legal basis of report	7
Tables	8
Figures	9
Abbreviations and National Standards	10
1. Introduction	13
2. Key Findings in 2024	22
3. Air Quality Monitoring	28
4. Actions to Improve Air Quality	38
5. Planning Update and Other New Sources of Emissions	64
6. Additional Activities to Improve Air Quality	66
Appendix A Details of Monitoring Site Quality QA/QC	68
Appendix B Full Monthly Diffusion Tube Results for 2024	73
Appendix C Other Monitoring Results	75
Appendix D Maps of Monitoring Locations	95
Appendix E Low Traffic Neighbourhoods Longer Term Trends	98

Legal basis of report

This report provides a detailed overview of air quality in Islington during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process².

² LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19))

Tables

Table A.	Abbreviations	10
Table B.	Summary of Air Quality Standards and Objectives	12
Table C.	Details of Automatic Monitoring Sites for 2024	28
Table D.	Details of Non-Automatic Monitoring Sites for 2024	28
Table E.	Annual Mean NO ₂ Monitoring Results: Automatic monitoring µg/m ³	32
Table F.	Annual Mean NO ₂ Monitoring Results: Non automatic monitoring (diffusion tubes)	32
Table G.	NO ₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg/m ³	35
Table H.	Annual Mean PM ₁₀ Automatic Monitoring Results (µg/m ³)	36
Table I.	PM ₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM ₁₀ 24-Hour Means > 50 µg/m ³	37
Table J.	Declared Air Quality Management Areas	38
Table K.	Three key measures 2024	40
Table L.	Delivery of Air Quality Action Plan Measures	41
Table M.	Planning requirements met by planning applications in Islington in 2024	64
Table N.	AIR-PT/WASP results (Rounds 55-58)	69
Table O.	National Bias Adjustment Gradko 2024	69
Table P.	Bias Adjustment Factor	71
Table Q.	Short-term to Long-term Data Adjustment	71
Table R.	Short-term to Long-term Data Adjustment	72
Table S.	NO ₂ Diffusion Tube Results	73
Table T.	School Annual Mean NO ₂ Ratified and Bias-adjusted Monitoring Results 2018-2024 (µg/m ³)	75
Table U.	Nursery Annual Mean NO ₂ Ratified and Bias-adjusted Monitoring Results 2020-2024 (µg/m ³)	80
Table V.	Care Home Annual Mean NO ₂ Ratified and Bias-adjusted Monitoring Results 2022-2024 (µg/m ³)	84
Table W.	Transport Projects Programme Annual Mean NO ₂ Ratified and Bias-adjusted Monitoring Results 2020-2024 (µg/m ³)	86
Table X.	Other Schemes Annual Mean NO ₂ Ratified and Bias-adjusted Monitoring Results 2018-2024 (µg/m ³)	90
Table Y.	Number of monitoring sites in Low Traffic Neighbourhood areas by year	98
Table Z.	Annual average mean NO ₂ ratified and bias-adjusted monitoring results 2018-2024 for Low Traffic Neighbourhoods (boundary, internal and non-road sites) compared to wider borough sites	99

Figures

Figure 1: Map of Islington's Air Quality Focus Areas	18
Figure 2: Average annual nitrogen dioxide levels over the last seven years, long-term diffusion tube and automatic sites	31
Figure 3: Precision and accuracy co-location study at Holloway Road	70
Figure 4: Map of Long-Term Non-Automatic Monitoring Sites (including triplicate tube site)	95
Figure 5: Map of Non-Automatic Monitoring Sites (2024)	96
Figure 6: Map of Automatic Monitoring Sites	97
Figure 7: Annual average mean NO2 ratified and bias-adjusted monitoring results 2018-2024 for Low Traffic Neighbourhoods (boundary, internal and non-road sites) compared to wider borough sites	99

Abbreviations and National Standards

Table A. Abbreviations

Abbreviation	Description
AIR-PT	Air and Stack Emissions Proficiency Test
AQ	Air Quality
AQMA	Air Quality Management Area
AQO	Air Quality Objective
AQS	Air Quality Standard
BID	Business Improvement District
CAD	Clean Air Day
CAV4	Clean Air Villages Four
CHP	Combined Heat and Power
CIMO	Construction Impact Monitoring Officers
CNG	Compressed Natural Gas
Conc	Concentration
CRP	Cross River Partnership
Defra	Department for Environment, Food and Rural Affairs
EV	Electric Vehicle
GLA	Greater London Authority
LAQM	Local Air Quality Management
LEN	Low Emission Neighbourhood
LLAQM	London Local Air Quality Management
LN	Liveable Neighbourhood
LTN	Low Traffic Neighbourhood
MAQF	Mayor's Air Quality Fund
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxide
NRMM	Non-Road Mobile Machinery
PM ₁₀	Particulate Matter less than 10 microgram in diameter

Abbreviation	Description
PM _{2.5}	Particulate Matter less than 2.5 microgram in diameter
QA/QC	Quality Assurance and Quality Control
SHINE	Seasonal Health Intervention Network
TEOM	Tapered Element Oscillating Microbalances
TfL	Transport for London
TG	Technical Guidance
ULEZ	Ultra Low Emission Zone
WHO	World Health Organisation
ZEN	Zero Emission Network

Table B. Summary of Air Quality Standards and Objectives

Pollutant	Standard / Objective / Guideline	Averaging Period	Date ⁽¹⁾	Objective set by
Nitrogen dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005	National ⁽²⁾
Nitrogen dioxide (NO ₂)	40 µg/m ³	Annual mean	31 Dec 2005	National ⁽²⁾
Nitrogen dioxide (NO ₂)	10 µg/m ³	Annual mean	No set date	WHO ⁽³⁾
Particles (PM ₁₀)	50 µg/m ³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004	National ⁽²⁾
Particles (PM ₁₀)	45 µg/m ³ not to be exceeded more than 3-4 times a year	24-hour mean	No set date	WHO ⁽³⁾
Particles (PM ₁₀)	40 µg/m ³	Annual mean	31 Dec 2004	National ⁽²⁾
Particles (PM ₁₀)	15 µg/m ³	Annual mean	No set date	WHO ⁽³⁾
Particles (PM _{2.5})	15 µg/m ³	24-hour mean	No set date	WHO ⁽³⁾
Particles (PM _{2.5})	10 µg/m ³	Annual mean	2040	National ⁽²⁾
Particles (PM _{2.5})	10 µg/m ³	Annual mean	2030	Mayoral ⁽⁴⁾
Particles (PM _{2.5})	5 µg/m ³	Annual mean	No set date	WHO ⁽³⁾
Particles (PM _{2.5})	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021	National ⁽²⁾
Sulphur dioxide (SO ₂)	266 µg/m ³ not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005	National ⁽²⁾
Sulphur dioxide (SO ₂)	350 µg/m ³ not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004	National ⁽²⁾
Sulphur dioxide (SO ₂)	125 µg/m ³ not to be exceeded more than 3 times a year	24-hour mean	31 Dec 2004	National ⁽²⁾
Sulphur dioxide (SO ₂)	40 µg/m ³ not to be exceeded more than 3-4 times a year	24-hour mean	No set date	WHO ⁽³⁾

Notes:

- (1) Date by which to be achieved by and maintained thereafter
- (2) National objectives set across England [national air quality objective levels](#)
- (3) 2021 World Health Organisation Air Quality Guidelines
- (4) London Mayoral Objective

1. Introduction

1.1. What is air pollution?

Air quality refers to the condition of the air around us and is an important measure of how healthy the environment we live in is. It is measured by how many pollutants, which can be chemicals or substances, there are in the air. Better air quality means fewer pollutants and cleaner air for us to breathe. Improving air quality is essential for our wellbeing and the planet's health.

The air pollutants causing most concern in London and Islington are:

- Particulate matter (PM) – tiny bits of solid material made of a range of substances suspended in the air. These can be a range of different sizes, with the main sizes examined in this report:
 - **PM₁₀**: Particles that are smaller than 10 micrometers (µm). These are about a fifth the width of a human hair and can include things like dust and pollen.
 - **PM_{2.5}**: Even smaller particles that are less than 2.5 micrometers (µm). These are so tiny they can get deep into your lungs and even into your bloodstream.

When we talk about PM₁₀ or PM_{2.5}, we're talking about how small the particles are, with PM_{2.5} being the finer, more harmful kind.

- Nitrogen dioxide (NO₂) – one of a group of gases called nitrogen oxides.

1.2. Health impacts of pollution

Long-term exposure to polluted air poses significant health risks. It is associated with an increased likelihood of developing heart and lung diseases, cancer, and even premature death. Additionally, long-term exposure to air pollution has been linked to a higher risk of dementia. In Islington, approximately 7.9% of all deaths are attributed to particulate air pollution, the second highest rate in the country ([Office for Health Improvement and Disparities, 2022](#)). Even short-term exposure to polluted air can lead to more hospital admissions for individuals with existing heart or lung conditions during periods of high pollution levels ([Public Health England \(PHE\), 2018](#); [Committee on the Medical Effects of Air Pollutants, 2023](#)).

Air pollution doesn't affect everyone equally. Some groups are more at risk, including children, older adults, pregnant individuals and those living in poorer areas. This is because of either increased vulnerability, higher exposure to air pollution, or a combination of both ([Public Health England \(PHE\), 2018 and Marmot Review 10 years on report](#) and [Air Pollution and Inequalities in London: 2019 | London City Hall](#)).

The council acknowledges the unequal effects of air pollution on health and wellbeing and are actively working to lower pollution levels and enhance air quality and reduce the impact of air pollution on everyone throughout the borough.

This Annual Status Report, aligned with government and London Mayor guidelines, summarises air pollution levels and outlines measures to mitigate its impact on local people.

1.3. How is air quality measured

1.3.1. Types of monitors

There are three main types of monitors that are generally used by local authorities to monitor air quality:

- Continuous automatic reference monitors- these are the most accurate monitors. They measure a range of different pollutants, 24 hours a day. However, they are expensive and fixed in one location so they cannot be widely deployed.
- Diffusion tubes- these small tubes provide monthly readings of nitrogen dioxide pollution. Although they are less accurate than automatic monitors they can be widely deployed to look at trends over an extended period of time. They are a nationally approved technique.
- Sensors- these devices continuously monitor a range of pollutants. They fall between reference monitors and diffusion tubes in terms of costs and size. However, their accuracy levels and quality control processes vary and are not yet approved for official monitoring duties such as this annual report.

1.3.2 Making data accurate- quality control

In order to make air pollution data as accurate and reliable as possible we follow a number of steps as outlined in [LLAQM.TG\(19\)](#):

- Accredited suppliers and maintenance
 - Reference monitors have regular checks and services by accredited organisations, with issues fixed promptly.
 - Diffusion tubes are supplied by accredited laboratories that follow any national and regional guidelines.
- Data control
 - Location of monitors are carefully considered to reduce chances of erroneous results e.g. making sure that sites are free from vegetation.
 - While deploying and collecting monitors guidelines on good practice are followed and any local changes or issues with the tube noted.
 - All data is checked for anomalous results e.g. unusually high or exceptionally low readings are examined and removed if they appear inaccurate and not a true reflection of air pollution levels at the location.

- Certain reference monitors need correction factors applied to correct for known inaccuracies.
- Laboratories supplying diffusion tube data participate in annual accuracy and reliability schemes. If any issues are flagged, these must be highlighted in this report and considered when interpreting results.
- Bias adjustment
 - Bias adjustment is a way to make sure the air quality readings from diffusion tubes are as accurate as possible. It involves using a more accurate, trusted monitoring method to check the diffusion tubes are providing the right information.
 - Every year, the council uses a bias adjustment factor to correct the readings from the diffusion tubes.
 - This factor comes from local or national studies where diffusion tubes are tested next to more precise air quality monitors.
 - In these studies, three diffusion tubes are placed near a very accurate monitor to see how close their readings are.
 - The information from the accurate monitor is used to adjust the diffusion tube readings, so they're more reliable.
- Annualisation
 - Annualisation is a method used in air quality monitoring to estimate the yearly average levels of pollutants when there is some data missing. This way, even with missing data, we can still get a good idea of the air quality over the entire year.
 - If a monitoring site has less than 75% data capture for the year you cannot calculate the annual average directly as it may not represent the true average for the year.
 - Instead, you compare the results to a reference monitor, located away from major sources of pollution, that has data results for the whole year. This provides a correction factor that can be used to adjust the mean of the diffusion tube to get a better idea of what the average would have been if it had data for the full year.

Despite the application of the quality control processes mentioned above, there will always be some uncertainty in air quality data, especially from diffusion tubes. Therefore, interpreting results requires caution, especially when there are small or short term changes in pollution levels.

More information on the process taken this year can be found in Appendix A of this report.

1.4. Air quality in Islington

1.4.1. Policies

Our [Air Quality Strategy and Action Plan 2019-23](#) outlines the actions we plan to take to improve air quality in Islington. We are in the process of updating our air quality action plan to cover 2025-2030 and plan to go out to consultation in due course.

Air pollution does not respect borders and has many sources, so we are committed to working with our partners, both inside and outside Islington, to reduce pollution from all sources locally and where possible outside the borough. By reducing pollution from these sources, we aim to lower concentrations and exposure, thereby making Islington greener and healthier.

Our Air Quality Action Plan therefore works in conjunction with other council priorities and policies such as:

- [Islington Together 2030](#) - which sets out how we will create a more equal borough for everyone over the coming years. The World Health Organisation (WHO) has declared that air pollution is one of the greatest environmental risks to health. The [Marmot Review 10 Years On](#) is clear that pollution levels are, on average, worse in areas of higher deprivation and quotes the Chief Medical Officer's report which describes worse impacts for deprived communities and places, showing these places have 'a higher exposure to air pollution and a greater burden of poor health increasing susceptibility to the impact of pollution'. By reducing air pollution levels, we can reduce the burden of a range of respiratory and cardiovascular diseases, and reduce health inequalities experienced due to the uneven impacts of air pollution where pollution levels and exposure is higher in more deprived areas.
- [Vision 2030: Building a Net Zero Carbon Islington by 2030](#) - sets out our vision of a fair and green future for local people. Our plan aims to achieve net zero carbon emissions in Islington by 2030. Actions in our air quality action plan, such as reducing wood burning and improving energy efficiency in our homes, align with this net zero carbon strategy. Many measures that reduce or eliminate NO₂ emissions also contribute to lowering CO₂ and other carbon emissions. Addressing local air pollution sources, through the actions listed in Section 4.2 Table K, has significant benefits in the fight against climate change.
- [Islington Transport Strategy 2020-2041](#) – sets out the vision, strategic objectives, and policies for Islington's transport environment up to 2041. The goal is to transform the borough's transport system to align with broader social, environmental, and economic objectives. Road transport is the biggest source of air pollution in the borough. As such, many of the actions listed in Section 4.2 Table K focus on reducing pollution from transportation sources. For example, our air quality action plan emphasizes the adoption of electric vehicles and encourages a shift toward active travel.

1.4.2. Monitoring sites

We have been monitoring air quality since 2000, using 24 long-term monitoring sites, including:

- Roadside monitoring
 - nine diffusion tube sites
 - one automatic continuous monitor
- Background monitoring
 - ten diffusion tubes
 - one automatic continuous monitor
- Triplicate tubes
 - three diffusion tubes located together with the roadside automatic monitor for a triplicate study to check accuracy of monitoring as outlined in Appendix A. The results of these three monitors are not included in averages for long term sites in this document.

These long-term diffusion tubes and automatic monitors are the sites that are reported on in the main part of this document in Section 3.1 Tables C-I (minus the triplicate tubes which are used for checking accuracy as stated above) and allow us to measure long-term trends in air quality in the borough. It is these long-term monitors that show a 40% decrease in NO₂ pollution over the past seven years.

We also have hundreds of additional diffusion tube monitoring sites for specific projects, and we have added the results for these monitoring sites in Appendix C of this document.

1.4.3. Longer term trends

There are set objectives for many air pollutants. If these objectives are unlikely to be met, a local authority must declare an Air Quality Management Area (AQMA) and make an Air Quality Action Plan setting out the steps that will be taken to meet the air quality objectives.

In August 2000, the council found that, although air quality was improving, the objectives for two pollutants - nitrogen dioxide (NO₂) and particulate matter of 10 microgram diameter (PM₁₀) - were unlikely to be achieved. Therefore, in 2001 an AQMA was declared for much of the borough and expanded to the whole of the borough in 2003. The AQMA remains in place because the council has not met the criteria for revocation as set out in the Mayor of London's [guidance for boroughs](#).

Until 2019, some parts of the borough were exceeding the annual objective level for NO₂ and meeting the annual objective levels for all other air pollutants. However, we continue to monitor and work to continue to reduce particulate matter because it is harmful to health at any level.

1.4.4. Differences in pollution across the borough

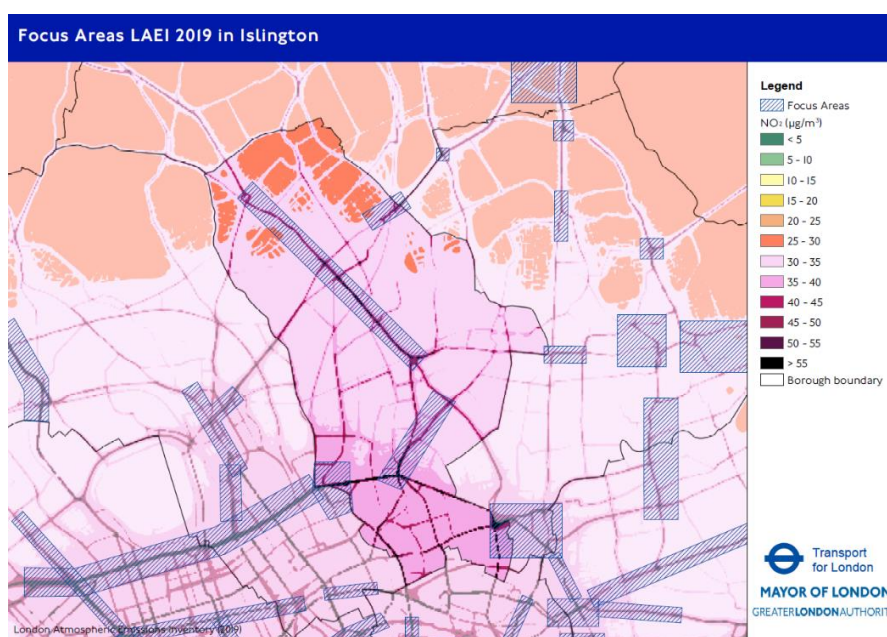
Air quality varies across the borough. It is generally better in quieter areas and worse near busy roads. The main areas of concern (or Focus Areas) are:

- A1 Holloway Road between Highbury and Archway
- Angel Town Centre
- Seven Sisters Road at Finsbury Park
- Old Street
- Kings Cross/Caledonian Road area.

These areas are being closely watched because they have higher levels of air pollution.

The map below shows the annual modelled mean NO₂ concentrations in Islington and its surrounding boroughs for 2019. It also highlights the Air Quality Focus Areas of higher pollution levels mentioned above. This map was made by the Greater London Authority (GLA) and Transport for London (TfL) using London Atmospheric Emissions Inventory data for 2019 and published in 2021. This data is now slightly out of date, with improvements in air quality seen since 2019, however it is still useful to see focus areas which remain the same. A new version of this map is due in 2025.

Figure 1: Map of Islington's Air Quality Focus Areas



Due to our extensive monitoring of air pollution in the borough we have been able to identify and take action at pollution hot spots. Where we find areas that have high levels of pollution, we are committed to taking action to make the borough cleaner, greener and healthier.

For example, in 2024 MacDonald Road in Archway next to the bus stand, had the highest monitored NO₂ levels in the borough (see Appendix C Table X for results). The pollution levels were 100 µg/m³ and 91 µg/m³ which is well above the annual objective limits and higher than measurements in 2023.

The council is working to reduce pollution levels at this location by enforcing against engine idling using the toughest sanctions available to local authorities via a new traffic management order and talking to TfL about replacing diesel buses with electric buses before 2034. The council continues to look for ways to secure funding and make the air cleaner at this location.

1.4.5. Sources of Pollution

The London Atmospheric Emissions Inventory 2019 is the latest study looking at sources of pollution in London. The main sources of pollution in Islington, according to this study, for three of the main pollutants are:

- NO_x – nitrogen oxide
 - Road Transport 41%
 - Commercial Heat/ Power 38%
 - Domestic Heat/ Power 10%
- PM₁₀ - particulate matter of less than 10 microgram in size
 - Road Transport 25%
 - Construction 22%
 - Commercial Cooking 20%
- PM_{2.5} - particulate matter of less than 2.5 microgram in size
 - Commercial Cooking 36%
 - Road Transport 24%
 - Domestic Biomass/ Wood Burning 10%

Pollution sources from outside Islington also impact pollution levels within the borough. Some sources are similar to those seen in Islington, like road transport and commercial cooking, but they also include sources not seen within the borough, like sea salt or industrial pollution.

Islington is committed to working with others, as well as taking actions ourselves, to reduce all sources of pollution in the borough.

1.4.6. Factors influencing air pollution

Pollution levels will vary from month to month or year to year, based on factors such as changes in weather or global atmospheric conditions. For instance, periods of high pressure, often experienced in winter, make the air a lot stiller so pollution levels will build up as the air cannot disperse. While periods with lots of sun change interactions of pollutants leading to an increase in ozone (O₃) and a decrease in nitrogen oxide (NO_x).

Local factors can also cause very localised changes in air pollution, not seen in wider areas. For example, building layout can affect how air pollution is dispersed in an area leading to localised build ups in pollution.

Pollution levels also vary throughout the day, for example at rush hour, leading to short-term spikes in pollution levels, not seen throughout the rest of the day.

Due to the range of factors that influence air pollution, as described above, understanding what has caused a change in pollution levels, especially a small one, can be particularly difficult. This is because it could be due to changes in several different sources at one time, weather changes, or a short-term or local change rather than a longer-term change.

1.5. World Health Organisation Guidelines

In September 2021 the World Health Organisation (WHO), using new evidence, published an update to their guidance on air pollution levels for a range of air pollutants (see Table B of the Abbreviations and National Standards section of this report). Section 3.2 Tables E-I, and Section 2.1.2 in this report show how we are comparing to the [national air quality objective levels](#), however the new WHO guidelines recommend lower air pollution levels. The council is working with its partners to set out a pathway towards achieving these levels and will be bringing forward a new action plan designed to take us closer to and ultimately achieve the WHO 2021 air quality guideline levels.

The WHO has not set out a timeline for when the interim and final air quality guideline levels should be met. However, given the adverse health impacts of air pollution any delays in reaching the recommended guideline levels will have adverse health effects and therefore guidelines should be met as soon as possible.

1.6. How to Get Involved

You can get more information on air quality on our [website](#).

You can do your bit to improve air quality. Think about how you travel, decrease your car use, especially for short trips where possible. If you need to drive think about car sharing, car clubs or low emission vehicles and try not to idle your engine. You can also impact air pollution by improving the energy efficiency of your home or business and avoid using fires and stoves or unseasoned wood.

You can eliminate the local air pollution caused by your gas boiler by switching to electric heating, including a heat pump. Use the [Ecofurb tool](#) to see what other changes you could make to your home to reduce its emissions and lower your energy bills. Further information on reducing your home's environmental impact, including any grants available, can be found on our [website](#).

Many of these actions will not only reduce the amount of air pollution you produce but will also reduce your exposure to air pollution and help you reduce your carbon

emissions, helping to address the climate emergency and helping Islington to achieve its [net zero carbon ambitions by 2030](#).

You can contact the council's Pollution Team on pollution@islington.gov.uk for further air quality information and guidance.

2. Key Findings in 2024

The main report details our monitoring results and actions taken across the borough to improve air quality in 2024, however key findings and some analysis of results can be found below.

2.1. Monitoring Results

2.1.1. Diffusion tube results- annual nitrogen dioxide (NO₂)

In 2024, the average annual NO₂ figure for all our long-term sites was 22 µg/m³. This is 2 µg/m³ lower than in 2023 and is significantly below the annual objective level for NO₂ of 40 µg/m³.

Our background sites have been below this objective level for a long time, However, since 2018, some roadside sites achieved this goal, and by 2020, all roadside sites met this target.

Air quality is improving across the borough over the longer term. Overall, there's been a 40% reduction in NO₂ levels from 2018 to 2024 at our long-term monitoring sites across the borough, with some sites even seeing a decrease of up to 50%. This compares to a 42% reduction from 2017 to 2023, as noted in last year's report. This is due to better air quality levels in 2018 compared to 2017, rather than any increase in pollution from 2023 to 2024 where pollution levels actually decreased.

In addition, the council continued to monitor pollution outside every school, nursery and care home in the borough throughout 2024, as well as for a number of specific projects. The results of this monitoring are set out below and in Appendix C of this report:

- In 2024 zero schools measured over the annual objective level of 40 µg/m³, just like in 2023. The average in 2024 was 19 µg/m³ compared to 21 µg/m³ in 2023.
- In 2024 zero nurseries measured over the annual objective level of 40 µg/m³, just like in 2023. The average in 2024 was 19 µg/m³, compared to 21 µg/m³ in 2023.
- In 2024 zero care homes measured over the annual objective level of 40 µg/m³, just like in 2023. The average in 2024 was 19 µg/m³, compared to 21 µg/m³ in 2023.
- Out of about 280 monitoring sites where NO₂ levels are checked in the borough only three sites in two locations had NO₂ levels above the annual objective level of 40 µg/m³. These are:
 - Two sites on MacDonald Road by the bus stand (see Section 1.4.4), which also exceeded in 2023.
 - One site on Pauntley Street/Archway Road (Z22) which measured 48 µg/m³. This was 8 µg/m³ higher than levels in 2023 and 12 µg/m³ higher than 2022, with similar levels to 2019-2021. This shows sustained higher

levels and as with the two sites on MacDonald Road is by a bus stand. The council will continue to monitor this location and act if required.

2.1.2. Reference monitor results- particulate matter (PM) and short-term nitrogen dioxide

Two monitoring sites, one roadside site on Holloway Road and one urban background site at the Islington Ecology Centre, also provide data on other pollutants and over shorter timescales. These showed:

- No exceedances of the NO₂ hourly objective level of 200 µg/m³.
- PM₁₀ below the annual objective level of 40 µg/m³, at 16 µg/m³ on the roadside site on Holloway Road and 14 µg/m³ at the background Arsenal site.
- Both sites meet the 24 hour objective level for PM₁₀ of 50 µg/m³, with no exceedances of this figure in 2024.
- All of these results reflect long-term trends as outlined in Section 3.2 Tables E to I.

Further details about the locations of the two reference monitor sites can be found in Section 3.1 Table C and Appendix D Figure 6.

2.1.3. Comparison to WHO guidelines

As discussed in Section 1.5 the WHO has created air quality guideline levels. The bullet points below compare the pollution results in 2024 for the roughly 280 NO₂ monitoring sites and two PM₁₀ sites in the borough to the annual guideline levels recommended by the WHO:

- NO₂ annual target of 10 µg/m³ (with interim targets of 40, 30 and 20 µg/m³)
 - Zero monitoring sites meet the annual target of 10 µg/m³.
 - 54% sites meet the interim target of 20 µg/m³.
 - 94% sites meet the interim target of 30 µg/m³.
 - 99% sites meet the interim target of 40 µg/m³.
- PM₁₀ annual target of 15 µg/m³ (with interim targets of 70, 50, 30 and 20 µg/m³)
 - Both sites meet all of the interim targets, however only the background site at Arsenal was below the final 15 µg/m³ guideline.

2.2. Actions to Improve Air Quality

2.2.1. Working with vulnerable groups

We continued work to protect vulnerable groups in Islington in 2024. For example:

- We worked on our air quality engagement project in the Mildmay and Highbury wards in 2024, with work continuing into 2025. This included:
 - A survey to find out common thoughts and opinions on air quality to help develop the rest of the project.

- Engagement on air quality with local groups, such as care homes, with event such as an art competition running in early 2025.
- Citizen science workshops with schools, individuals and community groups, to help them monitor and understand local air pollution and measures they can take to reduce their exposure.
- The creation of a real-time air quality website, which was launched in early 2025 [Air quality dashboard for Highbury and Mildmay | Islington Council](#) and [Islington data and statistics – Air Quality Dashboard](#).
- We continued working with care homes in the borough, helping the care homes who received grants following their air quality audits to install their air quality improvement measures. This included measures around greening, air filtration and pollution monitors.
- In 2024 the council continued working with Camden Council and 19 other London boroughs on the London Wood Burning Project to address the pollution caused by the burning of solid fuels like wood. We created enforcement training material, ran training sessions to 124 officers across London and ran a communication campaign over the winter of 2024/25.

2.2.2. Transport Infrastructure Projects

London's streets belong to everyone, but in recent years motor traffic volumes have been increasing. Between 2013 and 2019 an additional 1 billion miles were driven in London³, mostly on local streets, as sat navs made it easier for people to find cut throughs. Local people have told us they want their streets to be friendlier places that are easier for everyone to use, to enjoy being outside in clean air, to make it safer for walking, wheeling, cycling, using buggies and wheelchairs, and to relax or play.

The introduction of Low Traffic Neighbourhoods (LTNs), Liveable Neighbourhoods (LNs), School Streets and cycleways has created more space for those who want to enjoy Islington as they walk or cycle. This way we are starting to make Islington a more equal place for everyone.

As part of the council's transport infrastructure programme in 2024 (or early 2025) we:

- School Streets
 - Made all 36 existing primary School Streets permanent.
 - Agreed plans for a new School Street at Newington Green Primary, with implementation due to begin in 2025.
 - Began early feasibility work for School Streets at secondary schools, with consultations planned for 2025/26.
 - Completed environmental improvement work at Christ the King, bringing the total schemes at schools on main roads to six schools.

³ <https://roadtraffic.dft.gov.uk/regions/6>

- Liveable Neighbourhoods
 - Commenced implementation of the Mildmay Liveable Neighbourhood
 - Consulted on final draft proposals for the Cally Liveable Neighbourhood and made the decision to implement the scheme.
 - Conducted engagement on the development of proposals for Liveable Neighbourhoods in the area around Annette Road.
 - Conducted engagement, alongside City of London, on the Bunhill, Barbican and Goldan Lane Healthy Neighbourhood.
- Cycle infrastructure
 - Construction with TfL on Cycleway 50 was completed.
 - Cycling and pedestrian crossings were added on Southgate Road and Northchurch Road to connect a low traffic cycle route in Hackney to an Islington LTN.
 - Work continued with Camden Council to upgrade the York Way cycleway.
 - An agreement was made to upgrade Cycle Superhighway 1, with a protected track and new crossings, as well as new connections at Newington green, as part of the Mildmay Liveable Neighbourhood.
 - A consultation on reduced traffic and contraflow traffic on St John Street was conducted.

For the full list of actions taken please see Section 4.2 Table K and L. Work on the Transport Projects Programme continued throughout 2025, and further details will be included in the 2025 report.

Extensive monitoring was conducted for transport projects throughout 2024. Air quality data, alongside a range of other indicators, for each LTN was shared in six-month (interim) and 12-month (pre-consultation) reports. The full reports, including results for all indicators can be found on the [LTN section of the council website](#). The annual air quality figures for all monitoring sites, including those used in the LTN analysis, are also in Appendix C and E of this report. A summary of air quality results can be found below:

- All LTNs show average monitoring levels well below the annual objective level of 40 $\mu\text{g}/\text{m}^3$.
- All LTNs had lower average pollution levels than in 2023.
- All LTN areas show improvements in pollution levels over the longer term, with average pollution levels lower even than in 2020 where pollution levels are known to have decreased due to Covid-19.
- While changes in pollution levels differ slightly from one LTN to another they generally have decreasing NO_2 levels from 2018 to 2020, static pollution levels between 2020-2023, and a decrease in 2024. The trends seen in the LTN data match what has been observed across the borough. However, the council will continue to monitor these locations to identify long-term trends.
- Appendix E compares results in LTNs to longer term data trends where monitoring is available.

2.2.3. Active Travel

In 2024 we worked on a number of projects to help encourage a shift to active travel. Full details of these can be seen in Section 4.2 Tables K and L, but some highlights can be found below.

- Engagement and training with the community:
 - Schools continued to engage with the Transport for London (TfL) Travel for Life (formerly STARS) programme, with 55 engaged schools in 2023 (compared to 53 in 2023), including one with bronze, three silver and 38 gold status, an increase in those with gold from 2023.
 - In 2024/25, the council provided 610 adult and 2,096 children with cycle training and conducted 39 Dr Bike sessions, 33 led rides and 16 bike maintenance courses.
 - We also worked on some new innovative pilot programmes, including:
 - a cycle taxi service for those with mobility issues,
 - a cycle programme for the elderly and those with dementia,
 - a women only cycle training and led-ride programme,
 - a Try Before You Bike programme to include e-bikes, e-cargo bikes and social prescribing.
 - Ran an active travel festival, Saddle and Sole, with about 700 attendees.
 - Worked with Peddle My Wheels to promote the use of Islington's shared use cargo bikes (OurBike) located in Caledonian Road and Exmouth Market.
 - There were 5.75m trips in Islington on cycle hire bikes in 2024-25 with the two cycle hire operators working in Islington by agreement with the council.
 - Worked on a number of cycle infrastructure project as outlined in section 2.2.2 above.

2.2.4. Leading by example

The council has taken a number of steps to reduce its air quality and carbon emissions in 2024. Full details of these can be found in Section 4.2 Tables K and L, but some highlights can be found below:

- Fleet changes
 - We continued to electrify vehicles in the council fleet, with a total of 128 fully electric, 31 hybrid vehicles and 5 electric cargo bikes by the end 2024/25, representing 28% total fleet and showing an increase from 2023/24.
 - We also continued to retrofit vehicles with two additional Refuse Collection Vehicles repowered in 2024/25.

- We also took part in a number of cutting edge projects including vehicle to grid installations.
- Charging infrastructure
 - In 2024/25 76 charging points with 144 connectors remained in place at council owned buildings for council vehicles to use.

3. Air Quality Monitoring

3.1 Locations

Table C. Details of Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X Easting	Y Northing	Pollutants monitored	In AQMA?	Monitoring technique	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (m)	Inlet height (m)
IS2	Holloway Road	Roadside	530650	185750	NO ₂ , PM ₁₀	Y	TEOM	1	3	3
IS6	Arsenal	Urban Background	531328	186067	NO ₂ , PM ₁₀	Y	TEOM	1	N/A	2.5

Notes:

- N/A if not applicable.

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

Site ID	Site Name	Site Type	X Easting	Y Northing	Pollutants monitored	In AQMA?	Distance to relevant exposure (m)	Distance to kerb of nearest road (m)	Tube co-located with an automatic monitor (Y/N)	Tube height (m)
BIS005/03	Caledonian Road	Roadside	530708	183510	NO ₂	Y	0	1	N	2.5

Site ID	Site Name	Site Type	X Easting	Y Northing	Pollutants monitored	In AQMA?	Distance to relevant exposure (m)	Distance to kerb of nearest road (m)	Tube co-located with an automatic monitor (Y/N)	Tube height (m)
BIS005/02	Rosebery Avenue	Roadside	531327	182592	NO ₂	Y	0	1	N	2.5
BIS005/06	City Road	Roadside	532556	182739	NO ₂	Y	1	3	N	2.5
BIS005/07	Old Street	Kerbside	532632	182449	NO ₂	Y	0	<0.5	N	2.5
BIS005/08	Highbury Corner	Roadside	531672	184739	NO ₂	Y	2	2	N	2.5
BIS005/09	Balls Pond Road	Kerbside	532883	184816	NO ₂	Y	0	<0.5	N	2.5
BIS005/11	Holloway Road	Roadside	531024	185367	NO ₂	Y	0	1.5	N	2.5
BIS005/13	Junction Road	Roadside	529202	186090	NO ₂	Y	0	1	N	2.5
IS005/01	Navigator Square	Roadside	529401	186855	NO ₂	Y	-1	2	N	2.5
H1	Holloway Road	Roadside	530650	185750	NO ₂	Y	1	3	Y	3
H2	Holloway Road	Roadside	530650	185750	NO ₂	Y	1	3	Y	3
H3	Holloway Road	Roadside	530650	185750	NO ₂	Y	1	3	Y	3
BIS005/04	Percy Circus	Urban Background	530921	182861	NO ₂	Y	0	N/A	N	2.5
BIS005/05	Myddelton Square	Urban Background	531315	182991	NO ₂	Y	0	N/A	N	2.5
BIS005/01	Arran Walk	Urban Background	532317	184472	NO ₂	Y	1	N/A	N	2.5
IS005/03	Sotheby Road	Urban Background	532256	185983	NO ₂	Y	0	N/A	N	2.5
BIS005/10	Highbury Fields	Urban Background	531748	185442	NO ₂	Y	0	N/A	N	2.5

Site ID	Site Name	Site Type	X Easting	Y Northing	Pollutants monitored	In AQMA?	Distance to relevant exposure (m)	Distance to kerb of nearest road (m)	Tube co-located with an automatic monitor (Y/N)	Tube height (m)
BIS005/12	Lady Margaret Rd	Urban Background	529320	185795	NO ₂	Y	0	N/A	N	2.5
IS005/02	Zoffany Park	Urban Background	529883	187015	NO ₂	Y	0	N/A	N	2.5
BIS005/14	Elthorne Park	Urban Background	530000	187402	NO ₂	Y	0	N/A	N	2.5
BIS005/15	Turle Road/Wray Crescent	Urban Background	530477	186942	NO ₂	Y	0	N/A	N	2.5
IS005/04	Upper Street (Waterloo Terrace)	Urban Background	531625	184100	NO ₂	Y	0	N/A	N	2.5

Notes:

- N/A if not applicable.
- The location of monitor IS005/01 at Navigator Square varied with road layout changes delivered as part of changes to the Archway gyratory over several years (2016-18), the location remained the same from 2019 to 2023, with a move closer to the road in 2024, results might not therefore be directly comparable over time. The Navigator Square monitor IS005/01 was formerly called Archway Close, but the name changed with the change in road layout. H1-3 are used for the co-location study.

3.2 Comparison of Monitoring Results with Air Quality Objective's (AQOs)

In 2024 all sites recorded values below the national annual objective level of $40\mu\text{g}/\text{m}^3$ (see Table B in Section Abbreviations and National Standards), including both roadside and urban background sites, for the fifth time. All but one site showed a lower value in 2024 than 2023, with an overall average for all diffusion tube and automatic monitor long-term sites (not including triplicate tubes) of $22\mu\text{g}/\text{m}^3$ for 2024, $2\mu\text{g}/\text{m}^3$ lower than 2023. Values on average remained higher at roadside sites than background sites. Looking at longer trends over the seven years covered in this report, values have been decreasing since 2018, with a 40% decrease in values from 2018 to 2024.

Figure 2: Average annual nitrogen dioxide levels over the last seven years, long-term diffusion tube and automatic sites

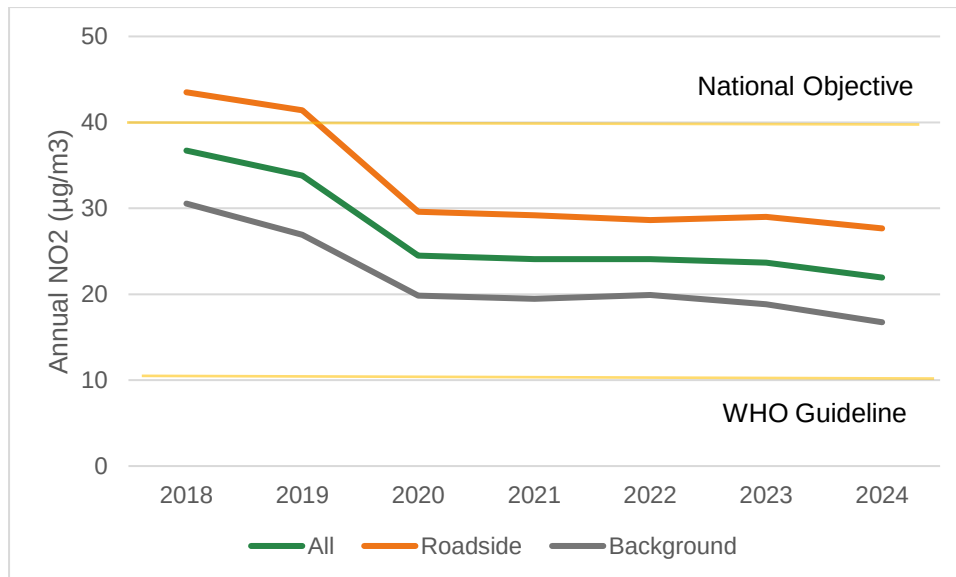


Table E. Annual Mean NO₂ Monitoring Results: Automatic monitoring µg/m³

Site ID	Site name	Site type	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
IS2	Holloway Road	Roadside	100	100	47	40	31	29	28	24	23
IS6	Arsenal	Background	99	99	27	25	20	20	20	17	15

Notes:

- The annual mean concentrations are presented as µg/m³.
- Exceedances of the NO₂ annual mean AQO of 40 µg/m³ are shown in **bold**.
- NO₂ annual means in excess of 60 µg/m³, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in **bold and underlined**. If no numbers are **bold and underlined**, the NO₂ hourly mean AQS objective has likely been met.
- 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%.
- (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. Annual Mean NO₂ Monitoring Results: Non automatic monitoring (diffusion tubes)

Site ID	Site name	Site type	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
BIS005/03	Caledonian Road	Roadside	100	100	36	39	29	29	26	29	26
BIS005/02	Roseberry Avenue	Roadside	100	100	51	44	31	30	30	32	30
BIS005/06	City Road	Roadside	92	92	45	45 (43)	33	29	28	30	24

Site ID	Site name	Site type	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
BIS005/07	Old Street	Roadside	92	92	45	41	29	27	30	29	28
BIS005/08	Highbury Corner	Roadside	100	100	48	44 (47)	31	33	33	30	29
BIS005/09	Balls Pond Road	Roadside	83	83	43	44	32	33	31	36	32
BIS005/11	Holloway Road	Roadside	100	100	44	41	27	28	31	29	25
BIS005/13	Junction Road	Roadside	100	100	36	34	27	24	21	25	22
IS005/01	Navigator Square	Roadside	100	100	40	42	26	30	29	26	37
BIS005/04	Percy Circus	Urban Background	92	92	35	32	23	22	19	21	19
BIS005/05	Myddelton Square	Urban Background	100	100	35	28	21	20	20	21	18
BIS005/01	Arran Walk	Urban background	100	100	30	26	17	18	19	18	16
IS005/03	Sotheby Road	Urban background	100	100	30	25	18	18	19	18	16
BIS005/10	Highbury Fields	Urban Background	92	92	28	26	19	19	18	18	16
BIS005/12	Lady Margaret Rd	Urban background	100	100	31	28	24	19	24	20	17
IS005/02	Zoffany Park	Urban Background	92	92	29	27	18	19	21	17	17
BIS005/14	Elthorne Park	Urban Background	92	92	29	26	18	19	19	19	17

Site ID	Site name	Site type	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
BIS005/15	Turle Road	Urban Background	100	100	32	26	19	21	18	18	16
IS005/04	Upper Street (Waterloo Terrace)	Urban Background	100	100	30	27	21	19	21	21	17
H1	Holloway Road	Roadside triplicate	92	92	47	40	31	29	28	27	27
H2	Holloway Road	Roadside triplicate	92	92	47	41	31	29	29	28	26
H3	Holloway Road	Roadside triplicate	100	100	48	40	30	29	28	26	25

Notes:

- The annual mean concentrations are presented as $\mu\text{g}/\text{m}^3$.
- Exceedances of the NO_2 annual mean AQO of $40 \mu\text{g}/\text{m}^3$ are shown in **bold**.
- NO_2 annual means in excess of $60 \mu\text{g}/\text{m}^3$, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**. If no numbers are **bold and underlined**, the NO_2 hourly mean AQS objective has likely been met.
- 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%.
- (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. NO₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg/m³

The results of the one-hour mean remain well below the objective of less than 18 times over 200µg/m³, with no exceedances in 2024. This continues the trend of the last seven years.

Site ID	Valid data capture for monitoring period %(^a)	Valid data capture 2024 %(^b)	2018	2019	2020	2021	2022	2023	2024
IS2-Holloway	100	100	0	0	0	0	0	0	0
IS6-Arsenal	99	99	0	0	0	0	0	0	0

Notes:

- Results are presented as the number of 1-hour periods where concentrations greater than 200 µg/m³ have been recorded.
- Exceedance of the NO₂ short-term AQO of 200 µg/m³ over the permitted 18 hours per year are shown in **bold**. If no numbers are **bold**, the NO₂ short term AQS objective has likely been met.
- 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 H. Annual Mean PM₁₀ Automatic Monitoring Results (µg/m³)

PM₁₀ continues to remain below the annual objective of 40 µg/m³ in 2024, continuing longer term trends.

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
IS2-Holloway	98	98	20	20	18	19	18	17	16
IS6- Arsenal	94	94	20	19	17	19	17	15	14

Notes:

- The annual mean concentrations are presented as µg/m³.
- Exceedances of the PM₁₀ annual mean AQO of 40 µg/m³ are shown in **bold**. If no numbers are **bold**, the PM₁₀ annual mean AQO objective has likely been met.
- 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 I. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 24-Hour Means > 50 µg/m³

Exceedances of the 24 hour mean remain well below the objective level of less than 35 times over 50µg/m³ in the year, with no exceedances for the two locations in 2024.

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024% ^(b)	2018	2019	2020	2021	2022	2023	2024
IS2-Holloway	98	98	2	7	2	1	2	0	0
IS6-Arsenal	94	94	1	9	2	2	3	0	0

Notes:

- Exceedances of the PM₁₀ 24-hour mean objective (50 µg/m³ over the permitted 35 days per year) are shown in **bold**. If no numbers are **bold**, the PM₁₀ 24-hour mean AQS objective has likely been met.
- 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%).

4. Actions to Improve Air Quality

4.1 Air Quality Management Areas

The [London Local Air Quality Management](#) (LLAQM) process requires boroughs to include information in this report about whether they have an Air Quality Management Area (AQMA) in place.

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 Islington can be found in Table J below. The table presents a description of the AQMA that is currently designated within Islington, which is the whole of the borough. The air quality objectives pertinent to the current AQMA designation(s) are as follows:

- NO₂ annual mean
- NO₂ 1 hour mean
- PM₁₀ 24-hour mean

Table J. 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
Islington AQMA	Initially declared 2001 with expansion	1 hour and Annual NO ₂ ^a	Whole of borough	No	67µg/m ³ annual mean in 2001 and 68 annual mean in	No exceedances of annual objective or 1 hour mean of	18 years for hourly objective ^c .	Islington Air Quality Strategy	Visit the AQAP for

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
	in 2003 to whole borough				2003. 0 exceedances of hourly objective in 2001 and 5 exceedances in 2003. ^b	200 µg/m ³ at long-term monitoring sites. Highest annual value of 37µg/m ³ at long-term site (with highest of 100µg/m ³ at all sites)	5 years for annual objective looking at long-term sites only ^d .	and Action Plan 2019 - 2023	Islington AQMA
Islington AQMA	Initially declared 2001 with expansion in 2003 to whole borough	24 hour mean PM ₁₀ ^a	Whole of borough	No	34µg/m ³ annual mean in 2001 and 38 µg/m ³ annual mean in 2003. 32 exceedances of 24hour mean objective in 2001 and 55 exceedances in 2003. ^b	No exceedances of annual or 24 hour mean of 50 µg/m ³ . Highest annual figure of 16 µg/m ³ .	22 years for 24 hour objective ^b . No exceedances of annual mean since 1999 when monitoring began.	Islington Air Quality Strategy and Action Plan 2019 - 2023	Visit the AQAP for Islington AQMA

Notes:

^a See table B in Abbreviations and National Standards Section

^b Based on recorded figure for 2001 and 2003 for Holloway Road roadside continuous monitor in Updating and Screening Assessment for 2003, which was the monitoring site with highest recorded pollution levels.

^c Based on Air Quality Progress report for 2007 where 34 exceedances were seen at Holloway Road.

^d Based on annual status report for 2000.

4.2 Air Quality Action Plan Progress

The [London Local Air Quality Management](#) (LLAQM) process requires that a snapshot of progress against actions for the calendar year 2024 is provided.

Tables K and L below provides a brief summary of Islington's progress against the Air Quality Action Plan actions as set out in our [Air Quality Strategy and Action Plan 2019-23](#), showing progress made in 2024 (and in some cases 2024/25 financial year running from April 2024 to March 2025 if this is how data is normally recorded). Continued progress in 2025 will be reported on in our annual report for 2025. Table K highlights three key measures taken in 2024 and Table L a full summary of all of our actions as set out in our air quality action plan.

Table K. Three key measures 2024

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
Encourage active participation of local people in air quality actions	Public health and awareness raising	Engage volunteers through citizen science, events, and partnerships to promote air quality awareness across the community.	September 2025	Islington Council Community groups Care homes Schools	In 2024, Islington Council advanced a Defra-funded project to raise air quality awareness through citizen science workshops and a new live data website. The workshops empowered schools and community groups to monitor local air pollution and spread the message, with pupils creating newsletters and assemblies. The air quality dashboard for Highbury and Mildmay launched in early 2025. Air quality dashboard for Highbury and Mildmay Islington Council and Islington data and statistics – Air Quality Dashboard .
Minimise traffic at sensitive locations during busy times	Public health and awareness raising Cleaner Transport	Implement School Streets to cut emissions and boost active travel, with alternatives where full closures aren't feasible.	2030 and ongoing	Islington Council Partner Schools	Work progressed on School Street implementation in 2024, where roads are closed at drop off and pick up time. By the end 2024/25 all 36 existing School Streets at primary schools were made permanent. An additional School Street was approved at Newington green as part of Mildmay Liveable Neighbourhood, with work to begin in 2025. Environmental improvements were made at Christ the King's Primary, bringing the total improvement work at schools on main roads to six schools. Early feasibility work also began for School Streets at secondary schools in the borough.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					This forms part of a wider effort in 2024 to create a more equal Islington with environmentally friendly streets where communities can come together and flourish, including starting to implement Mildmay Liveable Neighbourhoods (LNs), consultation and engagement on a number of other LNs and the development of cycle infrastructure including Cycleway 50.
Renew our fleet and replace vehicles with the cleanest possible technology	Borough Fleet Cleaner Transport	Review fleet for cleaner alternatives, including electric and retrofits, and explore greener options for heavy vehicles and usage.	2030 and ongoing	Islington Council	We continued to electrify vehicles in the council fleet in 2024, with a total of 128 fully electric and 31 hybrid vehicles and five electric cargo bikes by the end 2024/25, representing 28% total fleet and showing an increase from the previous year. We also retrofit a further two Refuse Collection Vehicles and took part in a number of cutting edge vehicle to grid installations in 2024/25. 76 charging points with 144 connectors remained in place at council owned buildings for council vehicles to use.

Table L. Delivery of Air Quality Action Plan Measures

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
1	Minimise traffic at sensitive locations during busy times	Public health and awareness raising Cleaner Transport	Pilot scheme to restrict the use of motor vehicles during drop off/pick up times near school entrances to minimise emissions and increase the number of pupils and their carers walking/cycling/scooting to school. Expand to further schools / nurseries etc. Support Play Streets. Monitor air quality outside schools and nurseries and assess the ways of publishing the details when data ratified.	By the end of 2024/2025 financial year, all 36 School Streets had been made permanent including Sacred Heart School Street in January 2025. More School Streets were explored and developed in 2024 as part of the Transport Projects programme: a decision to implement a School Street at Newington Green Primary School within Mildmay Liveable Neighbourhood was made in 2024 with implementation due to begin in 2025.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
				One environmental improvement scheme for primary schools on main roads was completed in 2024 at Christ the King Primary School bringing the total schemes to six primary schools across the borough. Early feasibility work began on a programme of School Streets for Secondary Schools with consultation due to begin in 2025/2026. By the end of 2024/25 there were 24 Play Streets in place across the borough. The council continued monitoring air quality outside every school, nursery, and care home in the borough in 2024, with results provided in this report. Breathe London sensors remained in place outside three schools in the borough, giving real time readings available online. A project increasing monitoring and displaying live data continued in 2024, with the website released early 2025 Air quality dashboard for Highbury and Mildmay Islington Council and Islington data and statistics – Air Quality Dashboard.
2	Schools air quality audits	Public health and awareness raising	Approach Islington schools that have been selected by The Mayor to conduct air quality audits and support them to install the recommended measures when the auditing is finalised. Audit all schools in the borough.	This scheme was completed in 2023 and more information can be found in the 2023 annual air quality report .
3	Improve knowledge about local air pollution near the schools and schools active travel campaign	Public health and awareness raising	Following the grant of funding from Department for Environment, Food and Rural Affairs (Defra) for ten local schools offering air quality monitoring, continued working with schools to advise pupils, carers, staff and visitors on current pollution levels near the schools, forecast pollution levels using airTEXT, information on air pollution including causes, impacts, ways to lower exposure and low pollution walking maps to get to school. Work with schools on joint engagement programme to encourage active travel and raise	Monitoring continued outside every school in the borough in 2024, see row 1 for more details. As part of our air quality engagement project in the Highbury and Mildmay wards in the borough we ran citizen science projects with schools and community groups in 2024. This included pupils monitoring air pollution in and around their school and then analysing the results. This scheme will continue in 2025. Schools continued to engage in the TfL Travel for Life (formerly STARS) programme, with 55 engaged schools in 2024 (compared to 53 in 2023). This included 1 bronze, 3 silver and 38 gold schools.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
			awareness of poor air quality. Use the Theatre in Education programme to offer schools advice on sustainable travel, active travel and air quality for all pupils from key stages 1 to 3. Use Defra funded school screen air pollution awareness project to promote active travel as a way to reduce pollution and exposure. Other activities include promotion of Walk to School Week, Bikeability training for pupils and anti-idling action events.	
4	Work closely with Islington's Health and Wellbeing Board.	Public health and awareness raising	Islington's Health and Wellbeing Board published Islington's Joint Health and Wellbeing Strategy in 2016 and one of the priorities includes prevention and management of long-term conditions. The council will support promoting healthier and more active families through various initiatives including developing healthy environments and access to physical activity and active travel.	Our care home air quality awareness project, working with some of the residents in Islington most vulnerable to the impact of pollution, continued throughout 2024. Four care homes that were awarded large grants began installing measures in 2024, with completion of installs in 2025. Surveys were also conducted with care homes in late 2024 to identify opinions on air quality and changes in knowledge following the project, with reports sent to care homes in early 2025. In 2024 we continued to be part of the North Central London (NCL) Paediatric Asthma Network and joined the NCL Climate Adaptation, Resilience and Air Quality Group, working together with health professionals to share learning and increase action on air quality.
5	Schools travel plans	Public health and awareness raising	Work with schools to offer school travel plans including AQ information and actions to reduce emissions and exposure to encourage a change in travel patterns. Encourage schools to review, update and engage with the STARS programme and work towards accreditation. Support all schools to achieve the highest accreditation.	Schools continued to engage in the TfL Travel for Life (formerly STARS) programme, see row 3 for more details. Schools taking part in the citizen science workshops described in row 3 were helped to use this work as part of their TfL Travel for Life accreditation.
6	National lead on airTEXT service and promote	Public health and awareness raising	Continue leading on and working with other local authorities and GLA to ensure that local people can get free alerts when high air pollution levels are	Islington continued to lead on and take part in the airTEXT scheme. At the end of 2024 there were 937 active subscribers receiving airTEXT alerts for Islington by email, text and voicemail, an increase of 41 since the end of 2023.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
	the service to local people.		predicted. Promote the scheme through SHINE, school awareness programmes and other media. Work with Whittington Health professionals on promoting the service to asthma sufferers.	AirTEXT was promoted through the Seasonal Health Intervention Network (SHINE) service, leading to 135 sign ups in London, of which 43 were in Islington, from April 2024 to March 2025.
7	Reduction in idling vehicles	Public health and awareness raising Cleaner Transport	Work with other boroughs on London wide campaign to target idling vehicles and increase awareness of air pollution from idling vehicles. Produce promotional materials including anti-idling signage, website, leaflets and work with schools, hospitals, businesses on wider engagement of their staff.	Engine idling continued to be enforced by our Civil Enforcement Officers through a Penalty Charge Notice (PCN). 15 PCNs were issued for engine idling from April 2024 to March 2025, with further drivers turning off or moving on after being spoken to. We continue to be part of the Idling Action London project, with the newest round of this project starting in 2024. The goals and objectives for this project are to deliver: • A public awareness and behaviour-change campaign • Business, fleet operator and driving instructor engagement and training • Policy, guidance and enforcement improvement work • A research project looking at exposure/impacts of vehicle engine idling inside vehicles As part of this project in 2024; campaign materials were updated, with a publicity campaign starting in early 2025 and new anti-idling signs were designed and deployed in idling hotspots.
8	AQ awareness events	Public health and awareness raising	Islington regularly participates in national awareness initiatives including Clean Air Day (CAD), Car Free Day (CFD), Walk to Work scheme and others to increase the understanding of air quality problems. We'll work in partnership with other local authorities and organisations to continue raising awareness about air pollution effects and how to minimise them.	About 700 people attended our annual active travel festival, Saddle and Sole in 2024, which was held around Car Free Day. This included group cycle rides to highlight the importance of active travel instead of using cars. The local economies team continued to reduce emissions from their public events in 2024, for example by replacing all generators with mains plug ins and using the council's new electric 26-tonne refuse collection vehicle to power the stage and lighting of their Whitecross Street Christmas event. Additionally in 2024 they now only offer climate friendly plant based food at these events.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
9	Encourage active participation of local people in AQ actions	Public health and awareness raising	Recruit volunteers for various campaigns and projects including anti-idling initiative and keep them informed about any upcoming events. Invite volunteers for various public information events, including AQ conference etc. Aim to train staff at various organisations within the borough about AQ messages and support them to spread the message to colleagues, friends and families.	As part of our work providing air quality grants to care homes in 2024 we supported care home managers in spreading awareness of air quality to their staff, service users and families. See row 55 for more information on our care home project. In 2024 Islington Council continued a Defra funded project raising awareness about air quality through the creation of a website with live air quality data and running of citizen science workshop with the community. the website released early 2025 Air quality dashboard for Highbury and Mildmay Islington Council and Islington data and statistics – Air Quality Dashboard. The workshops started in 2024 with schools, individuals and community groups. The participants were trained to spread the message beyond the participants attending the workshop. For example, pupils were helped to create newsletters or assemblies for the rest of the school.
10	Look for funding and work with world class academic institutions	All dependent on scheme	Islington is amongst the leading boroughs tackling air pollution through various initiatives and will aim to work with various universities on further research on air quality.	We continued to work with institutes throughout 2024, including working with London Clean Air and UCL students on commercial cooking and health professional engagement projects.
11	Improvements to heating systems	Emissions from developments and buildings	Improve heating systems through replacement of inefficient boilers as part of cyclical improvement work. Carry out the improvement works on domestic properties as well as school and business premises. Offer the grant support scheme to vulnerable private sector residents. Apply the most effective measures whenever possible, including through external schemes such as RE:NEW, RE:FIT, Mayor of London Warmer Homes and Section 106 Carbon Offset Funding when improving insulation and replacing boilers.	We referred 64 Islington households to the Retrofit Grant scheme for improvements to heating and/or insulation from April 2024 to March 2025 through our SHINE service for vulnerable residents. From April 2024 to March 2025 around 2,100 new high efficiency boilers, boilers and radiators or full system changes were actioned in domestic council managed/tenanted properties. Three householders were assisted through the council's Safe and Warm funding in 2024.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
12	Promotion of energy efficiency	Emissions from developments and buildings	Provide energy saving advice to residents within the borough. Refer vulnerable residents to SHINE services including airTEXT. Work with businesses in Zero Emission Network (ZEN) areas on energy efficiency audits to minimise the emissions and cost.	Islington residents continued to receive energy-saving advice from April 2024 to March 2025, including referrals to additional services through SHINE (which makes sure referrals get all the help they need to stay warm, save money and stay healthy in their homes), including 43 signups for airTEXT. The decarbonisation works at the council's Waste Recycling Centre (WRC) was completed in March 2024 with a launch event in May 2024 with the attendance of Mayor of Islington. The WRC is now fully decarbonised, and does not use any gas.
13	Apply tiered parking charges for short-term parking spaces	Cleaner Transport	Applied surcharge on parking diesel vehicles in short-term parking spaces from January 2018. Continue tiered parking permits based on fuel emissions. Review parking policies to take into consideration impacts on air quality and health.	The parking surcharge for diesel vehicles (including diesel hybrid) and charges for petrol and petrol hybrid vehicles based on carbon emissions remained in place for 2024. The concession for electric vehicles was removed in 2024 meaning these vehicles now pay standard rates. Overall this has led to a 13% drop in short stay transactions since 2021/22, with changes varying by vehicle types in 2024. The additional fee for match day parking continued in 2024, resulting in a decrease in transactions by 13% in one year.
14	Renew our fleet and replace vehicles with the cleanest possible technology	Borough Fleet Cleaner Transport	Conduct the review of the fleet to identify which vehicles may be operated as electric, biomethane, hydrogen, compressed natural gas (CNG), euro VI and ultra-low emission and consider the changes during next procurements. Procure first CNG powered welfare bus and assess the possibility of replacing wider fleet including heavy goods vehicles. Investigate possibilities of retrofitting the most polluting vehicles where no other option is viable. Review the council's vehicles usage. Analyse the possibility of car park spaces to be converted into bike storages where feasible.	The fleet electrification programme added more battery electric vehicles to the council fleet in 24/25. There were 129 full BEVs added to the fleet, 31 hybrid vehicles and 5 EAV cargo bikes. We also continued to repower vehicles with 2 additional RCVs repowered in 2024/25. The charging network remained static in 2024 with 76 EVCPs on the network with 144 connectors. In 2024 there were 4,872 charge cycles delivering a total of 111,983kwh across the fleet. A new procurement was carried out in 2024/25 to find a new EVCP installer and back-office provider. Compleo ltd were awarded the £1.2m contract to deliver the council's ongoing charger delivery as well as managing the existing network. The programme also worked on a number of cutting-edge projects in 2024/25, most of which are continuing throughout 2025. The council was involved in two Innovate funded projects to test vehicle to grid installations. An AC vehicle to

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
				grid (V2G) trial has been ongoing since January and will run for the next 12 months. We are also working on a first of it's kind mega-watt charging system to deliver a DC V2G charging system to work with two upgraded 26t refuse collection vehicle.
15	Adopt transport reduction strategy	Cleaner Transport	Explore reduction of traffic and co-ordinate the work with TfL so that both Islington and the Mayor's transport strategies work together. Propose re-designing of key streets where reducing traffic is essential to protect vulnerable road users. Working with TfL to investigate options of road user charging including workplace parking levies and work with the Mayor of London to strengthen these developments.	The Islington Transport Strategy 2020-2041 was in place throughout 2024 and covers traffic reduction, working with TfL, re-designing of key streets, protecting vulnerable road users, road user charging and workplace parking levies See row 1 and 18 for more details on School Streets, Liveable Neighbourhoods and Low Traffic Neighbourhood's and cycling route changes in 2024.
16	Freight consolidation scheme	Delivering servicing and freight	Work with other London boroughs on freight consolidation and discuss with our partner Camden Council inviting local businesses to join the scheme to minimise supply deliveries reducing vehicle traffic and emissions.	The freight consolidation scheme continued to run deliveries into the borough via the hub located in Camden throughout 2024 for stationary and janitorial supplies. The council worked closely in 2024 with Cross River Partnership (CRP) on an initiative that aimed to establish a trial micro logistics hub in Islington. The trial hub is due to open in 2025.
17	Increase cycle parking around the borough	Cleaner Transport Localised Solution	Install 400 cycle parking hangers around the borough to improve safety and modal shift to greener transport.	55 Sheffield cycle stands were installed across the borough in 2024/25, creating an additional 110 parking spaces for cyclists. Priority areas for these stands included residential areas that are near cycleways and LTNs, on street cycle parking near town centres and high streets. In addition, 56 new secure cycle storage facilities were installed on estates throughout the borough in 2024/25, offering secure storage for 383 more bikes. 507 on-street bike hangars were in place by the end of 2024-25, with a capacity for 3,042 bikes and 80% spaces occupied.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
18	Improve cycle network routes and connections of quiet ways through the borough	Cleaner Transport Localised Solution	Work with cycling groups to review and connect viable low traffic exposure routes to increase cycle confidence, safety and low pollution exposure. Review all one-way roads to consider giving two-way cycle advantage. Improve signage along cycle routes.	Transport for London completed construction of an experimental scheme for Cycleway 50 on Parkhurst Road, Seven Sisters Road, Isledon Road and Tollington Road in 2024. Construction of Cycleway 50 on Caledonian Road, Penn Road and Hungerford Road was also delivered in 2024. A new parallel pedestrian and cycle crossing was delivered on Southgate Road at Northchurch Road in 2024, connecting a low traffic cycle route in Hackney to an Islington LTN. The council continued to work in partnership with Camden in 2024 to upgrade the pop-up cycleway on York Way with more permanent materials, including stepped tracks and footway improvements between Wharfdale Road and Randell's Road. Further upgrades between Hungerford Road and Market Road are due to complete in 2025. In 2024 a decision was taken to develop an upgrade to Cycle Superhighway 1 on Boleyn Road including a bus gate, protected cycle track, new parallel crossing and zebra crossing as part of the Mildmay Liveable Neighbourhood, all due for implementation in 2025. New cycle crossings and connections were also agreed at Newington Green in 2024 as part of the Mildmay Liveable Neighbourhood, in order to improve connections to Cycle Superhighway 1 at Kingsbury Road. These are due for delivery in Spring 2025. The council consulted on proposals for the south of St. John Street in 2024, including reduced through traffic and contraflow cycling on St. John Street near the borough boundary with the City of London. The council consulted on final draft proposals for the Cally Liveable Neighbourhood including cycling and walking measures in 2024, and subsequently took a decision to implement the scheme.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
19	Improve public transport facilities in the borough	Cleaner Transport	Work with TfL on a bus reliability programme. Improve facilities at public transport hubs, including cycle storage outside stations. Examine council's roads space and improve reallocations of road space to prioritise pedestrians/cyclist over car parking. Support the delivery of Crossrail 2 to relieve crowding on existing lines such as Victoria and Piccadilly lines. Lobby for expanding night tube services in Islington and retaining night bus services in the borough. Continue to request provision of an all zero-emission fleet at the Metroline bus garage as soon as possible.	See row 17 for details of reallocating road space for cycle parking.
20	Enhance and plan the infrastructure of electric charging points across the borough	Cleaner Transport	Enhance the current network of electric charging points in the borough including rapid, fast and lamppost chargers and plan future expansion to prepare for increasing demand.	Electric Vehicle Charging points continued to be installed in 2024 with a total of 605 in place by December 2024. Following on from the announcement in 2023 by the Office of Zero Emission Vehicles (OZEV) of the Local Electric Vehicle Infrastructure (LEVI) capital fund, the council submitted a joint application with other boroughs to the fund, with the aim of increasing delivery of Electric Vehicle Infrastructure (EVI). Work is ongoing on a procurement of new charge points from 2026 onwards.
21	Increase car clubs' availability in the borough	Cleaner Transport	Support car clubs to increase availability of vehicles in the borough particularly ULEV and zero exhaust emissions vehicles, including vans.	In 2024 the council continued to support multiple car club operators within the borough. While there has been a reduction in the number of operators the council aims to work with operators to facilitate the electrification of their fleet.
22	Support geographical expansion of ULEZ	Cleaner Transport	Engage with TfL, GLA and other London boroughs on the expansion of ULEZ. Respond to various consultations to point out the benefits of extending ULEZ to whole of Islington as soon as possible. Lobby Mayor of London to tighten the criteria for ULEZ to reduce exclusions. To push for a	The ULEZ expansion to cover the whole of Islington happened in 2021 and has remained in place since. In 2023 the ULEZ was expanded to cover the whole of London and remained in place throughout 2024.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
			strengthening of the ULEZ so that it becomes a zero emission (exhaust) zone.	
23	Call on Mayor to put into practice diesel free London by 2025	Cleaner Transport	Support Mayor of London to review all aspects and policies to implement diesel free London by 2025 to address the public health crisis caused by air pollution. Develop a diesel free strategy for Islington as part of trend in diesel free direction, including diesel and petrol vehicles sale ban in 2040. Explore the option of phasing out parking permits to diesel vehicles in Islington before 2025 to support diesel free London.	See row 13 for more details on the council's parking surcharge for diesel vehicles and changes and impacts in 2024.
24	Promote active travel and Clean Air Walking Routes	Cleaner transport Public health and awareness raising	Work with TfL on planned improvement works to ensure all new road improvements are considerate of walking and cycling, creating safer and cleaner spaces for active travel, including all current and future works such as Highbury Corner, Old Street and Clerkenwell Green. Consider trialling smarter travel scheme incentives. Provision of personalised travel information. Improvements to footpaths, signage and directions to encourage people to walk. Promote active travel as part of Active 10 and other National Health Service (NHS) initiatives. Create map of Clean Air Routes and promote within the borough. Increase, develop and expand Clean Air Walking Routes.	In 2024/25, the council provided 610 adult and 2,096 children with cycle training. 39 Dr Bike sessions, 33 led rides and 16 bike maintenance courses were held. Additionally, the council have procured a number of new and innovative pilot programmes including a cycle taxi service aimed at those with mobility issues, a cycle programme for the elderly or those suffering from dementia, a women only cycle training and led-ride programme and extensions to the Try Before You Bike programme that now includes e-bikes, e-cargo bikes and social prescribing. Across these projects, there were 1,767 inclusive cycling participations. About 700 people attended our annual active travel festival, Saddle and Sole in 2024. There were 5.75m trips in Islington on cycle hire bikes in 2024/25 with the two cycle hire operators working in Islington by agreement with the council. The council delivered signage and improved accessibility in March 2024 in support of Transport for London's five boroughs Green Link Walk through Islington. The route links places of interest and new and existing green infrastructure along quieter streets.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
				A number of new cycle parking facilities were installed, and changes made to cycle lanes (see rows 17 and 18 in this table for more information). Details of the School Streets, wider Transport Projects programme and cycle schemes are given in rows 1 and 18.
25	Healthy Streets implementation	Cleaner transport Public health and awareness raising Local Solutions	Work towards implementing the Healthy Streets Approach to encourage walking and cycling and protect children from poor air quality.	In 2024 the council conducted engagement on the development of proposals for Liveable Neighbourhoods in the area around Annette Road (between Holloway Road and Hornsey Road). In partnership with the City of London, a second phase of engagement on the Bunhill, Barbican and Golden Lane Healthy Neighbourhood was completed in 2024, including proposals for through traffic reduction, cycling and walking measures in the area. In 2024, the council commenced implementation of the Mildmay Liveable Neighbourhood in the autumn. As part of the LN, alterations to improve and make the path within the Mayville Estate between Waller, Skelton and Bronte houses more accessible were completed in December 2024. Pavement accessibility improvements in a number of locations around the Mildmay LN area were completed in 2024. Further work on School Streets and Play Streets were conducted in 2024 (see row 1 of this table for details). The council also continued work on LTNs in the borough (see row 1 and 18 in this table for more details).
26	Identify barriers for cycling to work and for leisure	Cleaner transport Public health and awareness raising	Look at barriers for cycling within council own employees and local businesses. Identify need for further cycle training, confidence building, facilities and cycle provision. Investigate and negotiate staff membership for bike hire. Consider personalised travel planning for employees.	The council continued it's partnership with Peddle My Wheels / Our Bike in 2024 and expanded the number of shared use cargo bikes to seven: Cally Road, Archway, Highbury Barn, two on Holloway Road and Finsbury Park.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
27	Promote smarter driving training	Cleaner transport Borough Fleet	Ensure all employees driving council vehicles are familiar with eco driving techniques. Promote eco driving amongst general public to drive down pollution from brake and tyre wear etc.	Current accredited DVSA training courses which the council offer internally to all vocational drivers include: • Safe & Eco Driving • Vulnerable Road Users • Highway Code • Vehicle Legal Requirements See row 14 for information on fleet changes.
28	Angel (from Angel station to Essex Road station)	Localised Solutions All possible GLA themes dependent on work in focus area	Cooperation with Angel BID to involve local business in minimising air pollution, new electric charging infrastructure, improving the bus fleet that uses the routes in and around Angel, work with local schools on behaviour change, monitoring, auditing and implementing greening measures where feasible.	A project to improve Chapel Market delivered in partnership with the GLA, with funding provided by the Mayor of London's Good Growth Fund and the council was completed in 2024. The project enhanced features of the existing affordable, diverse and inclusive market whilst strengthening the offer through a wider choice of goods and services. It aimed to facilitate a new generation of traders from the local community and deliver an uplift in the public realm to make the street a more attractive and healthier place to shop, linger and enjoy.
29	Holloway Road (Highbury Corner to Archway)	Localised Solutions All possible GLA themes dependent on work in focus area	Improvements to Highbury Corner gyratory, requirement for bus fleet to meet highest standards as soon as possible, increasing amount of pollution absorbing plants, behaviour change campaign to promote active travel as well as use of side routes when cycling and walking, continue and increase ZEN promotion in Archway through offering various opportunities for businesses to participate and decrease pollution. Install delivery lockers to minimise home deliveries.	In 2024, works were completed on Holloway Road as part of TfL's Safer Junction programme to enhance safety for all road users including pedestrians and cyclists. The improvements included new pedestrian crossings, changes to the road layout, the planting of several new trees and improvements to bus stops.
30	Finsbury Park (including parts of Hackney and Haringey)	Localised Solutions All possible GLA themes	Working closely with TfL and neighbouring boroughs on possible improvements to cycle routes, collaboration with Town Centre management, increasing greening, mitigation	Transport for London completed construction of an experimental scheme for Cycleway 50 on Seven Sisters Road and Iseldon Road in 2024.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
		dependent on work in focus area	requirement for all new developments in the area to minimise impacts of air pollution during construction stages and modelled future impacts.	
31	Old Street/ Shoreditch (including parts of Hackney and Tower Hamlets)	Localised Solutions All possible GLA themes dependent on work in focus area	Proposed Old Street gyratory improvements, active travel promotion as part of new walking/cycling routes, ongoing City Fringe ZEN and Low Emission Neighbourhood (LEN) offers to businesses and local people to make various air quality positive actions, ULEV streets, green screens possibilities near sensitive locations such as schools, hospitals, school audits, close working partnership with City of London and Hackney, increase of electric charging facilities.	TfL completed the Old Street roundabout transformation project in June 2024. The northwest arm of the roundabout was closed permanently to all traffic and replaced with a new public space, with better walking and cycling access to Old Street station. The former Old Street roundabout now has fully segregated cycle lanes and cycle-only traffic signals around the re-designed junction, alongside new pedestrian crossings to make it much easier to navigate the area on foot. The station was also upgraded with the creation of two new passenger entrances and new lifts to an upgraded retail concourse. In partnership with the City of London, a second phase of engagement on the Bunhill, Barbican and Golden Lane Healthy Neighbourhood was completed in 2024, including proposals for through traffic reduction, cycling and walking measures in the area.
32	King's Cross/ Caledonian Road (including parts of Camden) Dalston Lane (Mainly Hackney) King's Cross/Euston/ Marylebone Road (Mainly Camden)	Localised Solutions All possible GLA themes dependent on work in focus area	Proposed gyratory improvements of existing road network, work closely with London Borough of Camden on minimising the impacts from developments bordering with Islington, improvements to electric charging facilities in the area, increasing cycle facilities and green infrastructure. Ongoing work with Hackney Council and supporting their actions whenever possible, monitoring construction activity in close proximity to Dalston Lane to ensure further pollution impact is avoided or mitigated through various conditions. Close working partnership with Camden and TfL on projects to minimise the impact from moving and stationary traffic in the area, increased construction	The council continued to lobby TfL for safety improvements to the King's Cross gyratory in 2024. TfL confirmed that safety improvement works on the King's Cross Road and Pentonville Road would commence in early 2025. Changes will include: • A simplified road layout for all road users, including a new straight-across crossing over Pentonville Road so that people will no longer need to wait on a central island. • Wider pavements at the junction of King's Cross Road and Pentonville Road. • The ability for cyclists to cross the inner ring road, helping cyclists travel from Northdown Street to King's Cross Road. • New early start signals for cyclists at the junction of Pentonville Road and Northdown Street, to help them safely move ahead of traffic, including a segregated facility for cyclists in the eastbound direction. • New section of bus lane

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
			impact monitoring and calls for reducing impacts through planning conditions, ongoing work with local communities, businesses and schools, improving charging facilities to encourage use of electric vehicles for personal and business use.	New trees on Pentonville Road and King's Cross Road. The council continued to work in partnership with Camden to upgrade the pop-up cycleway on York Way with more permanent materials, including stepped tracks and footway improvements between Wharfdale Road and Randell's Road. In 2024, the council took a decision to implement the Mildmay Liveable Neighbourhood, with some changes to plans based on feedback from public consultation, and began implementation in the autumn. In 2024 the council undertook public consultation on the Cally Liveable Neighbourhood, and later took a formal decision to implement the scheme with changes to the scheme based on feedback received.
33	Increase greening of the borough with pollution capturing and absorbing plants	Localised solutions	Ensure adequate, appropriate and well-located green space and infrastructure is planned for all new developments. When choosing the species and locations, consider eventual canopy size and possible local pollution hotspots e.g. junctions, busy roads. Look at options for planting greenery close to local schools, nurseries, hospitals, GP surgeries and other places near vulnerable residents.	The Council is committed to enhancing green spaces, habitats, and tree planting on new development sites. This effort utilizes existing policies in the Local Plan and incorporates Biodiversity Net Gain principles. Highways projects are focusing on greening interventions and improvements, particularly around school streets and pollution hotspots. The Tree Service is offering subsidies for tree planting at schools within the Borough. The Council has set a corporate target to increase green public open space by 1.5 hectares. 15% of this target was achieved by end 2024/25 and 22% is planned and committed to achieve 34% by 2026.
34	Increase greening of the borough with pollution capturing and absorbing plants	Localised solutions	Increase canopy cover of the borough in line with London and borough targets, using existing spaces and new developments.	The Council has two tree-related corporate targets: to increase both tree numbers and tree cover. In 2024-25, we planted over 920 trees on public land, surpassing our target of planting 600 more trees than we lose annually. Council capital funding has been secured to plant a similar number of new trees in 2025-26.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
				The i-Tree Eco survey is currently underway as of end 2024/25 and is expected to be completed by the summer of 2025.
35	Reduce pollution on Islington waterways	Localised solutions Emissions from developments and buildings Transport Solutions	Work with Canal and River Trust to reduce pollutants concentrations around Regent's Canal by Implementing Eco Zones in the area. Look at possibility of using the canal for freight servicing e.g. waste collection.	In 2024 we worked with the Canal and River Trust and other London boroughs on the Healthy Waterways project with the aim to conduct engagement with boaters on air quality, starting a survey in 2025. Work continued on the evaluation report for the Eco Zone Mooring consultation in 2024.
36	Power generation identification	Emissions from developments and buildings	Map the locations of generators (CHP, back-up generators, etc.) and review power sources in the city to remove excess pollution away from residents. Review standard planning conditions regarding power generators. Utilise the heat from London Underground network to provide cheaper and greener heat to local residents in Bunhill ward and look for further opportunities for heat networks and local secondary heat.	The GreenSCIES outline business case was completed for the low carbon New River heat network in 2024. Following the completion of the business case, heat zoning legislation has progressed that will mandate buildings to connect to heat networks. To support this a borough wide heat network strategy was carried out through the Department for Energy Security and Net Zero's Advanced Zoning Pilot programme in 2024 and completed in 2025. Work on the heat network prospectus for the borough and commercial model will continue in 2025 to support Islington's heat network ambitions. We continued to be part of the pan-London NRMM auditing project in 2024, with 11 sites audited as part of this scheme in 2024. We also communicated the upcoming strengthening of NRMM standards to relevant industries in 2024 ahead of the 1 January 2025 deadline.
37	Bid for available external funding	Monitoring and other core statutory duties	Apply for air quality funding to resource air quality improvements actions and projects in Islington.	In 2024 the council continued work on the following Defra schemes; - Air quality audits of care homes, funding recommended measures and conducting a communications campaign. - Creation of an online air quality database showing live data to aid with air quality engagement, alongside citizen science and wider community engagement.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
				The council started the following Mayor's Air Quality Fund (MAQF) projects in 2024: • Co-leading, with Camden, a pan-London training scheme to enforce smoke control areas and run a cross borough communications campaign. • Continuation of Idling Action London, with a focus on fleets. • A multi borough healthy waterways scheme. There was no Defra or MAQF grant funds on air quality available to bid for in 2024. The £1.4M Chapel Market project funded with £1M from the Mayor of London's Good Growth Fund and match funding from Islington council was completed in 2024.
38	Set up internal coordination meeting	Monitoring and other core statutory duties	Pull together key internal stake holders to coordinate work that impacts on air quality across the borough.	Work with a range of internal council teams continued throughout 2024 and air quality remained integrated in a range of council work programmes and strategies including Vision 2030: Building a Net Zero Carbon Islington by 2030, the Draft Local Plan and the Transport Strategy.
39	Lobby central government	Monitoring and other core statutory duties	Lobby central government to review Clean Air Act to provide legally enforceable right to clean air with new powers to regulate all emission sources (canals, solid fuels, etc.) and empower local authorities. Challenge government to ensure the current air pollution limits remain valid or even tougher after leaving European Union. Pressure government to reconsider and develop national scrappage scheme. Urge HM Treasury to end red diesel subsidies.	The council continued to respond to relevant air quality and pollution changes in 2024.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
40	Ban of diesel vehicles	Cleaner transport	Support any early intervention in the direction of banning diesel and petrol vehicles to minimise air pollution emitted to the atmosphere.	See row 13 in this table for information on the council's diesel surcharge and row 20 for information on the installation of public electric vehicle charging points. The fleet electrification programme continued throughout 2024, alongside continued roll out of infrastructure, see row 14 for more details. Details of the School Streets programme restricting vehicle use at pick up and drop off are given in row 1.
41	WHO Air Quality Standards	Monitoring and other core statutory duties	Work towards adopting the WHO obligations and/or standards, including air quality limits. Work to developing an evidence based and defined targets for Particulate Matters in line with the WHO objectives.	A range of actions were taken in 2024, mentioned throughout this report, which will help us to work towards WHO levels. The council also continued work on our new air quality action plan in 2024, investigating inclusion of new WHO targets introduced in 2021.
42	Work towards eliminating diesel generators	Cleaner transport	Work towards eliminating all diesel-powered generators, including vehicles from parks and open spaces.	Our annual rollout target to replace our electrical equipment is on hold, pending more charging infrastructure being made available in the Waste and Recycling Centre, however we are looking at small gains in deploying small teams locally, that will reduce transport who will use battery equipment. Following a delay in supply in 2024 the Grounds Maintenance diesel vehicles will start being replaced again in 2025.
43	Lobbying on anti-idling	Cleaner transport	Advocate for stronger anti-idling enforcement powers.	Engine idling continued to be enforced by our Civil Enforcement Officers through a Penalty Charge Notice (PCN) of £80 (reduced to £40 if paid within 14 days). Reports of engine idling can be made to our Enforcement Hotline 020 7527 7624. 15 PCNs were issued for engine idling from April 2024 to March 2025, with further drivers turning off or moving on after being spoken to.
44	Air quality positive standards	Emissions from developments and buildings	Require all major developments, minor new build developments and larger minor extensions to submit air quality assessment to meet London's air quality standards. Proposals mitigate or prevent adverse impacts on air quality and investigate and implement all reasonable opportunities to improve air quality. Developments in locations of poor air	The London Plan and Islington Local Plan require proposals to be at least air quality neutral. Major developments, minor new build developments, and larger minor extensions all have to submit an Air Quality Assessment. London Plan Policy T7 aims to reduce emissions and harmful air pollution from freight; it supports the use of zero-emission last-mile solutions (such as cargo

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
			quality should be designed to mitigate the impact of poor air quality to within acceptable limits. Require developments in excess of 200 net additional residential units or 10,000sqm net additional gross external floor space to be Air Quality Positive and implement measures on-site to actively reduce air pollution as far as possible.	cycles) and requires provision to be made for electric vehicle charging points for freight vehicles. The London Plan includes a policy (SI1) which requires masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment to consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach. The Islington Local Plan policy S7 requires developments in excess of 150 net additional residential units or 10,000sqm net additional gross external floor space to be Air Quality Positive. Islington Council are also producing a Climate Action Supplementary Planning Document (SPD) which includes a chapter on protecting air quality in the borough. This supports the implementation of Local Plan and London Plan policy through providing additional guidance on Air Quality Assessment requirements, how Air Quality Neutral should be approached for different types of application as well as further guidance on measures that can be incorporated as part of an Air Quality Positive approach. A consultation on the draft SPD took place in January and February 2025, with the final version of the guidance expected to be adopted in Autumn 2025.
45	Enforce NRMM Explore possibility for allocation funds from s106 at offsetting air quality impacts from developments	Emissions from developments and buildings	Promote, educate, raise awareness and enforce NRMM through work of our Construction Impact Monitoring Officers (CIMO). Work with other boroughs to submit the bid to the MAQF to continue raising awareness of NRMM policies after funding expires in March 2019. Explore the options for obtaining AQ monitors at new development sites of particular size as part of requirements through planning obligation especially near local schools or other sensitive areas. Research opportunities to use the funding	Our CIMOs continued to patrol the borough to proactively monitor construction sites in 2024 with a focus on all major construction sites. Smaller sites are inspected on a more reactive basis. Utilising air quality monitoring equipment provided by developers the council continue to monitor air quality and dust at construction sites, where relevant, and especially at sensitive locations such as schools. In addition, the council are exploring funding for air quality monitoring. As part of the London wide NRMM scheme, funded through the MAQF, 11 sites in Islington were audited in 2024, all of which were compliant.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
	Improving air quality from construction		for air quality improvements at schools following the audits. Require all developments to comply with Islington's Code of Practice for Construction Sites and guidance on reducing local air pollution. CIMOs to check compliance to improve air quality from construction sites. Ensure that contractors undertaking works to the highways use best practice to avoid adding to local air pollution.	The Islington Local Plan includes policy S2 which requires all developments to submit a sustainable design and construction statement to show how they will meet sustainable design policies. This allows a proper assessment of schemes at application stage and secures any benefits through planning obligations and/or conditions. Policy T5 requires development proposals, especially major developments or sites that may cause disruption during construction, to adhere to best practice construction techniques to limit impacts on air quality and reduce noise and vibrations from construction and the transportation of construction waste. Information must be provided on impacts and mitigation measures, including a Construction Logistics Plan. Local Plan policy S10 also states that sites must comply with best practice for construction, including Islington's Code of Practice for Construction Sites.
46	Research pollution mitigation measures	Emissions from developments and buildings	Continue working with King's College London and other local authorities in London Low Emission Construction Partnership (LLECP) on researching, developing and trialling construction equipment which is less polluting and promote the scheme, its findings and recommendations among developers operating in the borough. Look for further funding after funding finishes in 2019 and ensure the legacy of research continues beyond 2019. Maintain air pollution consideration in Environmental Impact Assessment for procurement to ensure that improving AQ is considered by suppliers.	LLECP finished in 2019 and is reported on in the annual air quality report for 2022. However, the council continue to be involved in research and action at construction sites where possible. This includes the NRMM scheme, see rows 37 and 45.
47	Continue reviewing all Part B installations in the borough	Emissions from developments and buildings	Ensure that all Part B installations e.g. dry cleaners, service stations etc. in Islington maintain the highest standards of air pollution emissions control.	The council continued to monitor and regulate Part B installations in 2024, with around 30 Part B permits in place in 2024, with exact numbers changing slightly throughout the year.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
48	Provide advice on and encourage use of non-combustion renewable energy technologies to developers	Emissions from developments and buildings	Provide wide range of services including advice on renewable energy technologies, planning, energy management etc. to ensure the best available technologies are used. Require all developments, through planning policy, to maximise opportunities for on-site electricity and heat production from solar panels, and other renewable technologies where appropriate.	The Local Plan strengthens the requirement to reduce energy demand. Development proposals are required to identify opportunities to maximise renewable energy production on-site, including through solar panels and air source heat pumps. The council is also producing a Climate Action SPD and Retrofit Handbook which will help households and businesses better understand how to reduce carbon emissions and increase energy efficiency of existing buildings. A consultation on the draft documents took place in January and February 2025, with the final version of the guidance expected to be adopted in Autumn 2025.
49	Adopt an integrated approach to energy supply which maximises both air quality and climate change benefits	Emissions from developments and buildings	Ensure that the heating systems of new developments do not have significant impact on local air quality by prioritising heating systems that will result in low or zero emissions of both carbon dioxide and NOx including heat networks, secondary heat or other low or zero emission sources. Require Combined Heat and Power (CHP) and ultra-low NOx gas boiler communal or district heating systems to be designed to ensure they emit very low levels of NOx and have no significant impact on local air quality.	The Local Plan requires minor new-build developments with individual heating systems to prioritise low carbon heating; air source heat pumps will be the most appropriate heat source for individual heating systems. Further guidance on the approach to the energy hierarchy for different types of planning applications is provided in the draft Climate Action SPD, including the use of templates for Sustainable Design and Construction statements for minor applications. The Local Plan is also clear that use of low emission CHP will only be considered by the council in exceptional circumstances, low emission CHP refers to technology which emit very low levels of NOx.
50	Cycle storage for new developments	Emissions from developments and buildings Cleaner transport	Work towards all new developments being required to ensure adequate cycle storage in each new home.	The Islington Local Plan, adopted in September 2023, includes minimum cycle parking requirements for new developments. Cycle parking was secured on relevant developments over 2024.
51	Work with community business groups to develop and	Public health and awareness raising	Engage with local businesses in ZEN Archway and City Fringe to improve local air quality, reduce energy and transport costs and identify barriers to minimising pollution. Continue to develop the work beyond ZEN areas and expand the schemes into	The council continued to conduct business energy audits and visits as part of Energising Small Business Grants throughout 2024 to identify carbon reduction and sustainability improvements. These visits include conversations about

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
	improve schemes	Localised solutions	the whole borough whenever possible. Deliver a superb urban environment by working on the LEN initiative together with other partners. Support Archway Town Centre Management in their bid to create a LEN in Archway and look for further areas of possible improvements. Escalate promotion of TfL's Deliveries Reduction Fund and help business groups to apply for funding to increase consolidation of deliveries.	actions that can improve air quality; such as indoor ventilation, air circulation, smart transportation and cycle schemes. We continued to promote the council's shop local campaign in 2024 to reduce travel as well as to support Islington's independent businesses. This included the cover of the councils newsletter Islington Life's winter edition, localised events, local supplier brokering, case studies to show business benefits of Low Traffic Neighbourhoods, development of the Archway loyalty card and successful roll out of a Cally loyalty card.
52	Require new developments to maximise the provision of green space, as well as maximising urban greening including green walls and biodiversity-based green roofs	Localised solutions Emissions from developments and buildings	Work with developers and businesses to ensure adequate, appropriate and well-located green space and infrastructure is included in new developments particularly near sensitive sites, e.g. nurseries, schools, care homes etc. Require developments to maximise provision of urban greening through planning policy requirements and planning conditions.	The Local Plan, adopted in September 2023, has increased the level of policy detail in regard to greening and includes information on; green roofs and vertical greening, biodiversity, sustainable drainage and cooling impacts as well as consideration of architectural and historic features. This reflects the importance of urban greening, including green roofs and walls in our sustainability objectives. The council is also producing a Climate Action SPD and Retrofit Handbook which both provide guidance on how greening can be considered as part of planning applications and retrofit proposals. A consultation on the draft documents took place in January and February 2025, with the final version of the guidance expected to be adopted in Autumn 2025.

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
53	Review Smoke control Area Develop communications plan related to the use of smoke free fuels and appliances	Emissions from developments and buildings	New structure for Smoke control area to cover whole borough has been adopted in 2018 removing all previous exemptions. Promote and enforce new Smoke Control Area. Increase awareness related to the use of smoke free fuels in open fires and wood-burning stoves as recommended by central government.	In 2024 we continued to work on the proposal to add the boroughs waterways to the Smoke Control Area, with preparation for a statutory consultation planned to start in 2025. In 2024 the council continued work on the London Wood Burning Project. The council are leading this scheme with Camden on behalf of 19 other boroughs (an increase of two boroughs from 2023). In 2024 we completed the Defra funded aspect of this project, including a communications campaign and survey on resident's opinions and knowledge on air quality and the communications campaign. In 2024 the MAQF funded element of the project began, with a focus on enforcement, as well as a communications campaign. Training sessions were created and run for the participating boroughs and leaflets and notices were created for use of enforcement officers.
54	Improve publicity of pollution data and its availability to the public Low-cost sensors to measure air pollution	Public health and awareness raising	Develop options for real time AQ monitoring data to be included on Islington's website. Introduce low-cost sensors alongside existing NOx tubes to gain better understanding of local air pollution and exposure to polluted air.	Air quality monitoring and reporting continued throughout 2024, including use of diffusion tubes, reference monitors and sensors. Our reference monitor data was available live on the London Air website. The council continued to monitor air quality at all schools, nurseries, and care homes in the borough in 2024, with the results found in this report. Extensive air quality monitoring continued to take place as part of the Transport Projects schemes. In 2024/25 we replaced our existing reference air quality monitors with new up to date monitors for NO₂ and PM₁₀, as well as new PM_{2.5} monitors. In 2024 the council continued to use low-cost sensors to assist in monitoring work along the canal, in low traffic neighbourhoods and outside schools. Three schools in the borough also have sensors as part of the Breathe London scheme. The council also continued a Defra funded monitoring and citizen science scheme in 2024 to create an online data platform displaying live air quality and transport data to help with air quality engagement in the Mildmay and Highbury areas in the borough. The website was released early 2025 Air quality dashboard for Highbury and Mildmay Islington Council and Islington data and statistics – Air Quality Dashboard. We also purchased handheld monitors which

Row	Measure	LLAQM Action Matrix Theme	Action	Progress
				were used in citizen science workshops in this project, allowing participating schools, community groups and individuals to monitor local air pollution.
55	Public Health to be briefed and involved in air quality issues	Public health and awareness raising	Provide briefing to Public Health senior management about progress on tackling poor air quality issues and improvements. Require Director of Public Health to sign off the Annual Status Report and Air Quality Action Plan. Involve Public Health team in supporting engagement with local stakeholders.	Our care home air quality awareness project continued throughout 2024, with the four care homes awarded large grants installing measures, with completion of installs in 2025. Surveys were also conducted with care homes in late 2024 to identify opinions on air quality and changes in knowledge following the project, with reports sent to care homes in early 2025. The Public Health team continued to be involved in air quality throughout 2024.
56	Working with internal teams	Potentially all themes	Work closely with other internal teams such as transport, energy, procurement, senior management, councillors to ensure new and existing strategies and policies are assessed for public exposure to pollution and actions taken to mitigate it where possible.	As evidenced throughout this report, teams across the council worked individually and together in 2024 on schemes that will help improve air quality. For example; transport planning, traffic and parking, planning, energy, climate action, public health and communications. This includes strategies and projects that required the support and guidance from senior management and councillors.
57	Working with external stakeholders	Potentially all themes	Work with the range of external organisations, including other London boroughs, GLA, the NHS, scientists, other partners and local people to encourage actions to reduce pollution and increase awareness.	As evidenced throughout this report, in 2024 the council worked with a number of external organisations including London boroughs, wider local authorities, GLA, Defra, community groups, charities and academics.
58	Maximising delivery and servicing by non-motorised and sustainable travel modes	Emissions from developments and buildings Delivery servicing and freight	Work toward all new developments for employment, including industrial and retail to maximise delivery and servicing by modes that do not generate air pollutants.	The Local Plan, adopted in September 2023, includes policies requiring delivery and servicing arrangements to investigate potential for non-motorised and sustainable transport modes, such as cargo cycles deliveries to improve air quality.

5. Planning Update and Other New Sources of Emissions

Table M. Planning requirements met by planning applications in Islington in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	6
Number of planning applications required to monitor for construction dust	6
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	6
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	0
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas in Islington Number of planning applications with conditions related to NRMM included. Number of developments registered at www.nrmm.london . Number of audits (based on pan-London project report) % of sites unregistered prior to audit % sites compliant with Stage IV of the Directive and/or exemptions to the policy.	8 conditions included 4 registered 4 audits 0% sites unregistered prior to audit 100% sites compliant after audit
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas) in Islington Number of planning applications with conditions related to NRMM included. Number of developments registered at www.nrmm.london . Number of audits (based on pan-London project report) % of sites unregistered prior to audit % sites compliant with Stage IIIB of the Directive and/or exemptions to the policy.	8 conditions included 7 registered 7 audits 0% sites unregistered prior to audit 100% sites compliant after audit

NRMM regulations are stipulated within Construction Management Plans for redevelopments. They are inspected by London Borough of Merton's team in conjunction with Islington's Environmental Pollution, Policy and Project Team.

5.1 New or significantly changed industrial or other sources

No new sources identified.

6. Additional Activities to Improve Air Quality

This section provides mandatory updates requested by GLA to ensure all boroughs report on these air quality activities in their annual report. These activities are also included in Section 4.2 Tables K and L above which summarises all actions taken in Islington in 2024.

6.1 London Borough of Islington Fleet

The council has 128 zero emission vehicles and 31 zero emission capable vehicles, which combined represents 28% of the total fleet. More details on changes to fleet made in 2024/25 can be found in Section 4.2 Tables K and L.

6.2 Planning Enforcement

Close working across the council has been used to ensure planning applications are reviewed at submission stage and air quality impacts considered through monitoring during construction, air quality conditions being discharged and any breaches enforced.

6.3 Pan-London NRMM Auditing Project

The council will continue to support ongoing NRMM enforcement work and the London wide NRMM Auditing Project.

In Islington NRMM regulations compliance is required by way of a Construction Management Plan (CMP) and within Islington's Code of Practice for Construction Sites, and the expected NRMM obligation is stated within Islington's template CMP. This is required for all sites where a CMP is required, meaning all major sites and any site where NRMM plant is expected to be used.

6.4 Air Quality Alerts

Islington continues to lead on and take part in the airTEXT scheme. At the end of 2024 there were 937 active airTEXT subscribers in Islington, an increase of 41 since the end of 2023. The council also promote other alert systems when relevant, such as the Mayor's air quality alert messaging to schools, care homes and GPs.

6.5 Air Quality Positive

We have received two major sites which, by way of their size, have been required to achieve Air Quality Positive status. The proposed measures include:

- Location of sensitive uses away from main roads and less sensitive commercial uses closest to existing road traffic emissions.
- The proposed masterplan has been designed to reduce exposure to emissions, including the public amenity area being located in the centre of the development, away from main roads and vehicle tailpipe emissions.
- Significant tree planting and green infrastructure to act as barriers to road traffic emissions and to promote cycling and walking through the site.
- The principal heat generation for the proposed development will be from Air Source Heat Pumps (ASHPs). Solar panels will also be utilised.
- The Proposed Development will provide:
 - pedestrian access to the west, southeast and northeast of the Development.
 - improve the pedestrian signal crossing on by providing a new connection through the site, the two accesses to the site will provide dropped kerb and tactile paving and the footway upgrade along the frontage.
 - opening up the site and providing a new public realm for others to walk around.
 - existing cycle routes continue to be available as well as the new Finsbury Park to Highbury Fields cycleway opened in 2021.
- The site has a public transport accessibility level score of 4 and 6A offering good and excellent accessibility by public transport.
- 1,848 long stay and 32 short stay residential cycles spaces will be provided and 36 long stay and 40 short stay visitor spaces in accordance with the London Plan standards. A separate 74 cycle spaces will be provided for staff.
- Car free development with minimal car parking in accordance with the London Plan. A total of 30 accessible car parking spaces provided to discourage the use of private cars.
- All parking spaces will include EV charging which is above the London Plan requirement of 20% of residential parking bays will be provided with EV charging infrastructure.
- A Healthy Streets transport assessment has been carried out on on-site and off-site routes.
- Sustainable delivery initiatives will be pursued where reasonably practicable, including synchronisation of deliveries from common suppliers.
- A Travel Plan will be produced to encourage alternative modes of transport. Inclusions in the plan will include an appointment of a Travel Plan Co-ordinator for the residential units; issue of travel awareness campaigns promoting sustainable travel practices; ensuring pedestrian and cycle permeability through the proposed development; production of travel information packs for residents; promotion of eco-driving practices; and promotion of car clubs.

Appendix A Details of Monitoring Site Quality QA/QC

More information on the monitoring approach used by Islington and corrections made for accuracy of the monitoring data can be found in the introduction of this report in [section 1.3.2](#).

A.1 Automatic Monitoring Sites

The authority is a member of the London Air Quality Network. Routine calibrations are carried out by Imperial College London once every two weeks.

QA/QC audits are carried out twice per year by Matts Monitors, who also provide emergency 48 hour call out services and supply all consumables for the sites.

The following issues were recorded by our engineers, leading to only short periods of missing data:

- Clock and noise issues at Holloway Road monitor in January
- Clock and communication issues at Holloway Road monitor in February
- Loose filter connection and erroneous readings at Arsenal monitor and flow and temperature issues at Holloway Road site in August
- Data communication issue at Arsenal monitor in September.

The council's two automatic monitoring sites measure Particulate Matter by TEOM. The finalised TEOM data is corrected using the Volatile Correction Model, as recommended in Defra's LAQM TG (19).

A.2 Diffusion Tubes

The laboratory supplying and analysing the diffusion tubes were Gradko, a UKAS accredited lab to ISO17025:2017 standards, testing lab number 2187. They use a preparation method of 50% triethanolamine (TEA) 50% Acetone and follow Practical Guidance when preparing samples.

The results of Gradko's QA/QC checks are as follows:

- 43 good and zero poor tube precision results of the 43 diffusion tube precision studies conducted over the past three years (2021-2023) taken from the [latest data](#) in May 2025.
- Latest AIR-PT results taken from [AIR-PT Rounds 55 to 58](#). Of the four rounds conducted in 2024, 100% results were deemed satisfactory (based on a z-score $\leq \pm 2$). See Table N below for full results over all of the rounds 55-58 for Gradko taken from the AIR-PT documents.

Table N. AIR-PT/WASP results (Rounds 55-58)

Air PT Round	AIR PT AR055 Jan-Feb 23	AIR PT AR056 May-June 23	AIR PT AR058 July-Aug 23	AIR PT AR059 Sept-Oct 23	AIR PT AR062 Jan-Feb 24	AIR PT AR063 April-June 24	AIR PT AR065 July-Aug 24	AIR PT AR066 Sept-Oct 24	AIR PT AR068 Jan-Feb 25
Gradko	100%	100%	100%	100%	100%	100%	100%	100%	50%

National bias adjustment results

A bias adjustment of 0.88 for 2024 has been derived for Gradko from the latest version of the [national bias adjustment calculator](#) version 04/25. See Table O below for full results of Gradko in 2024 from this calculator, with preparation 50% TEA in acetone for all sites.

Table O. National Bias Adjustment Gradko 2024

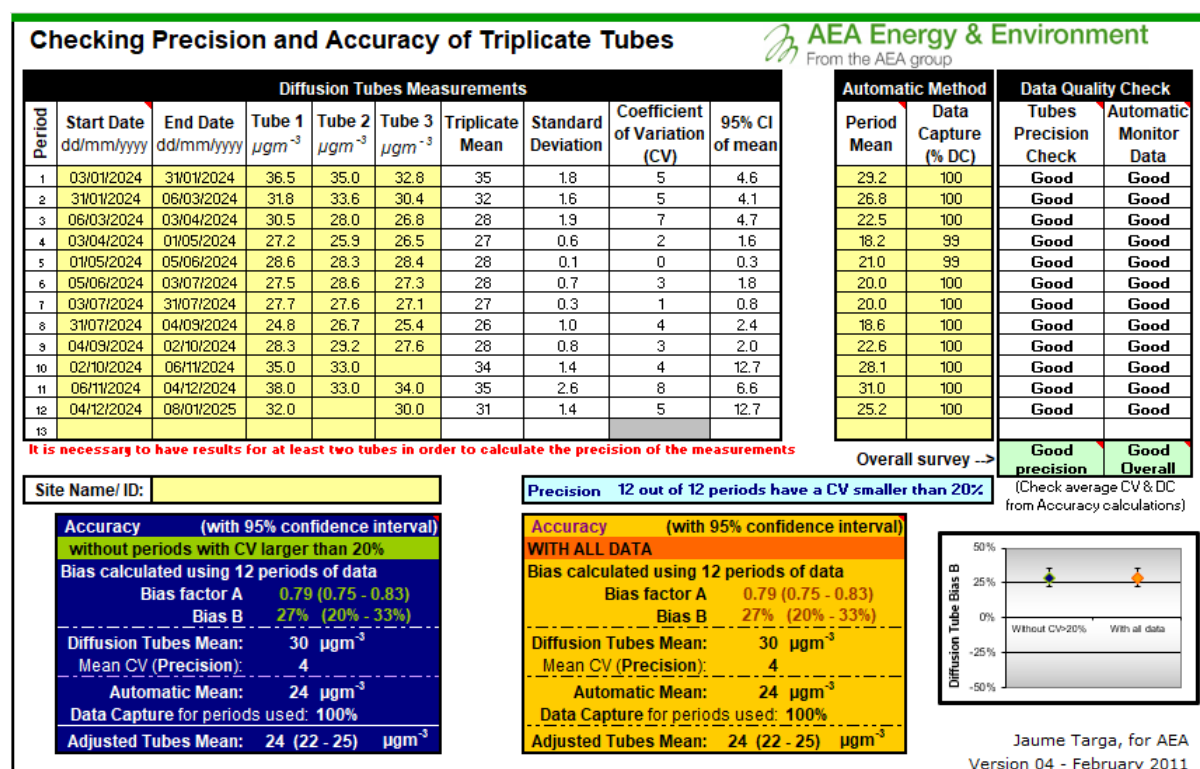
Site Type	Local Authority	Length of Study (mont hs)	Diffusion Tube Mean Conc ($\mu\text{g}/\text{m}^3$)	Automatic Monitor Mean Conc ($\mu\text{g}/\text{m}^3$)	Bias (%)	Tube Precision	Bias Adjustment Factor
Urban Background	City of London Corporation	10	26	21	26.8	G	0.79
Roadside	City of London Corporation	12	34	30	12.1	G	0.89
Urban Background	Falkirk Council	11	13	13	-1.6	G	1.02
Suburban	Redcar and Cleveland Borough Council	12	12	9	35.4	G	0.74
Kerbside	Marylebone Road Intercomparison	11	43	36	20.8	G	0.83
Roadside	Sandwell Mbc	12	30	25	24.2	G	0.81
Urban Background	Sandwell Mbc	12	19	17	8.0	G	0.93
Roadside	Sandwell Mbc	12	20	20	-2.6	S	1.03
Roadside	London Borough of Merton	12	27	22	25.7	G	0.80
Urban Background	London Borough of Wandsworth	10	19	14	31.7	G	0.76

Roadside	London Borough of Richmond Upon Thames	12	18	19	-9.1	G	1.10
Urban Background	London Borough of Richmond Upon Thames	12	13	13	5.0	G	0.95
	Average of all sites						0.88

Local bias adjustment results

A local co-location study was completed using data from the Holloway Road site ID IS2. The bias adjustment factor applied to the diffusion tubes from this is 0.79. See Figure 3 below for full results of the co-location study.

Figure 3: Precision and accuracy co-location study at Holloway Road



If you have any enquiries about this spreadsheet please contact the LAQM Helpdesk at: LAQMHelpdesk@uk.bureauveritas.com

Discussion of Choice of Factor to Use

The national bias correction factor of 0.88 was used for 2024.

The decision to use the national bias adjustment was made in accordance with LLAQM TG19 guidance because of the number of studies representing a number of settings with good precision. The number for the national bias adjustment was also more conservative than the local factor.

Bias adjustment factors used in previous years can be found in Table P below.

Table P. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.88
2023	National	03/24	0.85 January to May 0.83 June to December
2022	Local	Not applicable	0.83
2021	Local	Not applicable	0.88
2020	Local	Not applicable	0.94
2019	Local	Not applicable	0.88
2018	Local	Not applicable	1.12
2017	Local	Not applicable	1.02

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Annualisation, explained at section 1.3.2 of this report, did not need to be carried out at any of our long-term sites reported on in the main body of this report because these sites had 75% or more data capture over the year. However, it was carried out at seven further sites where data was captured for less than 75% of the year using the diffusion tube data processing tool. Two sites were used to create the annualisation factor- IS6 background site in Islington and HG4 background site in Haringey. These sites were chosen as they were local urban background sites with fully ratified data and good data capture. The process followed LLAQM.TG (19) methodology.

Table Q. Short-term to Long-term Data Adjustment

Site ID	Annualisation Factor IS6 Arsenal	Annualisation Factor HG4 Haringey Park South	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g}/\text{m}^3$)	Annualised Annual Mean ($\mu\text{g}/\text{m}^3$)*
CH6	1.0366	1.1004	1.0685	19.9	21.3
N35	0.9711	0.9852	0.9781	35.0	34.3
V2	0.9773	0.9886	0.9829	34.0	33.4
PF26	0.9479	0.9319	0.9399	24.2	22.7
PF61	1.3267	1.5355	1.4311	17.3	24.8
LEN17	1.0813	1.1519	1.1166	22.3	24.9
DC2	0.9547	0.9957	0.9752	22.9	22.4

* Before bias adjustment.

Distance Adjustment

Following LLAQM.TG (19) and LAQM TG (22) guidance two sites required distance adjustment due to results above $36\mu\text{g}/\text{m}^3$ and monitoring sites away from sites of exposure. These diffusion tube data processing tool was used to adjust these sites, with results as follows:

Table R. Short-term to Long-term Data Adjustment

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted ($\mu\text{g m}^3$))	Background Concentration ($\mu\text{g m}^3$)	Concentration Predicted at Receptor ($\mu\text{g m}^3$)
IS005/01	2	1	36.6	15	40.1
OC1	1	0.5	37.0	15	40.0

Appendix B Full Monthly Diffusion Tube Results for 2024

Table S. NO₂ Diffusion Tube Results

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual mean – bias adjusted	Distance corrected to nearest exposure
BIS005/03	100	100	37.3	34.8	24.2	23.2	27.3	24.1	26.6	25.8	28.7	31.0	39.0	31.0	29.4	25.9	
BIS005/02	100	100	37.0	37.3	34.6	31.0	36.0	31.6	32.8	29.5	36.8	36.0	40.0	27.0	34.1	30.0	
BIS005/06	92	92	28.8	27.6	25.9	19.3	27.3	22.8	24.0	21.5	26.8	32.0	38.0		26.7	23.5	
BIS005/07	92	92	31.1		31.7	27.2	31.2	29.7	33.4	29.5	31.5	36.0	41.0	33.0	32.3	28.4	
BIS005/08	100	100	36.6	32.8	30.6	27.7	35.6	30.7	32.3	26.5	33.9	36.0	35.0	31.0	32.4	28.5	
BIS005/09	83	83	34.3		38.0	30.0	38.8		34.0	36.1	41.5	39.0	39.0	36.0	36.7	32.3	
BIS005/11	100	100	29.9	31.8	25.4	24.5	29.4	25.6	27.7	22.1	25.9	34.0	36.0	28.0	28.4	25.0	
BIS005/13	100	100	32.3	24.9	25.5	18.4	23.7	20.4	23.0	19.5	25.6	27.0	29.0	24.0	24.4	21.5	
IS005/01	100	100	34.8	48.0	43.7	35.6	44.7	38.1	48.3	42.0	38.9	42.0	43.0	40.0	41.6	36.6	40.1
BIS005/04	92	92		30.0	23.5	17.4	19.0	15.2	15.8	17.5	21.4	24.0	27.0	23.0	21.3	18.7	
BIS005/05	100	100	22.3	26.8	19.9	16.1	18.8	15.9	14.9	15.3	20.8	24.0	25.0	22.0	20.1	17.7	
BIS005/01	100	100	23.5	22.7	20.1	11.2	16.5	12.3	13.9	13.4	15.2	21.0	25.0	20.0	17.9	15.7	
IS005/03	100	100	24.4	24.1	19.5	11.8	14.9	12.0	13.0	11.0	13.9	21.0	26.0	23.0	17.9	15.7	
BIS005/10	92	92	23.6	22.3	19.4	12.2	15.1		13.5	13.9	16.6	21.0	24.0	24.0	18.7	16.4	
BIS005/12	100	100	27.6	26.3	18.9	14.8	17.7	14.0	15.1	13.2	16.3	23.0	24.0	22.0	19.4	17.1	
IS005/02	92	92	26.9	24.4	18.2	13.2	16.1	12.8	15.9		16.5	23.0	22.0	20.0	19.0	16.7	
BIS005/14	92	92	23.7	24.2	17.4	12.1	16.3	13.3	17.0		17.6	23.0	24.0	21.0	19.0	16.8	
BIS005/15	100	100	27.9	21.4	18.0	13.8	15.3	11.3	14.1	13.7	14.4	19.0	21.0	24.0	17.8	15.7	
IS005/04	100	100	29.7	22.6	22.0	13.6	17.3	12.8	15.5	13.4	19.3	24.0	23.0	24.0	19.8	17.4	
H1	92	92	36.5	31.8	30.5	27.2	28.6	27.5	27.7	24.8	28.3	35.0	38.0	32.0	30.7	27.0	
H2	92	92	35.0	33.6	28.0	25.9	28.3	28.6	27.6	26.7	29.2	33.0	33.0		29.9	26.3	
H3	100	100	32.8	30.4	26.8	26.5	28.4	27.3	27.1	25.4	27.6		34.0	30.0	28.7	25.3	

Notes:

- Concentrations are presented as $\mu\text{g}/\text{m}^3$.
- Exceedances of the NO_2 annual mean AQO of $40 \mu\text{g}/\text{m}^3$ are shown in **bold**.
- NO_2 annual means in excess of $60 \mu\text{g}/\text{m}^3$, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**. If no numbers are **bold and underlined**, the NO_2 hourly mean AQS objective has likely been met.
- 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%.
- (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%).

Appendix C Other Monitoring Results

Data for schools, nurseries and schemes that had monitoring for 2024 can be found below.

Table T. School Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results 2018-2024 (µg/m³)

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
S2	Duncombe Primary School	530108	186995	100	29	26	18	19	20	18	17
S3	The Bridge School Primary	529992	185015	92	33	30	25	19	22	21	17
S4	Tufnell Park Primary School - Dalmeny Road	529800	185647	83	29	25	20	17	21	18	14
S6	Ambler Primary School - Blackstock Road	531690	186589	92	33	41	28	28	23	27	24
S7	New North Academy	532209	183959	100	30	28	21	22	22	21	19
S8	St Joseph's Primary School	528974	187139	83	34	34	29	29	34	27	28
S9	Drayton Park Primary School - Arvon Road	531449	185374	92	30	29	19	19	27	19	16
S10	Gillespie Primary School	531805	186305	92	30	28	20	20	21	19	17
S11	Yerbury Primary School – Foxham Road	529715	186316	100	40	28	20	19	20	18	17
S12	Ashmount Primary School - Hornsey Rise Gardens	530030	187715	100	26	24	21	19	20	19	16
S13	Prior Weston Primary School / Richard Cloudesley Primary	532429	182057	92	35	31	22	21	24	21	21
S14	Whitehall Park School – Hornsey Lane	529425	187621	100	42	42	34	29	25	25	23
S15	Hargrave Park Primary School	529067	186619	100	27	28	19	19	22	17	15

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
S16	St Mary Magdalene Academy Clerkenwell Parochial Campus	531193	182772	100	33	33	23	24	24	25	21
S17	Hugh Myddelton Primary School	531477	182640	100	35	32	23	23	23	23	19
S18	Moreland Primary School	531924	182824	92	32	34	24	22	23	21	19
S19	St Peter & St Paul Catholic Primary School	531830	182395	100	32	34	22	20	22	22	19
S20	St Luke's C of E Primary School	532459	182593	100	31	29	21	22	21	22	19
S22	Robert Blair School	530315	184567	100	37	34	28	26	24	26	21
S23	Sacred Heart Catholic Primary School	530927	185147	83	32	30	20	19	19	20	17
S24	St Mary Magdalene Academy - Lough Road / New River College	531037	184761	92	27	28	20	20	20	19	15
S25	Laycock Primary School	531533	184564	92	30	28	21	19	22	19	16
S26	Thornhill Primary School	531205	184130	100	29	27	22	22	20	21	18
S27	St Andrew's (Barnsbury) C of E Primary School	530817	183837	100	26	25	19	18	19	19	17
S29	Blessed Sacrament Catholic Primary School	530581	183657	92	28	30	22	21	21	21	21
S30	Vittoria Primary School	530544	183579	100	30	29	24	21	22	21	19
S31	Winton Primary School	530610	183178	100	32	30	23	21	22	22	20
S32	Christ the King Primary School / Arts and Media School Islington	530731	186939	92	29	24	18	19	19	17	15
S33	St Mark's C of E Primary School	530414	186619	92	26	28	22	20	21	19	17
S34	Pooles Park Primary School	530988	186813	92	34	29	22	21	24	22	19

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
S35	Montem Primary School/ Samuel Rhodes Primary School	530731	186327	92	40	34	26	26	24	22	22
S36	Grafton Primary School	530495	186164	92	31	30	21	19	22	19	17
S37	Pakeman Primary School	530789	186100	100	33	27	21	21	21	19	17
S38	St John's Highbury Vale Primary School	531788	186057	100	29	25	20	19	19	18	16
S39	St Joan of Arc RC Primary School	532040	185930	83	28	26	20	21	19	18	17
S40	Highbury Quadrant Primary School	532366	185588	92	30	29	20	20	22	19	17
S41	Newington Green Primary School - outside school	532996	185431	92	35	33	24	24	23	24	23
S42	St Jude and St Paul's C of E Primary School	533309	185006	75	28	26	19	20	21	19	17
S43	Canonbury Primary School	531757	184585	92	35	31	23	23	24	25	26
S44	William Tyndale Primary School	531652	184313	100	34	30	24	23	21	23	20
S45	St Mary's C of E Primary School	531906	183993	100	31	28	21	22	22	20	19
S46	Rotherfield Primary School	532468	184012	100	29	30	23	20	20	19	18
S47	St John Evangelist RC Primary School	531588	183335	100	31	32	23	20	20	22	20
S48	Hanover Primary School	532017	183287	100	33	30	21	20	20	19	17
S49	Ambler Primary School - Romilly Road	531632	186489	92	30	26	18	18	21	18	15
S50	Ashmount Primary School - Crouch Hill	530291	187808	75	32	33	24	26	22	31	21
S51	Drayton Park Primary School - Drayton Park	531406	185373	83	30	32	26	23	21	21	20

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
S56	The Bridge Secondary School / Tufnell Park Primary	529751	185551	83	33	27	25	20	21	17	16
S57	Beacon High School	529828	185428	100	34	27	20	22	21	18	17
S59	New River College Secondary	530887	184860	83	32	29	22	22	20	20	18
S60	Samuel Rhodes Secondary School	532128	185109	92	36	31	22	21	23	19	18
S61	St Paul's Steiner School	532710	184815	83	37	39	29	29	24	26	25
S62	The Children's House School	533251	185076	100	34	35	27	24	22	22	22
S63	Highbury Fields School	531760	185499	92	37	32	25	20	21	18	17
S64	City of London Academy Highbury Grove	531985	185083	100	41	39	28	29	25	24	24
S65	North Bridge House Senior Canonbury	531985	184551	100	37	30	22	20	21	20	17
S66	Dallington School	531877	182328	92	37	28	21	21	23	21	19
S69	The Gower School Primary / Pears Family School	530972	183154	100	35	33	22	22	20	22	20
S70	Elizabeth Garrett Anderson School	530973	183197	100	37	35	25	24	23	23	21
S71	City of London Academy Islington / Richard Cloudesley Secondary	532083	183594	100	34	31	21	19	25	20	17
S72	City of London Academy Highgate Hill	529745	187171	83	30	28	22	21	27	21	19
S73	St Aloysius College	529058	187343	100	34	37	29	25	21	22	21
S74	St Mary Magdalene Academy - Liverpool Road	531204	184844	100	No data	36	24	28	25	24	23
S77	The Bridge / New River College Primary	531244	183879	100	No data	No data	No data	18	23	19	17

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
S78	COLPAI School - Baltic Street	532161	182224	100	No data	No data	No data	25	26	20	20
S81	The Family School	530898	183118	92	No data	No data	No data	No data	No data	No data	22
LEN15	Central Foundation School	532914	182374	83	34	38	22	24	27	22	21
Z16	St John's Upper Holloway C of E Primary School	529546	186501	75	33	32	23	22	24	23	20

Notes:

- The annual mean concentrations are presented as $\mu\text{g}/\text{m}^3$.
- Exceedances of the NO_2 annual mean AQO of $40 \mu\text{g}/\text{m}^3$ are shown in **bold**.
- NO_2 annual means in excess of $60 \mu\text{g}/\text{m}^3$, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**. If no numbers are **bold and underlined**, the NO_2 hourly mean AQS objective has likely been met.
- 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%.
- Results have been distance corrected where applicable.
- (a) 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 2024, all schools measured below the objective level of $40\mu\text{g}/\text{m}^3$ for the fifth year in a row. The average for all school sites in 2024 was $19 \mu\text{g}/\text{m}^3$, suggesting the data is following a longer-term trend of decreasing pollution levels. Ashmount Primary, which showed an increase of $9 \mu\text{g}/\text{m}^3$ from 2022 to 2023 saw a decrease of $10 \mu\text{g}/\text{m}^3$ from 2023 to 2024, suggesting the increase in 2023 was a short-term issue. Two schools, St Josephs and Canonbury, saw a very small increase of $1\mu\text{g}/\text{m}^3$ from 2023 to 2024, all other schools had the same or lower values.

Table U. Nursery Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results 2020-2024 (µg/m³)

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2020	2021	2022	2023	2024
N1	Hornsey Lane Estate Community Nursery	529550	187634	92	18	17	21	17	16
N2	Hornsey Day Nursery Toddlers and Pre-School	529887	187695	100	23	23	27	23	21
N3	Margaret McMillan Nursery School and Children's Centre	530024	187592	92	39	39	33	34	33
N4	Blythwood Community Nursery	530437	187717	92	20	21	21	17	19
N5	Maria Montessori School - Crouch End	530213	187499	100	18	20	22	18	17
N6	Hornsey Day Nursery	530166	187198	92	26	26	25	22	22
N7	Little Angels Day Nursery and Pre-Prep School	529020	186706	100	20	21	22	19	16
N8	Bright Horizons Finsbury Park Day Nursery and Preschool	530995	187093	92	18	19	21	18	16
N9	North Islington Nursery School and Children's Centre	530850	187003	100	21	21	22	19	17
N10	Andover Pre-School and Brightstart Community Nursery	530875	186624	75	20	21	19	17	16
N11	Manor Gardens Nursery	530420	186375	92	21	20	20	19	16
N12	Bennett Court Playgroup	530554	186286	100	19	20	20	18	16
N13	Sam Morris Centre Nursery	531194	186286	92	21	21	21	20	17
N14	City and Islington College Camden Road Nursery	530566	185657	92	20	21	21	20	20
N15	Fatiha Nursery	530286	185989	92	No data	No data	No data	20	15
N16	Willow Children's Centre	530290	185985	100	20	20	20	17	15
N18	Les Petites Etoiles Bilingual Nursery – Tufnell Park	529933	185869	100	19	18	19	18	16
N19	Goodinge Early Years Centre	530150	185147	83	21	20	22	19	16
N20	Mount Carmel Day Nursery	530962	185308	100	21	21	19	21	18

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2020	2021	2022	2023	2024
N21	Paradise Park Children's Centre	531041	185045	92	18	19	20	17	15
N22	CurioCity Childcare	530685	184896	92	20	21	23	20	18
N24	City and Islington Lifelong Learning Nursery	531574	186705	75	34	32	29	30	30
N25	St Thomas' Playgroup	531527	186290	100	19	19	21	18	16
N26	Little Angels Day Nursery and Pre-Prep School (Highbury)	531909	186197	100	24	27	24	24	23
N27	Highbury Day Nursery	531484	186116	92	21	19	21	19	17
N28	Conewood Street Children's Centre	531848	186061	92	19	20	18	19	15
N29	Aberdeen Park Nursery	532341	185964	100	20	19	20	18	16
N30	Monkey Puzzle Day Nursery Highbury	531944	185867	100	24	22	20	20	20
N31	Highbury Community Nursery	531790	185780	100	25	21	20	19	17
N33	New Park Nursery and Montessori School	532383	185434	100	19	20	18	18	17
N34	Floral Place Nursery	532644	185027	100	20	20	20	18	16
N35	Minik Kardes Day Nursery	533347	184783	50	34	33	28	34	30
N36	Mildmay Community Nursery	532917	184912	83	22	20	21	20	20
N37	New River Green Children's Centre	532527	184657	100	21	20	19	19	17
N38	Essex Road Pre-school	532282	184405	75	20	20	19	19	17
N39	St Andrew's Montessori	530762	184129	100	19	19	19	19	17
N40	Bemerton Children's Centre	530638	184108	100	21	21	21	19	19
N41	Kate Greenaway Nursery School and Children's Centre	530458	183628	100	19	20	22	19	18
N43	Kids in Motion	530827	183582	100	21	20	19	19	17

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2020	2021	2022	2023	2024
N44	Beckett House Montessori Nursery School	531223	183898	100	19	20	23	19	17
N45	St Mary's Preschool	531740	183917	92	38	30	26	23	22
N46	Les Petites Etoiles Bilingual Nursery - Angel	531685	183708	100	25	24	25	22	21
N47	Kindred Islington Nursery and Preschool	532503	183878	100	21	21	21	21	18
N48	Rosemary Gardens Playgroup	532704	183952	83	21	16	22	18	14
N49	Hopes and Dreams Montessori Nursery School	531737	183065	100	30	29	27	29	25
N52	Newpark Montessori Nursery School	532070	182448	92	26	22	23	23	20
N53	Kido Nursery and Preschool Clerkenwell	532103	182725	100	25	21	23	22	20
N54	King Square Community Nursery at Toffee Park Youth Club	532326	182527	92	19	18	22	19	19
N55	The Co-operative Childcare	532383	182609	100	23	21	27	23	19
N56	King Square Nursery, Central Street	532090	182802	92	No data	No data	No data	No data	22
N57	N Family Club Angel Nursery	531283	183249	83	No data	No data	No data	No data	25
N58	Newpark Montessori Nursery, Arlington Square	532471	183574	92	No data	No data	No data	No data	19
N59	Maggie and Rose Nursery	531608	183937	92	No data	No data	No data	No data	18
N60	Nanny Jane's Nursery	532232	184179	83	No data	No data	No data	No data	30
N61	kGems Day Nursery	531789	184738	92	No data	No data	No data	No data	35

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2020	2021	2022	2023	2024
N62	Monkey Puzzle Day Nursery, Melody Lane	531950	185440	83	No data	No data	No data	No data	24
N63	St Augustine's Nursery	532356	185692	75	No data	No data	No data	No data	17
N64	Tiddler's Day Care	531651	186628	92	No data	No data	No data	No data	19
N65	Leaping Lizards Day Nursery	529776	186332	92	No data	No data	No data	No data	15
N66	Whittington Park Community Nursery	529842	186496	83	No data	No data	No data	No data	15
N67	Little Haven Childcare	529665	186652	83	No data	No data	No data	No data	19
N68	Les Petites Etoiles Bilingual Montessori	530530	187509	83	No data	No data	No data	No data	23
N69	Little Raccoons Day Nursery	530368	186515	92	No data	No data	No data	No data	18
V2	Archway Children's Centre	529300	186696	67	28	30	31	29	29

Notes:

- The annual mean concentrations are presented as $\mu\text{g}/\text{m}^3$.
- Exceedances of the NO_2 annual mean AQO of $40 \mu\text{g}/\text{m}^3$ are shown in **bold**.
- NO_2 annual means in excess of $60 \mu\text{g}/\text{m}^3$, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**. If no numbers are **bold and underlined**, the NO_2 hourly mean AQS objective has likely been met.
- 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%.
- Results have been distance corrected where applicable.
- (a) 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 2024 all nurseries measured below the objective level of 40 µg/m³ for the fourth year in a row. The average for all nursery sites in 2024 was 20 µg/m³. One nursery, Blythwood Community Nursery, saw a small increase of 2µg/m³ from 2023 to 2024, all other nurseries had the same or lower values.

Table V. Care Home Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results 2022-2024 (µg/m³)

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2022	2023	2024
CH1	Barchester Cheverton Lodge Care Home	529602	187427	92	19	19	15
CH2	Bridgeside Lodge Care Centre	532099	183254	83	21	22	22
CH3	St Anne's Care Centre	530922	186723	83	20	19	19
CH4	The Highgate Care Home	528976	187267	92	22	21	19
CH5	Muriel Street Care Home	530860	183497	100	20	21	18
CH6	Highbury New Park Care UK	532333	185860	67	20	20	19
CH7	Lennox House Care UK	530951	186682	92	22	21	17
CH8	Charterhouse	531886	181879	92	26	30	26
CH9	Cardinals Way Care Home	529691	187339	83	19	17	15
CH10	Orchard Close	532448	184173	100	19	18	16
CH11	King Henry's Walk Home	533110	184908	83	23	23	22

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2022	2023	2024
CH12	Wray Court	530620	186872	92	21	18	15
CH13	148 Hornsey Lane	529698	187754	75	22	22	19
CH14	Wilton Villas	532542	183732	100	21	18	19
CH15	158 New North Road	532536	183716	92	23	23	21
CH16	St Mungo's, Hilddrop Road	529997	185298	100	23	22	20

Notes:

- The annual mean concentrations are presented as $\mu\text{g}/\text{m}^3$.
- Exceedances of the NO_2 annual mean AQO of $40 \mu\text{g}/\text{m}^3$ are shown in **bold**.
- NO_2 annual means in excess of $60 \mu\text{g}/\text{m}^3$, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**. If no numbers are **bold and underlined**, the NO_2 hourly mean AQS objective has likely been met.
- 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%.
- Results have been distance corrected where applicable.
- (a) 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 2024 all care homes measured below the objective level of $40 \mu\text{g}/\text{m}^3$ for the third year in a row. The average for all care homes in 2024 was $19 \mu\text{g}/\text{m}^3$, compared to $21 \mu\text{g}/\text{m}^3$ in 2022 and 2023. One care home, Wilton Villas, saw a very small increase of $1 \mu\text{g}/\text{m}^3$ from 2023 to 2024, all other nurseries had the same or lower values.

Table W. Transport Projects Programme Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results 2020-2024 (µg/m³)

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2020	2021	2022	2023	2024
PF1	New North Road	532371	183926	92	23	23	24	21	21
PF2	Northchurch Road	532899	184292	75	28	25	26	25	23
PF3	Canonbury Road	532135	184155	100	37	35	38	32	33
PF4	Essex Road	532589	184551	100	35	38	32	37	38
PF5	Clifton Road	532427	184676	100	18	22	20	20	16
PF6	St Paul's Road / Grange Grove	531993	184823	100	25	28	25	26	23
PF7	Skinner Street / Rosoman Place	531385	182505	100	23	22	22	23	20
PF8	Northampton Road / Corporation Row	531449	182375	100	22	20	21	20	18
PF9	Drayton Park	531424	185763	92	24	23	23	22	19
PF10	Benwell Road	531117	185553	100	29	24	24	24	20
PF11	Highbury Crescent	531561	184857	100	21	21	33	24	17
PF12	Highbury Place	531691	184970	100	19	19	20	19	16
PF13	Baalbec Road	531792	185202	100	18	19	21	19	17
PF14	Cross Street	531883	183935	92	26	27	27	24	22
PF15	Lloyd Baker Street	531043	182661	100	23	21	22	24	20
PF16	Sonderburg Street	530983	186463	92	29	27	24	27	24
PF17	York Way / Hungerford	529916	184927	100	26	24	26	24	22
PF18	Riversdale Road	531931	186100	100	26	25	24	24	21

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2020	2021	2022	2023	2024
PF19	Green Lanes	532443	186135	92	27	25	22	24	23
PF20	Petherton Road	532505	185571	75	19	19	20	18	17
PF21	Tollington Road / Hornsey Road (Sobell Centre)	530931	186022	92	25	31	27	28	26
PF22	Newington Green Road	532755	184960	92	25	27	26	27	23
PF23	Mildmay Road	533025	185249	92	21	19	21	21	17
PF24	Caledonian Road	530610	184689	100	33	33	29	33	30
PF25	Boleyn Road	533343	185227	92	26	25	28	24	21
PF26	Grosvenor Avenue	532412	185108	67	24	22	25	24	20
PF27	York Way	530304	183772	100	27	29	27	26	25
PF28	Bingfield Street	530542	183933	83	24	22	23	23	19
PF29	Offord Road / Liverpool Road	531327	184559	83	27	25	26	23	21
PF30	Chapel Market / Liverpool Road	531416	183331	92	24	25	27	29	27
PF31	Theberton Street	531636	183782	100	21	26	26	25	21
PF32	Gaskin Street	531782	183767	100	22	24	28	25	21
PF33	Canonbury Lane	531757	184417	100	27	24	29	26	24
PF34	Pentonville Road	530845	183055	100	24	29	29	29	27
PF35	Dingley Road	532336	182754	100	25	25	27	26	23
PF36	St John's Street	531791	181810	83	26	26	30	31	28
PF37	St John's Lane	531792	181897	83	27	25	28	33	28

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2020	2021	2022	2023	2024
PF38	Cowcross Street	531622	181850	92	22	24	24	27	23
PF39	Banner Street	532355	182262	83	24	22	25	22	19
PF40	Essex Road / Gaskin Street	531806	183734	100	No data	42	37	37	40
PF41	Islington Green	531713	183638	100	No data	32	31	30	29
PF42	Upper Street	531694	183972	100	No data	33	31	30	29
PF43	Florence St / Hawes Street	531757	184040	100	No data	25	23	21	18
PF44	Halton Rd / Braes Street	531884	184251	100	No data	22	21	20	18
PF45	Copenhagen Street	530431	183685	100	No data	24	22	22	21
PF46	Wharfdale Road	530455	183295	92	No data	38	30	32	30
PF47	Pentonville Road / Kings Cross Bridge	530409	182996	100	No data	42	36	40	38
PF48	Newington Green	532804	185321	100	No data	32	29	29	26
PF49	Mildmay Park / Mildmay Grove South	532939	185038	100	No data	27	25	26	24
PF50	Highbury Park	531941	185531	92	No data	30	26	27	25
PF51	Highbury Grange	532156	185716	92	No data	20	21	19	15
PF52	Riversdale Road / Mountgrove Road	532232	186347	83	No data	19	20	18	17
PF53	Roman Way	530827	184623	83	No data	24	23	25	24
PF54	Offord Road	530975	184409	100	No data	27	25	24	22
PF55	Furlong Road	531417	184872	100	No data	22	24	23	20
PF56	Islington Park Street	531461	184358	83	No data	24	23	27	22
PF57	Hemingford Road	531203	184127	92	No data	24	23	25	21

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2020	2021	2022	2023	2024
PF58	Liverpool Road	531409	184021	100	No data	26	27	25	22
PF59	Tolpuddle Street	531228	183412	100	No data	25	22	25	22
PF60	Tabernacle Street	532908	182347	83	No data	24	24	24	22
PF61	St Jude Street	533322	185057	42	No data	20	22	21	22
PF62	Green Lanes	532797	185469	83	No data	28	26	28	23
PF63	Highbury Fields	531524	184894	92	No data	No data	No data	20	16
PF64	St Paul's Road / Wallace Road	532357	184872	100	No data	No data	No data	29	24

Notes:

- This includes monitoring sites put in specifically for the Transport Projects Programme. Additional monitoring sites located in each area were used in the six and 12 month reports analysing the impacts of the LTNs on air quality.
- Data for these additional LTN sites can be found in this report:
 - Section 3.2 Table E- BIS005/01, BIS005/02, BIS005/04, BIS005/08, BIS005/09, BIS005/10 and BIS005/11
 - Appendix C Table S- S6, S7, S9, S10, S16, S38, S43-S49, S51, S61, S63-S65 and S71
 - Appendix C Table T- N13, N24-N28, N30-N32, N37, N38, N45 and N47-N50
 - Appendix C Table W- C1-C5, OC2, OC3, OC10, IRC5, IRC6, IRC9, DC1 and DC2
 - With three additional sites DC3-DC5 with data until 2020 found in our annual report for 2020
- Concentrations are presented as $\mu\text{g}/\text{m}^3$.
- Exceedances of the NO_2 annual mean AQO of $40 \mu\text{g}/\text{m}^3$ are shown in **bold**.
- NO_2 annual means in excess of $60 \mu\text{g}/\text{m}^3$, indicating a potential exceedance of the NO_2 hourly mean AQS objective are shown in **bold and underlined**. If no numbers are **bold and underlined**, the NO_2 hourly mean AQS objective has likely been met.
- 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%.
- Results have been distance corrected where applicable.
- (a) 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%).

The average NO₂ level for tubes starting with PF in 2024 was 23 µg/m³, compared to 25 µg/m³ in 2023 and 26 µg/m³ in 2021 and 2022. Results for individual tubes vary, with all at or below the annual objective level of 40 µg/m³ with some showing an increase and some a decrease from 2023 to 2024, with no dramatic increases or ongoing trends noted. The largest increase was seen at PF40 on Essex Road from 37 µg/m³ in 2023 to 40 µg/m³ in 2024. This site has remained stable or decreased running up to this, suggesting no longer increasing trend. However, PF40 is one of the more polluted PF sites, with PF4 also on Essex Road the second most polluted PF site and seeing an increase of 1 µg/m³ from 2023 to 2024, following an increase of 5 µg/m³ the year before. We will therefore share this finding with relevant teams within the council and continue to monitor this site and any further changes. The results for the PF tubes, and other tubes used in Transport Projects monitoring, are analysed in Appendix E.

Table X. Other Schemes Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results 2018-2024 (µg/m³)

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
222	Upper Street	531611	184529	100	No data	No data	26	28	28	26	23
Z17	Holloway Road	529640	186701	100	49	47	39	38	31	30	30
Z21	Magdala Avenue	529170	186883	100	No data	34	22	24	28	25	23
Z22	Pauntley Street / Archway Road	529308	187092	100	No data	46	47	50	36	40	48
C1	Clerkenwell Green	531528	182089	92	32	34	25	23	23	23	21
C2	Clerkenwell Green	531488	182116	92	29	33	23	23	25	22	22
C3	Clerkenwell Green	531530	182149	75	30	33	24	22	24	24	20
C4	Clerkenwell Green	531559	182140	83	35	32	24	21	22	24	20

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
C5	Clerkenwell Green (pedestrian area)	531562	182164	92	33	31	23	22	22	22	19
LEN5	Old Street	532845	182525	92	53	51	41	37	40	37	35
LEN7	City Road	532742	182561	83	<u>72</u>	<u>69</u>	52	43	40	46	40
LEN9	Mallow Street	532698	182422	83	38	38	25	29	26	27	25
LEN10	Featherstone Street	532588	182356	83	35	32	24	21	24	23	20
LEN11	Featherstone Street	532682	182364	92	36	29	21	23	24	23	21
LEN12	Featherstone Street	532751	182372	83	44	39	25	25	27	25	24
LEN13	Leonard Street	532790	182362	92	45	43	27	25	27	26	24
LEN14	Leonard Street	532824	182369	92	40	45	28	31	28	22	23
LEN16	Bath Street	532480	182750	100	40	41	28	29	27	27	25
LEN17	Bath Street / Lever Street	532489	182707	67	42	36	29	25	26	24	22
LEN18	Bath Street	532531	182542	100	38	31	23	23	25	21	19
LEN19	Bunhill Row	532557	182422	92	40	35	28	26	26	24	23
LEN20	City Road	532681	182679	92	47	53	38	35	32	35	31
V4	MacDonald Road	529266	186832	100	<u>59</u>	<u>70</u>	<u>90</u>	<u>81</u>	57	<u>73</u>	<u>91</u>
V9	MacDonald Road	529247	186803	100	No data	No data	No data	<u>82</u>	60	<u>96</u>	<u>100</u>
OC1	Wakley Street	531738	182980	100	No data	No data	42	38	35	39	37
OC2	St John Street	531624	182481	100	No data	No data	25	22	28	24	22
OC3	St John Street	531771	182106	100	No data	No data	30	29	30	28	28
OC4	Clerkenwell Road	531892	182150	100	No data	No data	33	32	36	30	33
OC5	Percival Street	531890	182551	100	No data	No data	25	24	26	26	23

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
OC6	Old Street	532135	182283	83	No data	No data	32	32	32	31	32
OC7	Old Street	532277	182338	100	No data	No data	29	29	31	32	29
OC8	Old Street	532473	182408	100	No data	No data	30	28	28	28	29
OC9	City Road	532789	182250	100	No data	No data	29	28	29	31	30
OC10	City Road	532188	182884	100	No data	No data	25	26	27	26	25
B2	Pemberton Terrace	529363	186358	92	No data	31	22	21	23	21	20
B3	Pemberton Terrace / Monnery Road	529357	186282	100	No data	34	22	24	24	25	21
IRC2	Regent's Canal	530824	183461	83	No data	29	20	20	21	20	18
IRC4	Regent's Canal	530704	183471	92	No data	35	26	28	25	27	24
IRC5	Regent's Canal	531713	183294	83	No data	31	22	22	24	24	21
IRC6	Regent's Canal	531762	183289	92	No data	26	19	18	21	17	17
IRC9	Regent's Canal	531852	183272	100	No data	33	19	19	19	18	16
IRC12	Regent's Canal	530413	183517	100	No data	34	24	23	22	21	20
IRC15	Regent's Canal	530541	183499	100	No data	31	22	22	21	21	19

Site ID	Site name	X Easting	Y Northing	Valid data capture 2024(a)	2018	2019	2020	2021	2022	2023	2024
DC1	Highbury Corner (Dixon Clark Court side)	531700	184701	100	30	37	25	25	23	23	22
DC2	Dixon Clark Court Building	531730	184694	58	32	31	21	22	22	22	20

Notes:

- Concentrations are presented as $\mu\text{g}/\text{m}^3$.
- Exceedances of the NO_2 annual mean AQO of $40 \mu\text{g}/\text{m}^3$ are shown in **bold**.
- NO_2 annual means in excess of $60 \mu\text{g}/\text{m}^3$, 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%.
- Results have been distance corrected where applicable.
- (a) 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%).

Results for individual tubes vary, with some showing an increase and some a decrease.

Three monitoring sites at two locations recorded results over the annual objective level of $40 \mu\text{g}/\text{m}^3$ in 2024 – MacDonald Road next to the bus stand (V4 and V9 in Table W above) and Pauntley Street/Archway Road (Z22 in Table W above).

- MacDonald Road had the highest monitored NO_2 levels in the borough in 2024, with $100 \mu\text{g}/\text{m}^3$ and $91 \mu\text{g}/\text{m}^3$ at the two sites. These sites consistently record the highest values in the borough and have seen increases each year since 2022. This suggests a continued pollution issue at this location.

- Pauntley Street / Archway Road measured 48 $\mu\text{g}/\text{m}^3$ in 2024, an 8 $\mu\text{g}/\text{m}^3$ increase from 2023, which was 4 $\mu\text{g}/\text{m}^3$ higher than in 2022, but lower than 2021. As with MacDonald Road this monitoring site is located near a bus stand.
- The Foreword and Section 1.4.4 in the Introduction of this report explain more on what we are doing at these sites.

Appendix D Maps of Monitoring Locations

Figure 4: Map of Long-Term Non-Automatic Monitoring Sites (including triplicate tube site)

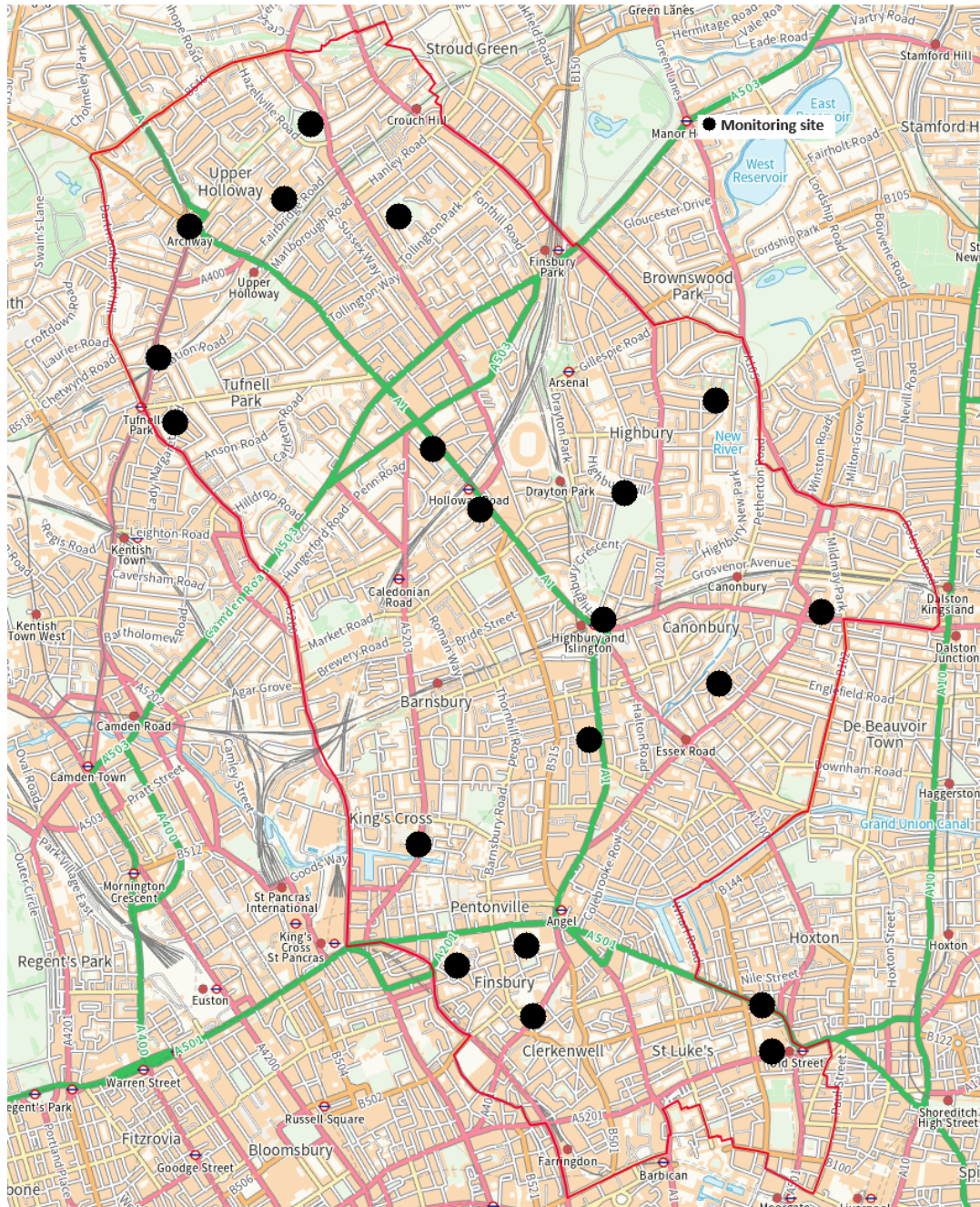


Figure 5: Map of Non-Automatic Monitoring Sites (2024)

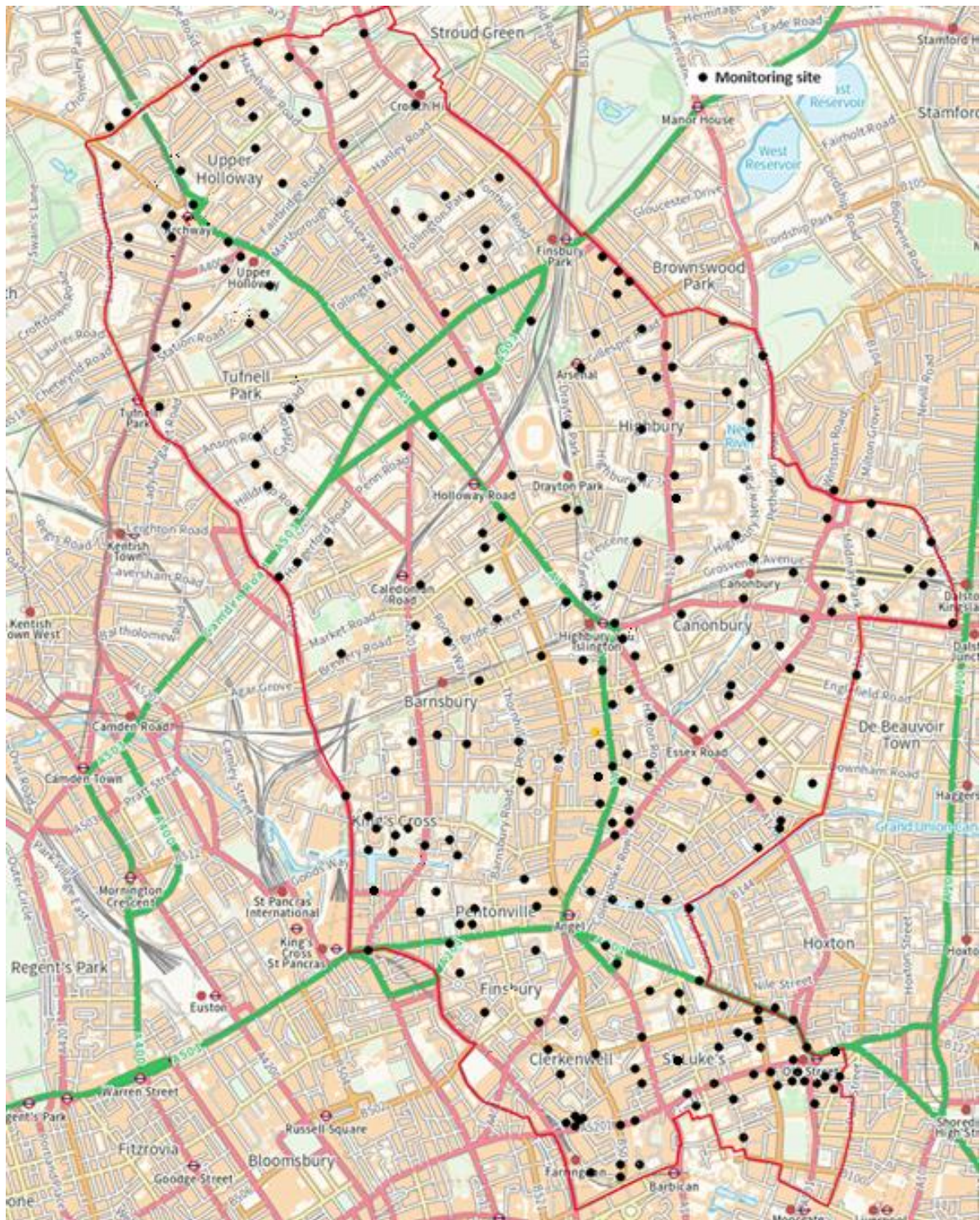
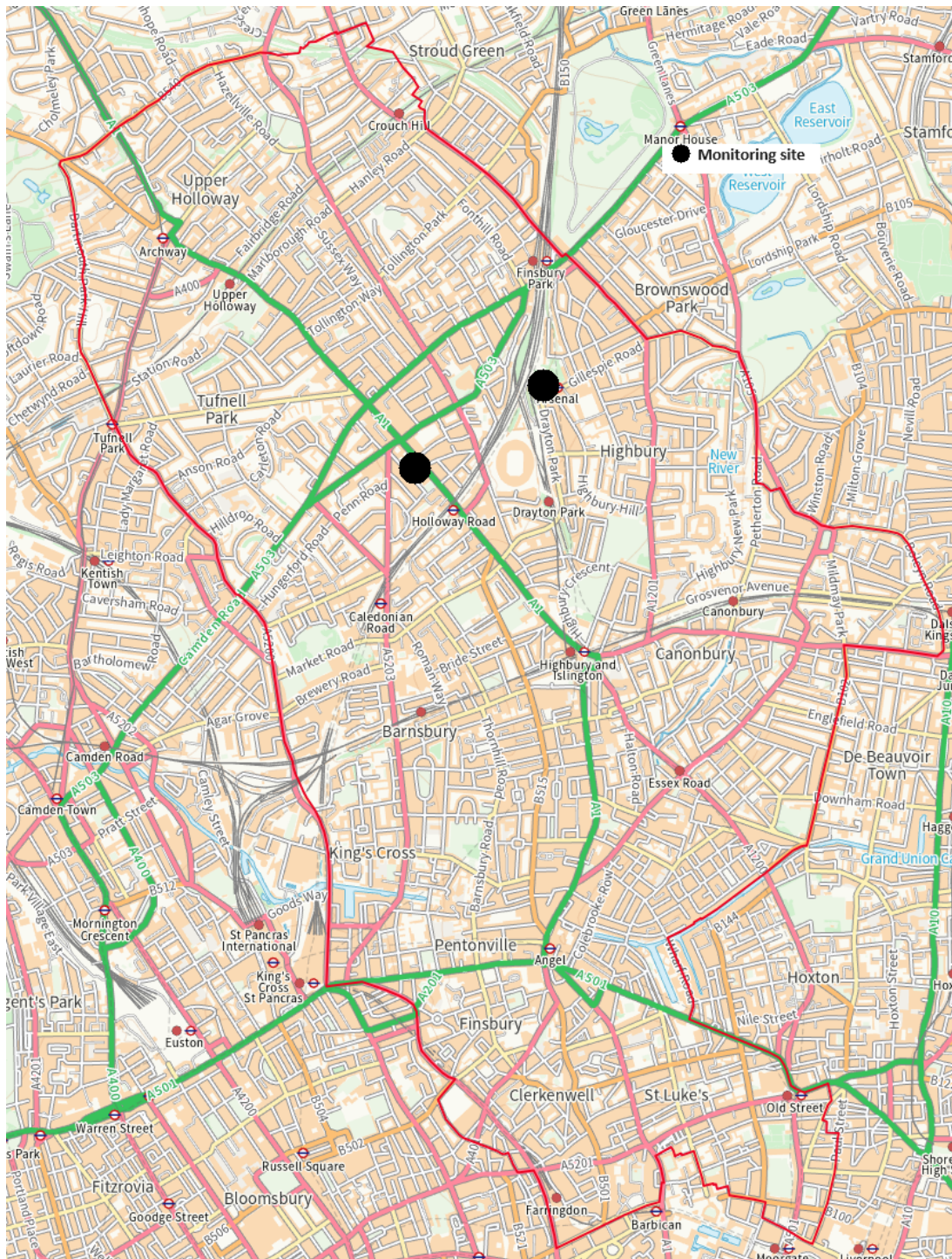


Figure 6: Map of Automatic Monitoring Sites



Appendix E Low Traffic Neighbourhoods Longer Term Trends

The number of monitoring sites in each LTN varies from year to year, with some sites put in specifically for LTNs, and others already in place. Monitoring used in annual comparisons can be found in Table Y below. This categorises the monitoring sites into one of three categories created specifically for the LTN monitoring (as outlined in the [reports for each LTN](#)):

- Boundary – roads on the boundary of a LTN
- Internal – roads inside a LTN
- Non-road – monitoring sites inside a LTN that are not on a road

Table Y. Number of monitoring sites in Low Traffic Neighbourhood areas by year

LTN	2018	2019	2020	2021	2022	2023	2024
Amwell	2 boundary 1 internal	2 boundary 1 internal	4 boundary 2 internal	4 boundary 2 internal	4 boundary 2 internal	4 boundary 2 internal	3 boundary 2 internal
Canonbury West	3 boundary 2 internal 4 non-road	3 boundary 2 internal 4 non-road	6 boundary 5 internal 4 non-road	6 boundary 5 internal	6 boundary 5 internal	6 boundary 5 internal	6 boundary 5 internal
Canonbury East	1 boundary 1 internal	1 boundary 1 internal	4 boundary 2 internal 1 non-road	4 boundary 2 internal 1 non-road	5 boundary 4 internal 1 non-road	5 boundary 4 internal 1 non-road	5 boundary 4 internal 1 non-road
Clerkenwell Green	1 boundary 4 internal	1 boundary 4 internal	5 boundary 4 internal	5 boundary 4 internal	5 boundary 4 internal	5 boundary 4 internal	5 boundary 4 internal
St Peter's	4 internal	4 internal 3 non-road	3 boundary 4 internal 3 non-road	5 boundary 4 internal 3 non-road	7 boundary 4 internal 3 non-road	7 boundary 4 internal 3 non-road	7 boundary 4 internal 3 non-road
Highbury	4 boundary 6 internal 1 non-road	4 boundary 6 internal 1 non-road	8 boundary 17 internal 1 non-road	9 boundary 17 internal 1 non-road	9 boundary 17 internal 1 non-road	9 boundary 17 internal 1 non-road	9 boundary 16 internal 1 non-road
St Mary's	3 boundary 1 internal	3 boundary 1 internal	5 boundary 5 internal 1 non-road	8 boundary 7 internal 1 non-road	8 boundary 7 internal 1 non-road	8 boundary 7 internal 1 non-road	8 boundary 7 internal 1 non-road

Average values for these sites can be found in Table Z below and Figure 7 below.

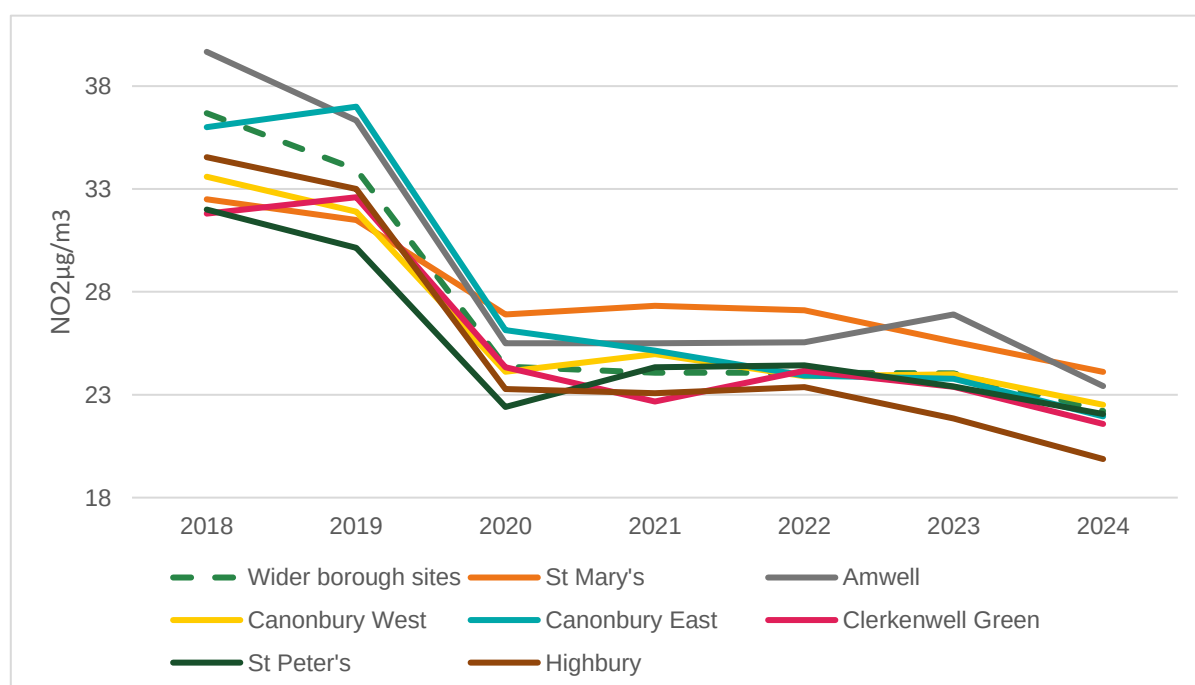
Table Z. Annual average mean NO₂ ratified and bias-adjusted monitoring results 2018-2024 for Low Traffic Neighbourhoods (boundary, internal and non-road sites) compared to wider borough sites

LTN	2018	2019	2020	2021	2022	2023	2024
Amwell	40	36	26	26	26	27	23
Canonbury West	34	32	24	25	24	24	23
Canonbury East	36	37	26	25	24	24	22
Clerkenwell Green	32	33	24	23	24	23	22
St Peter's	32	30	22	24	24	23	22
Highbury	35	33	23	23	23	22	20
St Mary's	33	32	27	27	27	26	24
Wider borough sites	37	34	24	24	24	24	22

Notes:

- Concentrations are presented as $\mu\text{g}/\text{m}^3$.
- 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%.

Figure 7: Annual average mean NO₂ ratified and bias-adjusted monitoring results 2018-2024 for Low Traffic Neighbourhoods (boundary, internal and non-road sites) compared to wider borough sites



Looking at the average monitoring results in 2024 for each LTN, all LTNs are well below the annual objective level of $40\mu\text{g}/\text{m}^3$, and all showed a small decrease in pollution levels from 2023 to 2024.

The LTNs were implemented, in many cases, at the end of or just after the period of low pollution in 2020 associated with Covid-19:

- St Peter's – July 2020
- Canonbury East – August 2020
- Clerkenwell Green – September 2020
- Amwell – November 2020
- Canonbury West – November 2020
- Highbury – January 2021
- St Mary's – February 2022

[Studies](#) have shown that Covid-19 pandemic led to a large decrease in London's pollution levels in 2020 and a smaller decrease in 2021. Some LTNs installed during 2020 and 2021 saw a slight increase in pollution from 2020 to 2021. This was likely due to traffic levels increasing after lockdown, as was true for all locations in the borough. However, when looking over the longer term, all LTNs show improvements in pollution levels, with lower average pollution levels in 2024 compared to pre-2020 levels. While changes in pollution levels differ slightly from one LTN to another they generally have decreasing NO₂ levels from 2018 to 2020, similar levels between 2020-2023 and a decrease in 2024. This is in line with the trends also observed in the wider borough sites.

Increases seen in some LTNs in the years before and after implementation are therefore likely due to wider changes in pollution levels due to factors such as national lockdowns, which significantly lowered pollution levels in 2020, similar levels from 2021-2023 and a small decrease in 2024. Without conducting complex modelling it is hard to pick out exactly how much of the changes in air pollution are due to LTNs and how much is due to wider factors such as those outlined in the summary section of this report. However, a [study](#) conducted by Imperial College London, using Islington data, suggested LTNs are having a beneficial impact on internal and boundary roads. The council will continue to monitor pollution in these areas, to look for longer-term trends.

Royal Borough of Kensington and Chelsea Air Quality Annual Status Report for 2024

Date of Publication: May 2025



This report provides a detailed overview of air quality in Kensington and Chelsea during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process¹.

Contact details:

[Redacted]

Pollution Regulatory Team Manager

Environmental Health, Transport & Regulatory Services

Council Offices, 37 Pembroke Road, London, W8 6PW

Email: airquality@rbkc.gov.uk

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

Contents

Abbreviations	6
Executive Summary	8
1. Air Quality Monitoring	11
1.1 Automatic Monitoring Sites	11
1.2 Non-Automatic Monitoring Sites.....	13
1.3 BTEX Non-Automatic Monitoring	20
1.3 Comparison of Monitoring Results with NAQOs	22
1.4 Interpretation of Automatic NO ₂ Monitoring Results.....	23
1.5 Interpretation of Non-Automatic Monitoring Annual Mean NO ₂ Results.....	30
1.6 Interpretation of NO ₂ Automatic 1-Hour Mean Objective Results.....	37
1.7 Interpretation of Annual Mean PM ₁₀ Results	39
1.8 Interpretation of PM ₁₀ 24-Hour Mean Objective Results	41
1.9 Interpretation of Annual Mean PM _{2.5} Results.....	43
1.10 Interpretation of SO ₂ Objective Results.....	45
1.11 Interpretation of O ₃ Objective Results	46
1.12 Interpretation of Benzene Monitoring	49
1.13 Mobile Sensors	49
2. Actions to Improve Air Quality.....	66
2.1 Air Quality Management Areas	66
2.2 Air Quality Action Plan Progress	68
3. Planning Update and Other New Sources of Emissions.....	101
3.1 New or significantly changed industrial or other sources	102
4. Additional Activities to Improve Air Quality.....	103
4.1 Royal Borough of Kensington & Chelsea Fleet	103
4.3 Pan-London NRMM Auditing Project	103
4.4 Air Quality Alerts	104
Appendix A Details of Monitoring Site Quality QA/QC.....	105
A.1 Automatic Monitoring Sites	105

A.2	Diffusion Tubes	106
A.2.1	AIR-PT	106
A.2.2	Network Field Inter-Comparison Exercise.....	106
A.2.3	Benzene Diffusion Tubes	107
A.2.4	Factor from Local Co-location Studies	107
A.2.5	Discussion of Choice of Factor to Use	110
A.3	Adjustments to the Ratified Monitoring Data.....	110
Appendix B	Full Monthly Diffusion Tube Results for 2024.....	115
Appendix C	Map(s) of Monitoring Locations and AQMAs	120

Tables

Table 1:	Summary of National Air Quality and International Standards, Objectives and Guidelines.....	7
Table 2:	KC1-KC5 2023-2024 NO ₂ Annual Mean Comparison	8
Table 3:	Automatic Monitor 2023-2024 PM ₁₀ Annual Mean Comparison	9
Table 4:	Automatic Monitor 2023-2024 PM _{2.5} Annual Mean Comparison	9
Table 5:	Automatic Monitor 2023-2024 O ₃ Annual Mean Comparison	10
Table 6:	Details of Automatic Monitoring Sites for 2024.....	11
Table 7:	Details of Non-Automatic NO ₂ Monitoring Sites for 2024.....	13
Table 8:	Details of BTEX Non-Automatic Monitoring Sites for 2024.....	20
Table 9:	Annual Mean NO ₂ Monitoring Results: Automatic Monitoring (µg/m ³)	22
Table 10:	Annual Mean NO ₂ Monitoring Results: Non-Automatic Monitoring (µg/m ³).....	25
Table 11:	Sites which exceeded the NO ₂ Annual Mean Objective in 2024	30
Table 12:	Sites which recorded increased NO ₂ Annual Mean concentrations in 2024	31
Table 13:	Sites which recorded the greatest reductions NO ₂ Annual Mean concentrations in 2024	31
Table 14:	NO ₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg/m ³	37
Table 15:	Annual Mean PM ₁₀ Automatic Monitoring Results (µg/m ³)	39

Table 16:	PM ₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM ₁₀ 24-Hour Means > 50 µg/m ³	41
Table 17:	Annual Mean PM _{2.5} Automatic Monitoring Results (µg/m ³)	43
Table 18:	2024 SO ₂ Automatic Monitoring Results: Comparison with Objectives.....	45
Table 19:	Ozone (O ₃) Automatic Monitoring Results: Comparison with 8-Hour Mean Objective, number of O ₃ 8 Hour Means >100 µg/m ³	46
Table 20:	Annual Mean Benzene Monitoring Results (µg/m ³)	48
Table 21:	Breathe London Sensor Details	50
Table 22:	Declared Air Quality Management Areas	67
Table 23:	Delivery of Air Quality Action Plan Measures	68
Table 24:	Planning requirements met by planning applications in Kensington & Chelsea in 2024.....	101

Figures

Figure 1:	Annual Mean NO ₂ Concentrations (2017-2024): Automatic Monitoring Stations	24
Figure 2:	Annual Mean NO ₂ Concentrations (2020-2024): Roadside Monitoring Locations (excluding Ken High St)	32
Figure 3:	Annual Mean NO ₂ Concentrations (2020-2024): Kerbside Monitoring Locations (excluding Ken High St)	33
Figure 4:	Annual Mean NO ₂ Concentrations (2020-2024): Kerbside Monitoring Locations on Kensington High Street	34
Figure 5:	Annual Mean NO ₂ Concentrations (2020 – 2024): Urban Background and Urban Centre Locations	35
Figure 6:	Annual Mean NO ₂ Concentrations (2018 – 2024): Railway Monitoring Locations	36
Figure 7:	NO ₂ Automatic 1-Hour Mean Objective	38
Figure 8:	Annual Mean PM ₁₀ Monitoring Results (2018-2024)	40
Figure 9:	Number of PM ₁₀ Daily Means >50 µg/m ³	42
Figure 10:	Annual Mean PM _{2.5} Monitoring Results (2018-2024)	44
Figure 11:	Number of O ₃ 8-Hour Mean Objectives > 100 µg/m ³ at KC1 between 2014-2024.....	47

Figure 12:	Breathe London Monthly Average NO ₂ Concentrations – Urban Traffic.....	55
Figure 13:	Breathe London Monthly Average PM _{2.5} Concentrations – Urban Traffic.....	56
Figure 14:	Breathe London Monthly Average NO ₂ Concentrations – Kerbside.....	57
Figure 15:	Breathe London Monthly Average PM _{2.5} Concentrations – Kerbside	58
Figure 16:	Breathe London Monthly Average NO ₂ Concentrations – Roadside.....	59
Figure 17:	Breathe London Monthly Average PM _{2.5} Concentrations – Roadside	60
Figure 18:	Breathe London Monthly Average NO ₂ Concentrations – Background	61
Figure 19:	Breathe London Monthly Average PM _{2.5} Concentrations – Background	62
Figure 20:	KCM03 & KCM04 Monthly Average NO ₂ Concentrations	63
Figure 21:	KCM03 & KCM04 Monthly Average PM ₁₀ Concentrations	64
Figure 22:	KCM03 & KCM04 Monthly Average PM _{2.5} Concentrations	65
Figure 23:	KC1 Triplicate Tubes Precision & Accuracy	108
Figure 24:	KC2 Triplicate Tubes Precision & Accuracy	108
Figure 25:	National Bias Adjustment Factor (BAF).....	109
Figure 26:	Automatic Monitoring Sites	120
Figure 27:	Map of NO ₂ Non-Automatic Monitoring Site(s) (Diffusion Tubes)	121
Figure 28:	Map of BTEX Tubes.....	122
Figure 29:	Map of Mobile Sensors	123
Figure 30:	Monitoring within GLA Focus Areas & AQMA (Borough wide).....	124

Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQFA	Air Quality Focus Area
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQP	Air Quality Positive
BEB	Buildings Emission Benchmark
BL	Breathe London
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
CAB	Cleaner Air Borough
EV	Electric Vehicle
Defra	Department for Environment, Food and Rural Affairs
GLA	Greater London Authority
KHS	Kensington High Street
LAEI	London Atmospheric Emissions Inventory
LA	Local Authority
LAQM	Local Air Quality Management
LLAQM	London Local Air Quality Management
NO ₂	Nitrogen Dioxide
NAQO	National Air Quality Objective
NRMM	Non-Road Mobile Machinery
O ₃	Ozone
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
TEB	Transport Emissions Benchmark
TfL	Transport for London
WHO	World Health Organisation

Table 1: 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	-
Ozone (O ₃)	100 µg/m ³ not to be exceeded more than 3-4 times a year	8-Hour Mean	31 Dec 2005
Particles (PM ₁₀)	50 µg/m ³ not to be exceeded more than 35 times a year	24-Hour Mean	31 Dec 2004
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	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 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/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

Executive Summary

This report provides a detailed review of air quality in Kensington and Chelsea during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process

In 2024, the Council expanded its air quality monitoring network with the installation of a new reference grade ozone monitor at our Cromwell Road site (KC2). A further 12 mobile sensors were installed, with the Council installing 7 at schools and nurseries. The Borough now has five reference-grade automatic air quality monitoring stations to measure four key air pollutants (nitrogen dioxide, particulate matter (PM₁₀ and PM_{2.5}) and ozone). In addition, it has 79 nitrogen dioxide diffusion tubes (at 77 different sites), 5 BTEX diffusion tubes and at the end of 2024, had 28 mobile sensors.

Nitrogen Dioxide (NO₂)

NO₂ concentrations at the Borough's reference grade automatic monitoring locations improved at all five sites in 2024, with the National Air Quality Objective (NAQO) and the World Health Organization (WHO) 2005 Guideline Value of 40 µg/m³ having been met at each location (see Table 2). This is the second consecutive year that the Council has been able to report this. As with last year, KC5 recorded the highest annual mean concentration out of the five locations, with 33 µg/m³, whilst KC1 continued to record the lowest annual mean concentration of 16 µg/m³ as shown in the table below. All sites had excellent data capture rates of 98% or higher.

Table 2: KC1-KC5 2023-2024 NO₂ Annual Mean Comparison

Site ID	Site name	NO ₂ Annual Mean Concentration		Difference
		2023	2024	
KC1	North Kensington	18 µg/m ³	16 µg/m ³	-2 µg/m ³
KC2	Cromwell Road	30 µg/m ³	27 µg/m ³	-3 µg/m ³
KC3	Knightsbridge	33 µg/m ³	29 µg/m ³	-4 µg/m ³
KC4	Chelsea Old Town Hall	34 µg/m ³	31 µg/m ³	-3 µg/m ³
KC5	Earl's Court	37 µg/m ³	33 µg/m ³	-4 µg/m ³

Compliance with the NAQO NO₂ 1-Hour Mean Objective of 200 µg/m³ (not to be exceeded more than 18 times per year) was achieved at all five automatic monitoring locations during 2024. This is the 6th consecutive year that the Council has been able to report this.

Of the 77 diffusion tube locations, just two (compared with eight last year) exceeded the annual mean objective of 40 µg/m³ in 2024. The highest annual concentration

(41.4 $\mu\text{g}/\text{m}^3$) was recorded towards the eastern end of Kensington High Street (KC98). In addition, whilst remaining over the objective, they both recorded an overall reduction of 1 $\mu\text{g}/\text{m}^3$. Of particular note is the improvement which has occurred at diffusion tube 'railway' monitoring locations – where concentrations have more than halved over the last six years (see Figure 6, P38).

However, whilst there continue to be improvements, it is important to recognise that the Borough is not close to meeting the 2021 WHO Annual Mean Guidance Value of 10 $\mu\text{g}/\text{m}^3$ for NO_2 at any monitoring location.

Particulate Matter (PM_{10})

PM_{10} is monitored at three sites. We can only report an improvement at KC2, with KC1 staying the same and KC5 experienced an increase of 1 $\mu\text{g}/\text{m}^3$. All locations met the annual mean NAQO of 40 $\mu\text{g}/\text{m}^3$ and the 2005 WHO Guideline Value of 20 $\mu\text{g}/\text{m}^3$ (see table 3). The 2021 WHO PM_{10} annual mean guideline value of 15 $\mu\text{g}/\text{m}^3$ was met at KC1 and KC2. All sites had excellent data capture rates of 95% or higher.

Table 3: Automatic Monitor 2023-2024 PM_{10} Annual Mean Comparison

Site ID	Site name	PM_{10} Annual Mean Concentration		Difference
		2023	2024	
KC1	North Kensington	12 $\mu\text{g}/\text{m}^3$	12 $\mu\text{g}/\text{m}^3$	0 $\mu\text{g}/\text{m}^3$
KC2	Cromwell Road	15 $\mu\text{g}/\text{m}^3$	13 $\mu\text{g}/\text{m}^3$	-2 $\mu\text{g}/\text{m}^3$
KC5	Earl's Court	18 $\mu\text{g}/\text{m}^3$	19 $\mu\text{g}/\text{m}^3$	+1 $\mu\text{g}/\text{m}^3$

Particulate Matter ($\text{PM}_{2.5}$)

$\text{PM}_{2.5}$ is monitored at two sites. Both met the NAQO annual mean and 2005 WHO Guideline Value of 10 $\mu\text{g}/\text{m}^3$. Neither location met the more stringent 2021 WHO annual mean guideline value of 5 $\mu\text{g}/\text{m}^3$. The table below demonstrates that KC1 recorded a small reduction in concentrations, whilst KC2 remained the same. Both locations had data capture rates of 96% or higher.

Table 4: Automatic Monitor 2023-2024 $\text{PM}_{2.5}$ Annual Mean Comparison

Location	Site name	$\text{PM}_{2.5}$ Annual Mean Concentration		Difference
		2023	2024	
KC1	North Kensington	8 $\mu\text{g}/\text{m}^3$	7 $\mu\text{g}/\text{m}^3$	-1 $\mu\text{g}/\text{m}^3$
KC2	Cromwell Road	7 $\mu\text{g}/\text{m}^3$	7 $\mu\text{g}/\text{m}^3$	0 $\mu\text{g}/\text{m}^3$

Ozone (O_3)

O_3 (or ground level ozone) is an emerging pollutant of concern for the borough as it has serious consequences for human health and ecosystems. It is usually associated as being more of a 'summer' pollutant, where increasing temperatures

and sunlight cause optimal conditions for ozone to form. However, with decreasing NO_x production and NO₂ concentrations, background ozone levels are gradually increasing, which in turn will likely further exacerbate summer episodes. Both monitoring sites breached the NAQO 8-hour mean level of 100 µg/m³, which is not to be exceeded more than 10 times per year.

Table 5: Automatic Monitor 2023-2024 O₃ Annual Mean Comparison

Location	O ₃ Annual Mean Concentration		Difference
	2023	2024	
KC1	55 µg/m ³	56 µg/m ³	+1 µg/m ³
KC2	Not Monitored	43 µg/m ³	N/A

Further information and analysis, graphs and data on all pollutants has been provided in Section 1 of this document.

1. Air Quality Monitoring

1.1 Automatic Monitoring Sites

We have five automated continuous monitoring locations within the Borough. Appendix C, Figure C1 shows the locations of the monitoring sites and information about each one is summarised in Table 6 below. There has been no change to the locations, the pollutants monitored at the automatic stations or their monitoring technique since the production of our previous ASR. QA/QC audits were carried out at all monitoring stations in March/April 2024 (and again in March 2025).

Table 6: Details of Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	AQMA	Monitoring Technique	Relevant Exposure Distance (m) ⁽¹⁾	Kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
			Easting	Northing						
KC1	North Kensington	Urban Background	524041	181752	NO ₂ , CO, PM ₁₀ , PM _{2.5} , SO ₂ , O ₃	Y	Chemiluminescent, FIDAS, GFC, Fluorescence UV, Photometric	3.5 m	8 m	3 m
KC2	Cromwell Road	Roadside	526520	178968	NO ₂ , PM ₁₀ & PM _{2.5}	Y	Chemiluminescent, BAM PM ₁₀ & BAM PM _{2.5}	10 m	4 – 5 m	1.4 m
KC3	Knightsbridge	Kerbside	527518	179395	NO ₂	Y	Chemiluminescent	0 m	0.8 – 4.2 m	2.4 m
KC4	Chelsea Old Town Hall	Roadside	527267	178089	NO ₂	Y	Chemiluminescent	0 m	7.7 m	34 m
KC5	Earl's Court	Kerbside	525695	178364	NO ₂ & PM ₁₀	Y	Chemiluminescent & BAM 1020 Heated	5.2 m	0.5 m	1.9 m

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 Non-Automatic Monitoring Sites

Nitrogen dioxide (NO₂) data is also collected using passive diffusion techniques. Further details on the laboratory, method, bias adjustment, and quality control are in Appendix A, Appendix B, Figures C2 and C3 in Appendix C show the locations of all the non-automatic monitoring stations within the borough and detailed information about each is in Table 7 below. There have been no changes to the non-automatic monitoring locations in the last 12 months.

Table 7: Details of Non-Automatic NO₂ 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?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
KC31	Ladbroke Grove / N Kens. Library	Roadside	524349	181265	NO ₂	Boroughwide	6.0	3.5	No	6.0
KC32	Holland Park	Urban Background	524786	179600	NO ₂	Boroughwide	5.0	380.0	No	4.0
KC33	Cromwell Road / Earls Court Road	Roadside	525355	178841	NO ₂	Boroughwide	1.0	1.1	No	2.1
KC34	Dovehouse Street	Urban Centre	527136	178105	NO ₂	Boroughwide	30.0	26.0	No	2.8
KC35	Brompton Road / Cottage Place	Roadside	527225	179163	NO ₂	Boroughwide	40.0	8.0	No	1.5
KC38	Earls Court Station	Roadside	525558	178560	NO ₂	Boroughwide	1.0	1.7	No	2.7
KC39	Lots Road / Upcerne Road	Roadside	526324	177024	NO ₂	Boroughwide	30.0	8.1	No	2.5
KC41	Ladbroke Crescent	Urban Background	524287	181193	NO ₂	Boroughwide	8.0	70.0	No	2.2

Site 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)
KC42	Pembridge Square Library	Roadside	525201	180702	NO ₂	Boroughwide	9.0	6.0	No	3.1
KC43	St Marks Grove	Urban Background	525955	177486	NO ₂	Boroughwide	12.0	38.0	No	2.3
KC44	Donne Place	Urban Background	527340	178825	NO ₂	Boroughwide	15.0	55.0	No	2.4
KC45	Chatsworth Court	Roadside	525268	178938	NO ₂	Boroughwide	13.0	13.0	No	2.0
KC47	All Saint's College	Urban Background	524051	181752	NO ₂	Boroughwide	10.0	8.5	Yes	2.1
KC47	All Saint's College	Urban Background	524051	181752	NO ₂	Boroughwide	10.0	8.5	Yes	2.1
KC47	All Saint's College	Urban Background	524051	181752	NO ₂	Boroughwide	10.0	8.5	Yes	2.1
KC48	Sloane Square	Roadside	528040	178674	NO ₂	Boroughwide	1.0	7.0	No	3.0
KC49	Harrods	Roadside	527531	179409	NO ₂	Boroughwide	1.0	4.0	No	2.5
KC50	Chelsea Physic Garden (Gate)	Roadside	527729	177733	NO ₂	Boroughwide	1.0	4.0	No	2.9
KC51	Chelsea Physic Garden (Met Station)	Urban Background	527690	177811	NO ₂	Boroughwide	3.0	92.0	No	1.5
KC52	Sloane Avenue	Roadside	527407	178659	NO ₂	Boroughwide	5.0	2.6	No	2.4

Site 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)
KC53	Walmer House	Urban Background	523796	181189	NO ₂	Boroughwide	20.0	12.5	No	2.3
KC54	Cromwell Road / NHM	Roadside	526531	178963	NO ₂	Boroughwide	10.0	3.1	Yes	2.6
KC54	Cromwell Road / NHM	Roadside	526531	178963	NO ₂	Boroughwide	10.0	3.1	Yes	2.6
KC54	Cromwell Road / NHM	Roadside	526531	178963	NO ₂	Boroughwide	10.0	3.1	Yes	2.6
KC55	Blantyre Street	Urban Background	526605	177428	NO ₂	Boroughwide	20.0	100.0	No	3.0
KC56	Chelsea Old Town Hall	Roadside	527268	178091	NO ₂	Boroughwide	14.0	9.0	No	3.1
KC57	Pavilion Street / Sloane Avenue	Roadside	527884	179144	NO ₂	Boroughwide	25.0	3.0	No	2.4
KC58	KHS / Kensington Church Street	Roadside	525639	179678	NO ₂	Boroughwide	1.0	13.0	No	2.7
KC59	KHS / Argyll Street	Kerbside	525341	179463	NO ₂	Boroughwide	1.0	0.7	No	2.5
KC60	Old Brompton Road / Draycott Ave	Kerbside	526191	178430	NO ₂	Boroughwide	8.0	0.7	No	2.5
KC61	Fulham Road / Limerston Street	Roadside	526384	177878	NO ₂	Boroughwide	20.0	10.0	No	2.4

Site 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)
KC64	Warwick Road	Roadside	524826	178903	NO ₂	Boroughwide	8.0	3.5	No	2.6
KC65	Barlby Road	Roadside	523900	182114	NO ₂	Boroughwide	20.0	0.5	No	1.8
KC66	Acklam Road	Other	524544	181895	NO ₂	Boroughwide	18.0	16.0	No	2.5
KC67	Southern Row	Other	524059	182149	NO ₂	Boroughwide	55.0	38.0	No	2.5
KC68	Exhibition Road	Kerbside	526862	179112	NO ₂	Boroughwide	0.5	0.5	No	2.1
KC69	Darfield Way	Urban Background	523586	180893	NO ₂	Boroughwide	2.0	11.7	No	2.0
KC70	Oakley Street	Kerbside	527173	177984	NO ₂	Boroughwide	4.0	0.8	No	2.0
KC71	Oakley Street	Kerbside	527269	177814	NO ₂	Boroughwide	4.0	0.7	No	2.0
KC72	Oakley Street	Kerbside	527332	177718	NO ₂	Boroughwide	4.0	0.8	No	2.0
KC73	Oakley Street	Kerbside	527227	177918	NO ₂	Boroughwide	4.0	0.6	No	2.0
KC74	Hans Road	Kerbside	527620	179319	NO ₂	Boroughwide	3.1	0.3	No	2.2
KC75	Basil Street	Kerbside	527687	179379	NO ₂	Boroughwide	3.4	0.7	No	2.0

Site 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)
KC76	Basil Street	Kerbside	527677	179327	NO ₂	Boroughwide	3.4	0.8	No	2.0
KC77	Lonsdale Road	Kerbside	524762	181048	NO ₂	Boroughwide	1.7	0.7	No	2.0
KC78	Lonsdale Road	Kerbside	524822	181066	NO ₂	Boroughwide	3.0	0.7	No	2.0
KC79	Cadogan Gardens	Kerbside	527882	178738	NO ₂	Boroughwide	1.5	0.4	No	2.0
KC80	Pavilion Road	Kerbside	527917	178755	NO ₂	Boroughwide	2.3	1.2	No	2.0
KC81	Brompton Square	Urban Centre	527166	179334	NO ₂	Boroughwide	20.0	65.0	No	2.7
KC82	KHS LP029	Kerbside	524765	179138	NO ₂	Boroughwide	0.5	0.5	No	2.0
KC83	KHS LP018	Kerbside	524920	179231	NO ₂	Boroughwide	0.5	0.5	No	2.3
KC84	KHS / Earls Terrace LP011	Kerbside	525001	179277	NO ₂	Boroughwide	0.5	0.5	No	2.0
KC85	KHS LP010	Roadside	525025	179290	NO ₂	Boroughwide	1.0	0.5	No	2.0
KC86	KHS LP064	Roadside	525165	179355	NO ₂	Boroughwide	1.0	0.5	No	2.0
KC87	KHS LP063	Roadside	525189	179369	NO ₂	Boroughwide	1.0	0.5	No	2.3

Site 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)
KC88	KHS LP060	Kerbside	525219	179388	NO ₂	Boroughwide	0.5	0.5	No	2.0
KC89	KHS LP054	Kerbside	525291	179433	NO ₂	Boroughwide	0.5	0.5	No	2.0
KC90	KHS / Stafford Court	Other	525317	179449	NO ₂	Boroughwide	0.5	5.0	No	2.0
KC91	KHS LP033	Kerbside	525521	179571	NO ₂	Boroughwide	0.5	0.5	No	2.1
KC92	KHS LP029	Kerbside	525568	179608	NO ₂	Boroughwide	0.5	0.5	No	2.1
KC93	KHS LP025	Kerbside	525612	179640	NO ₂	Boroughwide	0.5	0.5	No	2.1
KC94	KHS LP014	Roadside	525720	179693	NO ₂	Boroughwide	0.5	1.0	No	2.1
KC95	KHS / Kensington Palace Gardens	Kerbside	525787	179717	NO ₂	Boroughwide	0.5	0.3	No	2.0
KC96	KHS LP002	Roadside	525879	179705	NO ₂	Boroughwide	0.5	1.0	No	2.0
KC97	KHS LP007	Roadside	525810	179710	NO ₂	Boroughwide	0.3	0.5	No	2.0
KC98	KHS / Old Court Place LP011	Kerbside	525754	179689	NO ₂	Boroughwide	0.5	0.5	No	2.0

Site 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)
KC99	KHS LP022	Kerbside	525643	179641	NO ₂	Boroughwide	0.5	0.5	No	2.1
KC100	KHS / KHS Station LP032	Kerbside	525550	179572	NO ₂	Boroughwide	0.5	0.5	No	2.3
KC101	KHS / KHS Station LP034	Kerbside	525523	179552	NO ₂	Boroughwide	0.5	0.5	No	2.1
KC102	KHS / Wrights Land LP037	Roadside	525487	179531	NO ₂	Boroughwide	0.5	1.0	No	2.1
KC103	KHS / Three	Other	525400	179476	NO ₂	Boroughwide	0.5	5.0	No	2.5
KC104	KHS / Allen Street LP051	Kerbside	525328	179434	NO ₂	Boroughwide	0.5	0.5	No	2.1
KC105	KHS / Abingdon Road LP059	Kerbside	525240	179380	NO ₂	Boroughwide	0.5	0.5	No	2.1
KC106	KHS LP062	Kerbside	525198	179354	NO ₂	Boroughwide	0.5	0.5	No	2.0
KC107	KHS / Earls Court Road LP002	Roadside	525132	179313	NO ₂	Boroughwide	1.0	1.5	No	2.0
KC108	KHS / Earls Court Road LP009	Kerbside	525034	179273	NO ₂	Boroughwide	0.5	0.5	No	2.0
KC109	KHS / Melbury Road LP015	Kerbside	524958	179233	NO ₂	Boroughwide	0.5	0.5	No	2.0
KC110	KHS / Melbury Road LP021	Roadside	524889	179187	NO ₂	Boroughwide	0.5	1.0	No	2.0

Site 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)
KC111	KHS LP028	Kerbside	524798	179133	NO ₂	Boroughwide	0.5	0.5	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.

1.3 BTEX Non-Automatic Monitoring

There has been no change to the number of C₆H₆ (BTEX) diffusion tube monitoring sites within the Non-Automatic Monitoring Network. Further details on the laboratory, method, bias adjustment, and quality control are in Appendix A. Appendix C, Figure C2 shows the locations of all the sites within the borough and detailed information about each is contained in Table 8 below.

Table 8: Details of BTEX Non-Automatic Monitoring Sites for 2024

Tube ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	Relevant Exposure Distance	Distance to Kerb of Nearest Road	Inlet Height	Pollutant Monitored
KC01	Ladbroke Grove / North Kensington Library	524342	181271	Roadside	Boroughwide	6 m	3.5 m	5.5 m	C ₆ H ₆
KC02	Holland Park	524784	179599	Urban Background	Boroughwide	5 m	380 m	4 m	C ₆ H ₆
KC04	Dovehouse Street	527111	178165	Urban Background	Boroughwide	30 m	45 m	2.2 m	C ₆ H ₆
KC05	Pembridge Square Library	525191	180705	Roadside	Boroughwide	9 m	6 m	4 m	C ₆ H ₆

Tube ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	Relevant Exposure Distance	Distance to Kerb of Nearest Road	Inlet Height	Pollutant Monitored
KC0X	Old Brompton Rd/ Clareville Grove	526496	178553	Petrol Station	Boroughwide	3 m	12 m	N/A	C ₆ H ₆

1.3 Comparison of Monitoring Results with NAQOs

Concentration values for the following monitoring sites (bias adjusted and annualised, as required) are provided in Table 9 below. Those requiring any fall-off with distance correction have not been included here.

Table 9: Annual Mean NO₂ Monitoring Results: Automatic Monitoring (µg/m³)

Site ID	Site Type	X OS Grid Ref	Y OS Grid Ref	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
		Easting	Northing									
KC1	Urban Background	524041	181752	98.96	98.96	29.1	27.4	21	20	18	18	16
KC2	Roadside	526520	178968	99.51	99.51	47.6	43.7	30	30	30	30	27
KC3	Kerbside	527518	179395	99.64	99.64	<u>66.4</u>	54.4	32	34	36	33	29
KC4	Roadside	527267	178089	99.03	99.03	59.6	55	40	39	35	34	31
KC5	Kerbside	525695	178364	99.62	99.62	<u>78.7</u>	55.9	37	44	41	37	33

Notes:

The annual mean concentrations are presented as µg/m³.

Exceedances of the NO₂ annual mean NAQO of 40 µg/m³ are shown in **bold**.

NO₂ annual means in excess of 60 µg/m³, indicating a potential exceedance of the NO₂ 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%).

1.4 Interpretation of Automatic NO₂ Monitoring Results

For 2024 we can report that all five automatic monitoring locations (KC1-KC5) continued to meet both the NO₂ NAQO annual mean and the WHO 2005 NO₂ Guideline Value of 40 µg/m³. In addition, all sites had excellent data capture rates (>98%), with small to modest reductions in NO₂ annual mean concentrations. The greatest reductions were experienced at KC3 and KC5 (-4 µg/m³), both of which are kerbside monitoring locations.

In the previous Annual Status Report, published in 2024 (covering data from the calendar year 2023), we identified that our automatic monitoring station at KC3 (which had a lower data capture rate in 2023) showed a decrease in concentrations, while the diffusion tube KC49, around the corner, showed an increase (for the 2nd year) and we would monitor this in 2024. Data capture at KC3 was significantly improved this year (99.64%) We are able to report that for the 2024 monitoring period, KC49 did see a decrease in its annual mean concentration, consistent with KC3. However, the data capture rate for the diffusion tube was lower than ideal at 71.2%, which means the results have been annualised and may not be wholly representative. In addition, KC49 is close to an area where pick up and drop offs from Harrods occur and could account for the overall increase in concentrations generally at this particular location. We will continue to keep this under review.

With regards to the WHO 2021 Guideline Value of 10 µg/m³, none of the automatic locations met this more stringent concentration, however we are pleased to see concentrations decreasing steadily on an annual basis and will work to continue this trajectory.

Figure 1: Annual Mean NO₂ Concentrations (2017-2024): Automatic Monitoring Stations

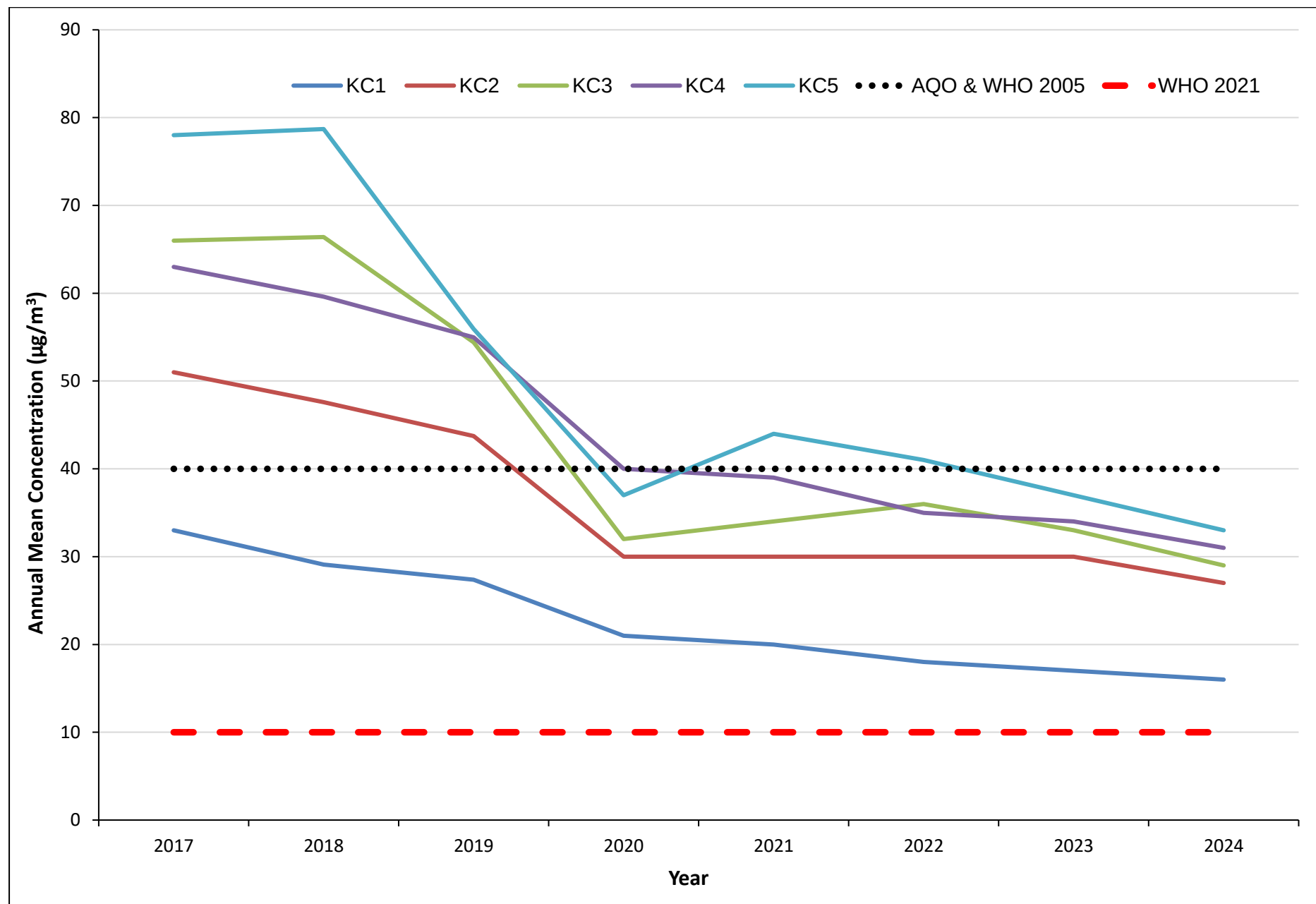


Table 10: Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³)

Site ID	Site type	In AQFA?	Valid data capture for monitoring period % ^(a)	Valid data capture 2023 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC31	Roadside	N	100	100.0	42.8	42.6	31.8	27.3	25.7	25.5	22.4
KC32	Urban Background	N	100	100.0	26.2	23.8	17.2	15.9	15.1	13.8	12.6
KC33	Roadside	Y	100	100.0	84.0	71.6	50.5	43.8	40.5	40.6	36.3
KC34	Urban Centre	N	100	100.0	39.0	36.3	26.5	23.4	22.6	20.3	17.8
KC35	Roadside	Y	83.0	83.0	58.5	56.0	38.0	34.8	34.6	35.0	32.0
KC38	Roadside	Y	100	100.0	75.8	70.3	47.1	41.0	36.1	35.9	34.5
KC39	Roadside	Y	100	100.0	30.6	29.2	22.9	22.7	17.9	15.9	14.0
KC41	Urban Background	N	100	100.0	32.2	30.5	22.4	20.9	20.2	19.4	16.4
KC42	Roadside	N	92.3	92.3	38.4	34.5	24.5	20.3	20.9	18.0	17.5
KC43	Urban Background	Y	100	100.0	30.0	29.9	22.4	21.2	18.0	17.4	15.3
KC44	Urban Background	N	100	100.0	35.5	33.1	24.0	25.5	18.4	18.5	15.5
KC45	Roadside	N	100	100.0	44.9	41.9	28.8	22.1	24.6	23.2	20.5
KC47	Urban Background	N	100	100.0	27.7	27.2	19.8	18.6	17.3	16.2	14.4
KC47	Urban Background	N	100	100.0	27.7	27.2	19.8	18.6	17.3	16.2	14.4
KC47	Urban Background	N	100	100.0	27.7	27.2	19.8	18.6	17.3	16.2	14.4
KC48	Roadside	N	100	100.0	58.4	49.9	41.6	36.6	32.1	31.3	28.9

Site ID	Site type	In AQFA?	Valid data capture for monitoring period % ^(a)	Valid data capture 2023 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC49	Urban Centre	Y	100	100.0	e	59.9	39.1	36.7	41.4	43.4	38.8
KC50	Roadside	N	100	100.0	41.0	45.9	28.5	26.6	23.2	22.1	18.8
KC51	Urban Background	N	90.6	90.6	27.7	31.4	27.0	17.7	16.1	16.0	13.7
KC52	Roadside	N	100	100.0	49.4	39.4	30.7	28.5	27.3	25.1	22.6
KC53	Urban Background	N	100	100.0	40.7	38.0	28.6	24.9	22.5	21.0	19.6
KC54	Roadside	Y	100	100.0	57.3	48.8	34.8	32.0	33.2	33.0	28.9
KC54	Roadside	Y	100	100.0	57.3	48.8	34.8	32.0	33.2	33.0	28.9
KC54	Roadside	Y	100	100.0	57.3	48.8	34.8	32.0	33.2	33.0	28.9
KC55	Urban Background	Y	100	100.0	40.5	37.5	26.4	24.0	22.9	20.1	19.0
KC56	Roadside	N	100	100.0	59.9	51.2	40.0	36.5	31.6	31.6	27.7
KC57	Roadside	N	100	100.0	47.1	42.8	27.0	26.2	23.4	21.1	20.2
KC58	Roadside	N	92.5	92.5	48.0	46.0	36.9	30.0	28.5	25.1	24.0
KC59	Kerbside	N	100	100.0	66.5	59.2	52.2	39.8	35.0	32.7	32.1
KC60	Kerbside	N	100	100.0	51.8	50.9	34.1	29.3	28.6	27.3	24.9
KC61	Roadside	N	100	100.0	45.2	43.6	33.4	29.9	27.3	27.7	24.6
KC64	Roadside	N	100	100.0	42.5	41.6	33.0	29.8	28.2	24.8	22.6
KC65	Roadside	N	100	100.0	34.5	33.2	24.6	21.4	20.2	18.8	17.9

Site ID	Site type	In AQFA?	Valid data capture for monitoring period % ^(a)	Valid data capture 2023 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC66	Other	N	100	100.0	38.5	33.6	27.3	22.1	20.5	18.1	17.1
KC67	Other	N	100	100.0	36.8	35.3	25.6	22.7	21.1	20.5	18.3
KC68	Kerbside	N	75.0	75.0	42.1	39.1	30.7	24.4	22.7	22.3	23.8
KC69	Urban Background	N	84.9	84.9	35.8	37.0	24.0	29.2	19.5	19.0	18.1
KC70	Kerbside	N	100	100.0	55.5	50.1	36.8	28.4	29.7	29.5	24.4
KC71	Kerbside	N	92.5	92.5	44.0	41.6	30.8	32.0	25.6	24.9	20.5
KC72	Kerbside	N	100	100.0	59.6	51.5	35.7	27.4	30.4	28.0	25.1
KC73	Kerbside	N	100	100.0	44.0	41.2	30.2	24.6	24.2	23.7	20.4
KC74	Kerbside	Y	100	100.0	-	38.8	27.8	28.5	26.4	24.7	21.9
KC75	Kerbside	Y	100	100.0	-	48.9	30.9	33.5	28.2	27.5	24.4
KC76	Kerbside	Y	100	100.0	-	46.2	30.4	21.8	27.1	26.2	23.1
KC77	Kerbside	N	90.6	90.6	-	30.4	23.3	21.4	19.4	17.2	16.9
KC78	Kerbside	N	66	66.0	-	30.4	25.5	23.0	23.5	19.2	19.4
KC79	Kerbside	N	92.5	92.5	-	34.1	25.6	21.6	21.3	20.1	18.0
KC80	Kerbside	N	92.5	92.5	-	35.8	22.0	21.0	20.4	19.4	17.3
KC81	Urban Centre	Y	90.6	90.6	32.5	32.0	22.9	21.4	19.0	17.4	17.6
KC82	Kerbside	Y	100	100.0	-	-	38.2	38.9	36.7	31.6	30.8

Site ID	Site type	In AQFA?	Valid data capture for monitoring period % ^(a)	Valid data capture 2023 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC83	Kerbside	Y	100	100.0	-	-	-	38.4	30.4	27.4	25.3
KC84	Kerbside	Y	100	100.0	-	-	44.6	45.6	38.8	35.5	36.6
KC85	Roadside	Y	83	83.0	-	-	41.8	38.2	32.9	25.5	29.3
KC86	Roadside	Y	100	100.0	-	-	36.8	34.9	33.6	33.0	28.4
KC87	Roadside	Y	83	83.0	-	-	38.6	38.6	34.7	31.0	30.3
KC88	Kerbside	Y	100	100.0	-	-	42.0	38.7	33.6	35.6	31.5
KC89	Kerbside	Y	100	100.0	-	-	50.4	51.3	40.0	37.1	36.4
KC90	Other	Y	90.6	90.6	-	-	-	44.5	35.5	38.0	34.7
KC91	Kerbside	Y	100	100.0	-	-	52.4	49.3	44.1	40.3	38.1
KC92	Kerbside	Y	75	75.0	-	-	-	42.5	37.6	34.2	29.8
KC93	Kerbside	Y	92.5	92.5	-	-	43.0	47.3	43.4	41.0	39.9
KC94	Roadside	Y	100	100.0	-	-	37.4	44.0	41.6	41.3	40.3
KC95	Kerbside	Y	100	100.0	-	-	44.8	47.2	42.1	42.6	38.8
KC96	Roadside	Y	41.5	41.5	-	-	-	41.1	37.7	35.1	33.9
KC97	Roadside	Y	56.6	56.6	-	-	45.7	42.4	41.5	41.0	36.1
KC98	Kerbside	Y	92.5	92.5	-	-	46.3	44.7	44.6	42.4	41.4
KC99	Kerbside	Y	100	100.0	-	-	46.4	45.3	44.0	38.2	32.7

Site ID	Site type	In AQFA?	Valid data capture for monitoring period % ^(a)	Valid data capture 2023 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC100	Kerbside	Y	100	100.0	-	-	50.3	41.9	40.8	37.7	35.9
KC101	Kerbside	Y	100	100.0	-	-	49.1	42.6	40.4	38.1	33.8
KC102	Roadside	Y	100	100.0	-	-	44.7	43.1	40.3	38.2	37.4
KC103	Other	Y	92.5	92.5	-	-	-	32.4	28.9	31.0	26.7
KC104	Kerbside	Y	100	100.0	-	-	44.6	37.1	32.8	31.7	30.3
KC105	Kerbside	Y	100	100.0	-	-	40.4	39.7	34.3	32.9	32.9
KC106	Kerbside	Y	90.6	90.6	-	-	42.3	38.1	33.7	31.1	29.8
KC107	Roadside	Y	100	100.0	-	-	35.0	36.3	29.6	27.2	27.1
KC108	Kerbside	Y	100	100.0	-	-	31.7	31.0	29.8	26.5	23.1
KC109	Kerbside	Y	100	100.0	-	-	36.9	35.5	32.9	29.4	27.4
KC110	Roadside	Y	100	100.0	-	-	34.4	33.7	29.8	27.6	25.3
KC111	Kerbside	Y	100	100.0	-	-	34.6	31.8	28.5	25.9	23.9

☒ 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/m³.

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 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%).

^e Data capture was below 25% for the year, therefore annualisation was not completed and data was not presented.

1.5 Interpretation of Non-Automatic Monitoring Annual Mean NO₂ Results

Two diffusion tube monitoring locations exceeded the annual mean objective in 2024 after bias adjustment and annualisation. This is a significant decrease in the number reported in the previous Annual Status Report published last year, which was eight. In addition, whilst remaining over the objective, they did both record an overall reduction in concentrations of 1 µg/m³.

Table 11: Sites which exceeded the NO₂ Annual Mean Objective in 2024

Site ID	Site Type	Data Capture	2023	2024	Difference
KC94	Roadside	100%	41.3 µg/m ³	40.3 µg/m ³	- 1 µg/m ³
KC98	Kerbside	92.5%	42.4 µg/m ³	41.4 µg/m ³	- 1 µg/m ³

Table 12 shows the monitoring locations that saw a small (<1) to medium (<4) increase in bias adjusted and annualised annual mean NO₂ concentrations between 2023 and 2024. It should be noted that although KC85 recorded the largest increase in concentrations it had a lower data capture rate (83%) and therefore would be unlikely to be totally representative of site conditions and should be treated with caution. These limitations should also be considered for KC68, which also saw a lower data capture rate of 75%. These sites will be kept under review during the next monitoring period and reported on next year. Of those tubes listed in Table 12, four of the five were located in close proximity (<1.50m) to a trafficked road and classified as either Kerbside or Roadside.

Table 12: Sites which recorded increased NO₂ Annual Mean concentrations in 2024

Site ID	Site Type	Data Capture	2023	2024	Difference
KC68	Kerbside	75%	22.3 µg/m ³	23.8 µg/m ³	+1.5 µg/m ³
KC78	Kerbside	66%	19.2 µg/m ³	19.4 µg/m ³	+0.2 µg/m ³
KC81	Urban Centre	90.6%	17.4 µg/m ³	17.6 µg/m ³	+0.2 µg/m ³
KC84	Kerbside	100%	35.5 µg/m ³	36.6 µg/m ³	+1.1 µg/m ³
KC85	Roadside	83%	25.5 µg/m ³	29.3 µg/m ³	+3.8 µg/m ³

69 monitoring sites recorded a reduction in annual mean concentrations. Those with the most significant reductions have been included within Table 13 below. We are aware that not all sites achieved a data capture rate of 100% for the monitoring period and particularly for those that achieved below 75%, the results will be treated with caution and reviewed again in the next Annual Status Report due for publication next year.

Table 13: Sites which recorded the greatest reductions NO₂ Annual Mean concentrations in 2024

Site ID	Site Type	Data Capture	2023	2024	Difference
KC49	Urban Centre	100%	43.4	38.8	-4.6 µg/m ³
KC70	Kerbside	100%	29.5	24.4	-5.1 µg/m ³
KC71	Kerbside	92.5%	24.9	20.5	-4.4 µg/m ³
KC86	Roadside	100%	33.0	28.4	-4.6 µg/m ³
KC92	Kerbside	75%	34.2	29.8	-4.4 µg/m ³
KC97	Roadside	56.6%	41.0	36.1	-4.9 µg/m ³
KC99	Kerbside	100%	38.2	32.7	-5.5 µg/m ³

Figure 2: Annual Mean NO₂ Concentrations (2020-2024): Roadside Monitoring Locations (excluding Ken High St)

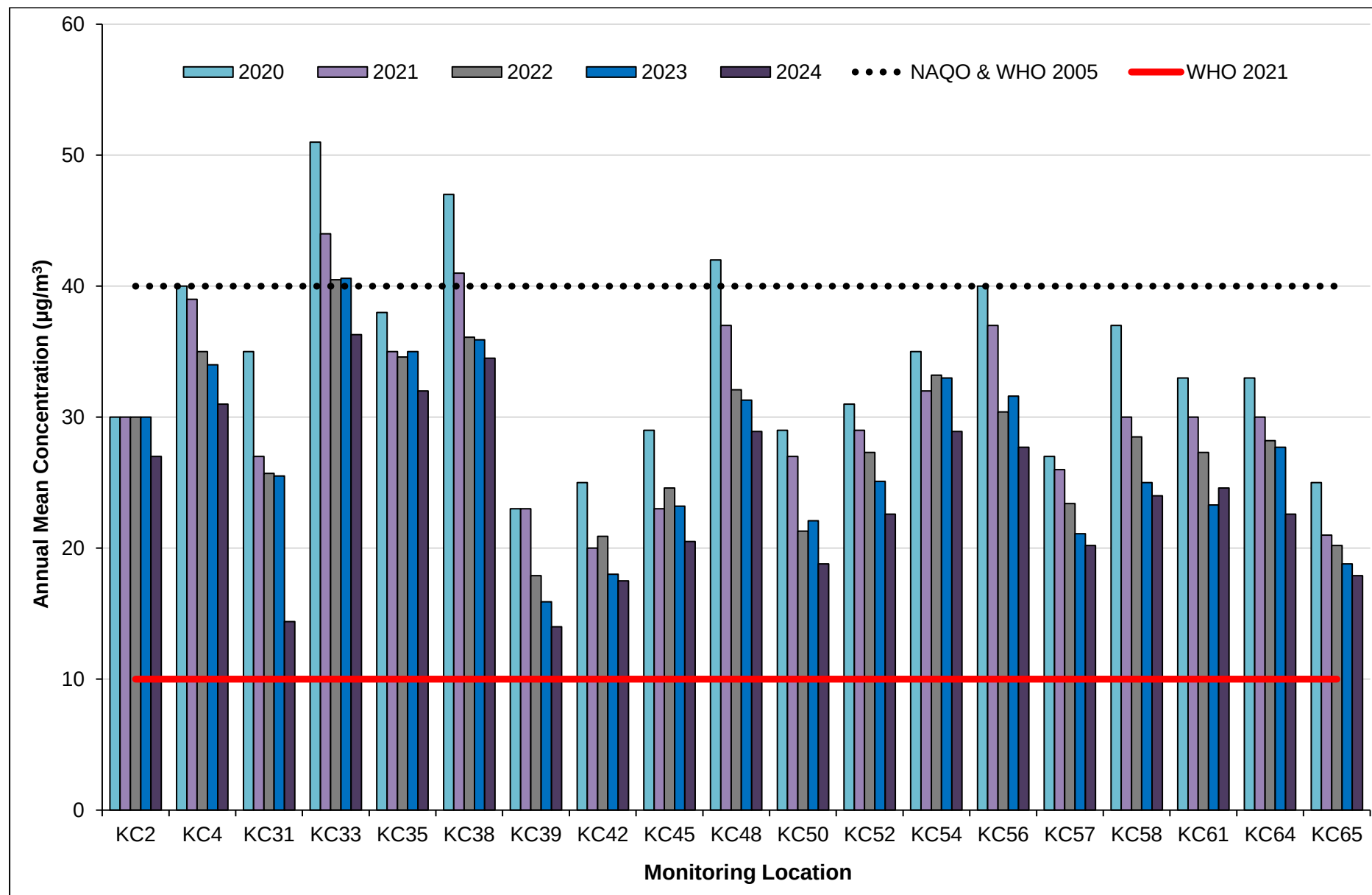


Figure 3: Annual Mean NO₂ Concentrations (2020-2024): Kerbside Monitoring Locations (excluding Ken High St)

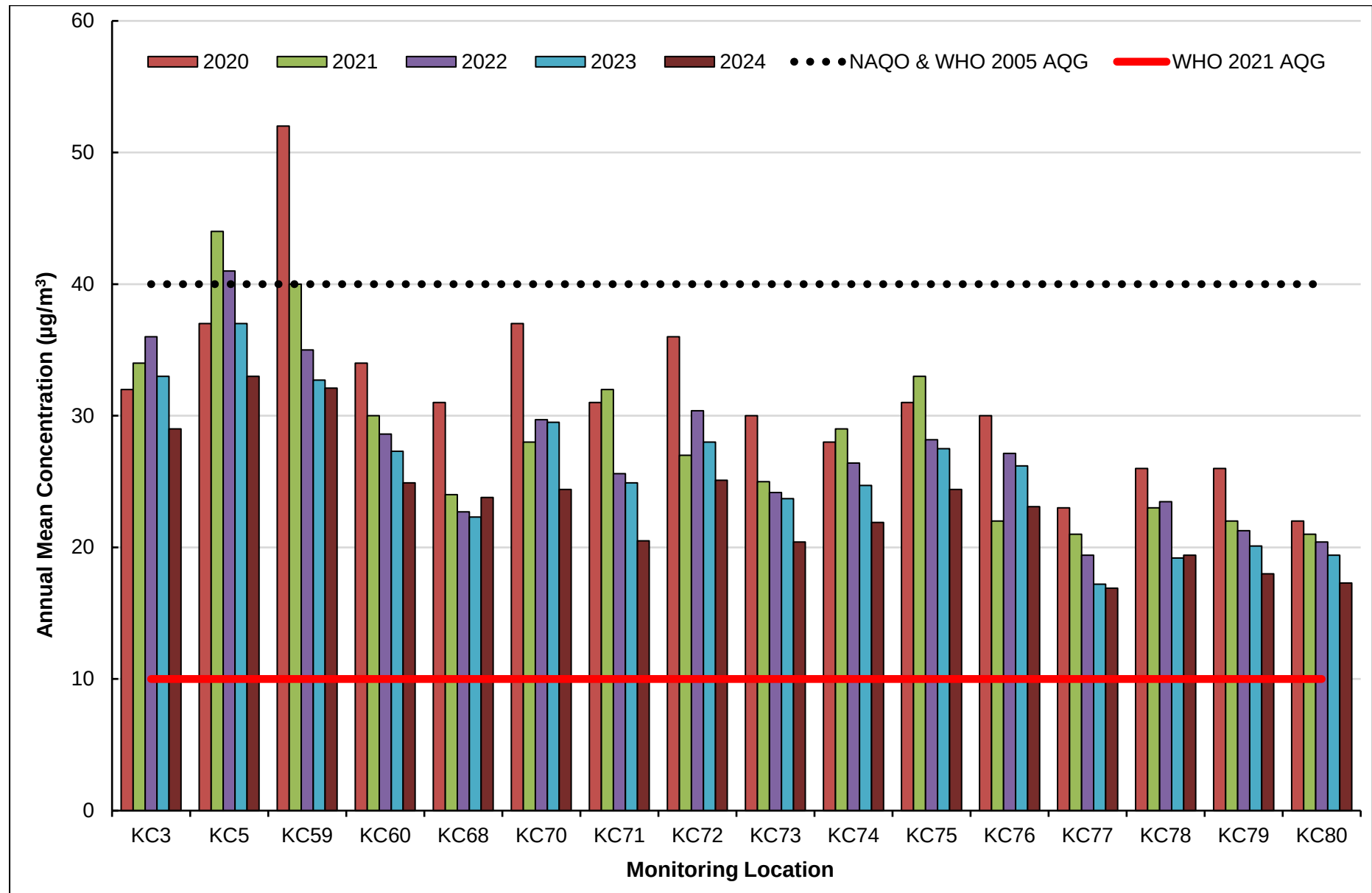


Figure 4: Annual Mean NO₂ Concentrations (2020-2024): Kerbside Monitoring Locations on Kensington High Street

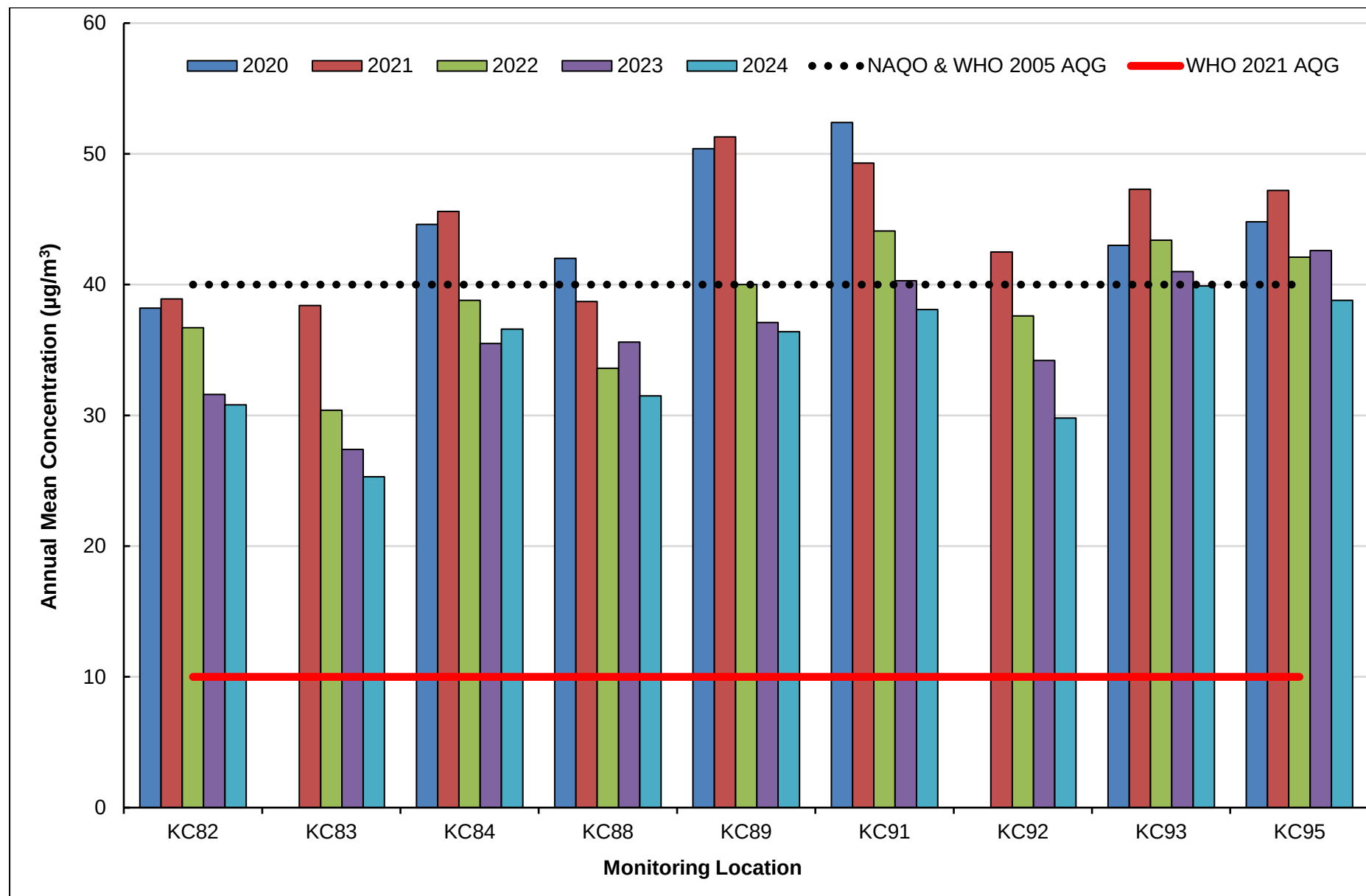


Figure 5: Annual Mean NO₂ Concentrations (2020 – 2024): Urban Background and Urban Centre Locations

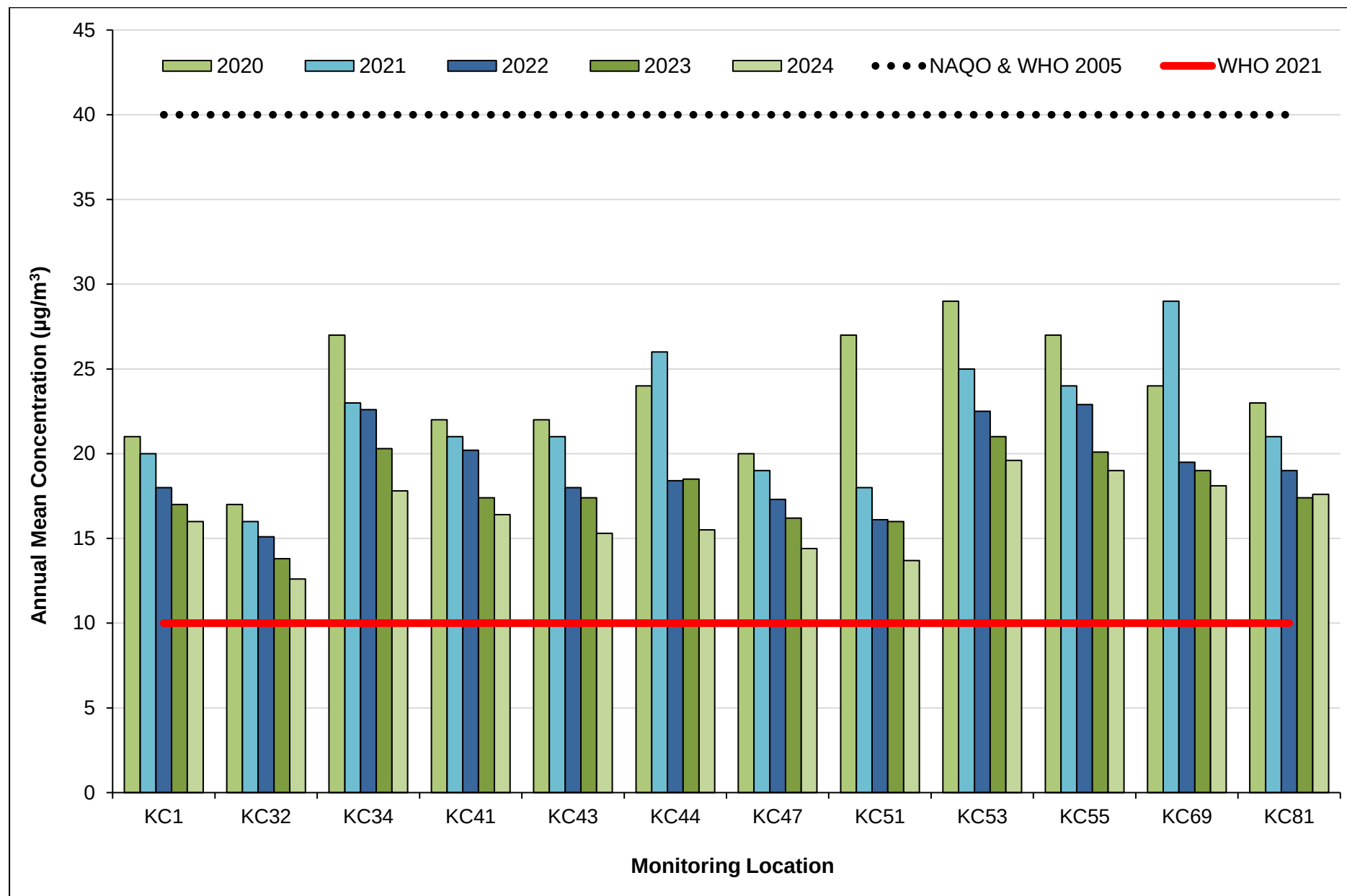


Figure 6: Annual Mean NO₂ Concentrations (2018 – 2024): Railway Monitoring Locations

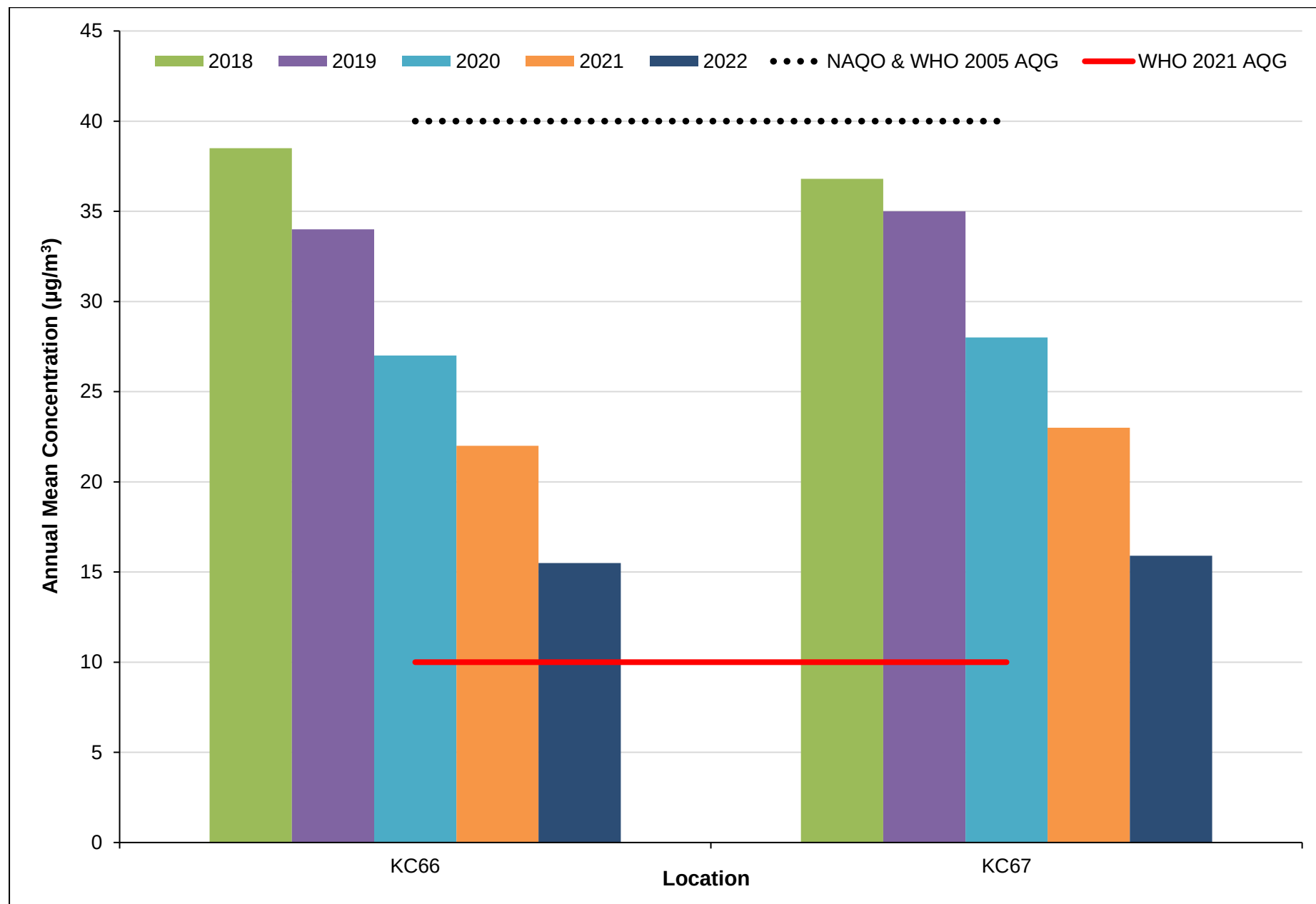


Table 14: NO₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg/m³

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2023 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC1	98.96	98.96	0	0	0	0	0	0	0
KC2	99.51	99.51	0	0	0	0	0	0	0
KC3	99.64	99.64	43	15	3	0	0	0	0
KC4	99.03	99.03	0	0	0	0	0	0	0
KC5	99.62	99.62	29	2	0	0	0	0	0

Notes

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

Exceedance of the NO₂ short term NAQO 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%).

1.6 Interpretation of NO₂ Automatic 1-Hour Mean Objective Results

Compliance with the NAQO NO₂ 1-hour mean objective of 200 µg/m³ (not to be exceeded more than 18 times in a year) was achieved at all five automatic monitoring locations during 2024 with no exceedances. This is the sixth consecutive year that all locations have achieved compliance with this objective. The WHO also recommend a 1-hour objective of 200 µg/m³; however, this is not to be exceeded more than once in a year. All sites have met this objective for the last four years, whilst KC1, KC2 and KC4, as Table 14 demonstrates, have achieved this for considerably longer.

Figure 7 presents the number of 1-hour means in excess of the NAQO for the period of 2019-2024. At KC3 and KC5, there has been an overall downward trend in concentrations between 2018 to 2022. Exceedances at KC1, KC2 and KC4 have remained consistent throughout the most recent five-year period with no 1-hour NO₂ mean concentrations in excess of 200 µg/m³.

Figure 7: NO₂ Automatic 1-Hour Mean Objective

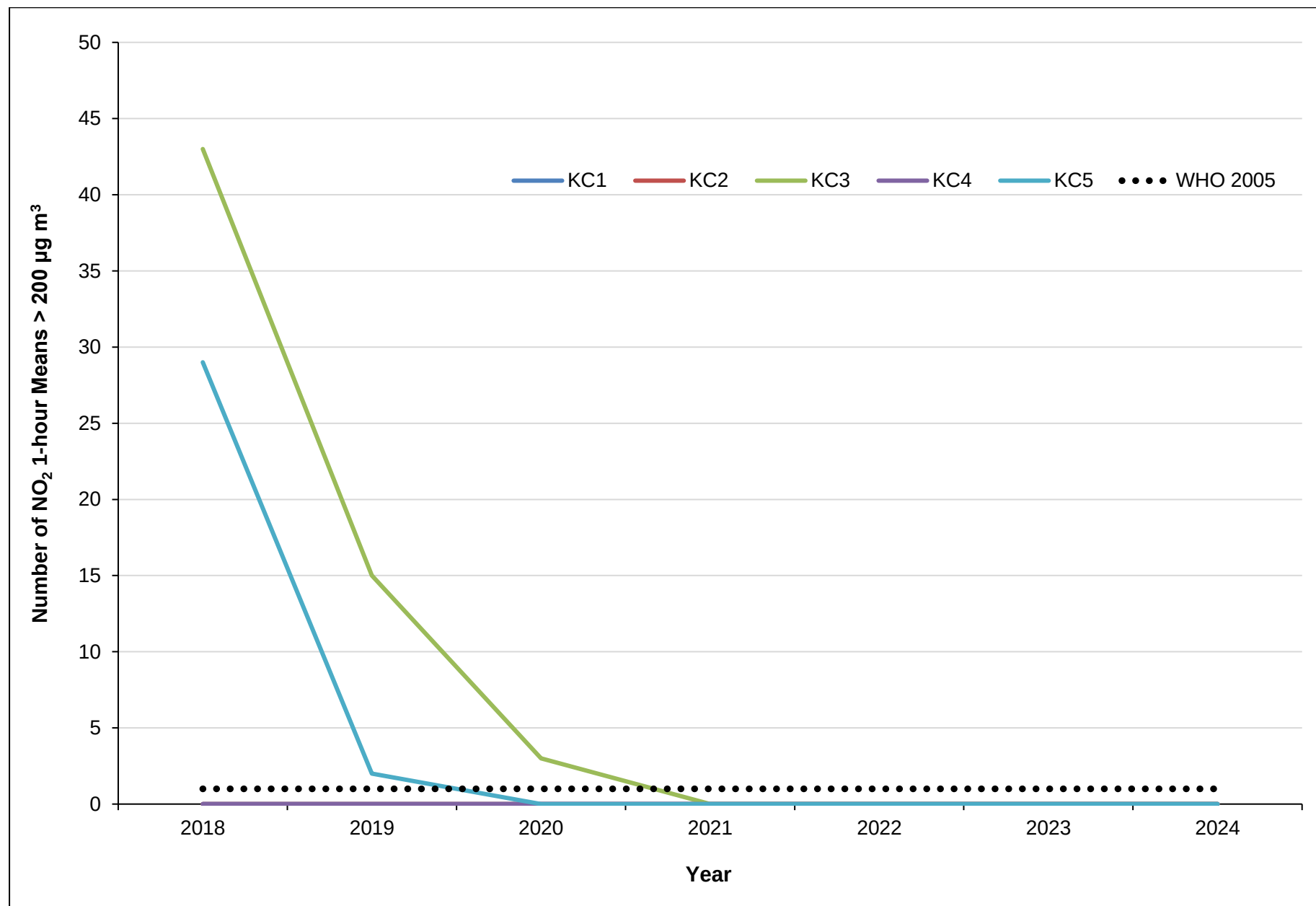


Table 15: Annual Mean PM₁₀ Automatic Monitoring Results (µg/m³)

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2023 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC1	99.3	99.3	14	15	13	14	15	12	12
KC2	96.6	96.6	18	-	-	17	18	15	13
KC5	95.2	95.2	25	24	24	25	22	18	19

Notes

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

Exceedances of the PM₁₀ annual mean NAQO 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%).

1.7 Interpretation of Annual Mean PM₁₀ Results

Compliance with the annual mean NAQO of 40 µg/m³ continued in 2024 for all sites, even though KC5 experienced a minimal increase in concentrations of 1 µg/m³. It is likely that this result is more representative of the PM₁₀ concentrations experienced in the area as data capture was significantly higher (95.2%) than that recorded for the 2023 monitoring period (88%). However, we will continue to monitor the results from this location and provide an update in the next ASR. In addition, we will continue to monitor trends at KC2 as no data was recorded between 2019 and 2020, before a new monitor was installed part way through May 2021.

The 2005 WHO Guideline Value for PM₁₀ annual mean concentration is 20 µg/m³ and all monitoring locations achieved this objective in 2024. The 2021 WHO Guideline Value for PM₁₀ Annual Mean concentration is 15 µg/m³. KC1 and KC2 have achieved this more stringent objective during 2023 and 2024, however KC5 exceed it as concentrations were at 19 µg/m³.

Figure 8: Annual Mean PM₁₀ Monitoring Results (2018-2024)

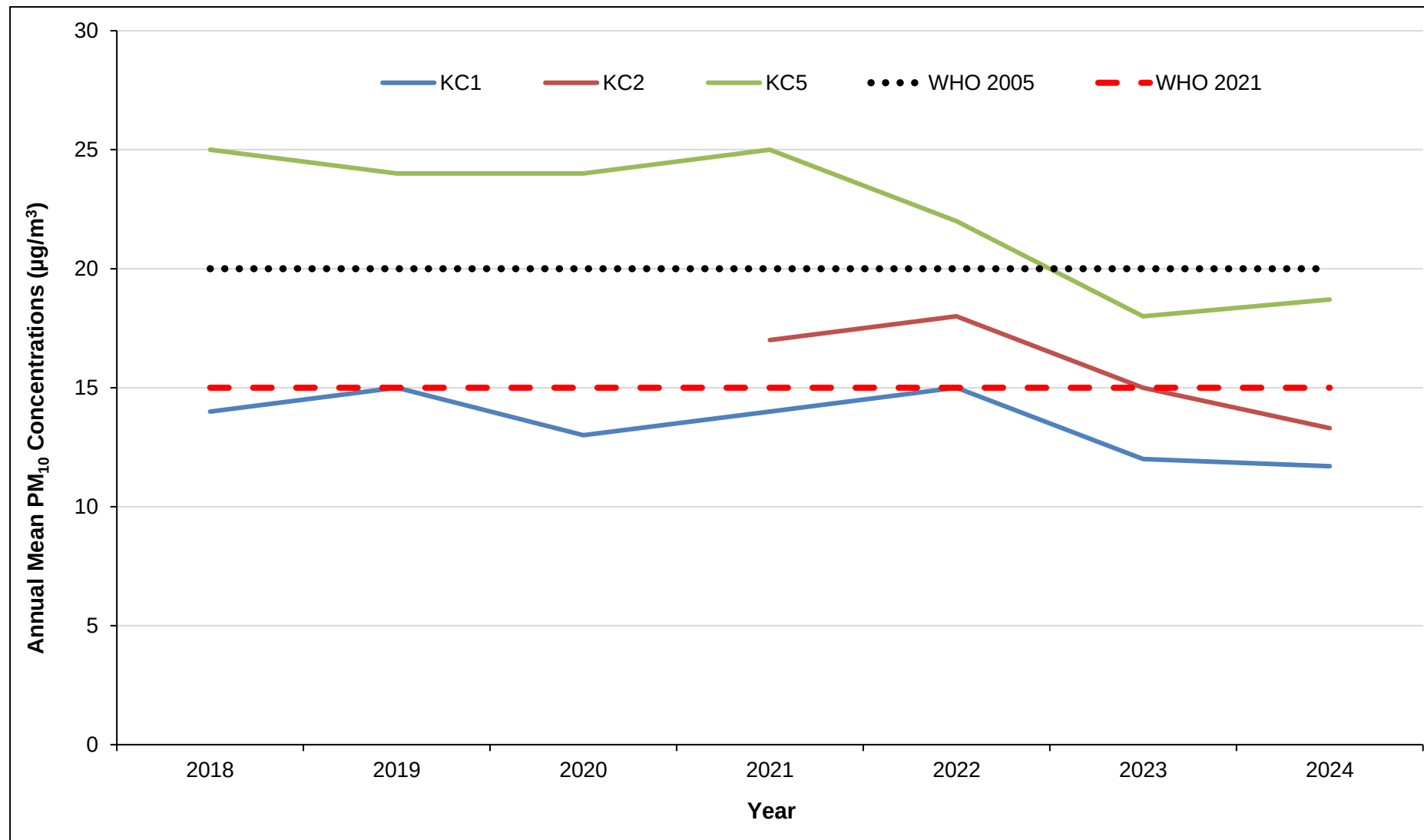


Table 16: PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 24-Hour Means > 50 µg/m³

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC1	99.3	99.3	1	5	0	1	4	1	0
KC2	96.6	96.6	0	-	-	1	4	1	0
KC5	95.2	95.2	4 (33.2)	13	10	6	10	5	3

Notes

Exceedances of the PM₁₀ 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%).

1.8 Interpretation of PM₁₀ 24-Hour Mean Objective Results

Compliance with the short term NAQO of fewer than 35 exceedances of a 24-hour average > 50 µg/m³ continued to be achieved in 2024. With the exception of 2022, the total number of exceedances of the 24-hour mean have been decreasing at all locations, as shown in Table 16.

The 2005 24-hour mean WHO Guideline Value is 50 µg/m³, however this concentration is not to be exceeded more than once. KC1 and KC2 have achieved this target during 2024, whereas KC5 exceeded it. Figure 9 displays the number of daily means in excess of the short term PM₁₀ NAQO across the KC1 and KC5 monitoring sites for the period of 2019-2024 and KC2 from 2021-2024.

Figure 9: Number of PM₁₀ Daily Means >50 µg/m³

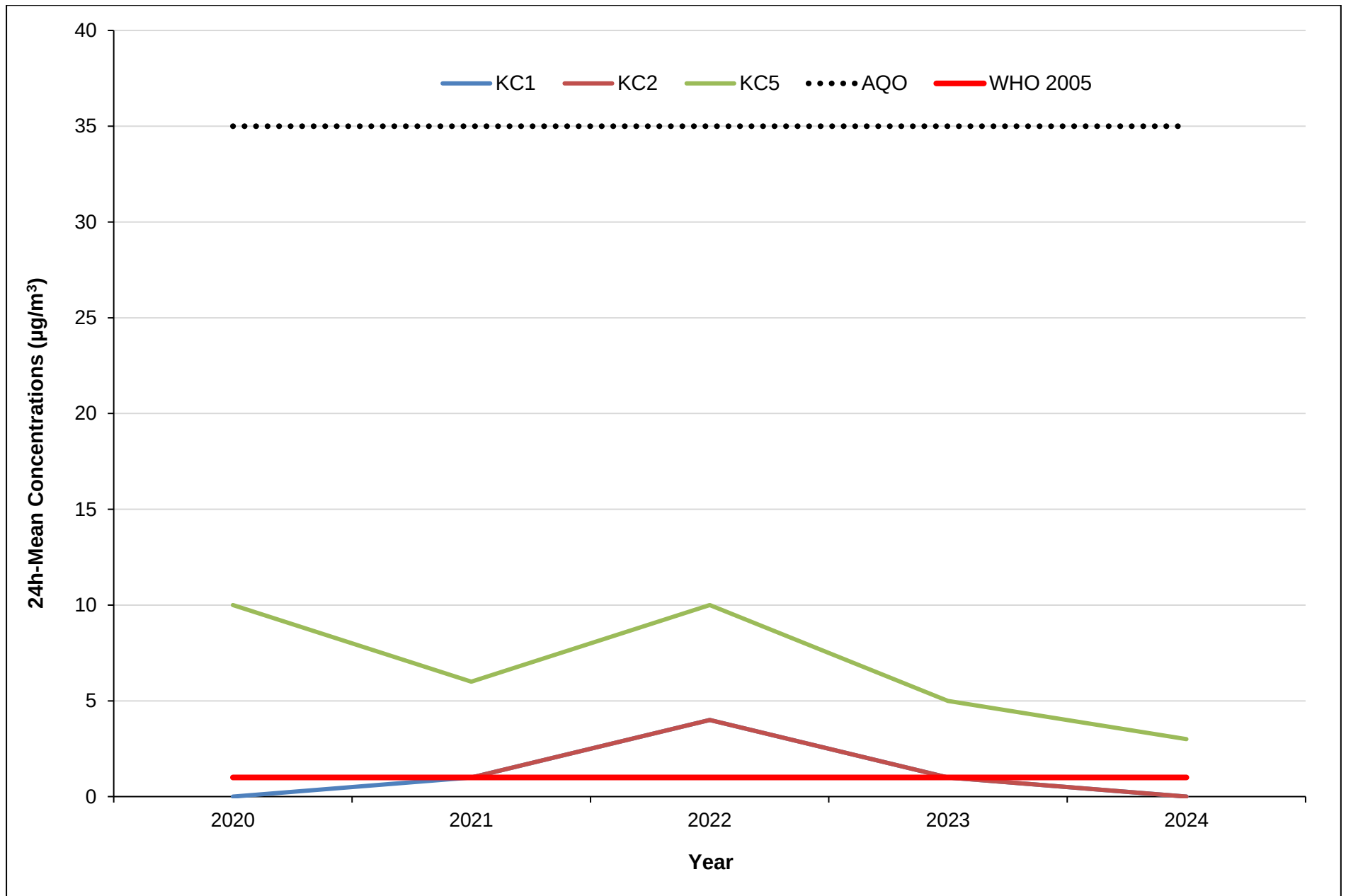


Table 17: Annual Mean PM_{2.5} Automatic Monitoring Results (µg/m³)

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
KC1	99.3	99.3	9.2	10	8	9	9	8	7
KC2	96.2	96.2	-	-	-	6	10	7	7

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%).

1.9 Interpretation of Annual Mean PM_{2.5} Results

For data collected prior to 2022, annual mean concentrations were compared to the previous NAQO of 25 µg/m³. However, with the introduction of the Environment Act 2021, this has been tightened to 10 µg/m³, which is in line with the 2005 WHO Guideline Value, albeit with differing dates of when it should be achieved.

Compliance with the NAQO of 25 µg/m³ has been achieved historically at KC1 and KC2 for a number of years, as has the new NAQO and WHO Guideline Value of 10 µg/m³. Figure 10 presents KC1 concentrations between 2020 and 2024, and KC2 concentrations between 2021 and 2024. Data at KC2 in 2021 should be treated with caution as the monitor was only installed part way through the year resulting in a low data capture of around 60%. Concentrations at KC1 improved by 1 µg/m³ while at KC2 they

remained the same as in 2023. The 2021 WHO Air Quality Guideline Value of 5 $\mu\text{g}/\text{m}^3$ has not yet been met but continues being worked towards.

Figure 10: Annual Mean PM_{2.5} Monitoring Results (2018-2024)

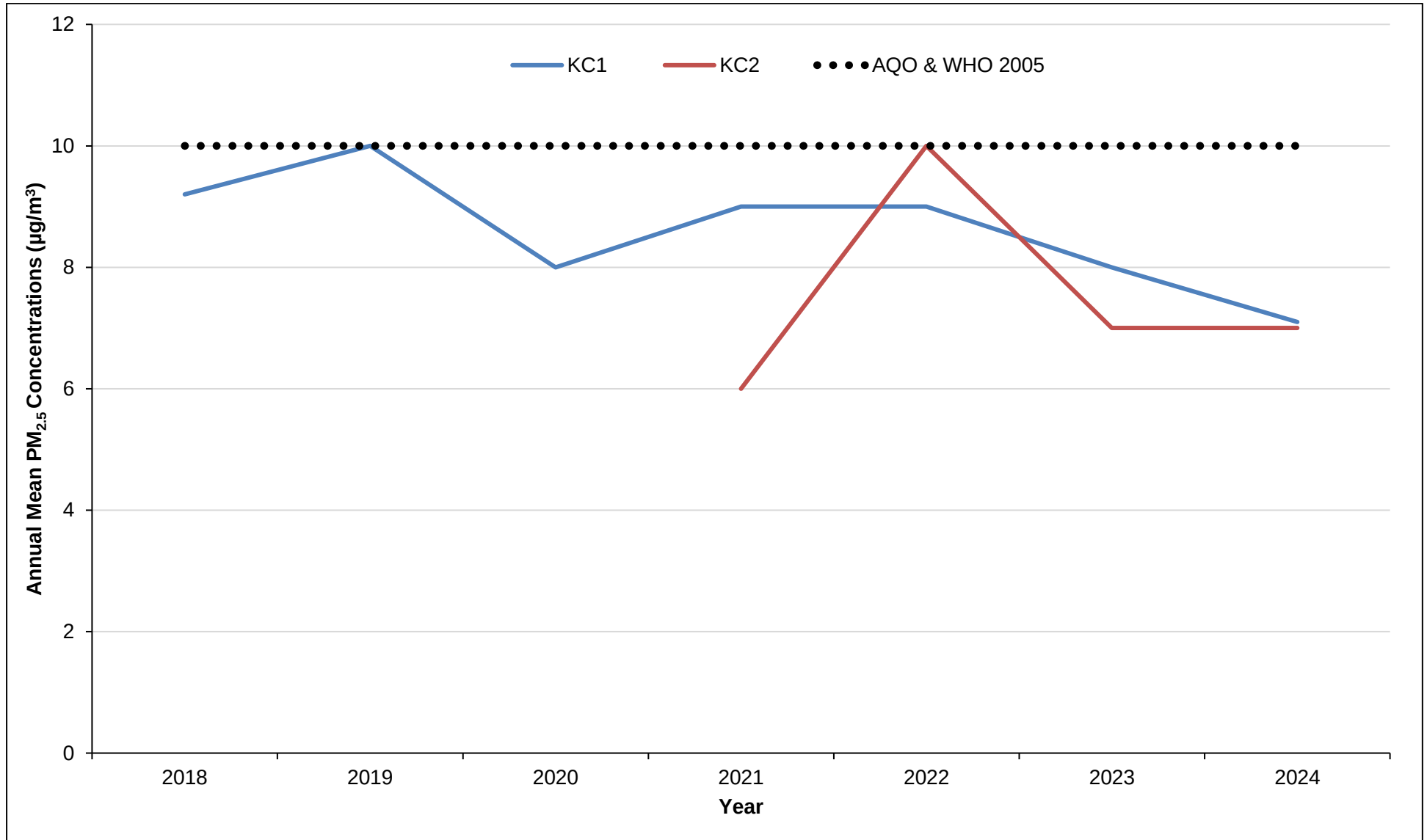


Table 18: 2024 SO₂ Automatic Monitoring Results: Comparison with Objectives

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	Number of 15-minute means > 266 µg m ⁻³	Number of 1-hour mean > 350 µg m ⁻³	Number 24-hour mean > 125 µg m ⁻³
KC1	81.22	81.22	0	0	0

Notes

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

Exceedances of the SO₂ objectives are shown in **bold** (15-min mean = 35 allowed a year, 1-hour mean = 24 allowed a year, 24-hour mean = 3 allowed a year).

If the period of valid data is less than 85%, the relevant percentiles are 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%).

1.10 Interpretation of SO₂ Objective Results

No mean values recorded at KC1 exceeded the 15-minute, 1-hour, or 24-hour SO₂ NAQO concentration limits for the 2024 monitoring period.

Table 19: Ozone (O₃) Automatic Monitoring Results: Comparison with 8-Hour Mean Objective, number of O₃ 8 Hour Means >100 µg/m³

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2020	2021	2022	2023	2024
KC1	98.82	98.82	308	66	195	213	159
KC2	83.66	83.66	-	-	-	-	56

Notes:

Exceedances of the O₃ 8-hour mean objective (100 µg/m³ over the permitted 10 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%).

1.11 Interpretation of O₃ Objective Results

The O₃ 8-Hour objective has not been met for a number of years at KC1. A concentration greater than 100 µg/m³ is not permitted to be exceeded more than 10 times per year, and KC1 saw 159 exceedances over 23 days in 2024. Although this constitutes a breach of the NAQO, it is a reduction on the 213 exceedances experienced at KC1 in 2023. In January 2024, the Council installed a new ozone monitor at KC2 and the 8-Hour objective was exceeded here too. The results for KC1 are shown graphically in Figure 11 overleaf, KC2 will be included from next year.

The significant increase in exceedances recorded at KC1 in 2020 was due to the COVID-19 pandemic lockdown measures, which saw a substantial reduction in fresh NO_x production due to the limited traffic and commercial activity in London. The limited NO_x production shifted the balance by making the reactions that remove ozone less effective.

Figure 11: Number of O₃ 8-Hour Mean Objectives > 100 µg/m³ at KC1 between 2014-2024

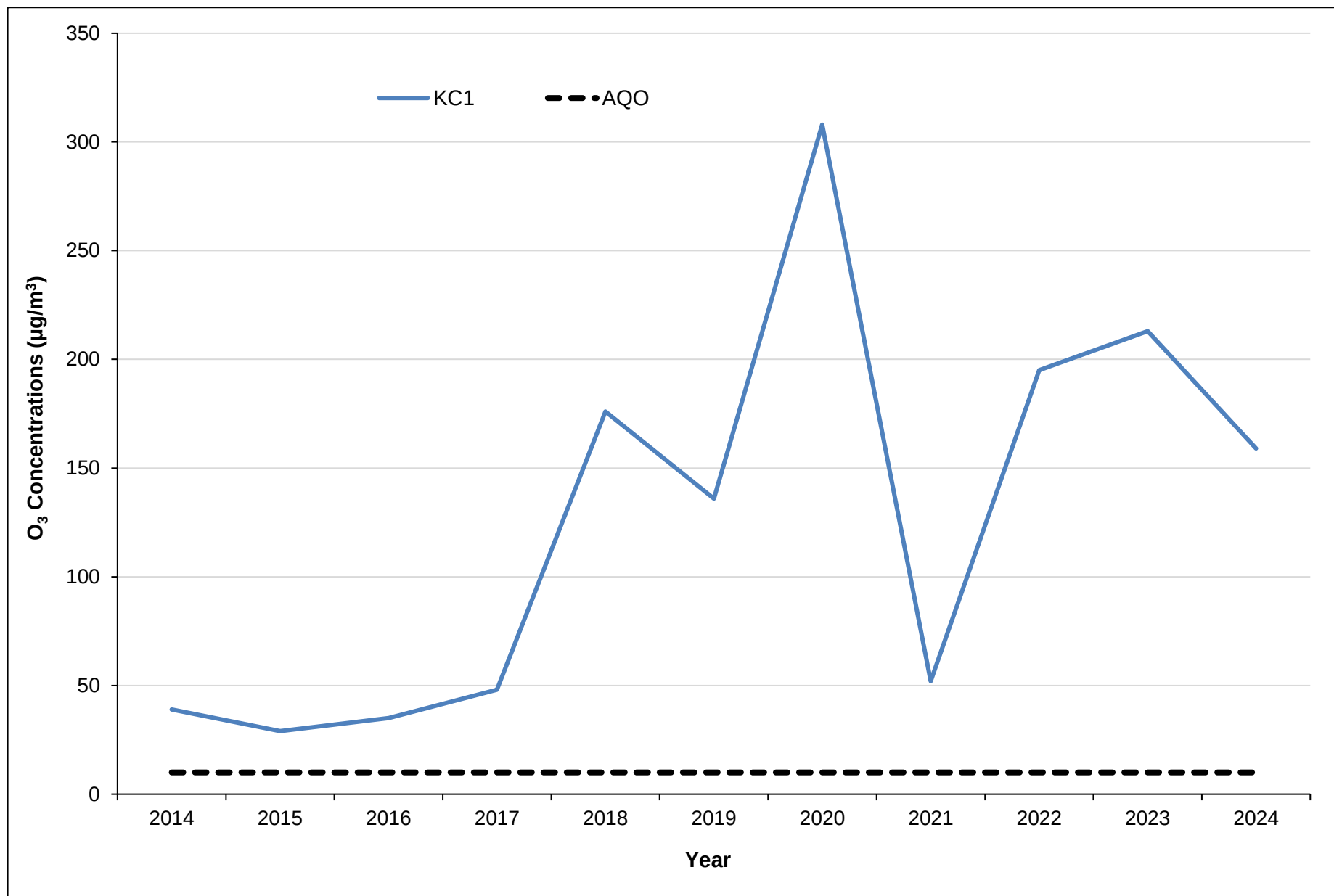


Table 20: Annual Mean Benzene Monitoring Results (µg/m³)

Year	KC01	KC02	KC03	KC04	KC05	KC0X
2000	5.1	3.1	11.4	2.6	4.2	-
2001	4.3	2.0	11.0	3.7	2.9	-
2002	4.9	1.8	12.5	2.1	2.6	-
2003	3.9	2.4	9.6	2.5	2.9	-
2004	2.1	1.2	9.5	1.4	1.6	-
2005	2.0	1.3	9.2	1.4	1.8	-
2006	2.3	1.9	9.2	1.7	2.0	5.7
2007	2.2	1.6	Site Discontinued	1.5	1.7	3.2
2008	2.3	1.6		1.6	2.0	2.8
2009	2.1	1.6		1.7	1.8	2.6
2010	1.6	1.0		1.2	1.6	1.7
2011	1.4	1.3		1.4	1.9	2.8
2012	1.2	1.1		1.0	1.1	1.6
2013	1.0	0.7		0.7	0.9	1.2
2014	0.9	0.7		0.7	0.8	1.3
2015	1.25	0.78		1.0	0.94	1.8
2016	1.18	0.87		0.89	0.92	<u>6.75</u>
2017	0.57	0.56		0.55	0.61	0.73
2018	0.57	0.47		0.78	0.53	0.85
2019	0.49	0.38		0.42	0.44	0.69
2020	0.53	0.40		0.45	0.42	0.71
2021	0.47	0.39		0.40	0.40	0.62
2022	0.50	0.46		0.43	0.49	0.84
2023	0.45	0.49		0.43	0.44	0.66
2024	0.46	0.40		0.43	0.45	0.68

Notes

Exceedances of the running annual mean of 16.25 µg/m³ are shown in bold.

Exceedances of the annual mean of 5 µg/m³ are shown in italics and underlined.

1.12 Interpretation of Benzene Monitoring

Benzene (C₆H₆) monitoring was undertaken at five locations using BTEX diffusion tubes for the 2024 monitoring period. Location types include two roadside, two background, and one site in close proximity to a petrol station forecourt. The petrol station has operated Stage Two (in addition to Stage One) Vapour Recovery systems since 2007.

Two NAQOs have been set for the assessment of benzene; a running annual mean of 16.25 µg/m³ to be met by 31/12/2003, and a more stringent annual mean of 5 µg/m³ to be achieved by 31/12/2010.

Table 20 demonstrates that there have been no exceedances of the running annual mean of 16.25 µg/m³ (the measured annual mean has assumed to be the equivalent of the running annual mean), and only one exceedance of the more stringent annual mean (5 µg/m³) at KC0X in 2016, when a concentration of 6.75 µg/m³ was recorded.

Since 2000 the highest annual mean concentrations of benzene were recorded at sites within proximity to petrol stations; KC03 and KC0X. KC03 was previously located next to a petrol station on Warwick Road before its closure in 2007, and as a result the monitoring location was discontinued. KC0X is located near to the Shell Petrol Station situated on the Old Brompton Road / Clareville Grove.

1.13 Mobile Sensors

Kensington and Chelsea Council remains a member of the Breathe London Network. In 2024 we saw the number of nodes deployed across the borough rise to 30, an increase of 12 nodes from the 18 operating by the end of 2023. Nodes BL1-BL9 were installed in 2021, BL11-13 in 2022, BL14-18 in 2023 and BL19-30 in 2024. Nodes BL14-18 were provided to schools participating in the Mayor of London's Future Neighbourhoods Project and installed during the first quarter of 2023 and BL23-30 were installed by the Council as part of its air quality audit programme for schools and nurseries, which commenced in May 2024.

The Breathe London network, until the end of 2024, was managed and operated by Imperial College Projects Limited (Imperial College London). The monitoring nodes have been provided by their partner Clarity Movement Co and the Mayor of London for the 2024 monitoring period. Prior to deployment, all the nodes are co-located with London Air reference monitors for two weeks. All scaled and

processed data is available to download on the individual Node information pages on the Breathe London website and through the API.
Details of Nodes BL1-BL30 are provided in Table 21 below.

Table 21: Breathe London Sensor Details

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	In AQFA?	Distance to Relevant Exposure	Distance to Kerb of Nearest Road	Height	Pollutants Monitored	Sensor Type
BL01	Oxford Gardens Primary School	523720	181240	Roadside	Y	N	1 m	10 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL02	North Kensington	524041	181752	Background	Y	N	2 m	5 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL03	Al Manaar, Acklam Road	524731	181797	Roadside	Y	N	0.5 m	1.5 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL04	St Mary Abbots Primary School	525554	179655	Roadside	Y	Y	1 m	50 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL05	Kensington High Street	525231	179383	Urban Traffic	Y	Y	0.5 m	1 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL06	South Kensington Underground Station	526823	178830	Urban Traffic	Y	Y	1 m	0.5 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL07	Royal Marsden Hospital	526921	178467	Urban Traffic	Y	N	0.5 m	5 m	2 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL08	Sloane Street	527831	179524	Urban Traffic	Y	Y	0.5 m	3 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL09	Holy Trinity Church of England Primary School	528080	178466	Roadside	Y	N	0.5 m	5 m	1.5 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL10	Oakley Street	527329	177713	Kerbside	Y	N	0.5 m	0.5 m	2.5 m	NO ₂ & PM _{2.5}	Clarity Node-S

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	In AQFA?	Distance to Relevant Exposure	Distance to Kerb of Nearest Road	Height	Pollutants Monitored	Sensor Type
BL11	Royal Brompton Hospital, Fulham Wing	526899	178410	Roadside	Y	N	0.5 m	2.0 m	2 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL12	Sloane Square	528049	178652	Roadside	Y	N	1.0 m	5.0 m	5 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL13	Warwick Road	525309	178406	Kerbside	Y	Y	0.5 m	0.5 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL14	St Francis of Assisi Primary School	523816	180710	Kerbside	Y	N	0.5 m	0.1 m	3.5 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL15	Avondale Park Primary School	524025	180627	Background	Y	N	0.5 m	20 m	4 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL16	Thomas Jones Primary School	524214	181119	Background	Y	N	0.5 m	9.5 m	1 m / 2 m (fence on split level)	NO ₂ & PM _{2.5}	Clarity Node-S
BL17	Colville Primary School	524811	181076	Background	Y	N	0.5 m	15 m	3.0 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL18	Lancaster West RA	523781	180877	Roadside	Y	N	0.5 m	3.5 m	3.0 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL19	Edward Woods Community Centre	523894	180163	Background	Y	Y	0.5 m	10 m	3 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL20	Science Museum	526845	179178	Roadside	Y	Y	0.5 m	5 m	6 m	NO ₂ & PM _{2.5}	Clarity Node-S

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	In AQFA?	Distance to Relevant Exposure	Distance to Kerb of Nearest Road	Height	Pollutants Monitored	Sensor Type
BL21	Sutton Way	523223	182042	Roadside	Y	N	0.5 m	0.5 m	3.5 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL22	Bonchurch Road	524185	181783	Roadside	Y	N	0.5 m	0.5 m	3.5 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL23	Barlby & Kensington Queensmill School	523859	181991	Background	Y	N	5 m/ 20 m	35 m	3 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL24	Kensington Aldridge Academy School	523896	181024	Background	Y	N	~5 m	25 m	~18 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL25	St. Cuthbert & St. Matthias Schools	525522	178262	Background	Y	Y	0.5 m	26 m	3 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL26	Kensington Primary Academy School	524710	178978	Background	Y	N	0.5 m	3 m (25 m to main road)	3 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL27	Marlborough Primary School	527436	178694	Roadside	Y	N	1 m	4 m	~ 12 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL28	Bousfield Primary School	525986	178378	Roadside	Y	N	1 m	3 m	3 m	NO ₂ & PM _{2.5}	Clarity Node-S
BL29	Golborne and Maxilla Nursery	524587	181653	Background	Y	N	0.5 m	5 m (9 m to Westway)	5 m (to street level in either direction)	NO ₂ & PM _{2.5}	Clarity Node-S
BL30	Park Walk Primary School	526591	177712	Background	Y	N	0.5 m	23 m	3 m	NO ₂ & PM _{2.5}	Clarity Node-S
KCM01	Kensington High Street 1 (VS009)	525726	179690	Urban Traffic	Y	Y	0.5	1	4	NO ₂ , PM ₁₀ & PM _{2.5}	Vaisala

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	In AQFA?	Distance to Relevant Exposure	Distance to Kerb of Nearest Road	Height	Pollutants Monitored	Sensor Type
KCM02	Kensington High Street 2 (VS010)	525273	179415	Urban Traffic	Y	Y	0.5	1	4	NO ₂ , PM ₁₀ & PM _{2.5}	Vaisala
KCM03	Sedding Street (VS008)	528048	178781	Urban Traffic	Y	N	0.5	0.5	4	NO ₂ , PM ₁₀ & PM _{2.5}	Vaisala
KCM04	Holland Park Avenue / Norland Square (VS014)	524338	180083	Urban Traffic	Y	N	1	0.5	4	NO ₂ , PM ₁₀ & PM _{2.5}	Vaisala

The NO₂ data presented in Figures 12-19 from the Breathe London sensors give an indication of the local air quality rather than a definitive picture as the Clarity Node-S units are not reference grade or MCERTS accredited instruments for this pollutant. However, in February 2024 the Clarity Node-S achieved MCERTS accreditation for PM₁₀ and PM_{2.5} so can now be used to provide indicative ambient air quality measurements for particulate matter. Sensors BL15 (Avondale Park Primary School), BL16 (Thomas Jones Primary School) and BL17 (Coleville Primary School) were decommissioned at the end of September as the school audit 12-month monitoring period came to an end in these locations.

As mentioned, the contract held by Imperial College London for the delivery of the Mayor's 136 sensors across the network concluded on 13th December 2024, whereby it was taken over by another operator. This means that sensors BL01-BL07 and BL09 ceased operating in December and have been decommissioned. A monthly concentration has been calculated for December for these sensors; however, it should be treated with caution as it will not be wholly representative of the month. More information on the impacts of this procurement and contract change will be provided in the report next year. We are working with the new operators of the network to have as many locations reinstated as possible for the 2025 monitoring period. The historic monitoring data will remain available on the Breathe London website hosted by Imperial College London for the public to access and download. We continue to work with Imperial to maintain our other Breathe London sensors installed before the contract end.

In addition, this will be the last reporting year for locations KC01-KC04 as the Visala monitors in 2024 came to the end of their working life. KCM01 closed in January 2024, KCM02 in March, KCM03 and KCMO4 in September. The historic monitoring data will remain available on the Air Quality England website for the public to access and download. The Pollution Regulatory Team will continue to review available monitoring options to see if these locations can be reinstated at a future date.

Figure 12: Breathe London Monthly Average NO₂ Concentrations – Urban Traffic

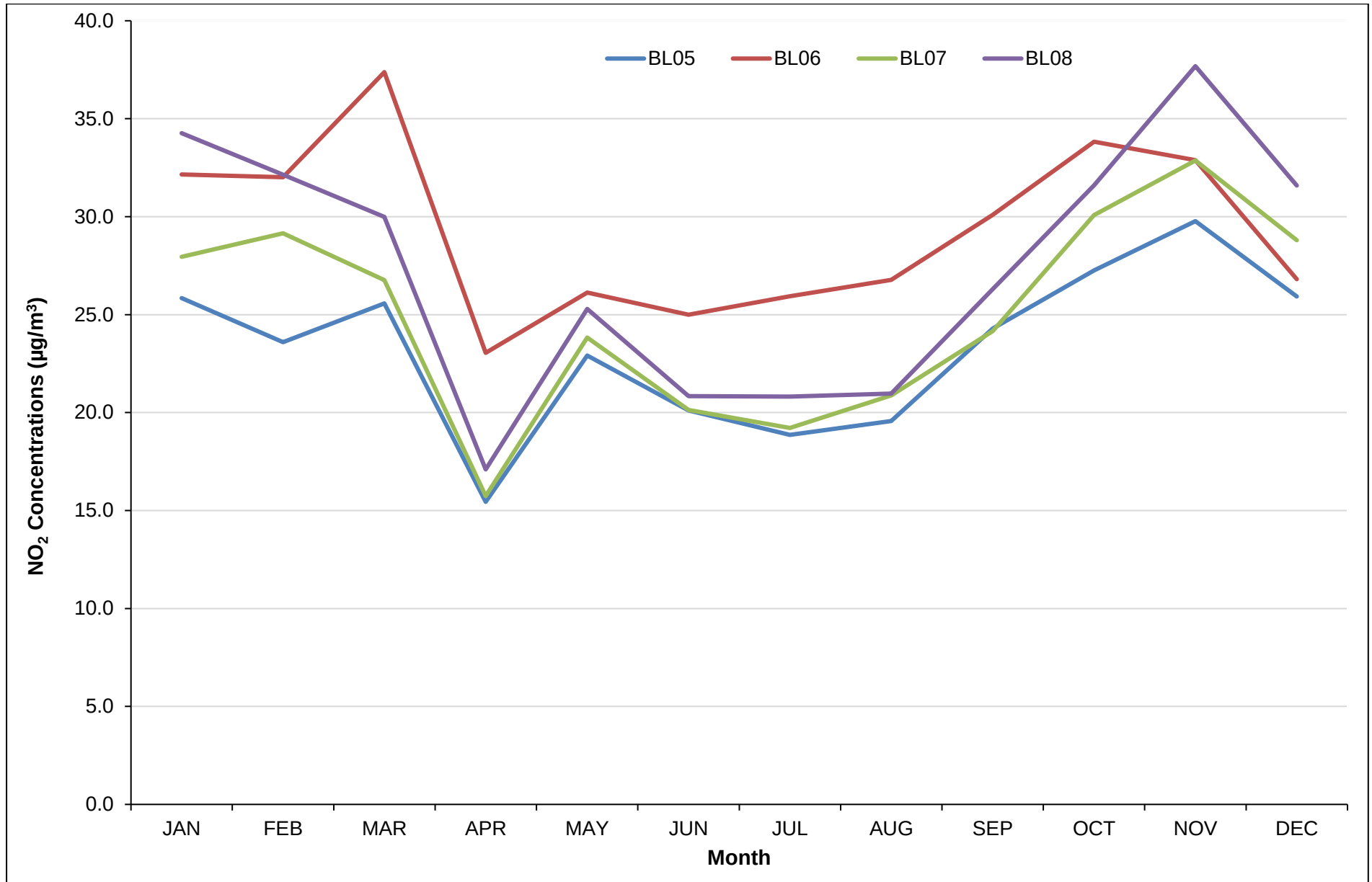


Figure 13: Breathe London Monthly Average PM_{2.5} Concentrations – Urban Traffic

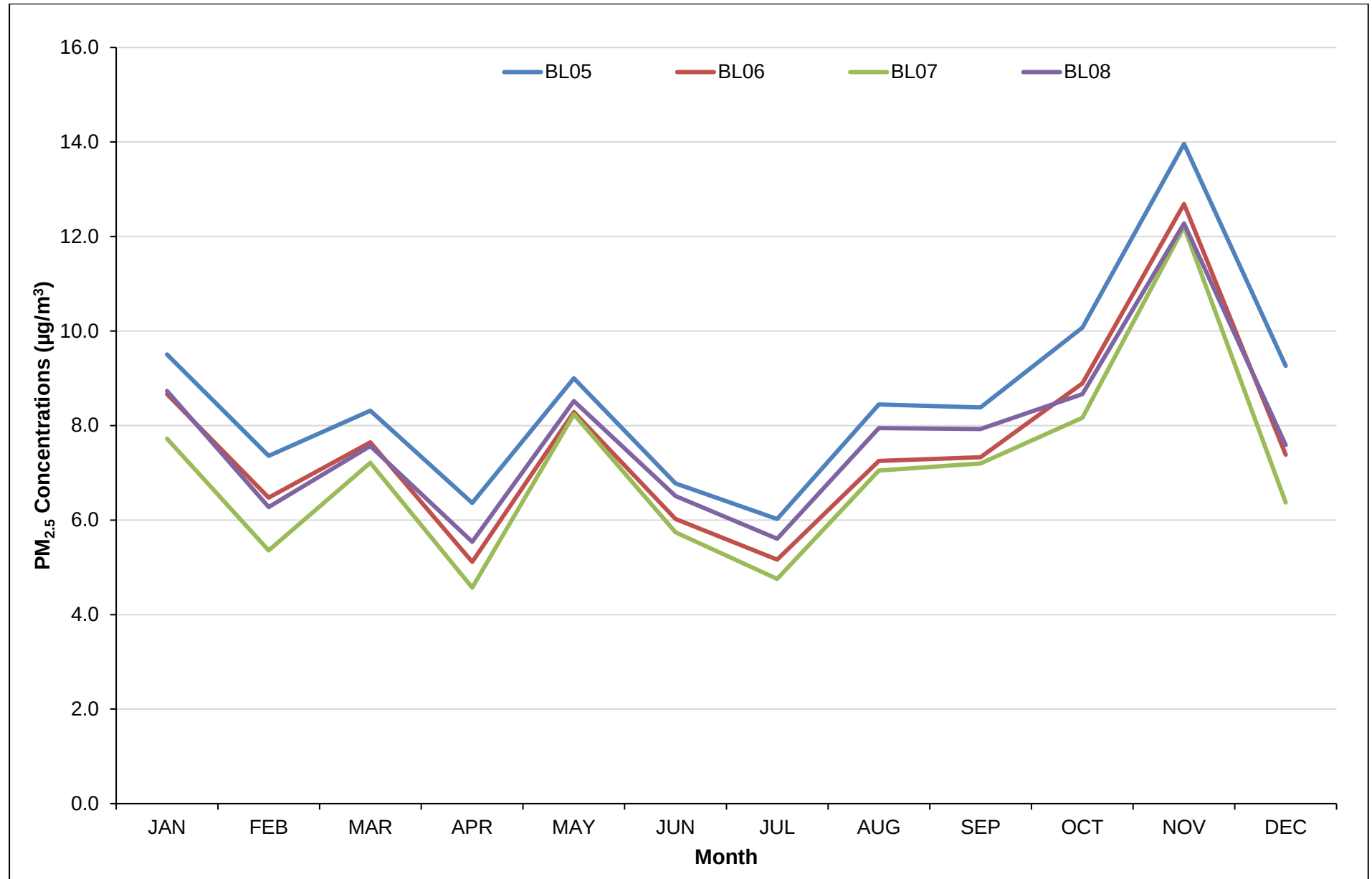


Figure 14: Breathe London Monthly Average NO₂ Concentrations – Kerbside

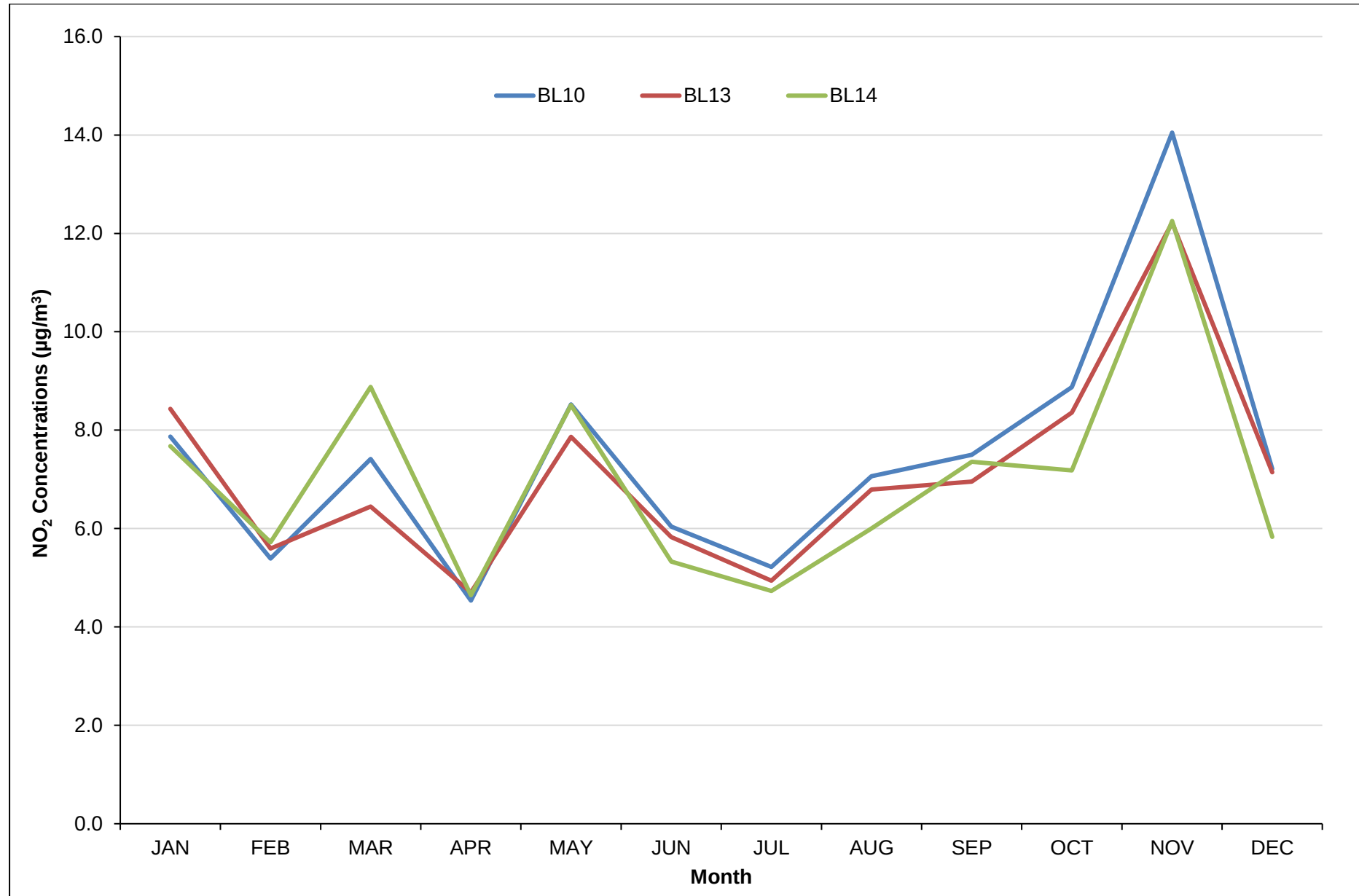


Figure 15: Breathe London Monthly Average PM_{2.5} Concentrations – Kerbside

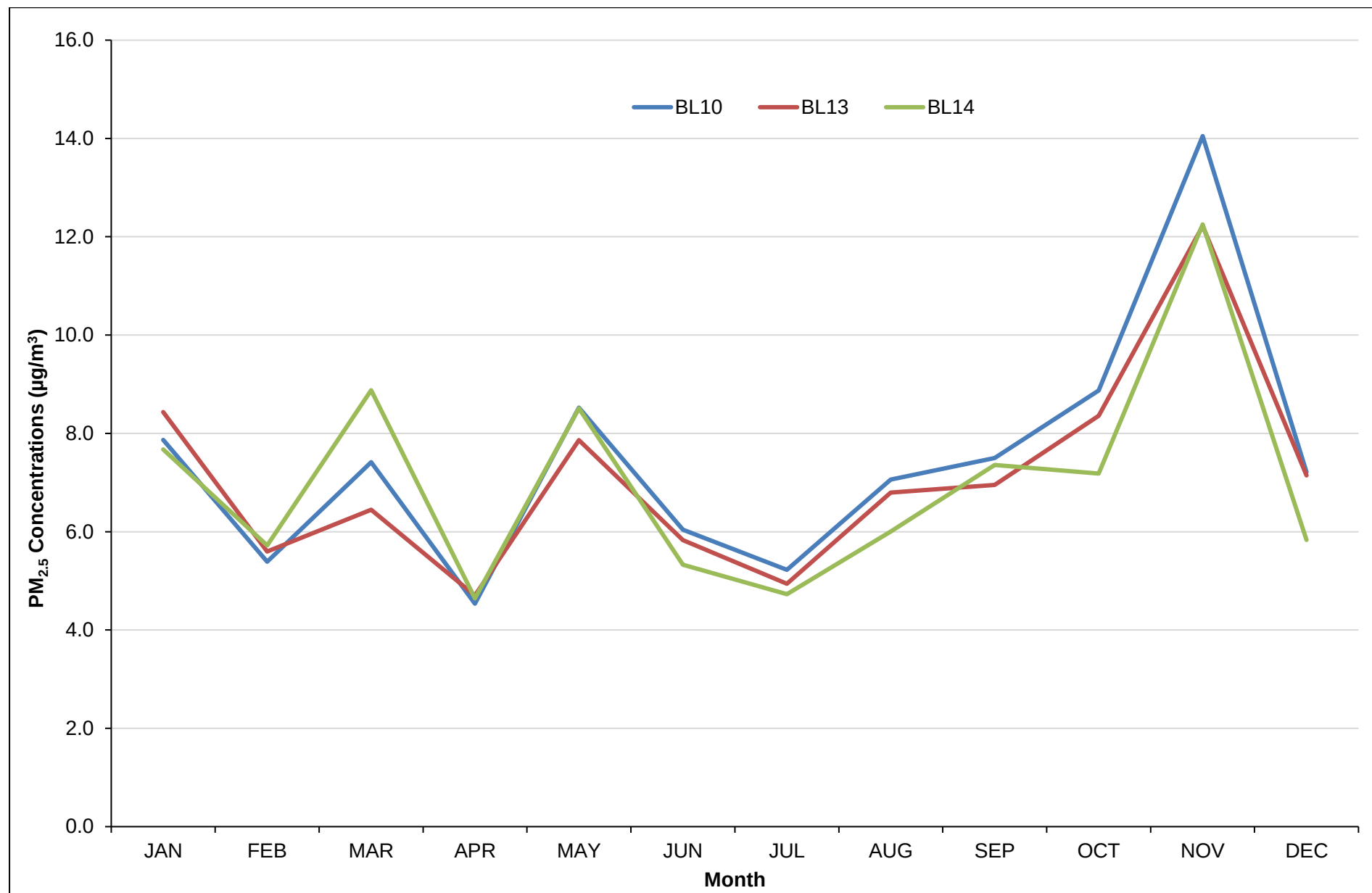


Figure 16: Breathe London Monthly Average NO₂ Concentrations – Roadside

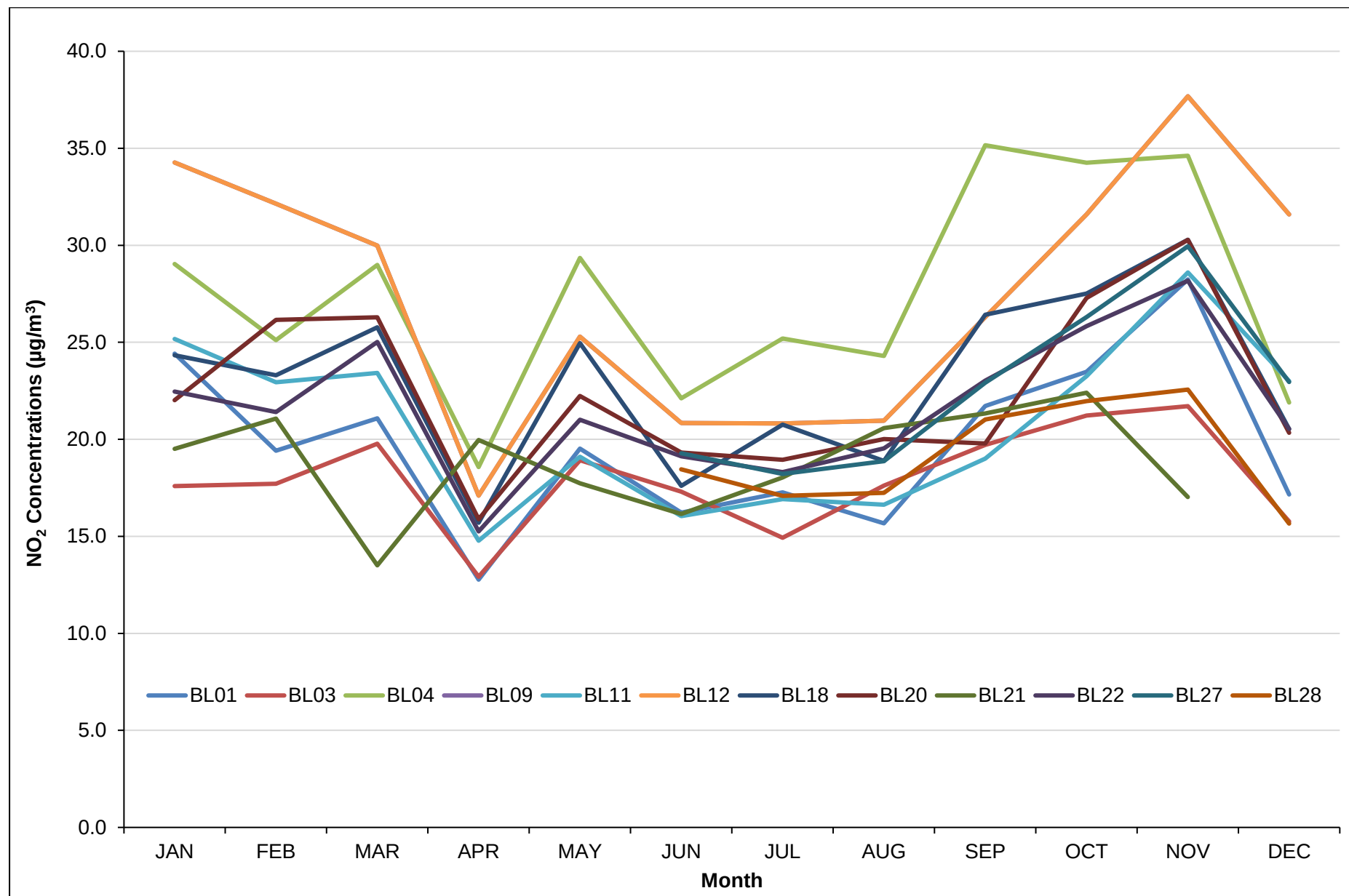


Figure 17: Breathe London Monthly Average PM_{2.5} Concentrations – Roadside

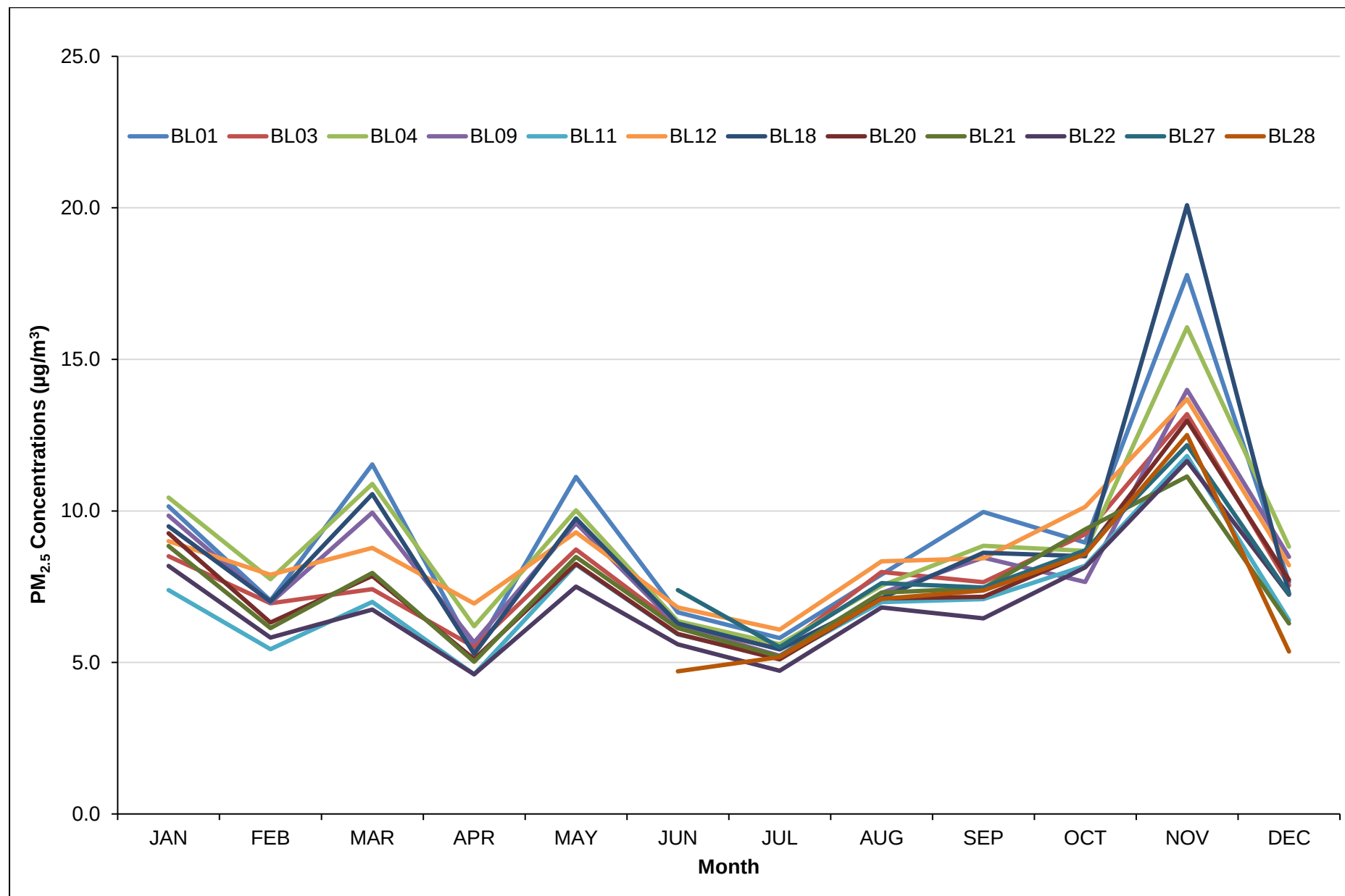


Figure 18: Breathe London Monthly Average NO₂ Concentrations – Background

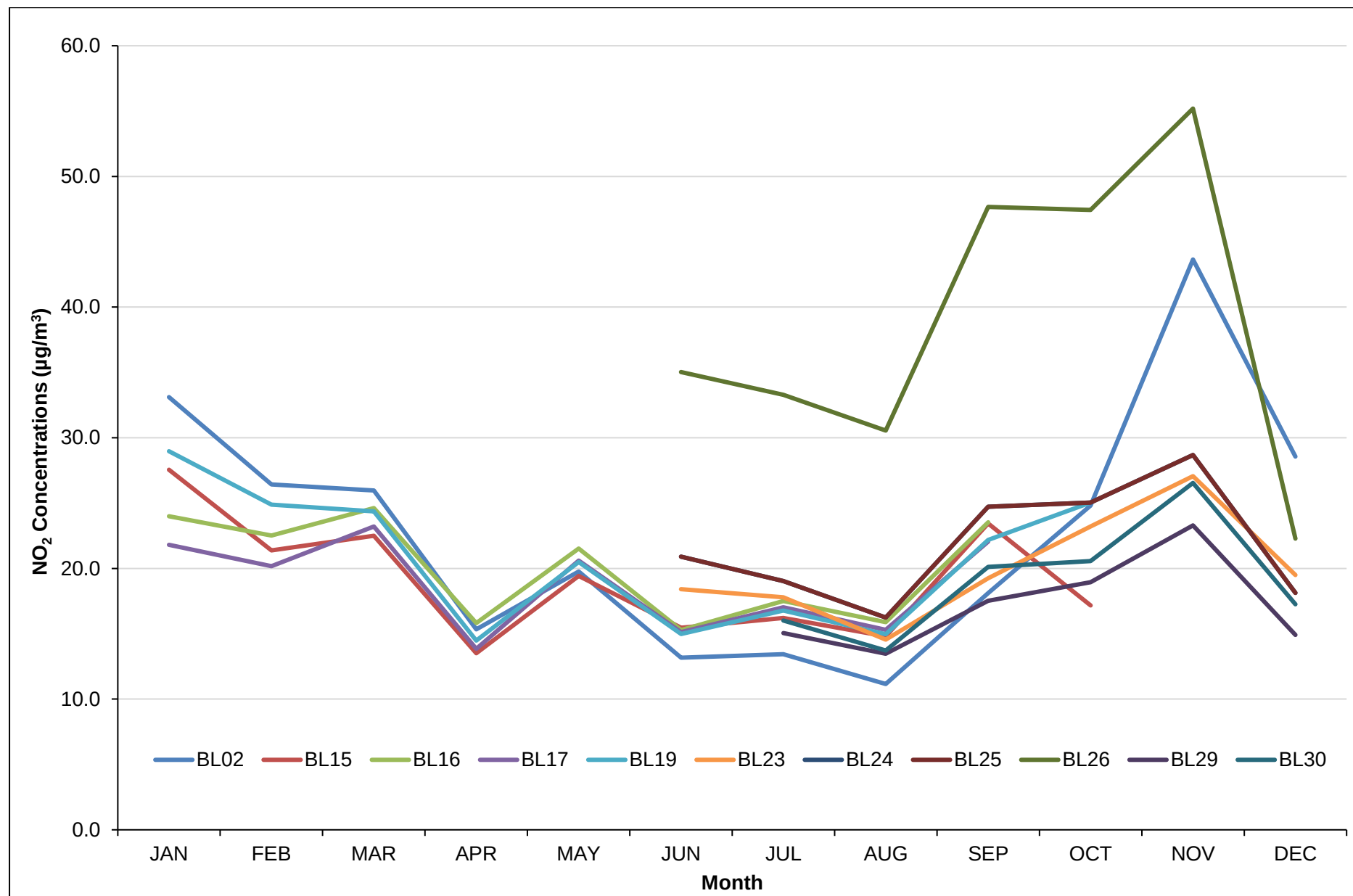


Figure 19: Breathe London Monthly Average PM_{2.5} Concentrations – Background

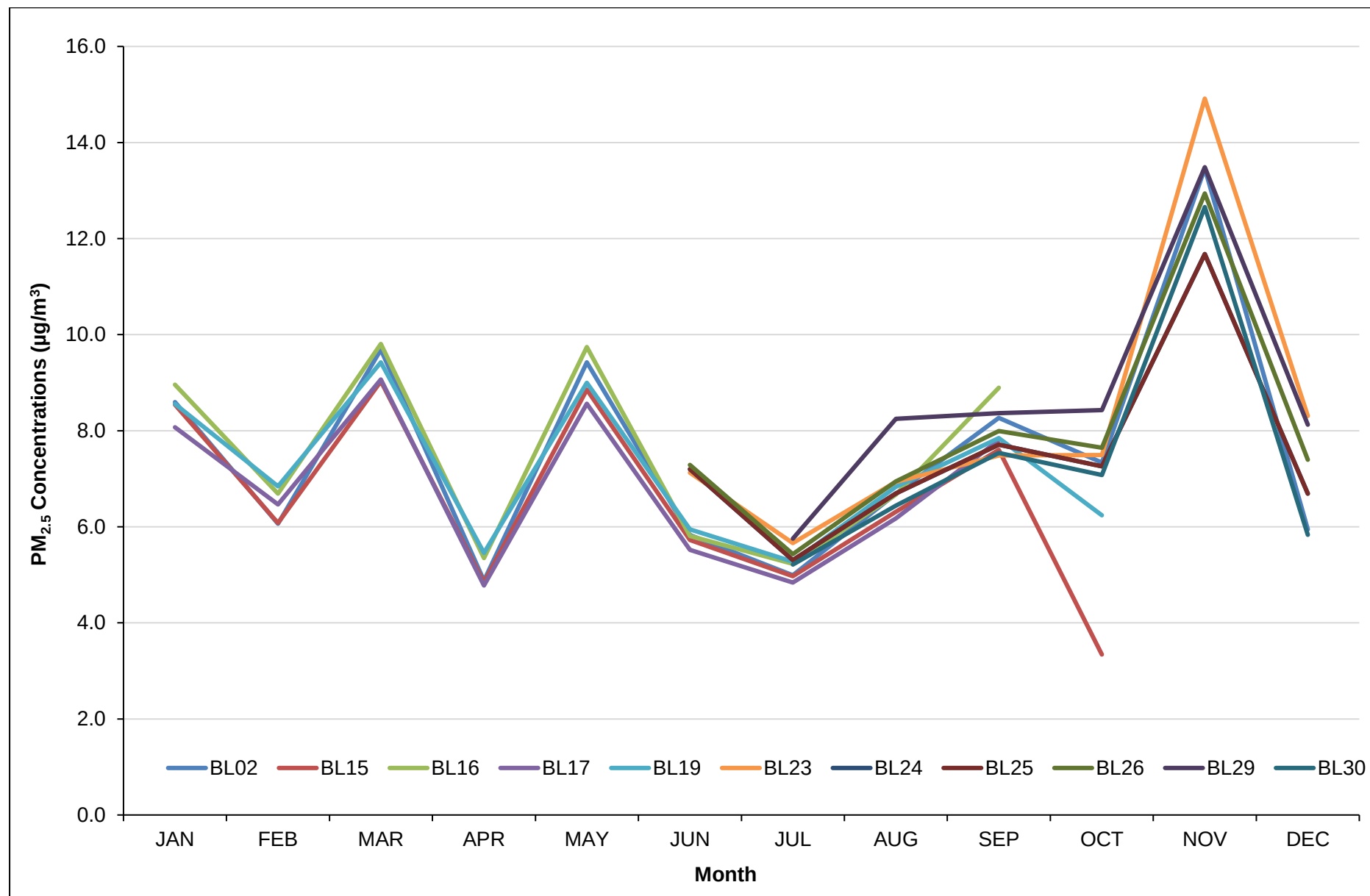


Figure 20: KCM03 & KCM04 Monthly Average NO₂ Concentrations

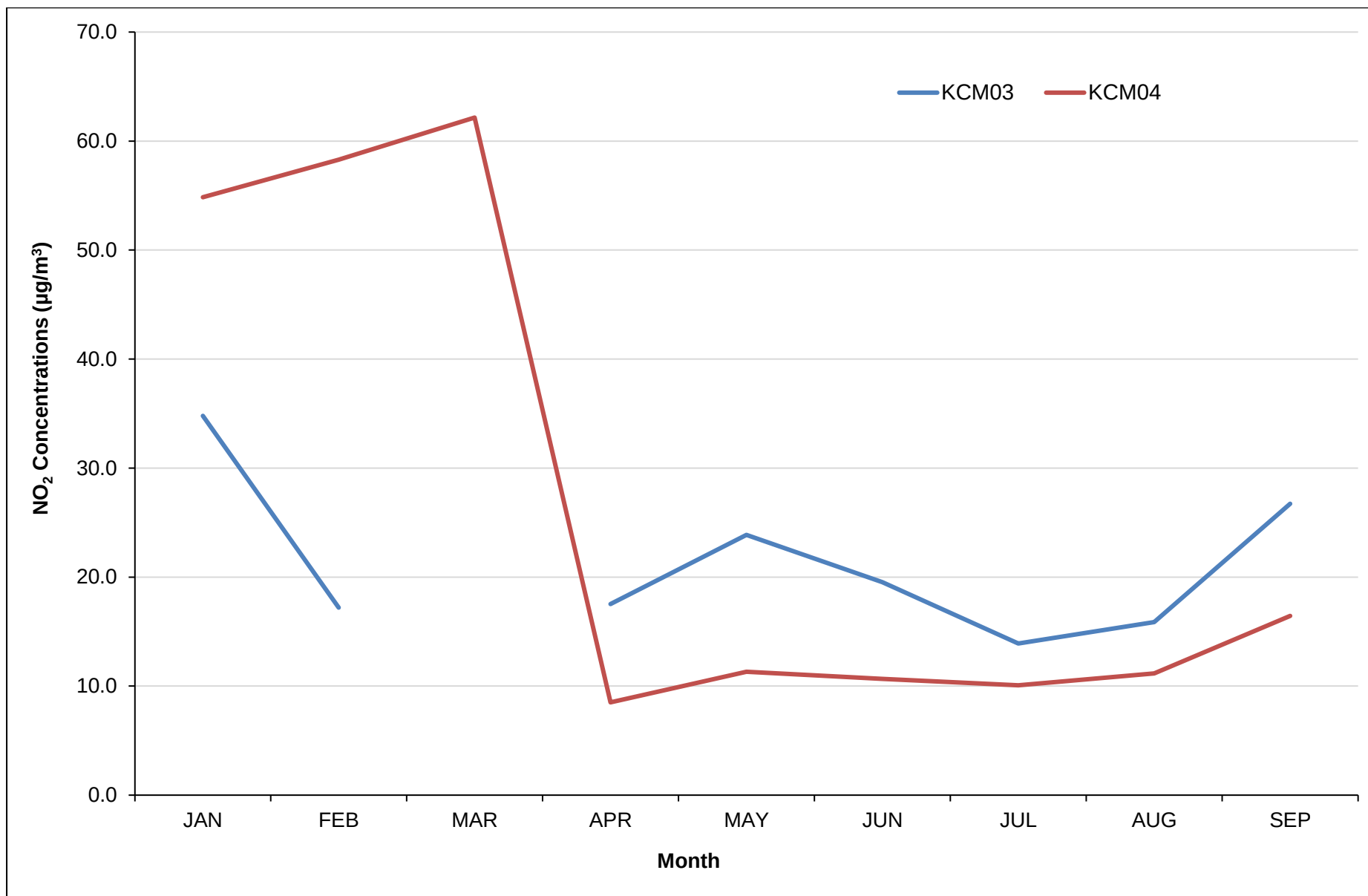


Figure 21: KCM03 & KCM04 Monthly Average PM₁₀ Concentrations

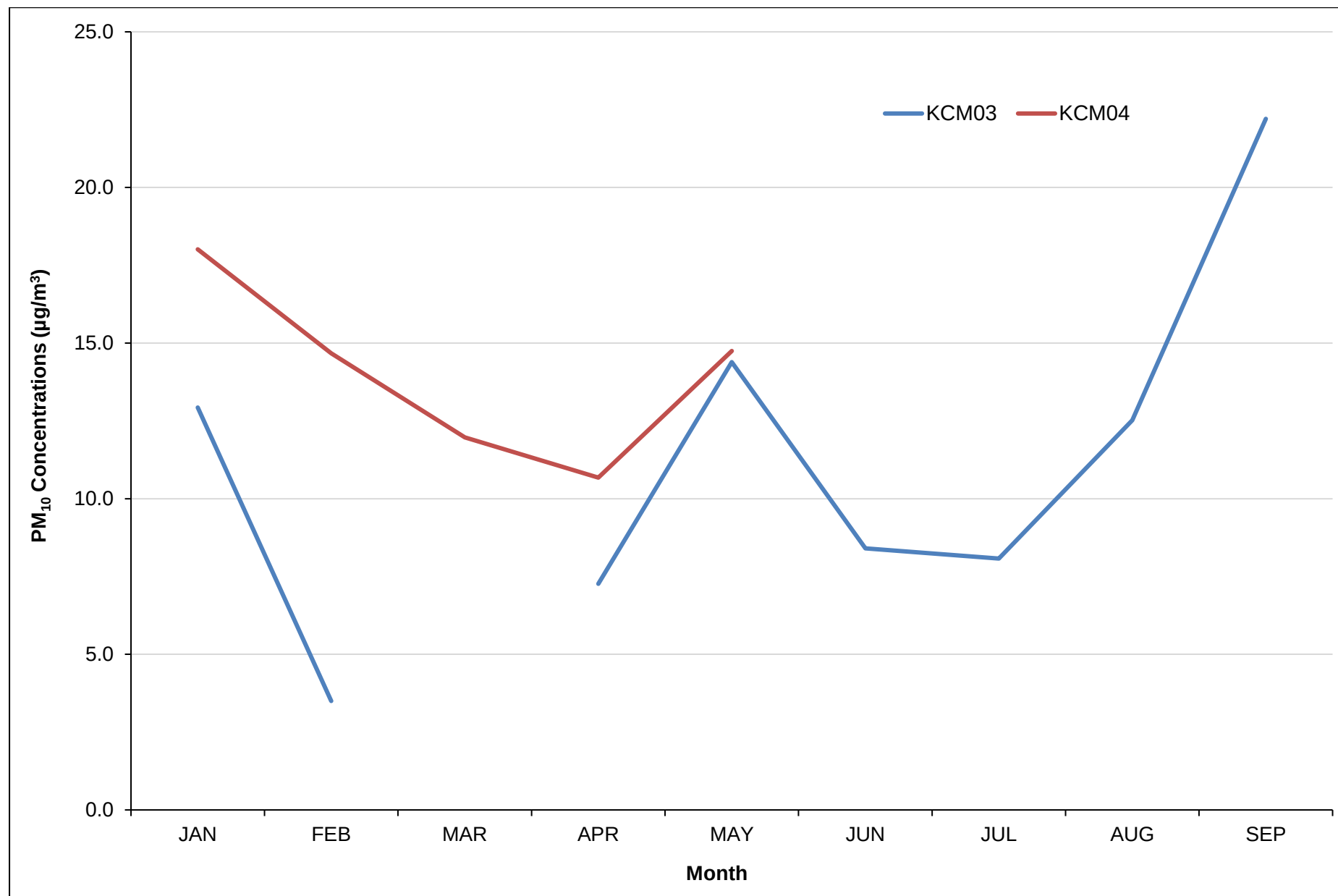
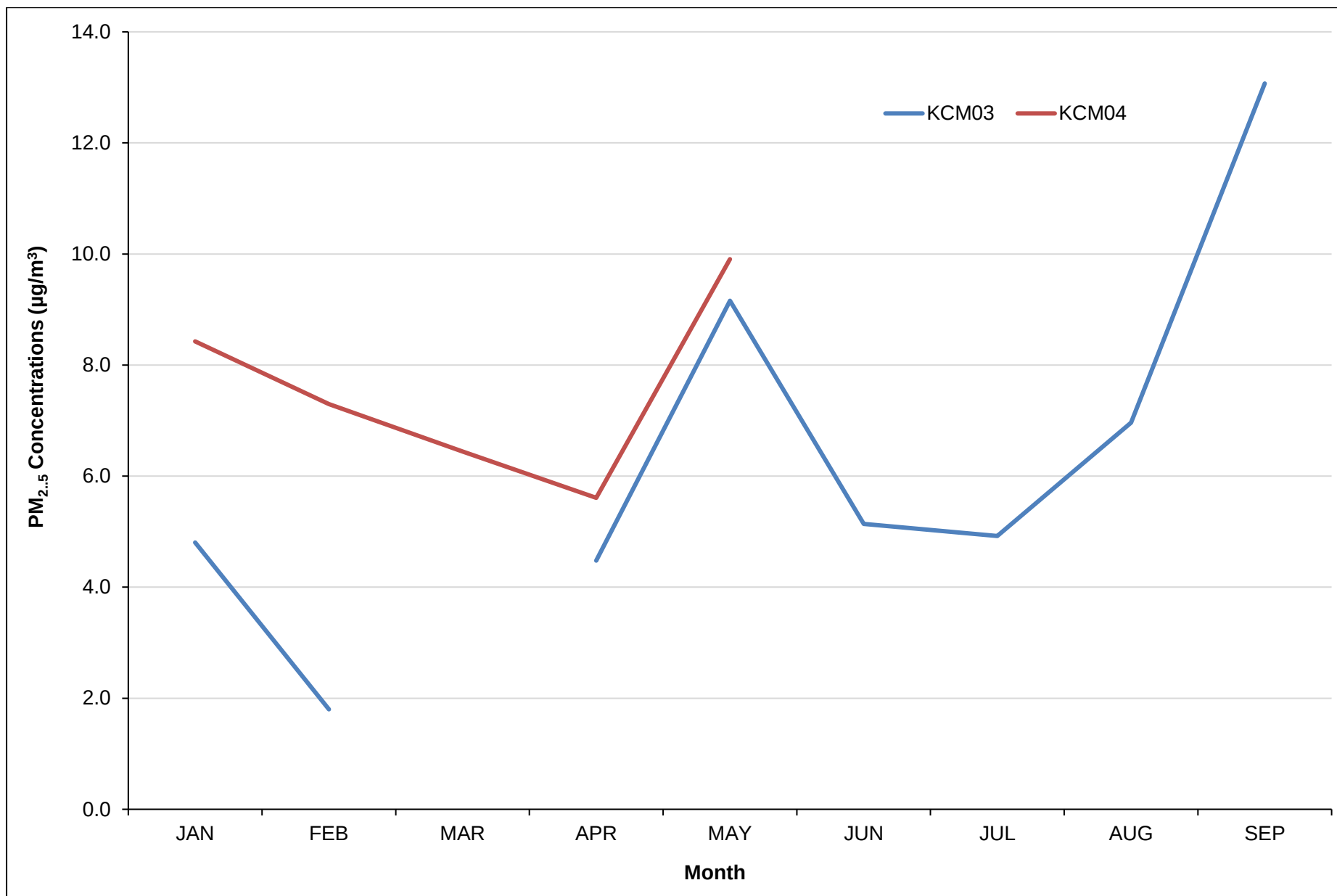


Figure 22: KCM03 & KCM04 Monthly Average PM_{2.5} Concentrations



2. Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMA) 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 the Council can be found in Table 22. The table presents a description of the boroughwide AQMA that is currently designated within Kensington and Chelsea. Figure C4 in Appendix C provides a map of the AQMA (entire borough) and also the air quality monitoring locations within GLA Focus Areas. The air quality objectives pertinent to the current AQMA designation are as follows:

- 01/11/2000, Particulate Matter PM₁₀ – Annual Mean and 24-Hour Mean
- 01/11/2000, Nitrogen Dioxide NO₂ – Annual Mean and 1-Hour Mean

Table 22: Declared Air Quality Management Areas

AQMA Name:	Kensington and Chelsea AQMA		
Declaration Date:	01/11/2000		
Pollutants & NAQO's:	Nitrogen Dioxide (NO ₂) 1 Hour Mean		
	Nitrogen Dioxide (NO ₂) Annual Mean		
	Particulate Matter (PM ₁₀) 24 Hour		
	Particulate Matter (PM ₁₀) Annual Mean		
Description:	Boroughwide. Source: Road Transport (unspecified).		
Is the Air Quality in the AQMA influenced by roads controlled by Highways England?	No		
Level of NO₂ Exceedance: Declaration	Level of NO₂ Exceedance: Current Year	Level of PM₁₀ Exceedance: Declaration	Level of PM₁₀ Exceedance: Current Year
KC1: 40 µg/m ³ KC2: 88 µg/m ³ KC3: 75 µg/m ³ KC4: 86 µg/m ³ KC5: Not Operational	KC1: 16 µg/m ³ KC2: 27 µg/m ³ KC3: 29 µg/m ³ KC4: 31 µg/m ³ KC5: 33 µg/m ³	KC1: 26 µg/m ³ KC2: 35 µg/m ³ KC5: Not Operational	KC1: 12 µg/m ³ KC2: 13 µg/m ³ KC5: 19 µg/m ³
Number of Years Compliant with NO₂ Air Quality Objectives		Number of Years Compliant with PM₁₀ Air Quality Objectives	
KC1: 5+ Years KC2: 5 Years KC3: 5 Years KC4: 4 Years KC5: 2 Years		KC1: 5+ Years KC2: 5+ Years KC3: 5+ Years	
Name & Date of AQAP Publication	Air Quality Action Plan 2022-2027, April 2022		
Web Link to AQAP	https://www.rbkc.gov.uk/environment/air-quality/air-quality-action-plan-2022-2027		

☒ Kensington and Chelsea confirm the information on UK-Air regarding their AQMA(s) is up to date.

☒ Kensington and Chelsea confirm that all current AQAPs have been submitted to GLA.

2.2 Air Quality Action Plan Progress

The Council's Air Quality Action Plan (AQAP) was adopted in 2022. The next iteration is due to be produced for consultation in 2027 and will detail how the Council will continue to strive for better air quality over the next 5-year period (2028-2033).

Error! Reference source not found.23 provides a brief summary of Kensington and Chelsea's 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 24 contains the actions that have been completed.

Table 23: Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
E6	Emissions from Developments & Buildings	School and nursery air quality audits Undertake air quality audits for schools located in the worst areas of air quality. Identify and implement measures to improve air quality.		RBKC Pollution Regulatory Team, Sustainable Transport and Climate Change Teams Arup, Global Action Plan RBKC Schools and Nurseries	Arup, in partnership with Global Action Plan (GAP), started work on the Council's air quality audit programme in May 2024. Progress between then and the end of December 2024 is as follows: • 10 schools/nurseries were audited. • 8 audit reports were drafted by Arup and reviewed by the Council. • Hosted by GAP, A 'All Hands' online engagement event took place with schools/nurseries in November to raise awareness of the project and the impact that poor air quality can have on health. • 1 in person school engagement event was held to raise awareness of the impacts of poor air quality and highlighting how to reduce exposure to it and steps individuals/school community can take to improve it. • 7 new air quality sensors were installed for a 12-month period and officers have produced quarterly

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					reports for each school that has a sensor, summarising the data. We are now working to arrange implementation of agreed recommendations, and further audits and engagement events have already been scheduled for 2025/26
T26	Cleaner Transport and Active Travel	Increase dockless e-bikes parking bays Identification of locations, consultation and implementation of dockless bicycle parking bays to make e-bikes more accessible to encourage increased use and help reduce footway obstructions caused by them.	Ongoing	RBKC's Transport Teams. Santander / Lime / Forest	In 2024, we identified 80 new rental e-bike parking bay locations and between March and April 2024 carried out a public consultation. In September, the Council confirmed it would be implementing 54 of the proposed rental e-bike parking bays Rental e-Bike Cycle Parking Bays (2024) - Kensington and Chelsea's Consultation and Engagement Hub - Citizen Space. 52 were installed in 2024, with the remainder to be installed in 2025. These additions bring the total number of bays provided for e-bike parking to 186 marked bays and 61 virtual bays. e-Bike suppliers have been providing ridership data since October 2023. Comparing October to December 2023 with October to December 2024 we see a 62 per cent increase in trips originating in the borough in the second period.
M3	Monitoring & Statutory Duties	Review opportunities for expanding the monitoring network Consider installation of additional fixed and mobile sensors, and work with community groups, residents,	Completed annually	RBKC's Pollution Regulatory Team GLA/Imperial College Breathe London Network	Twelve more Breathe London Nodes were installed across the borough, seven by RBKC in schools and nurseries, taking the total to 30 (at its peak). Data from these can be viewed on the Breathe London website: www.breathelondon.org

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		and schools to encourage undertaking their own monitoring.		RBKC schools and nurseries	A new reference grade ozone monitor was installed at our Cromwell Road Site (KC2) in 2024.
M1	Monitoring & Statutory Duties	Maintain Automatic Monitoring Network Continue to provide air quality pollutant monitoring across the borough via our five reference automatic monitoring stations and additional mobile sensors	Completed annually	RBKC's Pollution Regulatory Team Ricardo Enviro Technology	- Retained 100% of the automatic monitor network. - KC1 achieved an average data capture rate of 98% across all pollutants monitored. - KC2 achieved an average data capture rate of 99% across all pollutants monitored. - KC3 achieved an average data capture rate of 99% across all pollutants monitored. - KC4 achieved an average data capture rate of 99% across all pollutants monitored. - KC5 achieved an average data capture rate of 99% across all pollutants monitored.
M2	Monitoring & Statutory Duties	Maintain passive diffusion tube network Consider installation of additional fixed and mobile sensors, and work with community groups, residents, and schools to encourage undertaking their own monitoring.	Completed annually	RBKC's Pollution Regulatory Team Gradko	- Retained 100% of NO₂ diffusion tube network. - Diffusion tube sites achieved between 40% - 100% data capture rate across the 2024 monitoring period. Four tubes from Kensington High Street (with low data capture rates) were removed at the end of 2024 and new positions, elsewhere in the borough, will start in 2025. - Retained 100% BTEX diffusion tube network. - All 5 BTEX sites achieved a 100% data capture rate across the 2024 monitoring period.
M3	Monitoring & Statutory Duties	Review opportunities for expanding the monitoring network Consider installation of additional fixed and mobile sensors, and work with community groups, residents,	Completed annually	RBKC's Pollution Regulatory Team GLA/Imperial College Breathe London Network	Twelve more Breathe London Nodes were installed across the borough, seven by RBKC in schools and nurseries, taking the total to 30 (at its peak). Data from these can be viewed on the Breathe London website: www.breathelondon.org

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		and schools to encourage undertaking their own monitoring. Offer residents and community groups a chance to 'adopt a tube' to monitor nitrogen dioxide for a period of 12 months.		RBKC schools and nurseries	We have not yet been able to progress the adopt a tube scheme but still intend to look at this in 2025/6. A new reference grade ozone monitor was installed at our Cromwell Road Site (KC2) in 2024.
M4	Monitoring & Statutory Duties	Improve dissemination of data Update Council's website to provide overview and links to all air quality data, including Air Quality England and Breathe London.	Completed annually	RBKC's Pollution Regulatory and Tech Hub Teams Global Action Plan.	A review of Council air quality web pages has been undertaken. The air quality monitoring pages have been updated https://www.rbkc.gov.uk/environment/air-quality/air-quality-monitoring Further amendments will be completed as required. Through our air quality audit programme (see Action E6), for those schools who have a Breathe London sensor installed, we email quarterly reports to the schools/nurseries to summarise and explain the data inviting feedback and opportunity to have reports tailored for individual school needs. In addition, Global Action Plan discuss air quality monitoring data as part of the school engagement event.
M5	Monitoring & Statutory Duties	Statutory Reporting Produce an Annual Status Report for approval by DEFRA and the GLA and update on implementation of actions within this plan.	Completed annually	Multiple teams across the Council including the Pollution Regulatory Team, Sustainable Transport, Climate Change, Public Health	The Annual Status Reports are submitted to the GLA every May for review and comment. The 2023 ASR was submitted in May 2024. Upon publication they can be viewed on the Council's website: https://www.rbkc.gov.uk/environment/air-quality/air-quality-reports-and-documents

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
				and Lancaster West Team	
P1	Public Health & Awareness Raising	Promotion of existing air quality messaging services The Council subscribes to the AirTEXT messaging service. It will continue to subscribe and promote this and other schemes that are available, including CityAir, until such time that a more streamlined, tailored system can be implemented.	Subscription currently renewed annually	RBKC's Pollution Regulatory and Public Health Teams AirTEXT	At the end of 2024, RBKC had 445 active airTEXT subscribers, a net increase of 13 subscribers. There were 7 alert days, and 2,211 alert messages were sent by text, email or voicemail. It is understood that further improvements to the AirTEXT scheme are expected and will be presented to the consortium in 2025. The Council is also considering other alternatives.
P2	Public Health & Awareness Raising	Develop air quality messaging service Review existing awareness services and identify cost-effective options for reaching out to vulnerable groups and delivering appropriate action-orientated messages.	Adoption of new data platform by Dec 2025.	RBKC's Pollution Regulatory & Public Health Teams	It has not yet been possible to commence this review. Linked with action M4, the Council is currently considering whether to proceed with a new online data platform to amalgamate all of its air quality information to reduce the number of different websites that residents, students and consultants currently have to visit to obtain air quality data for the borough. It has spent the last few months reviewing systems that already exist and is in the process of deciding which one to proceed with.
P3	Public Health & Awareness Raising	Develop and embed alert service Ensure air quality alerts are disseminated to schools, NHS colleagues, and other interested parties.	Ongoing.	RBKC's Pollution Regulatory & Public Health Teams Greater London Authority / Mayor of London	As was reported last year, the NHS and Mayor of London has expanded its alert system and is automatically notifying healthcare professionals when air pollution is predicted to be high. Alerts from the Mayor of London continue to be sent to schools. Separately, the Pollution Team alerts colleagues in the Council's Public Health Team and Media and Comms Team.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
P4	Public Health & Awareness Raising	Increase awareness among NHS colleagues about the impact of air pollution on health Consult GPs to determine knowledge and data gaps and tailor information to support advice that can be provided to vulnerable patients and visitors to GPs and hospitals.	By March 2026	RBKC's Pollution Regulatory & Public Health Teams	Information about the Mayor of London's cascade system for healthcare professionals continues to be shared with public health colleagues who have also cascaded the information within their channels to raise awareness. Further work with GPs is required to understand if this information is sufficient for their needs.
P5	Public Health & Awareness Raising	Sense check Review of public health actions to identify progress and issues that have arisen – update to be published on Council website.	December 2026	RBKC's Pollution Regulatory & Public Health Teams	To be published once the school air quality audits and other public health projects have progressed further, towards the conclusion of this Plan.
P6	Public Health & Awareness Raising	Promotion of clean air walking and cycling routes Reduce the need for cars by promoting and making active travel such as walking, cycling, and public transport accessible and enjoyable. Update Council website and carry out more frequent promotion of schemes like Walk-It, CRPs, Clean Air Walking Routes, https://footways.london/ and RBKC's own walking tourist map.	Ongoing	RBKC's Pollution Regulatory and Sustainable Transport Teams. RBKC schools and nurseries Arup	We continue to promote clean air route mapping for walking and cycling routes to schools. Arup, who is completing air quality audits at our schools and nurseries has its own tool (Staterra) which assigns air quality scores to roads based on the volume of traffic. Internal local roads, for example, receive better air quality scores because they have less traffic, while busier through roads with higher volume of traffic, are assigned lower air quality scores. Global Action plan, highlight these routes during the engagement workshop to teachers and children who are encouraged to pass the information on to parents.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
P7	Public Health & Awareness Raising	Cycleways Map Production of an online Cycleways map.	Completed in 2023.	RBKC's Sustainable Travel & Tech Hub Teams	Completed. Map is available at: https://www.rbkc.gov.uk/parking-transport-and-streets/cycling-and-walking/cycle-routes .
P8	Public Health & Awareness Raising	Promotion of smoking cessation to reduce smoking at home and the impact on indoor air quality Delivery of smoking cessation sessions in schools. One You in the Community to reduce domestic smoking in the home, including the collection of smoke-free home pledges.	Completed annually	RBKC's Public Health Team	In 2024, 772 smokefree homes pledges were made and 712 people confirmed they had quit smoking in RBKC.
P9	Public Health & Awareness Raising	Support initiatives to improve indoor air quality Update web page to incorporate new NICE guidelines and produce new leaflet on indoor air quality.	Website updated; new leaflet due by August 2025.	RBKC's Pollution Regulatory, Tech Hub, Media & Comms and Design Teams	The information about indoor air quality on the Council's website has been updated and be accessed here . A new leaflet has been drafted and is in the process of being designed for use in 2025.
	Public Health & Awareness Raising	Support initiatives to improve indoor air quality Ensure health visitors and other Council officers are aware so information can be shared with those they visit.	Currently underway	RBKC's Pollution Regulatory Team, Public Health Team and Lancaster West Teams	The Lancaster West Team continues to offer residents (via the Green Skills Academy Equipment Library) living in any part of the borough the opportunity to borrow an indoor air quality sensor for a period of one month to help residents see how air quality changes within their homes to help identify a cause. The form is available here . Through the Future Neighbourhoods Programme, we had intended to address indoor air quality in schools in

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					the north of the borough who are part of this programme. However, this work is now being tied in with the GLA's filter programme so as resources were not duplicated.
P10	Public Health & Awareness Raising	Discourage burning of logs and house coal Launch an initial publicity drive backed up by yearly campaigns to highlight pollution caused by burning non-smokeless fuels in household fireplaces, with enforcement for persistent offenders. Engage GPs and other health visitors so they are also equipped to provide advice.	Currently underway	RBKC's Pollution Regulatory, Noise & Nuisance and Trading Standards Teams. LB Camden along with 19 other London Boroughs and the GLA.	The Council remains a member of the London Wood Burning Group and has attended regular steering group meetings and contributed to three subgroups (on training, data gathering and leaflets and notices). We have assisted with drafting information and warning letters and contributed to the specification used to procure the training provider who delivered training relating to enforcement of the Clean Air Act to council officers across London. We also contributed to the content and design of a new leaflet which will be available in 2025 to provide information about relevant legislation and the financial penalties which exist for producing smoke from a chimney. Through the group, there has been a campaign to advertise the impact of wood burning, using radio, buses and posters. 7 Officers from RBKC also attended the Clean Air Act training enforcement sessions.
P11	Public Health & Awareness Raising	Engagement with Canal and Rivers Trust and canal boat owners Evidence of wood burning in canal boats, so there is a need for engagement to see if there is scope to convert to electric.	Currently underway	Approximately 14 London Boroughs are members of the project.	In 2024, RBKC joined the Healthy Waterways project which aims to raise awareness among the boat dwellers across London on health impacts of air pollution and barriers they face to switch from fossil fuels. A questionnaire has been designed with the input of all participating boroughs and the survey will be carried out in 2025. As part of preparation, the Council visited the river and canal side of the borough to better understand where the boats are located and how many there are.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
P12	Public Health & Awareness Raising	Support NHS colleagues with audits in hospitals Provide guidance to hospitals on completing audits and developing action plans to reduce their own emissions and exposure to air pollution.	This will not start until 2027	RBKC's Pollution Regulatory and Public Health Teams.	The Council is currently focussed on progressing air quality audits in its nurseries and schools but intends to move on to hospitals once these are further ahead.
P13	Public Health & Awareness Raising	Combined sustainability leaflet Production of combined sustainability leaflet/booklet centred on key information and actions around the five priorities of Green Plan (air quality, climate change, biodiversity, fuel poverty, and waste) for residents and businesses. Ensure Council website on different areas of sustainability is more joined up and becomes an information hub for residents, students, businesses, and other organisations.	Ongoing	RBKC's Climate Change Team. The GLA.	The sustainability booklet remains in draft format. In 2024, research and preparation took place for our new climate change and energy efficient grants, which will be awarded in 2025, as part of Phase 3 of the Future Neighbourhoods 2030 programme. The grants will be offered to support community centres, libraries, leisure centres, places of worship, and micro, small, and medium-sized businesses (SMEs) in Notting Dale. These grants (funded by the Mayor of London) will help organisations reduce energy costs and use, cut emissions, improve building efficiency, and support climate adaptation and resilience; and create warmer, more sustainable spaces for residents to help meet the 2030 and 2040 carbon targets. The GLA are providing £45,000 for community centres and £26,000 for SMEs, offering grants between £500 and £3,000, with up to £5,000 available for community hubs. Eligible projects will include:

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					• Energy efficiency upgrades – LED lighting, insulation, draught-proofing, smart thermostats, double glazing, ventilation systems etc. • Renewable energy – Solar PV, heat pumps • Sustainable transport – E-cargo bikes, EV charging points • Sustainable business practices – Low-carbon supply chains, climate adaptation strategies • Climate adaptation and resilience measures e.g. SuDS, tree planting, permeable streets etc.
P14	Public Health & Awareness Raising	Training for Council staff Deliver training to Council staff so there is a baseline of knowledge about monitoring, what powers the Council has to improve air quality, and what actions individuals can take.	Training takes place annually.	Multiple teams across the Council: Pollution Regulatory, Ecology Service, Climate Change Team, and Planning.	Officers from the Noise and Nuisance Team and Pollution Regulatory Team attended training arranged by the London Wood Burning Group to understand about enforcement powers available to local authorities and appropriate action if someone releases smoke from their chimney. Planning colleagues have been trained on how to review energy assessments for major developments both residential and commercial. In November, The Ecology Team delivered three Biodiversity Net Gain refresher training courses for all Planning Development Control Management and Spatial Planning Officers (30).
T1	Cleaner Transport & Active Travel	Reduction in Council fleet operation emissions and for fleets of Council contractors	Ongoing	RBKC's Fleet Management Service and Climate Change Team.	There are currently 126 vehicles in total within the RBKC fleet (including Housing), out of which 20 are fully electric and 70 are hybrid vehicles. In total fully electric and hybrid vehicles now represent 71% of the total fleet, compared to 29% in 2023. The fleet will further reduce its number of

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		Subject to operational requirements, work towards 100 per cent of owned or leased Council vehicles being electric or hybrid by 2027 and ensure infrastructure (charging points) is in place to support this (see also action T14a and T14b). Reduce the size and number of vehicles in the Council fleet. Reduce fuel consumption and miles by assessing service delivery and operations. Replace car journeys with bike journeys where possible. Continue to deliver eco driving training for all Council staff and contracted drivers on a regular basis and embed the anti-idling advice. Ensure all Council contractors use electric or hybrid vehicles by 2027.			fossil fuelled vehicles, with 8 being replaced by plug in hybrid vehicles by the end of 2026. In 2024, the Climate Change Team commissioned Aether consultants to analyse the Council's carbon performance since the 2018/19 baseline year, for the past five years for both in-house and borough-wide emissions. A Carbon Performance Report has been produced. According to the latest GHG emissions inventory and carbon performance data, in 2022/2023 the Council emitted 36 ktCO₂e through its operations and estates, representing an 11 per cent reduction in emissions since the 2018/2019 baseline year. Transport produced 0.5 per cent of Council emissions (0.2ktCO₂e). These are emissions from business travels, contractors and Council fleet.
T2	Cleaner Transport & Active Travel	Implementation of travel hierarchy across the Council to encourage active travel Implement the Council's travel hierarchy and avoid business travel/journeys where possible (digital-by-default).	Ongoing	RBKC's Climate Change Team	The Council purchased five electrical assisted bikes for the Waste Action and Street Enforcement Teams in 2024. The aim is to expand this further across the Council. We have also drafted a proposal to re-launch the pool bike scheme at the Pembroke Road Council office and launch a new scheme at Kensington Town Hall.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		Develop costed proposals to establish a Council-wide pool bike service, including electric bikes (or use of existing e-bike hire schemes).			
T3	Cleaner Transport & Active Travel	Grey Fleet Review Review grey fleet and encourage staff members using personal vehicles (grey fleet) to switch towards using electric vehicles and public transport.	Towards the end of 2025	RBKC's Climate Change Team	A grey fleet draft strategy has been produced and requires internal sign off and approval.
T4	Cleaner Transport & Active Travel	Cleaner Transport provision within Procurement Ensure cleaner transport provisions become standard in any Council procurement and lease process. All departments to comply with the vehicle procurement process chart and adopt the travel hierarchy outlined in the Council's Green Fleet Strategy and Action Plan.	Effectively complete, but ongoing.	RBKC's Climate Change Team and Fleet Management.	An 'environmental' section has been introduced in the Sourcing Strategy template which has to be completed for all new contracts. The Climate Change Team is now one of the consultees of the Commercial Assurance Panel where all major contracts and papers are discussed. In addition, in 2024, a new contract was procured for the Council's vehicle fleet with includes a variety of electric vehicles.
T5	Cleaner Transport & Active Travel	Bike by Default Require zero emission, electric, or hybrid vehicles as a default for any courier or taxi bookings for people or deliveries.	To re-start in 2025	Lead by RBKC's Climate Change Team involving representatives from across the Council.	The Council will re-launch its own Green Champions scheme in May 2025 (for Council officers) and one of the key activities will be to promote sustainable transport for deliveries, couriers, events etc.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		Promotion of services such as 'Pedal Me'.			
T6a	Cleaner Transport & Active Travel	Cycle Training Cycling lessons for children and adults to learn to ride safely and increase confidence.	Ongoing	RBKC's Leisure and Sports Team	1,359 lessons were provided to adults and children in 2024.
T6b	Cleaner Transport & Active Travel	Cycle Training Re-start the Council's award-winning Social Cycling programme for two days per week, focusing on the harder to reach communities.	Ongoing	RBKC's Leisure and Sports Team	73 all ability sessions were held with 677 participants - every Friday and alternate Saturdays. The inclusive cycling All Ability Club, at Little Wormwood Scrubs provides access to cycling, from a fleet of specialist cycles delivered by an experienced team. Cycle Connect is an inclusive transport service focused on providing equitable access to active travel for disabled people, people with health conditions, isolated individuals, people with restricted mobility, and older adults. In 2024, there were 301 participants. The service closed end of the year and requires additional funding for 2025.
T7	Cleaner Transport & Active Travel	Dr Bike Surgeries Maintain our popular monthly public 'Dr Bike' surgeries once a month at three locations across the borough.	Ongoing	RBKC's Sustainable Transport Team	43 Dr Bike sessions were held, servicing 414 bikes.
T8	Cleaner Transport & Active Travel	Increase bike parking and tree planting	Ongoing	RBKC's Sustainable Transport Team	No progress was made with bike hangars. However, 66 parking bays were converted to on-street parking for rental e-bikes.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		Remove parking bays and replace with cycle hangars and trees.			
T9	Cleaner Transport & Active Travel	Install additional cycle parking Provision of secure visitor cycle parking.	Cannot be confirmed	RBKC's Sustainable Transport Team	No progress in 2024
T10	Cleaner Transport & Active Travel	Build on existing programme of school streets Continue to work with existing school streets and identify future streets.	Ongoing	RBKC's Sustainable Transport Team	No new School Streets implemented. Consultation on School Streets in St Albans Grove and Pembridge Square due to take place in 2025.
T11	Cleaner Transport & Active Travel	Promotion of STARS school travel plans Continue to work with schools to promote and implement school travel plans.	Ongoing	RBKC's Sustainable Transport Team	Accreditation is awarded in September - in Sept 2024, 9 schools achieved Gold accreditation, 2 at Silver and 4 at Bronze. These figures apply to the 2023-24 school year. More schools are now working towards an accreditation.
T12	20 mph borough	20 mph borough Review experimental 20 mph scheme to decide whether it will become permanent.	Completed in 2024	RBKC's Transportation & Highways Teams GLA TfL	The 20mph speed limit covers all borough managed roads. The only remaining 30mph limits in Kensington and Chelsea are on some of the Red Routes, which are managed by Transport for London (TfL). The section of Earl's Court Road between the West Cromwell Road and Old Brompton Road and Chelsea Embankment are also subject to a 20mph limit and TfL has announced plans to introduce 20mph limits on other parts of its network in Kensington and Chelsea.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
T13	Cleaner Transport & Active Travel	Work towards no diesel cars parked on our roads by 2030 April 2021 saw the introduction of new fees with the lowest charges applied to zero and low emission vehicles. We now wish to consider and consult on taking this further by potentially phasing out diesel permits and on street visitor parking for diesel cars by 2030.	-	-	As per last years' update, this action will not be implemented as it is no longer supported by the Council.
T14a	Cleaner Transport & Active Travel	Review the provision of electric charging across the borough Investigate the most cost-effective method to enable expansion of rapid charging points across the borough by encouraging TfL to make timely progress on securing a new procurement framework through Crown Commercial Services, from which boroughs will be able to call off contracts.	Underway	RBKC's Sustainable Transport Team	Further work completed to establish that procurement for new Rapid chargers can be undertaken through the London Councils Dynamic Purchasing System. LEVI funding bid submitted in full by end of 2024, but final funding decision has not yet been received.
T14b	Cleaner Transport & Active Travel	Review the provision of electric charging across the borough Expand network of slow and fast chargers to meet increasing demand.	Ongoing	RBKC's Transport Policy Team	30 fast chargers were installed in 2024 which expanded the Network to 921 total slow and fast chargers (with another 42 authorised and ready to be installed in Spring 2025).

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
T15	Cleaner Transport & Active Travel	Participation in the e-scooter trial and review of success Expand network of e-scooter parking bays.	Completed in 2022	RBKC's Sustainable Transport Team	This action was completed in 2022 with the implementation of 15 new rental e-scooter bays, bringing the total capacity to 33 bays. There are no further plans to increase these.
T16	Cleaner Transport & Active Travel	Continue to take action to reduce idling engines • Contribute to the pan-London Idling Action London campaign. • Respond to complaints, erect signs, and take enforcement action when appropriate. • Engage with schools and fleets to incite behavioural change. • Community events to target idling hotspots. • Record the number of interactions the enforcement teams have with idling drivers. Ensure all frontline enforcement teams tackle idling drivers.	Ongoing	RBKC's Pollution Regulatory Team, Parking Enforcement Officers and Street Enforcement Team.	The Council is part of the part of the pan-London Idling Action London campaign, attending quarterly steering group meetings and contributing to the policy, guidance and enforcement improvement workstream. In 2024, Parking Civil Enforcement Officers issued 207 leaflets to drivers about idling. The Street Enforcement Team, alongside the 'My Local Bobby Scheme' recorded 524 idling engine service requests and of these there were 464 interventions with drivers who were asked to cease idling. No FPNs were issued as all drivers ceased to idle. Officers received and responded to 11 requests for signage.
T17	Cleaner Transport & Active Travel	Continue to support the Mayor of London with the implementation of the extension of the Ultra-Low Emission Zone Monitor the impact of the ULEZ and assist with signage.	Completed in 2023	GLA RBKC's Transport, Pollution Regulatory Teams	To help clean London's air, the ULEZ was expanded on 29 August 2023 to cover all London boroughs.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
T18	Cleaner Transport & Active Travel	Protection of bus services Seek to protect all bus services in the borough and work with TfL to support their programme of upgrades for buses and rapid electrification of the fleet.	Ongoing	RBKC's Transport Policy Team	TfL consulted on changes to two services in 2024 (removal of route 414, and changes to route 452 that would shorten the route). RBKC formally objected to both, however TfL have decided to remove route 414. Decision on proposals for 452 is pending.
T19	Cleaner Transport & Active Travel	Assess impact on air quality of any major transport and public realm scheme implemented Consider impacts prior to implementation and monitoring while in place before making further decisions about whether they should be continued. Incorporate greening and planting where possible.	Ongoing	RBKC's Transport Planning Team	All of the Council's schemes seek to increase the street space available to pedestrians and to increase the separation distances between emitters (vehicles) and receptors (peds). The design of Sloane Street, Basil Street and Hollywood Road public realm schemes (all completed in 2024) were informed by air quality considerations.
T20a	Cleaner Transport & Active Travel	Ensure assessment of new developments Ensure Local Plan Review contains suitable policies to enable delivery of car-free developments and appropriate cycle parking, for example new developments have secure parking facilities for non-standard cycles, cargo bikes, hand carts, and visitor cycle bays and rapid charging points where possible.	Ongoing	RBKC's Transport Policy Team	The new Local Plan was adopted in July 2024. The plan includes transport policies to support active travel, cycle parking provision, and the effective management of car parking supply and demand. All parking spaces within new development are to be equipped with electric vehicle charging points. These policies were informed by the need to improve air quality in the borough and this AQAP.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
T20b	Cleaner Transport & Active Travel	Ensure assessment of new developments Require developments to increase the use of the river for movements of construction and waste. Require car-free developments in accordance with the London Plan.	Ongoing	RBKC's Transport Policy and Planning Teams.	Use of canal to remove materials from the Kensal Canalside Opportunity Area is being investigated. The new Local Plan policies are consistent with the London Plan. The Lead Member considers that some car parking should be provided with new development, and he has asked for the relevant policies to be applied accordingly.
T21	Cleaner Transport & Active Travel	Support businesses to reduce their emissions from deliveries Develop Environmental Charter for businesses.	Ongoing	RBKC's Climate Change Team GLA Local businesses in Notting Dale.	The Council has secured a total of £26,000 through the Mayor of London's Future Neighbourhoods 2030 programme (Phase 3) to support local businesses in Notting Dale with energy efficiency grants. The GLA grant agreement has been signed in 2024 for Phase 3 Future Neighbourhoods. In 2025, the Council will be offering change and energy efficiency grants for small and medium-sized enterprises (SME), social enterprises, commercial landlords and landlords with SMEs tenants in Notting Dale to implement energy efficiency measures and solutions. All information will be uploaded here https://storymaps.arcgis.com/stories/807cd8fa79934f67a14cda4d18b4454c. See response to P13 for further information. In 2022 (latest data available for the borough), the commercial and industrial sectors accounted for 48.5% of carbon emissions in the Borough. Therefore, improving energy efficiency within these industries could significantly reduce overall emissions and support the

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					Council's ambitious goal of becoming a carbon neutral borough by 2040.
T22	Cleaner Transport & Active Travel	Carry out study into post Covid-19 travel patterns We have commissioned the Centre for London to work with academic partners to investigate likely post Covid travel patterns and how we can best support active travel on our streets, including Kensington High Street.	Completed in 2023.	RBKC's Transport Teams	The research found that air travel, public transport ridership and office working are all still lower than before the Covid 19 pandemic. It also found that in Kensington and Chelsea 79 per cent of trips are made by residents are made on public transport, walking or cycling.
T23	Cleaner Transport & Active Travel	Upgrade existing cycle routes Upgrade existing routes to provide higher levels of service and improved public realm.	Ongoing	RBKC's Transport Teams.	Upgrade at junction of Courtfield Road/Ashburn Place was completed. Upgrades at Harrington Road/Ashburn Place and Old Brompton Road are due to go to site in 2025.
T24	Cleaner Transport & Active Travel	Modal filters for traffic segregation Consider installation of modal filters to facilitate traffic restrictions or segregation where research or evidence suggests benefits.	Ongoing	RBKC's Transport Teams.	A modal filter was installed at the northern end of Draycott Place.
T25	Cleaner Transport & Active Travel	Removal of parking bays to facilitate al fresco dining In 2020–2021, 100 parking bays have been removed to make way for	Ongoing	RBKC's Transport Policy and Licensing Teams.	There were c. 100 summertime terraces licensed during daylight savings time in 2024.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		al fresco dining. The Council intends to continue with this measure.			Several further former summertime terrace sites have been incorporated into public realm schemes as part of the borough's "Amazing Spaces" programme.
L1	Localised Solutions	Improve walking and cycling access to White City New pedestrian and cycle link under West London line at Latimer Road, which would connect to existing Q2 on Latimer Road in RBKC.	Underway	RBKC's Transport Policy and Planning Teams	A planning application for this infrastructure was submitted in late 2024. Should planning permission be granted - decision is expected before Easter 2025 - the scheme promoters expect to begin construction in 2026.
L2	Localised Solutions	Shepherd's Bush to Notting Hill Cycleway A new cycle route serving communities in Shepherd's Bush, Holland Park and Notting Hill Gate.	-	-	This action will not be implemented as it is no longer supported by the Council.
L3	Localised Solutions	Active travel schemes at Kensal Canalside Opportunity Area Implement a high-quality cycle route within the Kensal Canalside Opportunity Area, as set out in the Kensal SPD. Other schemes include new walking route over the canal to the cemetery and bridge over the railway line.	Underway.	RBKC's Transport Planning team and Planning Department.	The developers' proposals have several shortcomings. These have been highlighted to the developer. Updated information is expected in March 2025.
L4	Localised Solutions	Two-way cycling schemes	Underway	RBKC's Transport and	New schemes were implemented in Gilston Road, Victoria Grove and Powis Terrace. Schemes at Queen's

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		Delivering two-way cycling streets in one-way streets to form key links enabling cyclists to access existing Quietway/Cycleway routes.		Highways Teams.	Gate Gardens and Holland Street are due to go to site early 2025.
L5	Localised Solutions	Provide green man facilities at all signalised junctions Ensure there are green man facilities at: • Fulham Road and Beaufort Street • King's Road, Beaufort Street, Drayton Gardens junction with Old Brompton Rd • Chelsea Bridge Road/Lower Sloane Street • Fulham Road/Old Church Street	Underway	RBKC's Transport and Highways Teams.	Fulham Road / Beaufort Street and Drayton Gardens / Old Brompton Road schemes were implemented in 2023. Chelsea Bridge Road / Lower Sloane Street scheme implemented in 2022. King's Road / Beaufort Street and Fulham Road / Old Church Street (the final junction in the borough with no green man facilities) is in the design review stage with TfL. Consultation and construction (if approved) are programmed for 25/26 FY.
L6a	Localised Solutions	Reduction in museum delivery and servicing trips Feasibility study of locations within the borough for a consolidation hub.	Periodic review	RBKC's Pollution Regulatory Team and Transport Policy Team.	The CAV4 project working with the museums came to an end and the potential to identify a hub was investigated then and could not be identified. Since then, the Pollution Team has not had the resources to pursue this separately. In borough, no additional spaces have become available that are not accounted for, but this will be periodically reviewed.
L6b	Localised Solutions	Reduction in museum delivery and servicing trips Feasibility study into the conversion of one coach parking space or delivery bay to include an EV charge point for museum deliveries.			

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
L6c	Localised Solutions	Reduction in museum delivery and servicing trips Review into the consolidation of waste, delivery, and servicing trips.	December 2025	RBKC's Pollution Regulatory Team and Museums	The CAV4 project working with the museums came to an end and it has not been possible to carry out additional work with the museums on this issue since then. However, the Team intend to investigate this further towards the end of 2025.
L7	Localised Solutions	Work with schools on installing green screens and green infrastructure Carry out site walkovers at schools to identify opportunities to install green infrastructure.	Ongoing	RBKC's Pollution Regulatory Team	Planning permission for a green screen was installed at Bousfield Primary School and this was installed in 2024. Through the Council's air quality audit programme, green screens/infrastructure have been recommended at 5 schools, and these will be installed in 2025.
L8	Localised Solutions	Work with landowners on large streetscape improvements which include significant greening Work with landowners such as Cadogan Estates and the Westway Trust to implement localised measures to improve air quality and reduce carbon emissions.	Ongoing	RBKC's Pollution Regulatory Team and Climate Change Team, Imperial Breathe London, Cadogan Estates and the Knightsbridge Sustainability Forum.	The Pollution Regulatory Team met with the Sustainability Team at Cadogan and has provided support with interpreting data from the two Breathe London Sensors that the Estate Operates. The Climate Change Team attended the Knightsbridge Partnership Sustainability Forum and South Ken Zen meetings and network events and contributed to development of climate emergency strategies and plans led by major institutions and landlords in RBKC.
L9	Localised Solutions	Develop new place-making public realm projects to reduce traffic dominance Build on success of temporary road closure schemes in some streets and consider new similar schemes.	2025	RBKC Transport Teams.	No progress has been made. Kensington Park Road, between Elgin Crescent and Blenheim Crescent, no longer features a pedestrian and cycle zone, but streetscape scheme is due to go to site in 2025.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
L10	Localised Solutions	Implement road closures on Portobello Road during market operating times to improve conditions for pedestrians and shoppers. Make permanent the experimental scheme traffic order.	Completed in 2021.	RBKC Transport Teams.	Scheme has been made permanent.
L11	Localised Solutions	Future Neighbourhoods programme Develop an eco-neighbourhood in Notting Dale through the GLA's 2030 Future Neighbourhoods programme.	2027	RBKC's Climate Change Team, Pollution Regulatory Team, Ecology Service, Lancaster West Team and Planning Department. RBKC schools. GLA The Future Neighbourhoods Community.	50+ environmental initiatives are being delivered as part of Phase 1, 2 and 3 Future Neighbourhoods programme in Notting Dale. All projects will be completed by end of 2025. As part of Phase 3 of the Notting Dale Future Neighbourhoods 2030 programme, a 'Sustainable Schools - Holistic Project' has been included, which includes installation of SUDS, climate adaptation and resilient measures in four schools (Thomas Jones, Avondale, Colville and Oxford Gardens), indoor air quality monitoring in two schools, and food growing initiatives in three of these schools. This will be coupled with related educational activities, including a Climate Summit for schools in Notting Dale delivered by the local environmental charity Urbanwise. Food growing: Since Summer term 2024, three schools have received fortnightly visits from the school gardener, who has helped prepare growing spaces and started planting with the students. Teaching and food growing all underway and sessions carried out by HCGA.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					Indoor air quality monitoring: Currently exploring how to align with the GLA Schools Filter project which is to be launched in 2025. Meetings have been held between the Council and the GLA to identify synergies and alignment of the goals of both organisations. SUDs and climate adaptation measures: several site visits and feasibility studies have been carried out at different schools affected by flooding. In addition, climate adaptation and SUDs measures have been incorporated as part of the playground improvements project at Colville Primary School which will have benefits not only for the school but for the nearby streets. The Council has also been successful in applying for £95,000 grants from the Secretary of State for Education for four schools to support the implementation of Sustainable Drainage Systems (SuDS). In addition, also applied and secured £295,000 from the GLA Greener Schools Programme for three schools to implement LEDs, double glazing windows and solar panels. We also supported several schools to apply for the National Education Nature Park grant managed by RHS, with Avondale and St Ann's Nursery securing £20,000 for greening projects.
E1	Emissions from Developments & Buildings	Continue to assess all planning applications for air quality impact and ensure that emissions from energy and heat sources in new developments are minimised	Ongoing	RBKC's Pollution Regulatory Team	For period 01/01/2024 – 31/12/2024 the following have been reviewed for their impact on air quality and where appropriate comments and recommendations have been provided. • 19 Major Applications. • 649 Minor Applications.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		Review all applications and make recommendations for conditions. Make informed decisions on planning applications about decentralised energy (DE) networks, combined heating power (CHP), biomass, and biofuel, by considering the balance between air quality and carbon reduction benefits.			• 40 Discharge of Condition Applications. • 5 Pre-Application Advice Notes.
E2	Emissions from Developments & Buildings	Ensure emissions from construction are minimised and the cumulative effects of numerous nearby developments are taken into consideration Implement the Council's Code of Construction Practice and review dust management impact assessments.	Ongoing	RBKC's Pollution Regulatory Team	For period 01/01/2024 – 31/12/2024 the following have been reviewed for their impact on local air quality during the construction and development phases. • 11 Major Application Dust Risk Assessments reviewed. • 31 Discharge of Condition Applications reviewed regarding Environmental Management Plans. • 27 Minor Applications requested via condition to provide a Dust Risk Assessment via a Dust Management Plan. • 11 Applications requested via condition to provide demolition / construction air quality monitoring.
E3a	Emissions from Developments & Buildings	Non-Road Mobile Machinery (NRMM) Ensure that development sites NRMM requirements are understood and enforced through the planning system.	Completed annually	RBKC's Pollution Regulatory Team and Planning Department NRMM Service	For period 01/01/2024 – 31/12/2024 the following have been undertaken with regards to NRMM. • 19 NRMM conditions recommended. • An NRMM informative has been recommended to our Planning Department on every relevant application.
E3b	Emissions from	Non-Road Mobile Machinery (NRMM)	Completed annually	RBKC Pollution Regulatory Team	For period 01/01/2024 – 31/12/2024 there were a total of 15 audits undertaken by the NRMM team.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
	Developments & Buildings	Pan-London NRMM project.		NRMM Service	• 4 Self-Compliant Sites • 0 Compliant Site • 0 Non-Compliant Site • 10 No NRMM Sites • 1 Site Complete
E4	Emissions from Developments & Buildings	Air Quality Supplementary Planning Guidance Update the Council's supplementary planning guidance for air quality to reflect new policies and requirements of the Local and London Plan.	2026	RBKC's Pollution Regulatory, Planning Department, and Consultation Team.	The New Local Plan was adopted in July 2024. The Council's Air Quality SPG has been drafted to incorporate the requirements of the New Local Plan and consultation on this will commence in 2025 with adoption intended for 2026.
E5	Emissions from Developments & Buildings	Air Quality Neutral and Air Quality Positive Implementation and enforcement of Air Quality Neutral and Air Quality Positive policies.	Ongoing	RBKC's Pollution Regulatory and Planning Teams	For period 01/01/2024 – 31/12/2024 a total of 13 Air Quality Neutral Assessments were reviewed. 2 Air Quality Positive Assessments received.
E6	Emissions from Developments & Buildings	School Air Quality Audits Undertake air quality audits for schools located in the worst areas of air quality. Identify and implement measures to improve air quality. Engage schools on issues relating to the climate emergency and air pollution and develop an	Four-year programme which commenced in 2024	RBKC Pollution Regulatory, Sustainable Transport and Climate Change Teams Arup and Global Action Plan	Arup, in partnership with Global Action Plan (GAP), started work on the Council's air quality audit programme in May 2024. Progress between then and the end of December 2024 is as follows: • 10 schools/nurseries were audited. • 8 audit reports were drafted by Arup and reviewed by the Council. • Hosted by GAP, A 'All Hands' online engagement event took place with schools/nurseries in

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		Environmental Charter that schools can sign up to.		RBKC schools and nurseries	November to raise awareness of the project and the impact that poor air quality can have on health. • 1 in person school engagement event was held to raise awareness of the impacts of poor air quality and highlighting how to reduce exposure to it and steps individuals/school community can take to improve it. • 7 new air quality sensors were installed for a 12-month period and officers have produced quarterly reports for each school that has a sensor, summarising the data. • We are now working to arrange implementation of agreed recommendations, and further audits and engagement events have already been scheduled for 2025/26. As part of Phase 1 Retrofit Accelerator Programme, six schools have had their old inefficient gas boilers replaced with heat pumps. £3,6mil secured through the PSDS3b. All units were installed on site by April 2024. The Council also applied and secured additional £2,7mil from PSDS3c to support new schools as part of Phase 2 to replace their old heating systems with low carbon technologies. Six additional schools were investigated with site visits and audits carried out.
E7	Emissions from Developments & Buildings	New development green space and infrastructure Ensure adequate, appropriate, and well-located green space and	Ongoing	RBKC's Pollution Regulation Team, Ecology Service, Climate Change Team, Transport	All Major Applications reviewed for green space and infrastructure in conjunction with Climate Change and Biodiversity Teams.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		infrastructure is included in new developments.		Planning Team and Planning Department.	
E8	Emissions from Developments & Buildings	Smoke Control Zones (SCZ's) Ensure that borough-wide smoke control zones (SCZ's) are promoted and enforced.	Ongoing	RBKC's Pollution Regulatory, Noise and Nuisance, Media and Comms, Consultation and Governance Teams. Canal boat owners and Canal and River Trust Waterways.	The whole Borough is already a smoke control area. As part of our work with the London Woodburning group we have updated our information and warning letters and in 2025 will be considering whether to incorporate canal boats within the Order.
E9	Emissions from Developments & Buildings	Emissions from chimneys Issue authorisations for chimney heights for new appliances.	As received.	RBKC's Pollution Regulatory Team and Planning Service	No new chimney height applications received in 2024.
E10	Emissions from Developments & Buildings	Prescribed processes emission controls Carry out regular risk-based inspection processes and ensure authorisations are up to date.	Inspections undertaken in accordance with timetable.	RBKC's Pollution Regulatory Team Martin Cranfield Associates	Inspections of Part B permitted premises completed in accordance with requirements based on Risk Rating.
E11	Emissions from	Implementation of the Council's Climate Emergency Action Plan	Action Plan adopted in	Lead by RBKC's Climate Change	Climate Emergency Action Plan is part way through implementation; a progress report was produced in 2024.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
	Developments & Buildings	Implementation of the new Climate Emergency Action Plan, which sets out how the Council will become net zero by 2030 and the borough by 2040.	2022, and implementation continues until 2027.	but delivery involves all Council Departments.	A net zero update was presented at the Environment Select Committee in December 2024. Committee Report An internal Climate Adaptation and Resilient Workshop was organised in 2024 with all relevant departments attending. The aims were to: • Assess the increasing risks to Council services, current capability, procedures, and governance arrangements for dealing with extreme weather events. • Map out each department's roles and responsibilities. • Consolidate data and information on existing / future actions and projects relating to climate resilience. • Increase collaboration and leadership on resilience and climate adaptation. • Start to develop an internal climate adaptation and resilience action plan and associated risk register.
E12	Emissions from Developments & Buildings	Council Housing Action Plan development to implement the Housing Sustainability and Fuel Poverty Strategy Develop an action plan that outlines how the Council's housing stock will achieve net zero by 2030 and reduce air pollution and ensure these are incorporated in the capital programme of refurbishment.	Ongoing.	RBKC Climate Change Team & Housing Team.	A Net Zero update report which included updates on Council housing has been presented at the Environment Select Committee in December 2024. A new Housing Strategy will be consulted on and adopted in 2025.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
E13	Emissions from Developments & Buildings	A new renewable heat network will secure Lancaster West Estate in becoming net zero carbon Replace two existing communal networks powered by gas with the Notting Dale heat network, which is an integral part of the Lancaster West Estate's refurbishment programme.	Ongoing, with planned completion in 2026.	RBKC's Lancaster West Team with input from other Council teams including Pollution Regulatory Team, Climate Change and Planning Department.	The Notting Dale Heat Network made significant progress in 2024. Pipe installation has been completed on Camborne Mews and Verity Close, with works nearing completion at Lower Clarendon Walk. In 2025 the completion of secondary networks in 80% of homes and tertiary network installations, including HIUs, will enable all homes on Lancaster West Estate to go live with renewable energy in Summer 2026. A pilot project has been designed to explore the use of rented modular green screens from partner organisation Alive Labs. These will create an aesthetic form of fencing that also absorbs particulate matter. The system will be trialled during the construction of the Thermal Store outside Kensington Leisure Centre.
E14	Emissions from Developments & Buildings	Waste management sites Any new consents for waste management sites will address potentially dusty operations and require them to be enclosed within a building.	As received.		None received.
WP1	Working in Partnership	Collaboration with GLA and TfL to support working groups and policies that will improve air quality	Ongoing	RBKC's Pollution Regulatory Team GLA TfL	The Council collaborates with the GLA and TfL through the central London Air Quality Cluster Group and other pan London working groups.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
		Implementing actions from working groups such as the Wood-Burning Working Group.		Other London Boroughs.	
WP2	Working in Partnership	Collaborative partnerships to take action to improve air quality Continue to work with other local authorities, London Councils, LEDNET and other organisations to take action to improve air quality. Explore opportunities for trials of innovative measures/technologies and projects.	Ongoing	RBKC's Pollution Regulatory Team and Public Health. Other London Boroughs. The GLA, TfL Canal and River Trust Waterways	The Council continues to collaborate and work with other local authorities and organisations to improve air quality. It is part of the London Wood Burning Group, The Healthy Waterways Partnership and the Idling Action network, all of whom are part funded by the Mayor of London.
WP3	Working in Partnership	Work with universities To support research and to aid our own understanding of sources and potential mitigation.	Ongoing	RBKC's Pollution Regulatory Team Imperial College	In 2024, we continue to work with Imperial College to expand the number of air quality sensors on the Breathe London network.
WP4	Working in Partnership	Develop Environmental Steering Group of residents, businesses, and academic institutions To assist with delivery of Air Quality and Climate Emergency action plans and set up an air quality resource.	Ongoing	RBKC's Climate Change Team and Pollution Regulatory Team.	A Community Steering Group was created as part of the Future Neighbourhoods (FN) 2030 Programme, with 10 active residents involved. A new format is being explored as part of building a legacy in Notting Dale with the aim to be replicated across the borough. A 'Greener Survey' was drafted in 2024 (to go live in 2025) which includes questions about residents joining a wider steering group.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
					A FN2030 Project Delivery Partners network takes place quarterly which includes project leads, local partners and residents.
NEW ACTIONS					
P15	Public Health	Asthma Friendly Schools To work with schools to become 'Asthma Friendly' to ensure children with asthma are safe and can fully participate in all aspects of school life. There are nine criteria to fulfil to gain accreditation.	Ongoing	RBKC's Public Health & Pollution Regulatory Teams Borough Schools	Four schools are currently signed up in Kensington and Chelsea. Asthma friendly schools :: North West London ICS
T26	Cleaner Transport and Active Travel	Increase dockless e-bikes parking bays Identification of locations, consultation and implementation of dockless bicycle parking bays to make e-bikes more accessible to encourage increased use and help reduce footway obstructions caused by them.	Ongoing	RBKC's Transport Teams. Santander / Lime / Forest	In 2024, we identified 80 new rental e-bike parking bay locations and between March and April 2024 carried out a public consultation. In September, the Council confirmed it would be implementing 54 of the proposed rental e-bike parking bays Rental e-Bike Cycle Parking Bays (2024) - Kensington and Chelsea's Consultation and Engagement Hub - Citizen Space. 52 were installed in 2024, with the remainder to be installed in 2025. These additions bring the total number of bays provided for e-bike parking to 186 marked bays and 61 virtual bays. e-Bike suppliers have been providing ridership data since October 2023. Comparing October to December 2023 with October to December 2024 we see a 62 per cent increase in trips originating in the borough in the second period.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
T27	Cleaner Transport and Active Travel	Increase availability of e-cargo bikes	Summer 2025	RBKC Climate Change Team and Legal Services Our Bike	Through Phase 1 Future Neighbourhoods 2030 programme a community e-cargo bike renting system is being implemented in Notting Dale. An e-cargo bike will be made available in Notting Dale to encourage residents, community groups and businesses to adopt a more sustainable mode of transport. After exploring several suppliers in 2024, the Council selected 'Our Bike', which already operates successfully within other London boroughs such as Lambeth, Richmond, and Wandsworth. Our Bike will supply the e-cargo bike (purchased in 2024), oversee maintenance, and handle bookings via an app. The e-cargo bike requires a host to ensure the batteries are charged at least twice a week. Multiple hosting options were explored in 2024 with the final one identified as 'The Space'. The Council is in the process of finalising the legal agreement and it will be launched by summer 2025.
L12	Localised Solutions	Garden Greening Scheme (for Lancaster West Estate residents) To review plant species included within the Lancs West Garden MOT brochure to see if the existing range can be extended to incorporate a focus on improving air quality.		RBKC Climate Change Team & Ecology Service Lancaster West Team	Air-purifying plant species have been added to the Garden MOT brochure as an option for Lancaster West Estate residents to transform and maintain their gardens and balconies.

3. Planning Update and Other New Sources of Emissions

Table 24: Planning requirements met by planning applications in Kensington & Chelsea in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	22
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)	11 Online or Consultant Reporting
Number of CHPs/Biomass boilers refused on air quality grounds	0 (None Received)
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 (None Received)
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	2
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	3 contributions secured and a further 3 contributions received.
Number of planning applications with CIL payments that include a contribution to improve air quality	CIL is not collected for specific categories

Condition	Number
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.	2 registered 1 audit 100% sites compliant after audit (Only a very small proportion of the borough falls into the CAZ or OA).
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 Stage IIIB of the Directive and/or exemptions to the policy.	11 number of applications with NRMM conditions 20 developments registered in 2024 15 audits 100% of sites compliant after audit 0 Stage IIB exemptions

3.1 New or significantly changed industrial or other sources

No new sources.

4. Additional Activities to Improve Air Quality

4.1 Royal Borough of Kensington & Chelsea Fleet

There are currently 126 vehicles in total within the RBKC fleet (including Housing), out of which 20 are fully electric and 70 are hybrid vehicles. In total fully electric and hybrid vehicles now represent 71% of the total fleet, compared to 29% in 2023. The fleet will further reduce its number of fossil fuelled vehicles, with 8 being replaced by plug in hybrid vehicles by the end of 2026.

4.2 Planning Enforcement

Planning Applications requiring air quality comments are either forwarded directly to the Pollution Regulatory Team or through to the EH Plan inbox which is checked on a regular basis. Kensington and Chelsea participate in the Pan-London NRMM project which sees NRMM Officers visit construction sites to ensure their compliance.

4.3 Pan-London NRMM Auditing Project

Kensington and Chelsea is continuing to support the NRMM Enforcement project in 2025-2026.

Q1. What is the standard wording you use for NRMM conditions on construction/demolition sites?

A1. Prior to the commencement of the development, details shall be submitted to and approved in writing by the Local Planning Authority of all Non-Road Mobile Machinery (NRMM) to be used on the development site. All NRMM should meet as minimum the Stage IV emission criteria of Directive 97/68/EC and its subsequent amendments unless it can be demonstrated that Stage IV equipment is not available. An inventory of all NRMM must be registered on the NRMM register <https://nrmm.london/user-nrmm/register>. All NRMM should be regularly serviced, and service logs kept on site for inspection. Records should be kept on site which details proof of emission limits for all equipment'.

Reason: To ensure any impact on air quality is both minimised and managed and to comply with the NPPF (2024), development plan policies and Air Quality policies of the Local Plan.

Q2. Where is the wording applied?

A2. Wording is applied to the decision notice.

Q3. What sites is this condition applied to?

A3. The condition is applied to all planning applications.

4.4 Air Quality Alerts

RBKC supports *air*TEXT and the Mayor's Air Quality Alert Messaging, which are now sent directly to schools and healthcare professionals.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

Data Management and Local Site Operator (LSO) duties for RBKC's Automatic Monitoring Station Network for the period of 2021 was undertaken by Ricardo Energy and Environment, who have been employed by RBKC since November 2017. All real-time data from the monitoring stations were independently collected and validated on a daily basis. A combination of automatic and manual checks were utilised to assess data, identify, and diagnose potential equipment faults and adjust data to take account of calibration tests. Automatic overnight calibrations were supplemented with regular manual calibrations of analysers. The procedures used conform to EU standards that are a requirement of the AURN.

All data is also formally ratified and available online by accessing the Air Quality England Website and selecting Kensington & Chelsea within the 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 by Ricardo Energy and Environment's in house audit team.

In addition, the PM₁₀ / PM_{2.5} monitoring undertaken at KC1 North Kensington is affiliated to the AURN/LAQN monitoring network, which means that independent calibration and audits are completed for the FIDAS monitors by a Defra appointed contractor.

PM₁₀ Monitoring Adjustment

PM₁₀ monitoring is completed within the borough at three monitoring sites: KC1 with a FIDAS, KC2 with a BAM, and KC5 with a 1020 Heated BAM. As per LLAQM guidance¹, through independent data validation completed by Ricardo Energy and Environment, the BAM data is corrected by dividing the raw data by 1.035. Monitoring data from the FDMS and FIDAS monitors do not require correction during their data validation stage.

All fully validated monitoring PM₁₀ data is available through the Air Quality England Website.

A.2 Diffusion Tubes

The NO₂ diffusion tubes for 2024 were supplied and analysed by Gradko with the 50% Triethanolamine (TEA) in acetone preparation method. Gradko is a UKAS accredited laboratory that follows the procedures set out by Defra within Diffusion Tubes for Ambient NO₂ Monitoring: Practical Guidance for Laboratories and Users, and strict internal QA/QC procedures to ensure that concentrations reported are as accurate as possible. Gradko also participate in two independent QA/QC schemes to ensure their performance is constantly independently reviewed.

A.2.1 AIR-PT

AIR is an independent proficiency-testing (PT) scheme that is operated by LGC standards and supported by the Health and Safety Laboratory (HSL). AIR-PT began in April 2014 and combined two long running PT schemes: LGC Standards STACKS PT scheme, and the HSL WASP PT scheme. AIR is a recognised performance-testing programme for labs undertaking NO₂ diffusion tube analysis as part of a wider UK NO₂ monitoring network. The AIR-PT results for Gradko during 2024 are presented in Table A.1 below.

Further information on proficiency testing can be found at Defra's Local Air Quality Management webpages under QA/QC framework for NO₂ diffusion tube monitoring.

Figure A. 1: Gradko Performance within AIR-PT for NO₂ Diffusion Tubes – 2024

AIR PT AR062	AIR PT AR063	AIR PT AR064	AIR PT AR065
January – February 2024	April – June 2024	2024	2024
100%	100%	TBC	TBC

A.2.2 Network Field Inter-Comparison Exercise

Gradko International participates in the NO₂ Network Field Inter-Comparison Exercise, operated by the National Physical Laboratory (NPL), which complements the AIR-PT scheme in assessing sampling and analytical performance of diffusion tubes under normal operating conditions. This involves the regular exposure of a triplicate set of tubes at an Automatic Urban Network site (AURN) site where continuous chemiluminescent analysers measure NO₂ concentrations.

The inter-comparison exercise is completed at the Marylebone AURN monitoring station. Of particular interest is the bias of the diffusion tube measurement relative to the automatic analyser that gives an indication of accuracy. Performance criterion

have been established for participating laboratories in line with the Air Quality Directive 2008/50/EC requirement for indicative monitoring techniques, as the 95% confidence interval of the annual mean bias which should not exceed $\pm 25\%$.

In conjunction with this, a measure of precision is determined by comparing the triplicate co-located tube measurements, commonly referred to as the coefficient of variation (CoV). This value is useful for assessing the uncertainty of results due to sampling and analytical techniques. The NPL performance criterion for precision is that the mean coefficient of variation for the full year should not exceed 10%, should this be achieved the precision is given a score of 'good'.

Gradko operates well within the required level of performance in terms of accuracy and precision, as shown by the results presented in Table A.2.

Figure A. 2: Precision Results for Gradko in 2024

2024 Good	2024 Bad
11	0

A.2.3 Benzene Diffusion Tubes

All Benzene tubes were analysed by a Gradko International a UKAS accredited laboratory using desorption scanning gas chromatography / mass spectrometry (GC / MS). This method of analysis gives unequivocal identification of BTEX peaks. The analysis is carried out in accordance with the Gradko International Laboratory Quality Procedure GLM 4.

The accuracy of the Laboratory measurements was monitored by participation in the Laboratory Measurement Proficiency Scheme.

The measurement method used in the Benzene survey were consistent with the sampling, analysis, and QA/QC requirements of EN 14662-4: 2005 Ambient Air Quality – Standard Method for Measurement of Benzene Concentrations – Part 4: Diffusive Sampling followed by Thermal Desorption and Gas.

A.2.4 Factor from Local Co-location Studies

Due to a change in diffusion tube supplier RBKC no longer forms part of the London Wide environmental Programme (LWEP). The diffusion tubes are now directly supplied to us by Gradko, rather than through a third party, previously Bureau Veritas.

Figure 23: KC1 Triplicate Tubes Precision & Accuracy

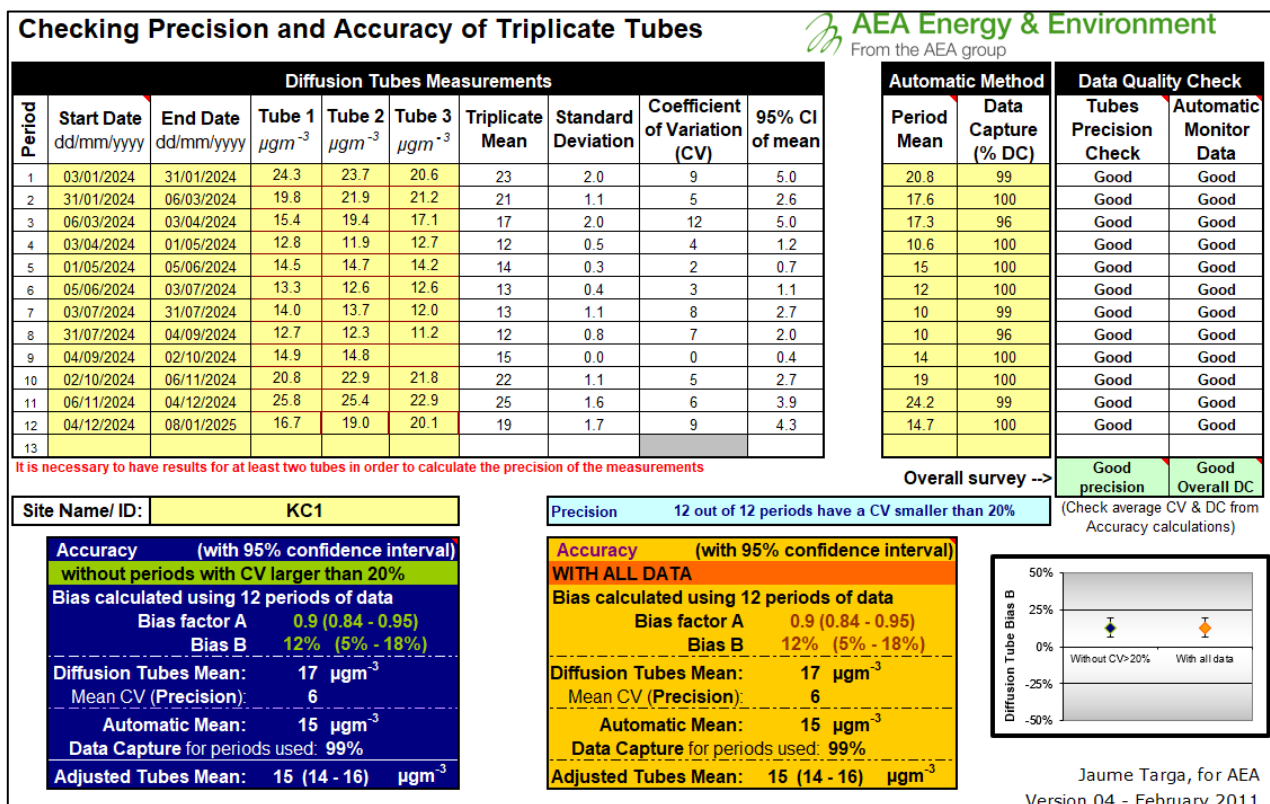


Figure 24: KC2 Triplicate Tubes Precision & Accuracy

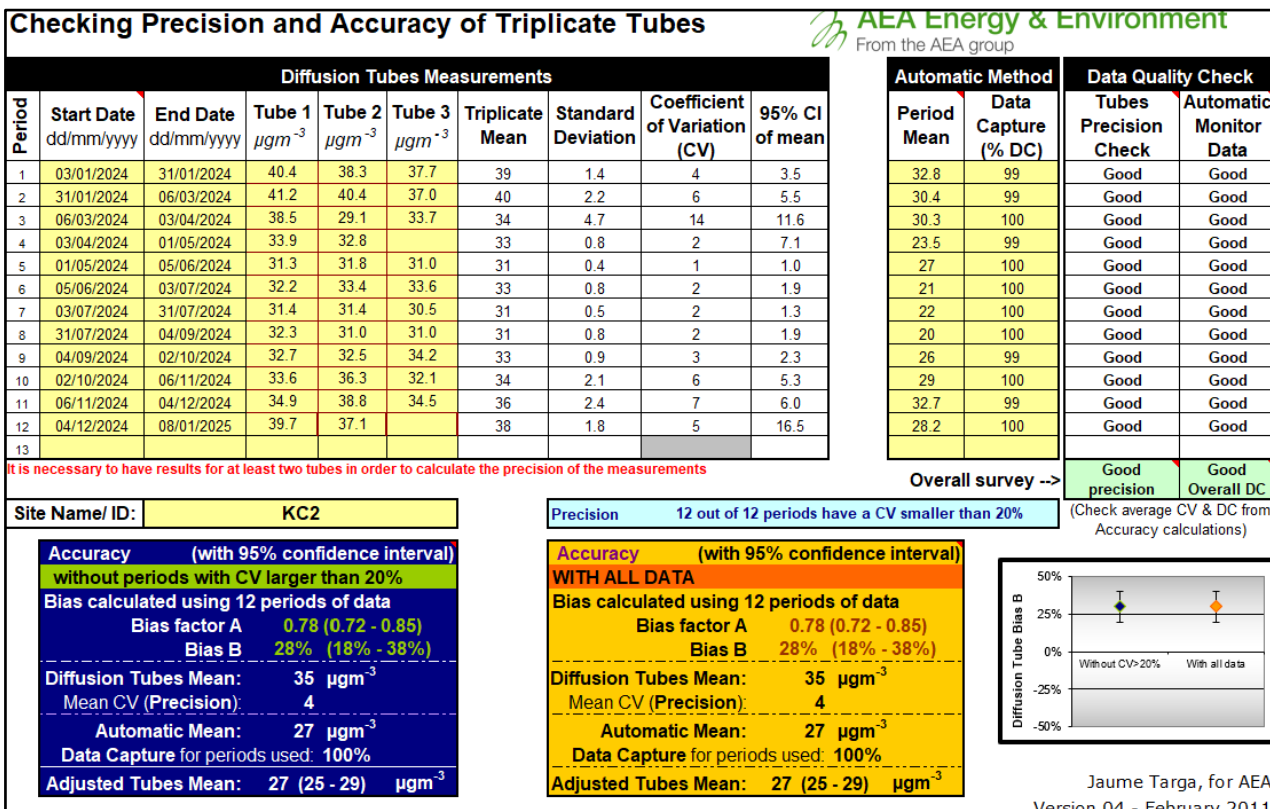


Figure 25: National Bias Adjustment Factor (BAF)

National Diffusion Tube Bias Adjustment Factor Spreadsheet							Spreadsheet Version Number: 04/25			
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. 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.							This spreadsheet will be updated at the end of June 2025 LAQM Helpdesk Website Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.			
Step 1:		Step 2:	Step 3:	Step 4:						
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.		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.	Select a Year from the Drop-Down List If a year is not shown, we have no data	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 factor³ shown in blue at the foot of the final column. If you have your own co-location study then see footnote⁴. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953						
Analysed By¹	Method To undo your selection, choose (All) from the pop-up list	Year⁵ To undo your selection, choose (All)	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision⁶	Bias Adjustment Factor (A) (Cm/Dm)
Gradko	50% TEA in Acetone	2024	UB	City Of London Corporation	10	26	21	26.8%	G	0.79
Gradko	50% TEA in Acetone	2024	R	City Of London Corporation	12	34	30	12.1%	G	0.89
Gradko	50% TEA in Acetone	2024	UB	Falkirk Council	11	13	13	-1.6%	G	1.02
Gradko	50% TEA in acetone	2024	SU	Redcar And Cleveland Borough Council	12	12	9	35.4%	G	0.74
Gradko	50% TEA in acetone	2024	KS	Marylebone Road Intercomparison	11	43	36	20.8%	G	0.83
Gradko	50% TEA in acetone	2024	R	Sandwell Mbc	12	30	25	24.2%	G	0.81
Gradko	50% TEA in acetone	2024	UB	Sandwell Mbc	12	19	17	8.0%	G	0.93
Gradko	50% TEA in acetone	2024	R	Sandwell Mbc	12	20	20	-2.6%	S	1.03
Gradko	50% TEA in Acetone	2024	R	London Borough Of Merton	12	27	22	25.7%	G	0.80
Gradko	50% TEA in acetone	2024	UB	London Borough Of Wandsworth	10	19	14	31.7%	G	0.76
Gradko	50% TEA in acetone	2024	R	London Borough Of Richmond Upon Thames	12	18	19	-9.1%	G	1.10
Gradko	50% TEA in acetone	2024	B	London Borough Of Richmond Upon Thames	12	13	13	5.0%	G	0.95
Gradko	50% TEA in acetone	2024		Overall Factor³ (12 studies)				Use		0.88

A.2.5 Discussion of Choice of Factor to Use

Historically a single BAF derived from the North Kensington Monitoring Station (NKMS) Urban Background co-location site, was used to correct raw Diffusion Tube data. The NKMS BAF is considered to represent the best local BAF for Urban Background Diffusion Tube monitoring locations and monitoring locations away from busy roads in the borough.

Table A 1: Bias Adjustment Factor History

Year	Local or National	Version of National Spreadsheet	Adjustment Factor
2024	Local	03/25	0.88
2023	Local	03/24	0.82
2022	Local	03/23	0.80
2021	Local	03/22	0.83
2020	Local	06/21	March 0.88 May 0.89 Jan, Feb, Apr, Jun-Dec 0.95
2019	Local	09/20	Non-Urban Background: 0.87 Urban Background: 1.01
2018	Local	06/19	0.98
2017	Local	03/18	1.15
2016	Local	-	1.15

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

In regard to the 2024 diffusion tube data set, 3 monitoring locations (KC78, KC96 and KC97) had data capture below 75%.

Annualisation of the monitoring sites has been completed in line with Box 4.8 and 4.9 within LLAQM.TG(19) and full working details are presented in Table A.4 and Table A.5. In completing the annualisation process, data has been taken from a number of automatic monitoring sites that are part of the LAQN/AURN. In line with LLAQM.TG(19) the monitoring sites that have been used lie within a radius of approximately 50 miles of the sites to be annualised and have a data capture of 85% or above.

Distance Adjustment

In line with LLAQM.TG(22) distance correction has been applied to NO₂ monitoring sites that are not sited at locations of relevant exposure as detailed within the LLAQM Guidance documents. The Diffusion Tube Data Processing Tool V4.0 has been used to predict the NO₂ concentration at a location of relevant exposure; the calculations are presented below.

To complete the NO₂ fall off with distance calculations a background value for each monitoring location is required. Background NO₂ concentrations for 2023 have been derived from the Defra Background Map database that has a current baseline of 2018.

Distance correction has been completed for all Roadside and Kerbside monitoring locations and not the Urban Background and Urban Centre locations.

Table A 2: Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor All Saint's College	Annualisation Factor Westminster	Annualisation Factor Haringey Priory Park South	Annualisation Factor Bloomsbury	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g}/\text{m}^3$)	Annualised Annual Mean ($\mu\text{g}/\text{m}^3$)	Comments
KC78	1.0365	1.0544	1.0503	1.0309	1.0430	22.2	23.2	-
KC96	1.0049	1.0294	1.0267	1.0324	1.0234	39.6	40.6	-
KC97	1.0454	1.0608	1.0275	1.0053	1.0348	41.7	43.2	-

Table A 5: NO₂ 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
KC33	1.1	2.1	36.3	28.9	35.4	-
KC49	4.0	5.0	38.8	28.8	38.1	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
KC84	0.5	1.0	36.6	28.9	35.6	-
KC89	0.5	1.0	36.4	28.9	35.5	-
KC91	0.5	1.0	38.1	28.9	37.0	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
KC93	0.5	1.0	39.9	28.9	38.6	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
KC94	1.0	1.5	40.3	28.9	39.3	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
KC95	0.3	0.8	38.8	28.9	37.3	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
KC97	0.5	0.8	36.1	28.9	35.5	-

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted ($\mu\text{g}/\text{m}^3$)	Background Concentration ($\mu\text{g}/\text{m}^3$)	Concentration Predicted at Receptor ($\mu\text{g}/\text{m}^3$)	Comments
KC98	0.5	1.0	41.4	28.9	39.9	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
KC102	1.0	1.5	37.4	28.9	36.7	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>

Appendix B Full Monthly Diffusion Tube Results for 2024

Table B. 1: NO₂ 2024 Diffusion Tube Results (µg/m³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
KC31	524342	181271	30.7	28.2	26.5	24.1	27.2	22.6	22.3	21.7	29.2	31.4	30.0	27.5	26.8	22.4	
KC32	524784	179599	21.7	16.9	13.4	11.1	12.4	11.3	11.6	12.4	13.8	19.6	19.8	16.6	15.1	12.6	
KC33	525355	178841	46.4	46.9	40.4	39.4	41.5	45.7	44.4	38.2	40.7	41.7	45.6	50.3	43.4	36.3	35.4
KC34	527164	178103	29.8	23.7	18.6	18.1	20.6	16.0	16.9	15.5	20.7	26.0	27.5	21.5	21.2	17.8	
KC35	527192	179185	36.1	40.0	32.3	37.4	37.6	-	39.7	-	40.9	39.7	38.0	40.9	38.3	32.0	
KC38	525548	178556	45.3	41.5	39.8	41.5	40.9	40.1	40.0	36.3	44.6	40.6	46.4	38.1	41.3	34.5	
KC39	526317	177022	22.3	18.4	13.5	13.3	15.0	12.6	13.5	12.6	17.6	21.2	22.0	18.1	16.7	14.0	
KC41	524294	181200	24.0	20.4	21.2	14.8	18.1	14.6	14.3	13.0	20.4	24.7	28.0	21.9	19.6	16.4	
KC42	525191	180705	26.6	21.4	19.9	15.7	17.6	18.5	18.4	17.5	-	25.1	29.2	20.3	20.9	17.5	
KC43	525950	177487	26.4	20.8	18.8	14.7	16.0	12.8	13.7	14.4	17.5	21.9	23.9	18.7	18.3	15.3	
KC44	527335	178810	28.2	23.2	15.3	14.3	16.9	13.1	15.5	14.4	1.5	25.0	26.7	27.5	18.5	15.5	
KC45	525263	178936	29.9	28.3	26.9	18.8	23.4	21.1	21.0	16.1	22.2	30.4	32.1	23.9	24.5	20.5	
KC47a	524046	181758	24.3	19.8	15.4	12.8	14.5	13.3	14.0	12.7	14.9	20.8	25.8	16.7	-	-	
KC47b	524046	181758	23.7	21.9	19.4	11.9	14.7	12.6	13.7	12.3	14.8	22.9	25.4	19.0	-	-	
KC47c	524046	181758	20.6	21.2	17.1	12.7	14.2	12.6	12.0	11.2	-	21.8	22.9	20.1	17.2	14.4	
KC48	528011	178675	39.5	38.1	34.1	31.8	34.6	32.8	30.6	31.5	35.1	38.2	37.9	29.8	34.5	28.9	
KC49	527516	179395	42.0	38.0	46.5	36.2	51.7	44.2	49.2	43.8	54.7	52.0	52.5	45.0	46.3	38.8	38.1
KC50	527726	177727	24.6	25.8	23.7	17.3	25.2	23.7	22.3	19.2	19.3	23.9	21.6	22.7	22.4	18.8	

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
KC51	527690	177800	18.7	16.5	16.4	10.9	15.2	12.4	13.6	13.2	17.4	20.7	25.0	-	16.4	13.7	
KC52	527411	178659	30.3	25.8	26.8	22.7	26.0	24.8	22.9	19.7	30.5	30.0	37.5	27.7	27.1	22.6	
KC53	523792	181189	29.9	26.4	20.6	16.9	20.4	20.6	20.6	19.7	22.9	25.9	33.0	24.0	23.4	19.6	
KC54a	526522	178968	40.4	41.2	38.5	33.9	31.3	32.2	31.4	32.3	32.7	33.6	34.9	39.7	-	-	
KC54b	526522	178968	38.3	40.4	29.1	32.8	31.8	33.4	31.4	31.0	32.5	36.3	38.8	37.1	-	-	
KC54c	526522	178968	37.7	37.0	33.7	-	31.0	33.6	30.5	31.0	34.2	32.1	34.5	-	34.5	28.9	
KC55	526608	177429	32.8	26.1	21.8	18.6	18.1	14.9	16.3	14.2	24.0	26.0	32.2	28.1	22.8	19.0	
KC56	527268	178089	35.6	33.3	32.5	29.9	32.8	30.3	31.7	31.5	33.6	34.4	39.8	31.7	33.1	27.7	
KC57	527889	179145	29.7	23.5	21.8	19.7	22.9	21.2	20.0	19.3	27.3	27.5	30.0	27.1	24.2	20.2	
KC58	525630	179674	34.5	33.0	29.3	26.0	30.1	29.6	29.8	27.7	33.4	32.4	-	10.3	28.7	24.0	
KC59	525342	179464	41.6	37.5	29.3	32.3	38.8	40.9	37.0	35.4	46.5	38.9	42.0	39.6	38.3	32.1	
KC60	526231	178425	31.4	34.7	26.6	24.4	30.7	27.1	27.9	21.9	32.0	34.2	36.9	29.5	29.8	24.9	
KC61	526377	177867	31.2	31.4	23.5	25.7	27.0	26.5	25.9	24.8	32.3	32.5	40.2	32.3	29.4	24.6	
KC64	524825	178902	32.5	27.9	25.7	22.9	25.2	25.8	25.4	22.6	24.6	32.0	32.1	26.9	27.0	22.6	
KC65	523899	182113	27.2	23.9	18.1	15.0	18.1	16.4	18.4	16.1	23.1	26.8	28.1	25.0	21.3	17.9	
KC66	524541	181893	27.8	20.3	19.3	13.6	18.6	15.8	16.3	16.0	21.1	25.4	28.4	22.7	20.4	17.1	
KC67	524056	182148	26.4	26.9	20.3	17.5	17.4	17.6	18.0	18.5	21.6	24.3	29.6	24.4	21.9	18.3	
KC68	526863	179060	33.1	-	25.4	36.0	24.7	-	35.7	24.9	25.1	-	25.0	26.3	28.5	23.8	
KC69	523587	180893	25.3	22.0	18.6	14.5	17.8	15.7	-	27.3	-	24.2	29.0	22.0	21.6	18.1	
KC70	527170	177985	12.3	32.7	30.2	31.8	28.5	28.6	28.2	26.8	30.7	32.4	39.3	28.6	29.2	24.4	

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
KC71	527267	177812	-	27.5	26.7	19.4	23.2	20.9	23.0	18.9	21.1	29.2	33.4	25.8	24.5	20.5	
KC72	527330	177716	32.4	28.6	27.3	28.4	32.1	30.6	28.8	26.1	29.3	34.8	33.5	28.2	30.0	25.1	
KC73	527227,	177918	28.5	21.3	24.3	22.1	24.3	20.2	18.9	18.5	26.1	30.6	30.5	26.5	24.3	20.4	
KC74	527600	179325	33.5	29.9	24.9	22.8	25.2	22.9	23.8	21.7	28.5	30.3	22.9	28.2	26.2	21.9	
KC75	527675	179325	36.7	29.7	25.0	28.2	31.1	25.8	25.6	26.5	28.4	29.4	33.0	29.8	29.1	24.4	
KC76	527691	179390	35.8	31.7	26.8	23.9	27.9	22.0	21.4	22.4	26.8	28.8	33.2	30.7	27.6	23.1	
KC77	524820	181065	23.7	21.7	17.3	14.0	17.3	15.2	14.9	-	20.9	25.1	28.0	23.7	20.2	16.9	
KC78	524762	181049	-	27.3	23.1	18.8	-	-	16.6	16.4	19.5	-	32.4	23.7	22.2	19.4	
KC79	527892	178731	27.8	20.8	21.2	17.5	19.5	16.8	-	16.4	20.3	24.7	29.4	22.5	21.5	18.0	
KC80	527917	178755	27.1	22.5	17.1	16.3	17.8	15.5	-	15.6	21.9	26.1	24.6	23.4	20.7	17.3	
KC81	527214	179153	24.0	23.6	16.9	11.8	15.9	12.8	13.9	-	36.0	23.6	26.3	26.6	21.0	17.6	
KC82	524764	179139	38.1	36.7	32.8	27.9	36.6	38.9	39.9	34.2	33.8	40.9	42.7	38.7	36.8	30.8	
KC83	524919	179229	34.4	28.3	25.3	27.3	29.8	30.7	29.6	25.9	31.4	34.8	34.7	31.3	30.3	25.3	
KC84	525002	179275	44.9	39.7	34.4	36.9	45.4	48.7	44.6	44.8	45.8	48.4	45.9	44.6	43.7	36.6	35.6
KC85	525002	179277	38.5	33.3	25.3	26.4	35.3	37.6	-	-	45.0	36.9	40.3	31.3	35.0	29.3	
KC86	525165	179355	36.1	34.3	35.0	30.8	39.4	33.2	34.2	35.1	24.8	29.5	39.3	35.7	33.9	28.4	
KC87	525187	179369	36.7	34.5	27.9	31.5	39.4	37.3	33.5	33.9	-	-	51.0	35.8	36.2	30.3	
KC88	525219	179387	45.4	43.6	42.0	33.6	37.0	13.5	38.5	33.4	38.5	39.9	42.4	43.9	37.6	31.5	
KC89	525291	179432	45.0	38.9	31.7	33.1	43.4	42.2	42.2	37.7	54.3	54.2	47.1	52.5	43.5	36.4	35.5
KC90	525317	179448	-	-	32.7	35.6	41.4	57.1	42.7	42.5	53.2	47.0	55.2	48.0	41.5	34.7	

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
KC91	525520	179571	39.6	40.0	40.8	39.6	52.0	49.6	43.1	44.6	47.2	53.3	46.1	51.2	45.6	38.1	37.0
KC92	525520	179573	29.8	-	35.8	34.1	-	37.8	37.5	36.9	30.6	37.8	40.3	-	35.6	29.8	
KC93	525597	179623	56.6	49.1	34.7	39.1	53.4	53.6	50.5	44.2	53.2	51.5	-	38.7	47.7	39.9	38.6
KC94	525719	179694	47.4	50.0	44.3	48.7	43.9	57.7	42.4	48.4	52.1	51.4	51.7	39.5	48.1	40.3	39.3
KC95	525786	179717	50.4	47.2	41.7	47.7	46.8	54.2	46.3	42.8	52.2	42.5	42.0	43.1	46.4	38.8	37.3
KC96	525860	179707	41.1	44.2	-	34.5	-	-	-	34.8	43.6	-	-	-	39.6	33.9	
KC97	525810	179710	5.4	-	-	-	-	54.7	46.7	38.2	54.0	-	50.4	42.5	41.7	36.1	35.5
KC98	525755	179687	51.3	47.6	55.2	48.8	52.7	-	57.7	48.6	52.3	54.8	49.2	26.2	49.5	41.4	39.9
KC99	525644	179639	34.9	32.6	39.4	35.0	40.1	38.4	45.4	39.5	39.8	49.1	41.2	33.6	39.1	32.7	
KC100	525550	179572	41.1	43.5	41.9	31.9	46.9	46.6	48.7	45.4	45.8	47.1	37.9	37.3	42.8	35.9	
KC101	525523	179552	46.5	19.6	41.1	35.5	42.9	44.5	44.2	43.6	41.9	44.6	41.1	39.7	40.4	33.8	
KC102	525486	179529	49.9	46.0	39.4	38.1	46.2	45.6	46.2	46.0	40.7	47.4	49.5	41.2	44.7	37.4	36.7
KC103	525411	179478	-	32.1	29.4	26.9	32.8	26.7	33.6	24.1	34.8	36.9	40.7	32.8	31.9	26.7	
KC104	525327	179434	37.7	35.7	35.2	27.6	37.2	33.2	38.2	35.1	34.8	38.5	40.3	40.9	36.2	30.3	
KC105	525239	179379	39.8	38.6	37.2	29.8	40.5	38.2	42.7	37.2	41.3	42.4	48.8	34.7	39.3	32.9	
KC106	525197	179353	38.1	-	34.8	26.0	34.9	36.6	35.9	34.4	36.9	41.8	42.4	30.2	35.6	29.8	
KC107	525132	179314	36.2	29.2	31.9	25.9	32.5	29.2	35.3	31.9	33.8	37.2	35.3	30.8	32.4	27.1	
KC108	525034	179273	34.1	26.0	25.1	19.9	26.7	24.2	27.1	24.4	33.8	32.6	31.1	26.3	27.6	23.1	
KC109	524957	179233	35.4	27.5	27.2	26.9	36.4	33.6	35.8	34.0	34.7	37.0	35.5	28.9	32.7	27.4	
KC110	524888	179186	34.4	29.9	29.1	23.2	34.0	27.5	32.9	30.3	32.9	35.1	27.4	26.6	30.3	25.3	

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure
KC111	524797	179132	31.5	29.9	24.2	23.2	27.5	27.0	24.3	26.7	29.6	32.2	34.9	31.9	28.6	23.9	

☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Error! Reference source not found.**B.1.**

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

☒ Local bias adjustment factor used.

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

☒ Kensington and Chelsea confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

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

NO₂ annual means exceeding 60µg m⁻³, indicating a potential exceedance of the NO₂ 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

Figure 26: Automatic Monitoring Sites

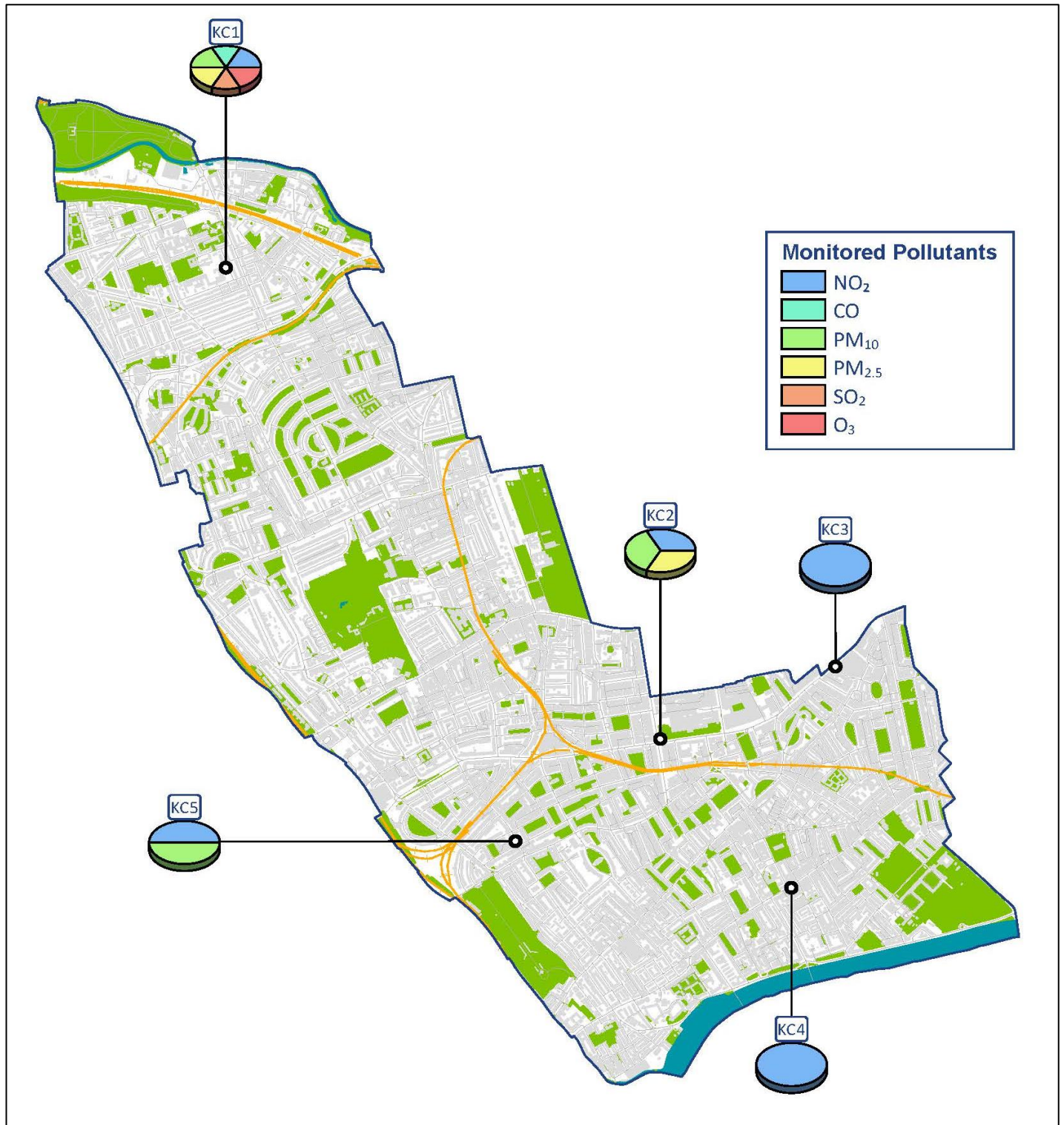


Figure 27: Map of NO₂ Non-Automatic Monitoring Site(s) (Diffusion Tubes)



Figure 28: Map of BTEX Tubes

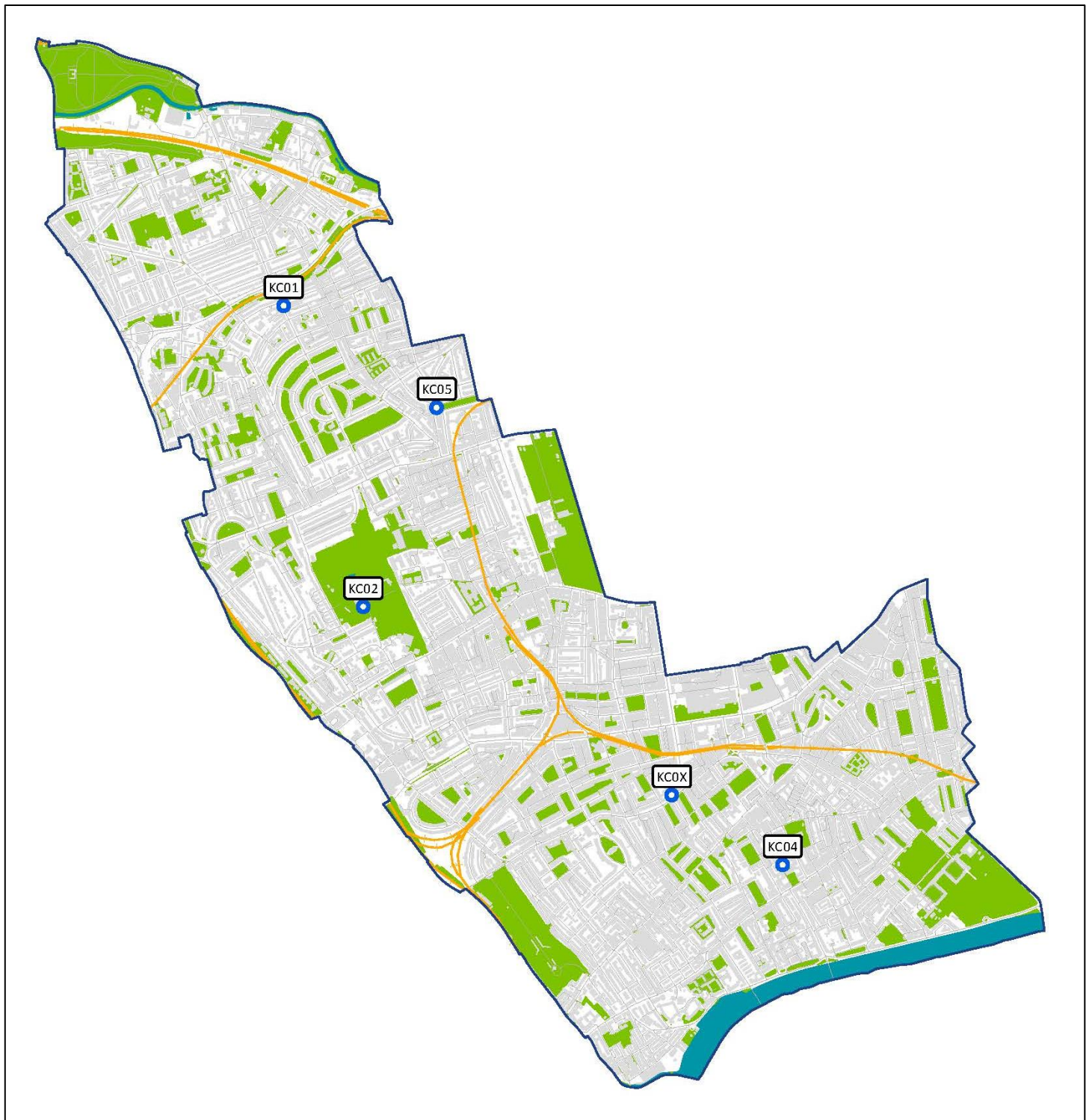


Figure 29: Map of Mobile Sensors



Figure 30: Monitoring within GLA Focus Areas & AQMA (Borough wide)



Royal Borough of Kingston upon Thames Air Quality Annual Status Report for 2024

Date of publication: August 2025



This report provides a detailed overview of air quality in the Royal Borough of Kingston during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process¹.

Contact details:



Air Quality Officer

Regulatory Services
Kingston & Sutton Shared Environment Service

Guildhall 2
High Street
Kingston upon Thames
KT1 1EU

Email: pollution_control@kingston.gov.uk
Telephone - 020 8770 5000

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

Contents

Abbreviations	4
1. Air Quality Monitoring.....	6
1.1 Locations	6
2. Action to Improve Air Quality.....	34
2.1 Air Quality Management Areas	34
2.2 Air Quality Action Plan Progress.....	36
3. Planning Update and Other New Sources of Emissions.....	51
3.1 New or significantly changed industrial or other sources.....	53
4. Additional Activities to Improve Air Quality	54
4.1 Royal Borough of Kingston upon Thames Fleet.....	54
4.2 Planning Enforcement	54
4.3 Pan-London NRMM Auditing Project	54
4.4 Air Quality Alerts.....	55
4.5 Air Quality Positive	55
Appendix A Details of Monitoring Site Quality QA/QC.....	56
Appendix B Full Monthly Diffusion Tube Results for 2024	61
Appendix C Map(s) of Monitoring Locations and AQMAs.....	64

Tables

Table A Summary of National Air Quality and International Standards, Objectives and Guidelines	5
Table B Details of Automatic Monitoring Sites for 2024	6
Table C. Details of Non-Automatic Monitoring Sites for 2024	7
Table D. Annual Mean NO ₂ Monitoring Results: Automatic Monitoring (µg m ⁻³)	11
Table E. Annual Mean NO ₂ Monitoring Results: Non-Automatic Monitoring (µg m ⁻³)	15
Table F. NO ₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg m ⁻³	26

Table G. Annual Mean PM ₁₀ Automatic Monitoring Results (µg m ⁻³)	28
Table H. PM ₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM ₁₀ 24-Hour Means > 50 µg m ⁻³	31
Table I. Annual Mean PM _{2.5} Automatic Monitoring Results (µg m ⁻³)	32
Table L. Declared Air Quality Management Areas	35
Table M. Delivery of Air Quality Action Plan Measures	36
Table N. Planning requirements met by planning applications in the London Borough of Sutton in 2024	51
Table O. Bias Adjustment Factor	58
Table P. Non-Automatic Monitoring Data Adjustment	60
Table U. NO ₂ 2024 Diffusion Tube Results (µg m ⁻³)	61

Figures

Figure 1-A Annual Mean NO ₂ Concentrations at Automatic Monitoring Site	13
Figure 1-B Annual Mean NO ₂ Concentrations at Diffusion Tubes Monitoring Sites - Kingston and North Kingston	19
Figure 1-C Annual Mean NO ₂ Concentrations at Diffusion Tubes Monitoring Sites - New and Old Malden	20
Figure 1-D Annual Mean NO ₂ Concentrations at Diffusion Tubes	21
Figure 1-E Annual Mean NO ₂ Concentrations at Diffusion Tubes Monitoring Sites - South of the Borough	22
Figure 5-A Map of Non-Automatic Monitoring Locations in the Royal Borough of Kingston	64
Figure 5-A Map of Map of Automatic Monitoring Site(s) in the Royal Borough of Kingston	65

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 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 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?	Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
KT4	Tolworth Broadway	Roadside	519706	165885	NO ₂ , PM ₁₀ /PM _{2.5} ⁽³⁾	Yes	Kingston AQMA	Chemiluminescent; BAM	7	4.2	1.6
KT5	Cromwell Road	Roadside	518562	169519	NO ₂ , PM ₁₀	Yes	Kingston AQMA	Chemiluminescent; BAM	3	2.7	1.6
KT6	Kingston Vale	Roadside	521251	172166	NO ₂ , PM ₁₀	Yes	Kingston AQMA	Chemiluminescent; BAM	10	3	1.6

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)
1	Guildhall Complex	Kerbside	517951	169029	NO ₂	Kingston AQMA	15	1.0	No	2.5
2	17-19 Penrhyn Road	Roadside	518067	168672	NO ₂	Kingston AQMA	3	2.0	No	2.5
3	52 Portsmouth Road	Roadside	517565	167715	NO ₂	Kingston AQMA	5	2.0	No	2.5
4	88 Brighton Road	Kerbside	517532	167296	NO ₂	Kingston AQMA	4	0.5	No	2.5
5	Victoria Road/Brighton Road	Kerbside	517765	167143	NO ₂	Kingston AQMA	1	3.0	No	2.5
6	St. Mark's Hill/Ewell Road	Roadside	518424	167604	NO ₂	Kingston AQMA	2.5	5.0	No	2.5
7	Victoria Road near Surbiton Station	Kerbside	518039	167346	NO ₂	Kingston AQMA	2	0.5	No	2.5
8	Upper Brighton Road/Langley Road	Roadside	518336	166655	NO ₂	Kingston AQMA	2.5	2.0	No	2.5
9	199 Douglas Road/Thornhill Road	Kerbside	518737	165768	NO ₂	Kingston AQMA	3	0.5	No	2.5
10	Ewell Road near jct Elgar Avenue	Kerbside	519365	166230	NO ₂	Kingston AQMA	4	0.5	No	2.5
11	53 Elgar Avenue	Kerbside	519664	166505	NO ₂	Kingston AQMA	6	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)
12	136 Tolworth Broadway/Service Road	Roadside	519714	165886	NO ₂	Kingston AQMA	3	2.0	No	2.5
13	Tolworth Roundabout (Sundial Court)	Kerbside	519808	165873	NO ₂	Kingston AQMA	1.5	1.0	No	2.5
14	Kingston Road (near station)	Kerbside	519872	165692	NO ₂	Kingston AQMA	14	0.5	No	2.5
15	A240 Kingston Road/Old Kingston Road (REMOVED 2020)	Kerbside	520192	165264	NO ₂	Kingston AQMA	30	0.5	No	2.5
16	Hook Road South/Hunters Road	Kerbside	518087	165096	NO ₂	Kingston AQMA	6	1.0	No	2.5
17	Hook Road (St Paul's Primary)	Roadside	518026	164785	NO ₂	Kingston AQMA	2.5	22.0	No	2.5
18	Hook Centre	Kerbside	517991	164532	NO ₂	Kingston AQMA	4	0.5	No	2.5
19	Garrison Lane/Reynolds Avenue	Kerbside	518155	163395	NO ₂	Kingston AQMA	5	0.5	No	2.5
20	353 Malden Rushett Crossroads	Roadside	517256	161578	NO ₂	Kingston AQMA	2	2.5	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)
21	Opposite 148 Leatherhead Road	Roadside	517683	163465	NO ₂	Kingston AQMA	2	3.0	No	2.5
22	Hook Rise North/Tolworth Rec Centre	Roadside	518601	165270	NO ₂	Kingston AQMA	3	1.5	No	2.5
23	40 Fife Road	Kerbside	518147	169455	NO ₂	Kingston AQMA	4	0.5	No	2.5
24	14-16 Cromwell Road	Roadside	518467	169509	NO ₂	Kingston AQMA	2	2.0	No	2.5
25	Queen Elizabeth Road/London Road	Kerbside	518533	169348	NO ₂	Kingston AQMA	4	0.5	No	2.5
26	Richmond Road/Kings Road	Roadside	518199	170056	NO ₂	Kingston AQMA	4	1.5	No	2.5
27	Fire Station, Richmond Road (replaced w/ Latchmere Rd/ St Agatha Dr 2020)	Roadside	517800	171423	NO ₂	Kingston AQMA	12	1.0	No	2.5
28	41 Kingston Hill	Kerbside	519353	169895	NO ₂	Kingston AQMA	3	1.0	No	2.5
29	240 Kingston Vale near Robin Hood Lane	Kerbside	521107	172054	NO ₂	Kingston AQMA	6	0.5	No	2.5
30	Coombe Hill School	Roadside	520611	169889	NO ₂	Kingston AQMA	10	2.5	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)
31	248 Malden Road near A3	Kerbside	521651	167397	NO ₂	Kingston AQMA	8	0.5	No	2.5
32	South Lane	Kerbside	521252	166877	NO ₂	Kingston AQMA	7	0.5	No	2.5
33	96 Burlington Road	Roadside	521873	168117	NO ₂	Kingston AQMA	3	1.5	No	2.5
34	66 New Malden High Street	Roadside	521416	168373	NO ₂	Kingston AQMA	7	1.5	No	2.5
35	113-115 Clarence Avenue	Roadside	520708	169258	NO ₂	Kingston AQMA	4	1.0	No	2.5
36	38 Coombe Lane West near A3 junction	Roadside	520047	169651	NO ₂	Kingston AQMA	3	2.0	No	2.5
37	51 Elm Road	Kerbside	520764	169525	NO ₂	Kingston AQMA	6	0.5	No	2.5
38	Kingston Road (Carpet Right)	Roadside	520503	168388	NO ₂	Kingston AQMA	15	2.0	No	2.5
39	Cambridge Road/Gloucester Road	Kerbside	519372	169098	NO ₂	Kingston AQMA	1	8.0	No	2.5
40	Cambridge Road/Hawks Road	Roadside	519064	169244	NO ₂	Kingston AQMA	1.5	1.5	No	2.5
41	Wheatfield Way/Fairfield Road	Roadside	518276	169164	NO ₂	Kingston AQMA	2.0	3.5	No	2.5
42	Latchmere Road/St Agatha Drive	Roadside	518806	170718	NO ₂	Kingston AQMA	2.0	1.0	No	2.5

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. Annual Mean NO₂ 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
KT4	519706	165885	Roadside	76.4	76.4	44.0	41.4	32.8	30.9	34.9 (32.7) *Ann	28.1	22.2
KT5	518562	169519	Roadside	99.8	99.8	57.0 *Ann	57.2	40.6 (44.7)	50.5	43.4 (42.3)	34.8	30.0
KT6	521251	172166	Roadside	84.7	84.7	36.0	33.2	24.6	25.5	24.5	19.1	16.6

Notes:

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

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

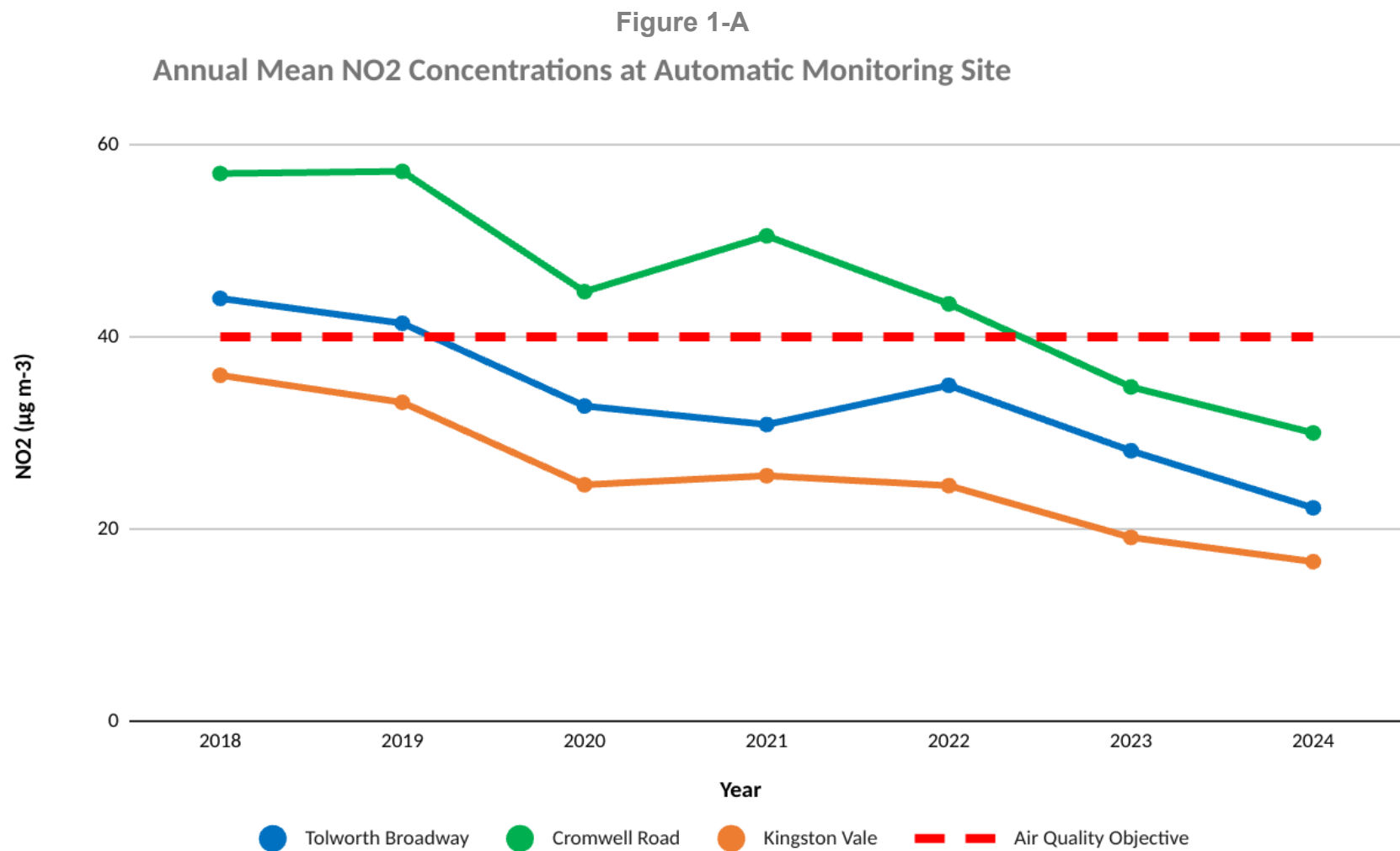
NO₂ annual means in excess of 60 µg m⁻³, indicating a potential exceedance of the NO₂ hourly mean AQS objective are shown in **bold and underlined**.

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%).



Discussion

Annual concentrations of NO₂ have continued to fall in 2024, with all sites reaching new 7 year minimum concentrations. This is the second year in a row that the Cromwell Road monitor has been below the national limit of 40 µg m⁻³. The Cromwell Road bus station remained closed for the majority of the year and reopened in November 2024; concentrations at the Cromwell Road monitor may have remained artificially decreased in response. There is also the potential that the ULEZ expansion played a part here as well, as a decrease is observed across all sites in Kingston to a relatively similar degree. All sites have surpassed previous minimum concentrations observed in 2020 and 2021, despite increases observed in 2022. Both Tolworth Broadway and Kingston Vale monitors have returned concentrations below the national limit every year since 2020 and 2019, respectively.

Table E. Annual Mean NO₂ 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
1	517951	169029	Kerbside	99.5	99.5	21.7	20.1	16.3	15.2	14.6	11.5	10.8
2	518067	168672	Roadside	99.5	99.5	44.0	41.0	33.2	28.3	26.4	20.6	19.0
3	517565	167715	Roadside	99.5	99.5	30.7	28.6	23.1	22.2	20.6	17.0	14.8
4	517532	167296	Kerbside	99.5	99.5	27.6	25.6	20.8	19.6	18.3	14.9	13.5
5	517765	167143	Kerbside	99.5	99.5	36.9	34.3	27.8	26.5	26.3	20.5	18.5
6	518424	167604	Roadside	99.5	99.5	36.4	33.9	27.4	22.2	19.8	15.8	14.6
7	518039	167346	Kerbside	99.5	99.5	43.5	40.5	32.8	27.1	27.5	21.4	19.5
8	518336	166655	Roadside	99.5	99.5	37.6	35.0	28.3	26.0	23.9	18.5	16.7
9	518737	165768	Kerbside	99.5	99.5	22.2	20.6	16.7	17.0	14.7	12.9	11.5
10	519365	166230	Kerbside	91.6	91.6	38.1	35.4	28.7	26.3	23.7	20.6	17.5
11	519664	166505	Kerbside	99.5	99.5	26.1	24.3	19.7	17.7	17.2	14.3	12.3
12	519714	165886	Roadside	74.7	74.7	43.8	40.7	33.0	34.1	29.6	22.6	24.8
13	519808	165873	Kerbside	99.5	99.5	<u>65.1</u>	<u>60.5</u>	42.7 (44.4)	45.6	40.7 (39.1)	35.3	29.4

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
14	519872	165692	Kerbside	99.5	99.5	41.6	38.6	31.3	31.6	28.4	27.8	25.3
15	520192	165264	Kerbside	0.0	0.0	41.0	38.1	30.9	-	-	-	-
16	518087	165096	Kerbside	90.3	90.3	38.5	35.8	29.0	25.0	24.0	19.6	17.0
17	518026	164785	Roadside	99.5	99.5	37.0	34.4	27.9	22.8	24.0	18.5	16.6
18	517991	164532	Kerbside	99.5	99.5	42.7	39.7	32.2	24.7	25.5	21.0	18.4
19	518155	163395	Kerbside	99.5	99.5	29.5	27.4	22.2	19.4	18.4	14.8	13.4
20	517256	161578	Roadside	99.5	99.5	34.9	32.5	26.3	22.2	22.5	18.7	17.4
21	517683	163465	Roadside	99.5	99.5	36.1	33.5	27.2	24.2	21.9	18.3	16.3
22	518601	165270	Roadside	99.5	99.5	44.8	41.7	33.8	31.1	28.5	25.3	22.1
23	518147	169455	Kerbside	99.5	99.5	39.6	36.8	29.8	23.5	22.7	18.3	16.3
24	518467	169509	Roadside	99.5	99.5	<u>75.9</u>	<u>70.6</u>	<u>60.1</u> (51.2)	52.6	50.0 (51.1)	39.3 (36.2)	33.5
25	518533	169348	Kerbside	99.5	99.5	40.0	37.2	30.2	25.1	23.8	21.4	19.0
26	518199	170056	Roadside	99.5	99.5	34.7	32.3	26.1	23.9	21.4	17.1	15.5
27	517800	171423	Roadside	0.0	0.0	34.8	32.4	26.2	-	-	-	-

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
28	519353	169895	Kerbside	99.5	99.5	49.6	46.1	37.4 (33.3)	43.3	40.0	29.9	22.2
29	521107	172054	Kerbside	99.5	99.5	31.5	29.3	23.8	21.3	22.3	19.0	17.0
30	520611	169889	Roadside	99.5	99.5	38.9	36.2	29.3	31.0	28.2	23.8	18.4
31	521651	167397	Kerbside	99.5	99.5	38.6	35.9	29.1	33.3	28.8	23.8	21.3
32	521252	166877	Kerbside	99.5	99.5	27.1	25.2	20.4	16.3	15.9	13.3	13.4
33	521873	168117	Roadside	99.5	99.5	38.9	36.2	29.3	31.2	28.6	23.9	21.7
34	521416	168373	Roadside	99.5	99.5	37.8	35.1	28.4	27.9	26.3	19.7	17.0
35	520708	169258	Roadside	99.5	99.5	30.7	28.5	23.1	24.9	22.5	17.2	13.7
36	520047	169651	Roadside	99.5	99.5	32.2	30.0	24.3	27.2	25.2	20.3	16.8
37	520764	169525	Kerbside	99.5	99.5	26.0	24.1	19.6	18.5	17.5	14.4	13.8
38	520503	168388	Roadside	99.5	99.5	36.1	33.6	27.2	33.8	31.4	26.2	26.4
39	519372	169098	Kerbside	99.5	99.5	46.8	43.5	35.2	35.1	32.7	28.6	28.6
40	519064	169244	Roadside	99.5	99.5	42.3	39.3	31.9	31.0	29.9	25.0	23.4
41	518276	169164	Roadside	81.1	81.1	-	-	-	34.2	31.7	23.7	22.1

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
42	518806	170718	Roadside	99.5	99.5	-	-	-	14.1	13.1	11.2	10.5

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 $\mu\text{g m}^{-3}$.

Exceedances of the NO₂ annual mean objective of $40\mu\text{g m}^{-3}$ are shown in **bold**.

NO₂ annual means exceeding $60\mu\text{g m}^{-3}$, indicating a potential exceedance of the NO₂ 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%).

Figure 1-B

Annual Mean NO₂ Concentrations at Diffusion Tubes Monitoring Sites - Kingston and North Kingston

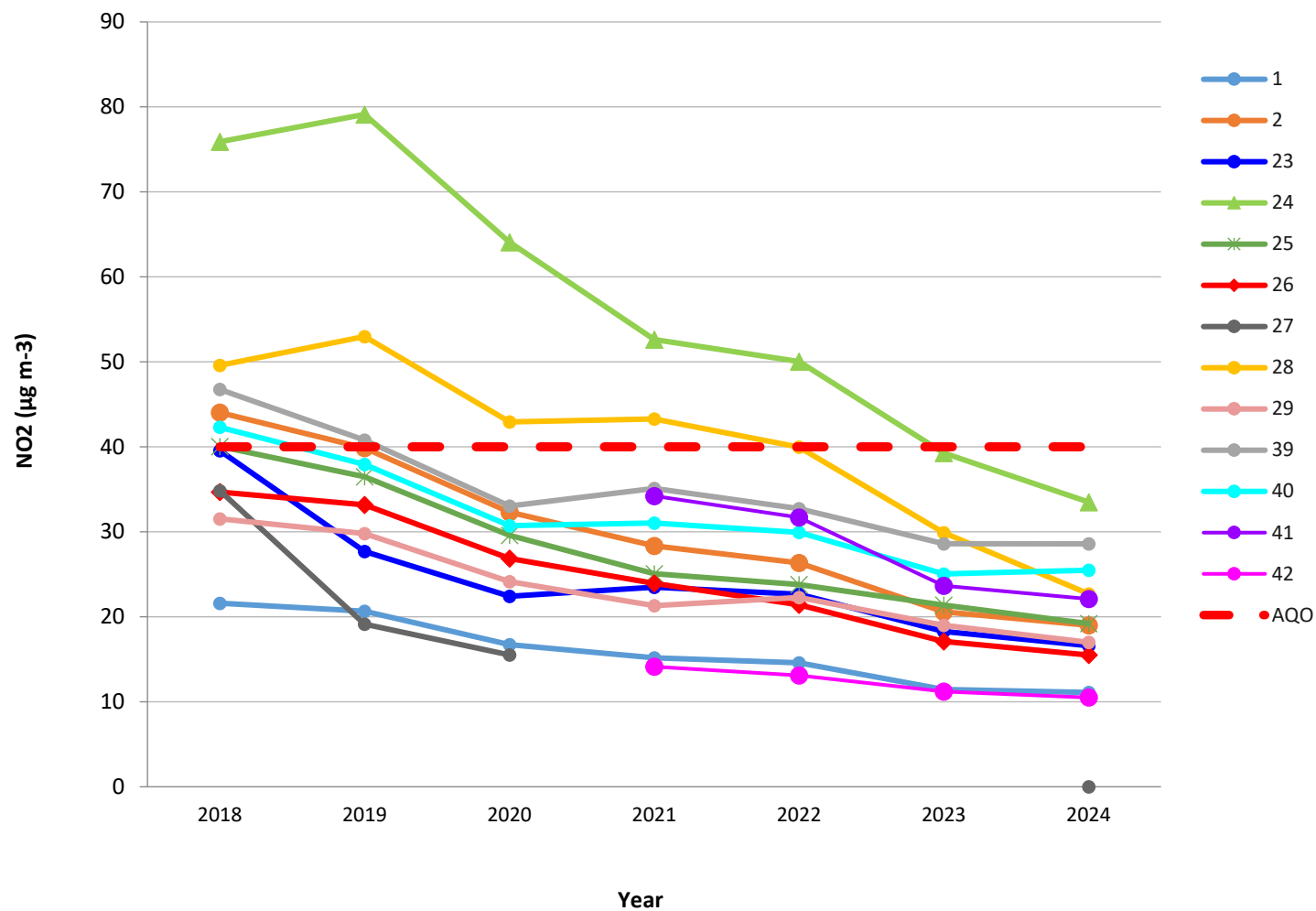


Figure 1-C

Annual Mean NO₂ Concentrations at Diffusion Tubes Monitoring Sites -
New and Old Malden

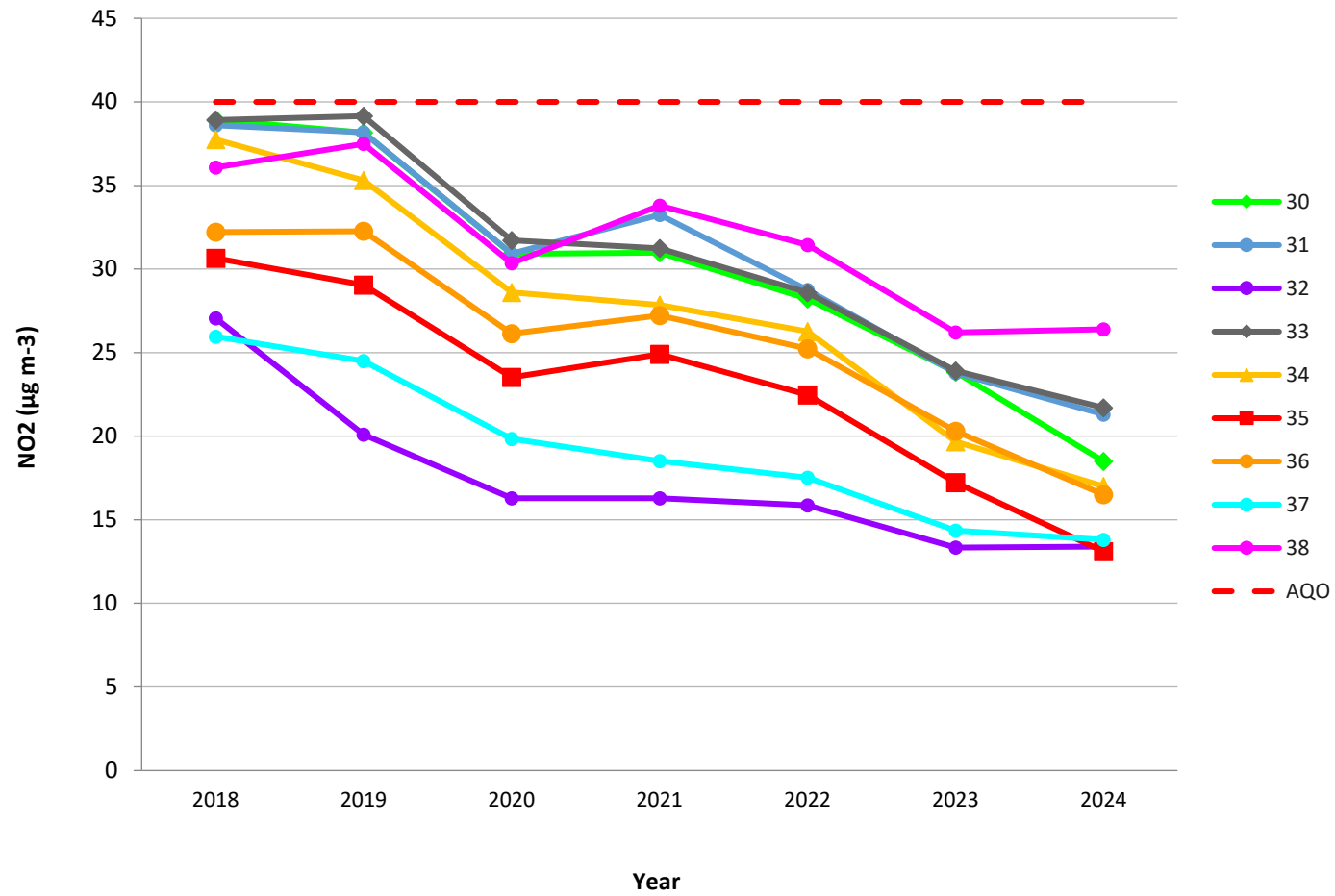


Figure 1-D

Annual Mean NO₂ Concentrations at Diffusion Tubes Monitoring Sites - Surbiton

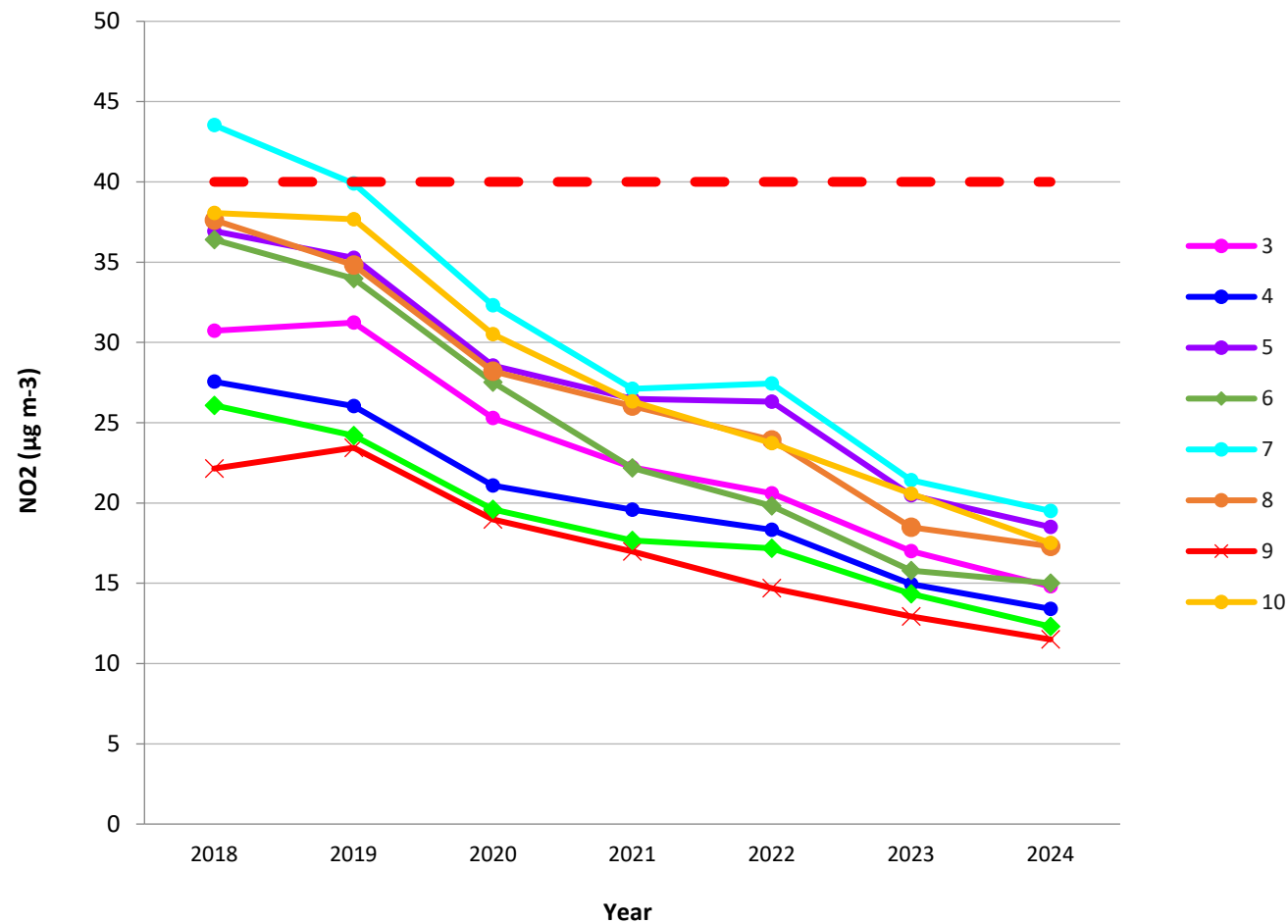
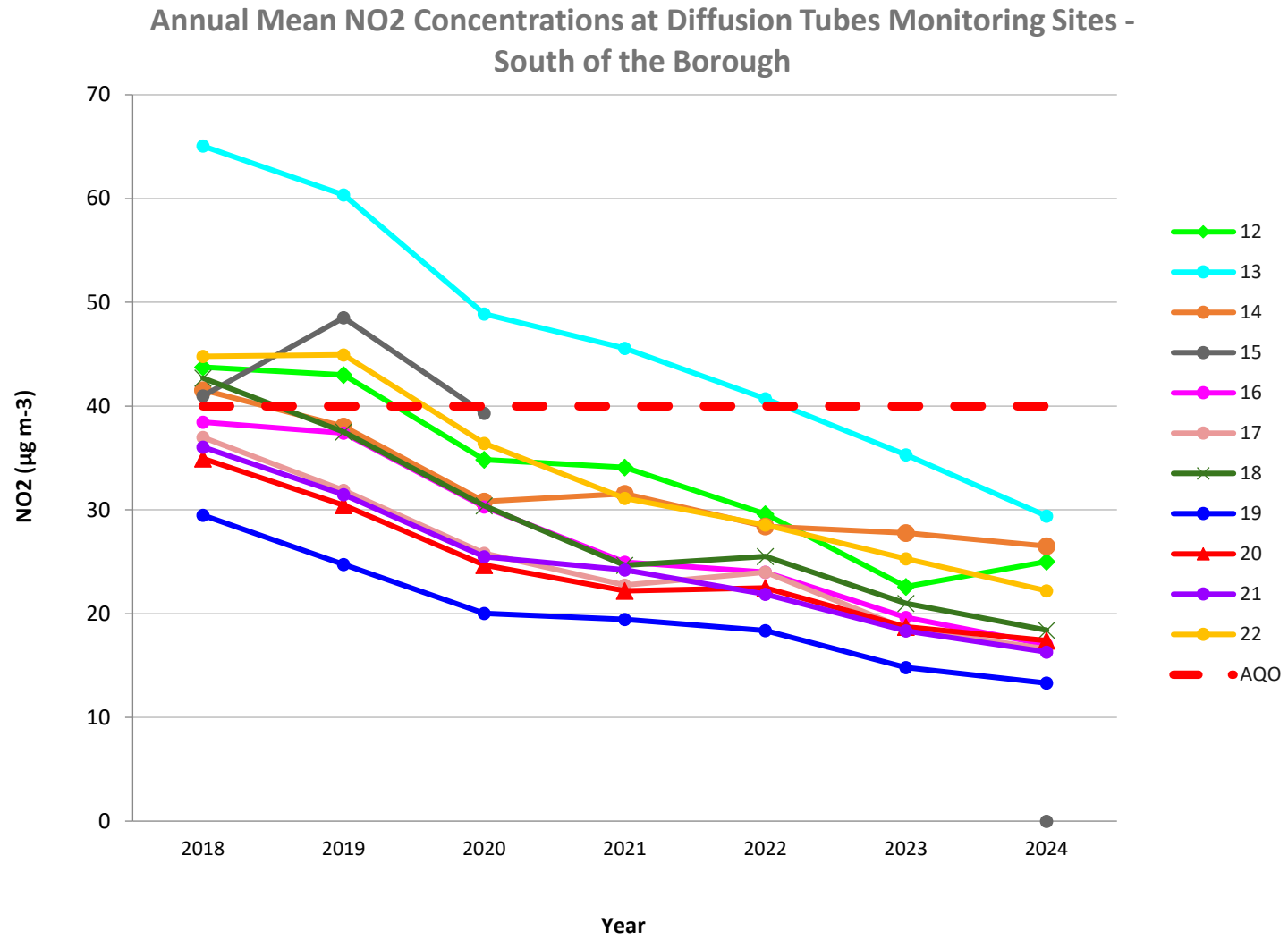


Figure 1-E



Discussion

General Overview

In 2024, the NO₂ Annual Mean Air Quality Objective was achieved at all diffusion tube sites in the Royal Borough of Kingston upon Thames. The annual mean NO₂ concentrations across all, bar four, diffusion tube sites have also decreased in the last year.

After a full year of Kingston being within the London Ultra Low Emission Zone (ULEZ), pollutant concentrations in the borough generally continue to be on a decreasing trajectory over the last 7 years. For the second year running, no diffusion tube site recorded an exceedance of the annual national objective. The highest annual NO₂ concentrations in 2024 were detected at 24 (Cromwell Road), 13 (Tolworth Roundabout), and 39 (Cambridge Road/Gloucester Road). Minor increases from 2023 concentrations were detected at sites 12 (Tolworth Broadway/Service Road), 32 (South Lane), 38 (Kingston Road (Carpet Right)), and 40 (Cambridge Road/Hawks Road). Increases at sites 32, 38, and 40 may be considered as statistical noise as all increases were 1.5% or below. The increase at site 12 was more significant.

There are various factors that may have affected the fall in annual mean NO₂ concentrations across the majority of sites in Kingston; these include, the switch to low emission vehicles by the general public, post-COVID hybrid working, and traffic improvements.

ULEZ, and the knock on impacts of it (e.g. people avoiding driving in London, or upgrading to vehicles with cleaner technology) have likely played a role here; the uptake of newer vehicles and decisions to change transport modes were likely accelerated across the borough, especially in the face of heightened media attention. The effects of this still expansion cannot be accurately represented in this report, given the relatively short length of time the expansion, and the potential impacts of other activities to reduce air pollution occurring within the borough.

Cromwell Road

The Cromwell Road (24) site in 2023 had an annual NO₂ concentration of 39.3 µg m⁻³ and this has fallen to 33.5 µg m⁻³ in 2024, a fall of approximately 12 %. This site has had one of the steepest declines in NO₂ concentrations over the last 7 years with the most significant fall occurring between 2019 and 2021, closely mirrored 2022 and 2024. While the former decrease is expected as a result of COVID restrictions, the second sharp decline between 2022 and 2024 is potentially due to the 15-month long refurbishment of the bus station over 2023 and 2024. It is expected that the report for 2025 and beyond will either provide definitive information on the cause of this reduction (i.e. if the closure of the bus station is the reason), or allow us to determine whether the introduction of electric buses in this location will have a significant/continued impact on pollutant concentrations. As all nearby roads are now included within ULEZ, it is reasonable to assume that it has had some impact as well, although the depth of this impact is not easy to ascertain.

Tolworth Broadway

Tolworth Broadway (13) saw a 14.5 % decrease in annual NO₂ concentrations between 2023 and 2024. The fall of annual NO₂ concentration at this site has remained steady since 2020, Site 13 is located on a key junction of the A3; an essential transport route which was likely less impacted by COVID restrictions than other sites across the borough. In locations like this, the impact of ULEZ is more likely to be seen, as traffic using this road is likely to have been impacted by both the initial and latter expansions of ULEZ, as the A3 is a direct route into Central London.

Sites close to site 13, such as diffusion tube site 12 (Tolworth Broadway) and automatic monitoring site KT4 (Tolworth Broadway) have consistently shown lower annual mean NO₂ concentrations than site 13, this is likely due to site 13 being located close to the outer lane of the roundabout while sites 12 and KT4 are located further away from the road in Tolworth Broadway. Worth noting is

that site 12 was one of four locations that actually saw an increase (by approx. 8%) in annual concentrations of NO₂ between 2023 and 2024. The reason for this is not immediately clear, although it may be attributed to the lane closures on the Tolworth Roundabout between November 2023 and May 2024. This is one of two sites which required annualisation in 2024.

Cambridge Road (A2043)

Over the 7 years, the annual mean NO₂ concentration at the Cambridge Road/Gloucester Road junction (39) has decreased. After the COVID associated dip in concentrations in 2020, concentrations rose again in 2021 which was somewhat expected as a response to the “return to status quo”. Concentrations began decreasing again from 2022 then into 2023. This year, there has been no change in annual mean NO₂ concentrations between 2023 and 2024.

The other monitors along this road (38 and 40) showed minor increases in NO₂ concentration, which implies that this effect may be localised to this road only.

There is a large phased construction project occurring nearby these monitors on Cambridge Road. This regeneration project is to provide over 2000 new dwellings and requires extensive construction and demolition work, which in turn, will result in an influx of HGVs other traffic to this location; this may have had some impact on traffic flows in the area, which may be why no significant reduction in concentration was observed, even with the ULEZ being active in Kingston this year.

Table F. NO₂ 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
KT4	519706	165885	Roadside	76.4	76.4	0	0	0 (109.5)	0	0 (106.8)	0	0
KT5	518562	169519	Roadside	99.8	99.8	1	5	0	0	0	0	0
KT6	521251	172166	Roadside	84.7	84.7	0	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 NO₂ 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%)

Discussion

In 2024, the NO₂ 1-hour mean objective was met across all automatic monitoring sites in the Royal Borough of Kingston upon Thames, as no site had NO₂ concentrations exceeding 200 µg m⁻³. Across the 7 years, the objective of 200 µg m⁻³ over 18 hours per year has never been exceeded. For sites Tolworth Broadway (KT4) and Kingston Vale (KT6), the NO₂ concentrations have

never exceeded $200 \mu\text{g m}^{-3}$ since 2018. Cromwell Road (KT5), had a few exceedances between 2018 and 2019, however, since 2020 NO_2 concentrations have never exceeded $200 \mu\text{g m}^{-3}$.

Table G. Annual Mean PM₁₀ 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
KT4	519706	165885	Roadside	-	-	23	22	21.7	21.6	23	-	-
KT5	518562	169519	Roadside	95.9	95.9	30	26	23.9	27.7	30.1	28.6	23.2
KT6	521251	172166	Roadside	95.8	95.8	22	20	17.7	17.7	16.7	16.5	15.7

Notes

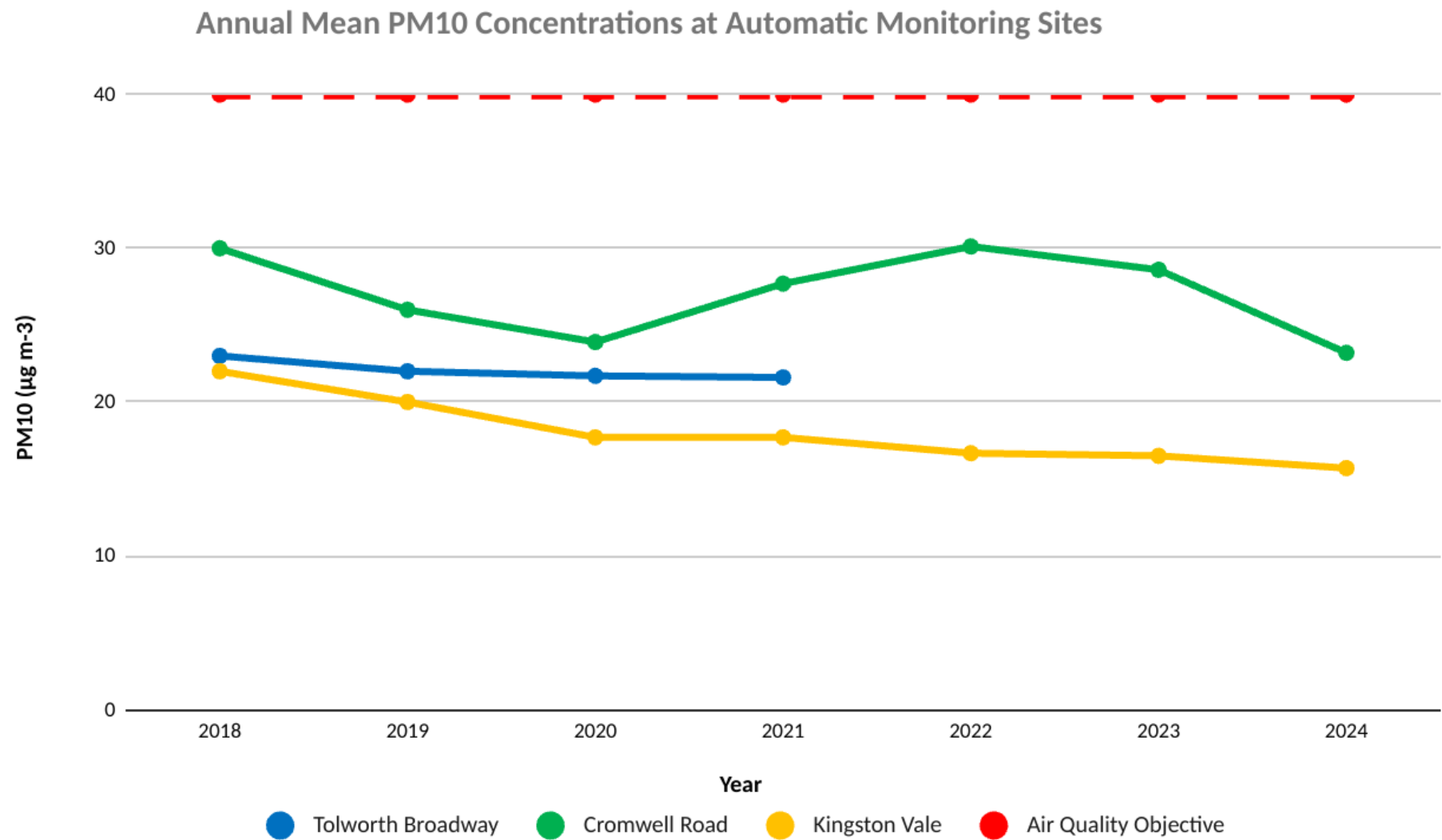
The annual mean concentrations are presented as µg m⁻³.

Exceedances of the PM₁₀ 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%).



Discussion

The main source of PM₁₀ in Kingston is dust from construction sites, wood burning, car tyres, brake and road wear, dust resuspension and various other activities in industrial sites. In 2024, the PM₁₀ annual mean air quality objective was met across all automatic monitoring sites across the Royal Borough of Kingston upon Thames.

Tolworth Broadway (KT4) was changed into a PM_{2.5} monitor in 2022. Prior, the annual mean PM₁₀ concentrations remained steady between 21-23 µg m⁻³.

The Cromwell Road (KT5) site has still detected the highest annual mean PM₁₀ concentrations in the borough, however, this year is the first time annual mean PM₁₀ concentrations have dipped below 2020 (COVID pandemic) levels (23.9 µg m⁻³); a new 7 year low of 23.2 µg m⁻³ in 2024. It is possible that this is an artificially low concentration, as the bus station was closed until November 2024, however only a small decrease in concentration was observed between 2022 and 2023, despite the bus station being closed for a third of the year in 2023. ASRs following this one will tell us if this is a sustained improvement or not. If sustained, its possible that the improvement could be attributed to the improvements to the bus fleet and ULEZ to a lesser extent.

The Kingston Vale (KT6) site has consistently shown the lowest annual mean PM₁₀ concentrations in the borough. Across the 6 years, there has been a gradual fall in PM₁₀ concentrations.

Table H. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 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
KT4	519706	165885	Roadside	-	-	2	7	6	5	-	-	-
KT5	518562	169519	Roadside	95.9	95.9	1	5	0	0	0	0	6
KT6	521251	172166	Roadside	95.8	95.8	0	0	0	0	0	0	0

Notes

Exceedances of the PM₁₀ 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%).

Discussion

In 2024, all automatic monitoring sites in the Royal Borough of Kingston upon Thames had met the PM₁₀ 24-hour mean objective, as no site had exceeded the 24-hour mean exceedance of 50 µg m⁻³ for over 35 days.

Tolworth Broadway (KT4) was changed into a PM_{2.5} monitor in 2022. Prior, the number of PM₁₀ 24-hour mean exceedances was between 2 and 6.

The Cromwell Road (KT5) site has the highest number of PM₁₀ exceedances over 7 years and has 6 in 2024, after having none since 2020. This is a very congested area (A307), and any construction dust from the redevelopment of the bus station may have had an impact on the annual result for this year despite the bus station not being operational.

The Kingston Vale (KT6) site has consistently had the lowest number of PM₁₀ 24-hour mean exceedances across 7 years, with none in 2024.

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
KT4	519706	165885	Roadside	85.6	85.6	-	-	-	-	8.3 (9.3) *Ann	9.2	9.4

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%).

Discussion

Only 3 years worth of data has been collected so far by this monitor, so full trend analyses is not yet possible, however since 2022, concentrations have remained below $10 \mu\text{g m}^{-3}$ and therefore within the annual mean concentration target. 2024 reported the highest concentration of $\text{PM}_{2.5}$ so far.

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 Royal Borough of Kingston upon Thames can be found in Table L. The table presents a description of the single borough-wide AQMA that is currently designated within Kingston. Appendix C provides a map of the AQMA and also the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designations are as follows:

- Particulate Matter PM₁₀ – Annual Mean and 24-Hour Mean
- Nitrogen dioxide NO₂ - Annual 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
Kingston upon Thames AQMA	02/01/2003	NO ₂ (annual mean) PM ₁₀ (annual mean, 24 hour mean)	Entire borough	No	NO ₂ - annual mean - 73 µg m ⁻³ (Kingston Bypass A3) PM ₁₀ - annual mean - 33 µg m ⁻³ (Kingston Bypass A3) PM ₁₀ - 24 hour mean - 42 exceedances (Kingston Bypass A3)	None	2 years	Royal Borough of Kingston upon Thames AQAP 2021-2026 (June 2021)	https://www.kingston.gov.uk/downloads/file/1054/air-quality-action-plan-2021-2026

RBK confirms the information on UK-Air regarding their AQMA(s) is up to date.

RBK confirms that all current AQAPs have been submitted to GLA.

2.2 Air Quality Action Plan Progress

Table M provides a brief summary of Kingston upon Thames' 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 (where applicable).

2024 is potentially the penultimate year for this Action Plan, as this plan is in place until 2026. Revision of this plan begins in 2025 with a view to publicly consult in the first quarter of 2026.

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
4	Borough Fleet Action	Devise and implement a driver training system to promote efficient driving practice amongst Council employees.	2026/27	Environmental Protection	This project is currently in development for implementation; talks are underway with a provider who will provide telemetric and telematic data about driving behaviours and an educational programme for participants. This educational programme will subsequently be disseminated to the entire staff.
32	Emissions from developments and buildings	Promoting and delivering energy efficiency retrofitting projects in workplaces and homes using the GLA RE:NEW and RE:FIT programmes to replace old boilers /top-up loft insulation in combination with other energy conservation measures.	Ongoing through and beyond the period of this AQAP	Property Services	RBK held a second Efficient Homes show in May 2024 to help residents and local businesses learn about ways to improve the energy efficiency of their properties. The event provided an opportunity for attendees to speak with experts and featured exhibitors showcasing commercial and residential retrofit technology and services. The event featured over 30 local businesses and community groups and was attended by more than 260 people.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					- Phase 1 of the Social Housing Decarbonisation Fund Wave 2.2 (SHDF) funded works were completed. This included the installation of new solar panels on the roofs of 9 properties. This measure improved the energy efficiency of these properties, elevating them from a band D to a band C rating. The completion of this phase enabled the council to achieve a spend of £266,000 by the March 2024 deadline, from the total allocated funding of £567,557.87. The second phase of these works is now underway on 53 properties and involves a variety of measures, including loft insulation upgrades, external and cavity wall insulation, ventilation, and solar and battery storage. - RBK was successful in receiving £752,050 of Public Sector Decarbonisation Scheme (PSDS) grant funding for heat decarbonisation and energy efficiency measures. The council is contributing an estimated £1,351,266 over the 2 years of the bid. Mitie have provided designs for the 4 selected sites (Hook Centre, New Malden Library, Surbiton Library and The Dukes Centre) which met the requirement for close to or end of life boiler status. The grant will go towards measures including gas boiler replacements, Building Management System upgrades, LED upgrades and solar PV installation. These works are projected to reduce carbon emissions by 119 tonnes

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					annually once completed. The Council signed a design and delivery partnership agreement with Cenergist under the Retrofit Accelerator programme. Cenergist supported the PSDS bid submission and have completed 15 High Level Appraisals of council properties. They are now compiling Investment Grade Proposals on a further 7 buildings. The council continued to work with CREW energy to offer discounted home energy audits to residents. This service offers bespoke information and advice on a range of retrofit measures suitable for their homes. The offer has been advertised across the council's news website, social media and community boards.
41	Public Health and Awareness Raising	Design and deliver a clean air communications campaign to raise awareness of the harm caused by poor air quality and how individuals can take action to reduce their emissions.	Ongoing through and beyond the period of this AQAP	Strategy and Engagement	Communications over the 2024 period: - Clean Air Night - Walk to Work Day - Community tree / greenery planting - Electric vehicle charger survey - Forest e-bike hire scheme - Community cycle rides - Dr Bike bike maintenance sessions - Solid fuel burning (prompted by the resident who contacts RBK frequently) - Gas boiler alternatives through the retrofit workstream (heat pumps / solar panels) Play Streets / Street Parties in support of Car Free Day.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
1	Borough Fleet Action	Ensure that all SEND Vehicles are Euro 6 Complaint with a reissued fleet of vehicles by Sept. 2021 and transition to all electric vehicles as soon as a suitable replacement is available to match current specification.	Ongoing	Sustainable Transport	All vehicles used for SEND transport are ULEZ compliant. Electric vehicle transition will form part of the contract renewal process where possible.
2	Borough Fleet Action	Kingston to sign the Clean Van Commitment from Global Action Plan and commit to swapping fleet vehicles for zero emission versions, where they exist and are suitable, by 2028. Kingston to lobby vehicle providers.	2024	Procurement	The Clean Van Commitment is closed, however Kingston is continuing to building upon the successes the of previous years and transferring more fleet to no or low emissions vehicles
3	Borough Fleet Action	Replace all remaining housing fleet to electric when suitable cost-effective electric vehicles are available. Ensure that housing fleet vehicles for which like for like EV options do not yet exist are Euro VI-compliant.	Ongoing	Procurement	Electric vehicle transition will form part of the contract renewal process where possible. All vehicles are ULEZ compliant.
5	Cleaner Transport	Continue to lobby TfL and Surrey CC to increase the rate at which ultra-low emission buses are introduced in Kingston.	Ongoing	Highways and Transport	The Council lobbies for emission improvements to the bus fleet through Kingston at regular meetings with colleagues at TfL, and welcomes that some routes passing through Kingston are now being serviced by electric buses.
6	Cleaner Transport	Carry out a public consultation process to maximise quality of the bus service by optimising routes and frequencies.	Ongoing	Highways and Transport	Expected progress on this action in 2024 was not possible due to vacancies within the sustainable transport team.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
7	Cleaner Transport	Lobby Transport for London and South Western Railways for changes to the zones system for Kingston, Surbiton and Chessington resulting in cheaper, Zone 5 fares.	Ongoing	Assistant director for Highways, Transport and Regulatory Services	The Council lobbies for changes to the zone system for the borough at regular meetings with TfL colleagues
8	Cleaner Transport	Implement a public e-bike hire scheme in the borough in 2021.	2025	Sustainable Transport	Concession contract renewed for final 12 month period from September 2024. Since inception to 31/12/24 243,335 journeys have been made using Forest bikes, covering a total distance of 516,662 miles and avoiding 46.54 tons CO2.
9	Cleaner Transport	Working with schools to carry out an Active Travel Challenge over one month with rewards on offer for entrants. Possibly targeting parents and guardians with children at schools with school streets.	Ongoing through and beyond the period of this AQAP	Sustainable Transport	There is no update due to staff absence & an unfilled vacancy in the team in 2024.
11	Cleaner Transport	Encourage businesses to sign up to a green pledge for Kingston. Hold a healthy green workplaces conference to encourage the use of sustainable transport.	Ongoing through and beyond the period of this AQAP	Kingston Healthy and Safe	Part of the Climate Emergency Action Plan, Theme 6, Green Economy: Businesses have signed up to the Kingston Green Business Community (established in 2022). Businesses have the opportunity to apply for the Kingston Green Business Challenge; whereby a business will aim to increase efficiencies; one of the objectives to meet this criteria is to decarbonise and/or change modes of transport. The Kingston Green Business Challenge continues to receive applications with 10 businesses receiving/renewing their accreditation in the 2023/24 period

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
13	Cleaner Transport	Discouraging unnecessary idling through continued participation with the Idling Action campaign if possible, installation of anti-idling road signs at known hotspots, promotion of anti-idling online workshops provided by Idling Action with schools, businesses, and borough drivers.	Ongoing through and beyond the period of this AQAP	Environmental Protection	Kington Continues to participate within the London idling action project. There is continued promotion of vehicle anti-idling and localised investigations and education where founded complaints are received.
14	Cleaner Transport	Assess the feasibility of changing all borough residential roads to 20mph.	Ongoing through and beyond the period of this AQAP	Highways and Transport	98% of residential roads in Kingston are 20 mph
15	Cleaner Transport	Increasing the proportion of electric and hydrogen vehicles and low emission vehicles in Car Clubs.	2028	Sustainable Transport	Delay in procurement so the new car club contract will start Summer 2025. Aim to introduce hybrid and EV vehicles to car club fleets over the three year length of the contract.
16	Cleaner Transport	4 Very Important Pedestrian Days a year on weekdays leading to trials of play streets in residential areas. In business areas, target one a year on a Sunday.	Ongoing through and beyond the period of this AQAP	Sustainable Transport	Kingston upon Thames had play streets in the following roads in 2024: - Sycamore Grove - Highclere Road - Homersham Road - Piper Road - Manorgate Road

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
17	Cleaner Transport	Surcharge on diesel vehicles below Euro 6 standards for Residents and Controlled Parking Zone permits.	Completed 2024	Parking	The council considered updated proposals for emission based pricing and has decided to retain and uplift charges in a standard range rather than a surcharge. A decision was also taken to withdraw the free permit for electric vehicles, now charge in line with all other resident permit options. To incentive reduced car ownership, tiered pricing has been introduced for resident parking permits in line with the scheme for business parking permits, with a levy applied for a 2nd and 3rd+ vehicles. Consideration should be given to updating this measure to reflect the expansion of ULEZ and whether further measures such as EBP remain viable measures for encouraging transition to lower emission vehicles.
19	Cleaner Transport	Installation of rapid electric vehicle chargers in 3 RBK town centre car parks.	Completed 2024	Sustainable Transport	This action was performed by a previous contractor and is no longer relevant in its current form. Our new contractor/enforcement provider may be able to offer up to 10 EV charging points as part of their Social Value Commitment. Talks ongoing
20	Cleaner Transport	Reallocation of road space; reducing parking in accessible destinations and or restricting parking on congested high streets and busy roads to improve bus journey times,	Ongoing through and beyond the period of this	Highways and Transport	No update available

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		cycling experience, and reduce emissions caused by congested traffic.	AQAP		
21	Cleaner Transport	Provision of infrastructure to support walking and cycling.	Ongoing through and beyond the period of this AQAP	Highways and Transport	TMO consultation is completed and we have just completed transferring administration of the existing on-street hangars to the supplier for these new on-street hangars (to ensure all users pay the same annual fee. An installation schedule will be agreed with the new supplier shortly. Procurement for the 24/25 TfL funding has successfully completed with a further 9 hangars to be installed in Local Authority housing developments over the summer months.
22	Delivery Servicing & Freight	Update of local authority Procurement policies to include a requirement for suppliers with large fleets to have attained silver FORS accreditation.	Completed 2023	Procurement	Completed
23	Delivery Servicing & Freight	Update of Procurement policies to ensure sustainable logistical measures are implemented (and include requirements for preferentially scoring bidders based on their sustainable criteria).	Completed 2023	Procurement	Completed
24	Delivery Servicing & Freight	Secure delivery and servicing plans and monitoring via planning obligations for large traffic	Ongoing through and	Planning	Standard Activity for the team responsible. We already request Planning to condition a DSP for

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		generators, including commercial developments, new and expanded schools, other community facilities and major residential developments.	beyond the period of this AQAP		all larger developments and review them once submitted.
25	Emissions from developments and buildings	Construction Management Plans imposed by planning obligation on all major and other sensitive development in consultation with advice from Transport/Highways and Air Quality.	Ongoing through and beyond the period of this AQAP	Planning	Standard Activity for the team responsible. Planning requests to condition a DSP for all larger developments and review them once submitted.
26	Emissions from developments and buildings	London Plan policies on energy efficiency applied to relevant development; Aspiration to adopt BREEAM target policies for development in RBK new Local Plan subject to viability testing.	Ongoing through and beyond the period of this AQAP	Planning	Development applications are evaluated based on relevant development plan policies, including the requirements of the London Plan. For major development proposals, Policy SI2 of the London Plan requires a minimum 35% reduction in carbon emissions compared to the standards outlined in Part L of the Building Regulations, which primarily focuses on building energy efficiency. Additionally, major residential development should achieve at least a 10% reduction through energy efficiency measures, while non-residential development should achieve at least 15%. The Council's Draft Local Plan proposes that non-residential developments comprising an area of 500m² or more should achieve a BREEAM rating of 'Excellent' or above. The evidence of viability suggests that requiring the BREEAM 'Excellent' rating and achieving net zero carbon on developments could have a significant impact in some cases.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
27	Emissions from developments and buildings	Ensuring enforcement of Non Road Mobile Machinery (NRMM) air quality policies through continuing membership of the NRMM enforcement project.	Ongoing through and beyond the period of this AQAP	Environmental Protection	The use of our standard NRMM planning condition during 2024 is summarised in Table N. The Council continued taking part in the pan-London NRMM part project, originally funded by the MAQF.
28	Emissions from developments and buildings	Apply London Plan CHP and biomass air quality policies to relevant development.	Ongoing through and beyond the period of this AQAP	Planning	Ongoing
29	Emissions from developments and buildings	Applying London Plan 2022 Air Quality Neutral policies to new major development.	Ongoing through and beyond the period of this AQAP	Planning	Ongoing
30	Emissions from developments and buildings	Urban Greening Factor requirement for relevant development in line with London Plan; Maintenance plans for green infrastructure secured by planning condition.	Ongoing through and beyond the period of this AQAP	Planning	Ongoing
31	Emissions from developments and buildings	Ensuring that Smoke Control Zones are fully promoted and enforced through investigating complaints of smoke, consolidating the smoke control zones into a single zone that	Ongoing through and beyond the period of this	Environmental Protection	The consolidated smoke control order is now in effect. The Pollution Control team continues to investigate instances of smoke emissions, under the legislation, and are part of the London Wood Burning project developing policy and protocol

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		encompasses the entire borough, and investigating fuel retailers for compliance.	AQAP		for implementation of the legislation and data collection methodology.
33	Emissions from developments and buildings	Ensure that planning and development within the borough are compliant with relevant planning policies in relation to air quality in order to mitigate the potential impacts of development on air quality and to protect the health and amenity of the population.	Ongoing through and beyond the period of this AQAP	Planning	Ongoing
34	Localised Solutions	Carry out air quality audits on the three schools in Kingston where NO ₂ concentrations are the highest in accordance with the GLA audit toolkit. Promote Schools Pollution Helpdesk and GLA audit toolkit.	2026	Environmental Protection	Due to limited resources this has not yet commenced in RBK.
35	Localised Solutions	Bid for funding to be able to implement 3 experimental schools streets per year and seek to make existing experimental schemes permanent.	Ongoing	Sustainable Transport	In October 2024 the experimental Lovelace School Street in Devon Way became permanent. Two further school streets schemes at St Phillip's & Ellingham Schools were evaluated in order to prepare them for committee in January 2025.
37	Localised Solutions	Carry out study to assess feasibility of implementing Kingston's first Zero Emissions Zone.	Ongoing	Highways and Transport	No update available
38	Localised Solutions	Continue to ensure that streets are designed in line with Healthy Streets	Ongoing	Highways and Transport	In 2024 the overall "factored" Healthy Streets score rose from 3.2 to 3.93 and it's overall

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Guidance with a specific focus on promoting sustainable transport by making highways safer, more accessible, and attractive through design, maintenance and greening. Implement a framework to ensure that all planned maintenance works consider Healthy Streets impacts.	through and beyond the period of this AQAP		position increased from 23rd to 20th of all 33 London boroughs.
40	Monitoring and other core statutory duties	Collect and publish air quality monitoring data in line with the requirements of the London Local Air Quality Management framework.	Ongoing through and beyond the period of this AQAP	Environmental Protection and Public Health Lead; all other contributing departments (e.g. highways, procurement etc)	This task is led and completed annually by the pollution control team
42	Public Health and Awareness Raising	Develop a communications strategy which raises awareness of the harm caused by solid fuel burning. Material to be published early every winter for maximum impact.	2026	Strategy and Engagement	RBK is participating in the London Woodburning Project along with other London boroughs. General communications around Clean Air Day and Clean Air Night occur as standard annually. With more intense communications are planned on in 25/26
43	Public Health and Awareness Raising	Implement a schools outreach programme designed to raise awareness of the impacts of air pollution and help them to create clean air route plans. Provide this service to at least five schools in the borough and produce an article outlining findings for the head's newsletter.	2029	Strategy and Engagement	This has not taken place due to lack of resources, however it is hoped that the project will commence in 2025/6

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
44	Public Health and Awareness Raising	Ensure that the Director of Public Health is fully briefed on the content of the Annual Status Reports on air quality in relation to the current situation in our local authority area, actions that have been taken thus far, and what is needed to reduce the health impacts of poor air quality in the future.	Ongoing through and beyond the period of this AQAP	Environmental Protection	The Director of Public Health is provided with a copy of the Annual Status Report and is updated on progress against actions taken. The Public Health team are invited to contribute to relevant projects and initiatives that have a direct or indirect public health impact.
45	Public Health and Awareness Raising	Director of PH will be consulted on all relevant air quality projects to liaise with key stakeholders.	Ongoing through and beyond the period of this AQAP	Public Health	Ongoing as needed
46	Public Health and Awareness Raising	In relevant Public Health publications and in the statutory Annual Public Health Report, the Public Health DPH will have responsibility to ensure inclusion of up to date information on air quality impacts on the population.	Ongoing through and beyond the period of this AQAP	Public Health	In follow up to the JSNA 2023 which included Air Quality issues, the new Joint Local Health and Wellbeing Strategy 2025-2028 (which draws from the JSNA), includes a priority on respiratory health (which includes an air quality component). The JLHWS is scheduled for sign off in April 2025 (consultation just completed in March 2025)
47	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 (as part of	Ongoing through and beyond the period of this AQAP	Public Health	The Kingston Consultant in Public Health, along with team members in the Healthy & Safe team, gives input on Air Quality projects and initiatives as required.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		a wider role, not a dedicated air quality post).			
48	Public Health and Awareness Raising	Director of Public Health/relevant CHoS to sign off Statutory Annual Status Reports and all new Air Quality Action Plans.	Ongoing through and beyond the period of this AQAP	Public Health	Ongoing as required
49	Public Health and Awareness Raising	Provide a briefing which can be disseminated amongst the Transport team detailing their responsibilities in relation to air quality improvement as well as risks and opportunities relevant to their service area that relate to air quality.	2025	Environmental Protection	Kingston's new air quality officer will begin this task alongside the establishment of an air quality working group within the council.
50	Public Health and Awareness Raising	Promotion of availability of airTEXT air pollution alert system on the website, doctor's surgeries, hospitals, and schools. Mayor's air quality alerts to be disseminated using social media.	Ongoing through and beyond the period of this AQAP	Environmental Protection	RBK has continued to promote the AirTEXT service as well as recommending ways in which residents can reduce their exposure to, and emissions of, air pollution
51	Public Health and Awareness Raising	Support five schools to join and achieve bronze accreditation in the TfL STARS accredited travel planning programme by providing information on the benefits to schools and supporting the implementation of such a programme.	Ongoing through and beyond the period of this AQAP	Sustainable Transport	Please note that the staff member responsible for this work was unwell for much of this period and left in autumn 2024. The position has not yet been filled and so this work has currently stalled. STARS/TfL Travel for Life accredited schools in 24/5:

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					6 Gold (Christ Church Primary; Coombe Hill Junior; Lovelace Primary; Shrewsbury House; Tiffin School, St John's Primary School) 1 Silver (Coombe Hill Infant) 1 Bronze (Ellingham Primary)

3. Planning Update and Other New Sources of Emissions

Table N. Planning requirements met by planning applications in the London Borough of Sutton in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	All Major developments are assessed for air quality; including operational air quality, air quality neutral, and construction impact The council started recording this data in 2024
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)	All major developments with demolitions and Air Quality Dust Management Plans perform monitoring, visual or otherwise. The council started recording this data in 2024
Number of CHPs/Biomass boilers refused on air quality grounds	0 No proposals included CHPs/Biomass Boilers in 2024
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 No proposals included CHPs/Biomass Boilers in 2024
Number of developments required to install Ultra-Low NO _x boilers	This information is not collected. All developments are required to install boilers with NO _x emissions below 40 mg/kWh, in adherence to the London Plan 2021
Number of developments where an AQ Neutral building and/or transport assessments undertaken	167 planning applications were assessed by the pollution control team in 2024 – all applications submitted to the Pollution Control team for consultation are screened for the requirement of an AQN assessment as a minimum
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	This number is being recorded as of 2024 in database management software, however personnel issues have rendered the information inaccessible.
Number of planning applications with S106 agreements including other requirements to improve air quality	0 (context: no applications were submitted which included CHP/Biomass)

Condition	Number
Number of planning applications with CIL payments that include a contribution to improve air quality	0 (context: no applications were submitted which included CHP/Biomass)
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.	Kingston upon Thames has no relevant development sites within Opportunity Areas
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 Stage IIIB of the Directive and/or exemptions to the policy.	13 audits; 5 cold engaged 3 sites self compliant 7 sites compliant 10 registered and 2 complete 1 non-compliant; dues to failure of emissions tests <i>A relevant code within our databases has been created to record the number of NRMM conditions applied; due to personnel changes in that team, the statistics currently remain unavailable to us.</i>

The Royal Borough of Kingston upon Thames Planning Department consults the Environmental Protection Team on all major planning applications as well as some non-major applications that are likely to be of interest. Applications are reviewed by officers within the team in respect of contaminated land, noise and air quality. Typically, one officer coordinates the team's response and records data such as the air quality conditions that were recommended.

The enforcement of air quality conditions is largely the responsibility of the Planning Enforcement Team unless environmental nuisance issues arise. However, NRMM enforcement is carried out by the LB Merton-led pan-London NRMM enforcement project, funded by the Mayor's Air Quality Fund.

3.1 New or significantly changed industrial or other sources

No new or significantly changed sources identified.

4. Additional Activities to Improve Air Quality

4.1 Royal Borough of Kingston upon Thames Fleet

There are a small number of zero emission and zero emission capable vehicles within the borough's fleet in 2024.

Kingston is serviced by a fully electric waste management fleet following the delivery and activation of 27 electric vehicles since November 2023.

4.2 Planning Enforcement

Planning conditions are enforced by the Planning Enforcement Officers in Kingston upon Thames. Breaches discovered within the NRMM enforcement project are passed on to the relevant teams within the council (Environmental Health or Planning) to be dealt with. Once received, the council's enforcement protocols apply.

4.3 Pan-London NRMM Auditing Project

The Royal Borough of Kingston upon Thames will continue to support the NRMM Enforcement project through 2024/2025.

The council uses planning conditions to enforce NRMM requirements on construction sites;

"NRMM

All Non-Road Mobile Machinery (NRMM) of net power of 37kW and up to and including 560kW used during the course of the demolition, site preparation and construction phases shall comply with the emission standards as published on the NRMM Website (<https://nrmm.london/>). Unless it complies with the standards set out on the website, 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 developer shall keep an up to date list of all NRMM used during the demolition, site preparation and construction phases of the development on the online register at <https://nrmm.london/>"

and some conditions for NRMM (e.g. generators) in an operational site is being adapted and trialed;

"Prior to the occupation of the development hereby permitted, a report with details of the combustion plant in order to mitigate air pollution shall be submitted to and approved in writing by the council. The report shall include the following:

- a) Details to demonstrate that the termination height of the Flue stack for the combustion Plant has been installed a minimum of 2 metres above any openable*

window and/or roof level amenity area

- b) Details of emissions certificates, and the results of NO_x and PM₁₀ emissions testing of each Emergency Diesel Generator Plant and associated abatement technologies including Diesel Particulate Filters (DPF) shall meet a minimum dry NO_x emissions standard of 100 mg/Nm⁻³ (at 15% O₂) respectively by an MCERTS accredited organisation shall be provided following installation and thereafter on an annual basis to verify compliance of the relevant emissions standards in part b). The DPF particulate emissions abatement system must achieve a value less than 0.015 g/kWh and a minimum reduction of 95% in the weighted engine-out brake-specific PM mass emissions. Where any combustion plant does not meet the relevant emissions Standards in part b) above, it should not be operated without the fitting of suitable secondary NO_x abatement Equipment or technology as determined by a specialist to ensure comparable emissions.*
- c) Details to demonstrate where secondary abatement is used for the Emergency Diesel Generator the relevant emissions standard in part b) is met within 10 minutes of the generator commencing operation. During the operation of the emergency Diesel generators there must be no persistent visible emission. The maintenance and cleaning of the systems shall be undertaken regularly in accordance with manufacturer specifications. The diesel fuelled generators shall only be used for a maximum of 24 hours when there is a sustained interruption in the mains power supply to the site, and the testing of these diesel generators shall not exceed a maximum of 12 hours per calendar year.*

Approved details shall be fully implemented prior to the occupation/use of the development and thereafter permanently retained and maintained.”

All sites in Greater London are subject to NRMM conditions in accordance with the guidance provided by the Greater London Authority (GLA).

4.4 Air Quality Alerts

The Council website promotes the AirTEXT (<https://www.airtext.info/>) service as well as recommends ways in which residents can reduce their exposure to and emissions of air pollution. The Council has also shared pollution episode alerts from the GLA forecasting service.

4.5 Air Quality Positive

Large major developments (i.e. >200 dwellings) are required to submit Air Quality Positive statements in accordance with the London Plan 2021, following the criteria set out in the latest guidance; currently the Air Quality Positive LPG (London Plan

Guidance), published in February 2023 is the standard by which all statements are assessed.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

The Council's monitoring stations are routinely calibrated, serviced and audited to ensure data is as accurate as possible. Monthly calibration and servicing is performed by Matt's Monitors. Ricardo Energy and Environment perform site audits and data management to national standards and the operational procedures defined by AURN. Audits were carried out in June and December 2024, and data subsequently ratified.

All monitor faults occurring in 2024 were able to be addressed in a manner that did not have a significant impact on annual data collection.

PM₁₀ Monitoring Adjustment

The monitoring stations in the Royal Borough of Kingston upon Thames are serviced and calibrated by Matt's Monitors, and the data is collected and managed (including ratification) by Ricardo.

A.2 Diffusion Tubes

The diffusion tubes used by the Royal Borough of Kingston upon Thames are supplied and analysed by Gradko utilising the 20% triethanolamine (TEA) in water preparation method. A bias adjustment factor of 0.84 for the year 2024 has been derived from the national bias adjustment calculator dated June 2025.

The Royal Borough of Kingston upon Thames did not conduct any co-location studies in 2024, so it was not possible to calculate a local adjustment factor. As a result, the national adjustment factor of 0.84 is applied to diffusion tube monitoring results in this report.

Gradko International Ltd is a UKAS-accredited laboratory and participates in laboratory performance and proficiency testing schemes. These provide strict performance criteria for participating laboratories to meet, thereby ensuring NO₂ concentrations reported are of a high calibre. The lab follows the procedures set out

in the Harmonisation Practical Guidance. Gradko previously participated in the Workplace Analysis Scheme for Proficiency (WASP) for NO₂ diffusion tube analysis Page 38 and the Annual Field Inter Comparison Exercise. In April 2014, a new scheme, AIR PT13, was introduced. This is an independent analytical proficiency-testing (PT) scheme operated by LGC Standards and supported by the Health and Safety Laboratory (HSL). AIR PT combines two long-running PT schemes: LGC Standards STACKS PT scheme and HSL WASP PT scheme.

Laboratory performance in AIR PT is also assessed by the National Physical Laboratory (NPL) alongside laboratory data from the monthly NPL Field Intercomparison Exercise carried out at Marylebone Road, central London. A laboratory is assessed and given a 'z' score. A score of 2 or less indicates satisfactory laboratory performance.

Gradko International Ltd.'s performance for 2024 for 100% of samples submitted by Gradko was deemed satisfactory.

The laboratory has also achieved a "good" precision result for 2024. Tubes are considered to have "good" precision where the coefficient of variation of duplicate or triplicate diffusion tubes for eight or more periods during the year is less than 20%, and the average CV of all monitoring periods is less than 10%.

Discussion of Choice of Factor to Use

Using the most recent national bias adjustment data (Version 06/24), a bias adjustment factor of 0.84 has been applied to all the diffusion tubes in the 2024 calendar year. For comparison, in 2023 a national bias adjustment factor of 0.81 was used. The relevant examples were selected using the spreadsheet workflow by using the same laboratory, and preparation method. A local bias adjustment was not used as there are no co-located diffusion tubes. Details are shown in Table O. The bias adjustment factor obtained from the LAQM Support Website at: <https://laqm.defra.gov.uk/biasadjustment-factors/national-bias.htm>

Table O. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	06/24	0.84
2023	National	06/24	0.81
2022	National	06/23	0.84
2021	National	03/22	0.84
2020	National	03/21	0.81
2019	National	03/20	0.93
2018	National	03/19	0.93
2017	National	03/18	0.89

National Diffusion Tube Bias Adjustment Factor Spreadsheet				Spreadsheet Version Number: 06/25						
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. 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:		Step 2:	Step 3:	Step 4:						
Select the Laboratory that Analyses Your Tubes from the Drop-Down List		Select a Preparation Method from the Drop-Down List	Select a Year from the Drop-Down List	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 a laboratory is not shown, we have no data for this laboratory.		If a preparation method is not shown, we have no data for this method at this laboratory.	If a year is not shown, we have no data ² .	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 ²	Year ³	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (mg/m3)	Automatic Monitor Mean Conc. (Cm) (mg/m3)	Bias (B)	Tube Precision ⁵	Bias Adjustment Factor (A) (Cm/Dm)
Gradko	20% TEA in water	2024	R	Worcestershire	12	12	12	-3.4%	G	1.04
Gradko	20% TEA in water	2024	R	Cheshire West And Chester	12	33	27	21.7%	G	0.82
Gradko	20% TEA in water	2024	R	Cheshire West And Chester	11	30	27	12.9%	G	0.89
Gradko	20% TEA in water	2024	R	The Highland Council	12	19	18	6.9%	G	0.94
Gradko	20% TEA in water	2024	R	The Highland Council	11	15	11	35.3%	G	0.74
Overall Factor ³ (31 studies)									Use	0.84

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

In 2024, no automatic air quality monitoring sites in the Royal Borough of Kingston upon Thames required annualisation.

Two diffusion tube sites required annualisation following the removal of onerous data:

- Site 3 - 52 Portsmouth Road
- Site 12 - 136 Tolworth Broadway/Service Road

Distance Adjustment

No distance adjustment was required for annual diffusion tube data collected for 2024.

Table P. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor N. Kensington	Annualisation Factor Westminster	Annualisation Factor London Hillingdon	Annualisation Factor	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g m}^{-3}$)	Annualised Annual Mean ($\mu\text{g m}^{-3}$)	Comments
3	0.918	0.9349	0.9582	-	0.937	18.8	17.6	
12	1.0687	1.0397	1.0419	-	1.0501	28.4	29.8	

Appendix B Full Monthly Diffusion Tube Results for 2024

Table U. NO₂ 2024 Diffusion Tube Results (µg m⁻³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
1	517951	169029	17.6	14.5	13.6		9.9	8.3	8.8	8.1		17.4	20.6	13.4	13.2	11.1		
2	518067	168672	28.2	25.3	22.2	19.8	20.5	21.7	20.1	17.6	22.2	24.7	29.6	19.5	22.6	19.0		
3	517565	167715	25.5	20.5	19.0	12.6	14.4	12.9				21.7	25.1	17.2	18.8	14.8		
4	517532	167296	22.6	17.1	16.6	12.2	13.7	11.9	11.1	10.1		18.6	25.3	16.1	15.9	13.4		
5	517765	167143	26.9	20.8	23.2	17.5	20.3	17.6	19.5	18.2	26.4	25.2	28.0	20.2	22.0	18.5		
6	518424	167604	23.9	18.5	18.1		15.4	13.9	13.8	12.6	19.3	21.0	23.1	16.2	17.8	15.0		
7	518039	167346	29.5	24.7	23.7	18.4	22.0	21.2	18.7	18.0	25.7	23.9	31.6	21.7	23.3	19.5		
8	518336	166655	26.0	20.7	17.7	17.4	20.0	20.1	16.3		22.4	20.5	26.0	18.8	20.5	17.3		
9	518737	165768	20.8	15.2	13.6	9.7	10.9	9.2	9.6	9.6	13.6	16.8	20.6	14.8	13.7	11.5		
10	519365	166230	30.6	22.2		17.9	20.4	17.8	15.5	13.5	20.9	20.8	30.8	19.3	20.9	17.5		
11	519664	166505	22.4	16.2	16.8	11.0	12.5	10.1	9.5	8.8	14.5	17.1	22.3	15.0	14.7	12.3		
12	519714	165886				23.7		28.4	27.1	24.7	30.2	31.1	32.9	28.8	28.4	25.0		
13	519808	165873	37.2	35.0	34.0	31.5	35.0	38.8	32.2	30.5	36.8	40.7	36.5	31.9	35.0	29.4		
14	519872	165692	44.4	34.0	32.2	29.7	28.2		25.3	26.4			34.6	28.6	31.5	26.5		
15	520192	165264	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
16	518087	165096	25.9		20.0	17.3	18.7	17.8	16.8	15.0	22.0	19.8	30.5	18.9	20.2	17.0		
17	518026	164785	26.5	20.3	20.0	17.6	17.9	16.2	15.8	15.2	21.2	22.4	24.9	19.1	19.7	16.6		

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
18	517991	164532	30.5	23.9	23.9	18.3	19.8	19.4	18.4	16.7	22.1	23.5	26.8	20.3	21.9	18.4		
19	518155	163395	20.7	15.1	18.5	13.1	14.7	13.7	12.6	9.2		18.2	22.4	15.6	15.8	13.3		
20	517256	161578	27.0	21.8	21.0	18.9	20.0	19.2	16.6	18.2	21.1	20.2	25.0	19.7	20.7	17.4		
21	517683	163465	25.0	20.6	19.7	17.9	18.7	19.8	15.6	14.4	20.7	19.2	23.9	17.5	19.4	16.3		
22	518601	165270	37.0	29.9	26.4	23.0	20.8	24.8	21.8	22.2	26.6		31.4	26.2	26.4	22.2		
23	518147	169455	25.3	20.1	21.4	15.7		15.6	15.4	14.4	20.1	23.0	26.2	19.6	19.7	16.6		
24	518467	169509	49.9	46.2	43.1	35.0	36.2	38.8	30.1	33.2	38.0	45.1	43.6	39.8	39.9	33.5		
25	518533	169348	32.4	24.7	25.2	16.8	22.5		17.7	15.9	22.7	25.1	26.4	22.2	22.9	19.2		
26	518199	170056	25.7	20.0	19.8	15.1	16.9	13.5	14.0	12.0	18.3	23.2	27.3	15.1	18.4	15.5		
27	517800	171423	-	-	-	-	-	-	-	-	-	-	-		-	-		
28	519353	169895	39.5	30.7	28.8	16.9	28.5	27.3		19.3	26.3	22.6	32.4	25.6	27.1	22.7		
29	521107	172054	27.2	21.9	22.2	17.1	19.9	19.2	17.2	16.4	20.4	19.5	23.0	18.4	20.2	17.0		
30	520611	169889	32.7	27.2	23.7	22.0	18.8	19.0	15.2	15.8		21.4	27.1	19.5	22.0	18.5		
31	521651	167397	35.9	27.9	26.7	9.2	24.9	24.1	20.8	18.0	28.5	29.1	33.8	25.8	25.4	21.3		
32	521252	166877	23.9	16.5	15.5	22.1	11.9	10.7	9.8	9.1	14.3	17.3	23.7	15.8	15.9	13.4		
33	521873	168117	34.5	29.9	30.7	22.1	25.2	21.6	21.1	17.5	24.9	30.4	29.3	22.7	25.8	21.7		
34	521416	168373	27.3	22.2	21.6	16.1	17.7	17.1	16.5	14.5	20.4	22.6	27.4	19.2	20.2	17.0		
35	520708	169258	25.9	18.4	17.2	11.9	12.8	11.7	11.1	9.6	15.4	18.7		18.6	15.6	13.1		
36	520047	169651	34.2		21.9	16.6	17.1	15.9	13.1	13.0	16.5	20.8	25.9	20.9	19.6	16.5		
37	520764	169525	24.2	19.0	17.7	11.8	13.1	11.9	10.4	11.0	16.8	19.9	22.8	18.7	16.4	13.8		
38	520503	168388	38.8	31.2	31.5	27.1	30.8	26.2	27.8	24.0	34.5	35.2	38.9	30.7	31.4	26.4		

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
39	519372	169098	39.8	33.3	34.2	28.6	34.1	34.8	29.1	28.0	37.3		42.2	33.7	34.1	28.6		
40	519064	169244	35.8	32.8	32.3	28.0	29.1	30.9	26.4	25.2	30.4		33.9	29.7	30.4	25.5		
41	518276	169164	35.0	31.1	26.0	21.2	24.1	25.2	20.8		25.8	24.7	28.8		26.3	22.1		
42	518806	170718	20.0	14.6	13.5	9.3	9.8	9.1	9.0	9.0	11.6	14.5	14.2	16.1	12.5	10.5		

All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table U.

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

National bias adjustment factor used.

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

Kingston upon Thames confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System

Notes:

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

NO₂ annual means exceeding 60µg m⁻³, indicating a potential exceedance of the NO₂ 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

Figure 5-A Map of Non-Automatic Monitoring Locations in the Royal Borough of Kingston

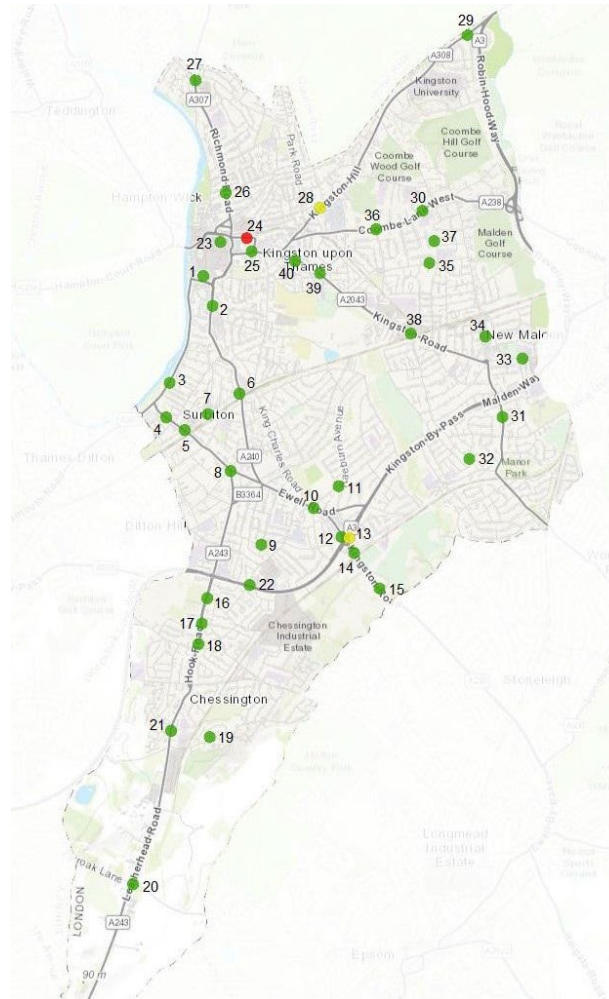
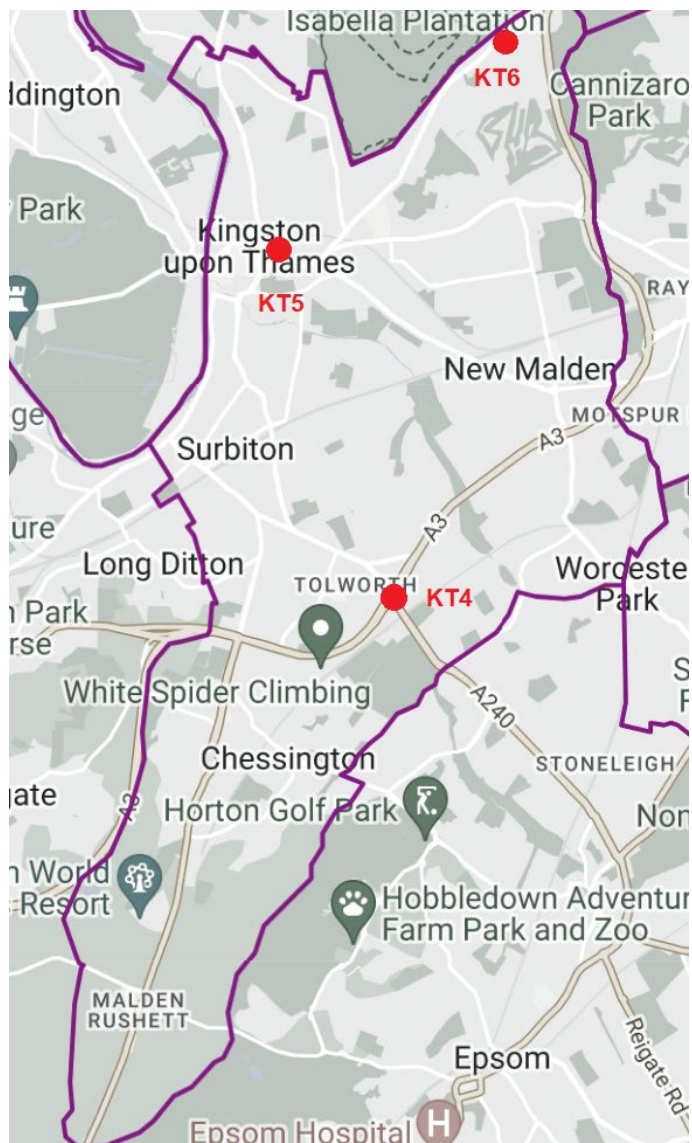


Figure 5-B Map of Map of Automatic Monitoring Site(s) in the Royal Borough of Kingston



London Borough of Lambeth Air Quality Annual Status Report for 2024

Date of publication: [Date]



This report provides a detailed overview of air quality in the London Borough of Lambeth during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process¹.

Contact details: sustainability@lambth.gov.uk

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

Contents

Abbreviations	5
1. Air Quality Monitoring	7
1.1 Locations.....	7
1.2 Comparison of Monitoring Results with AQOs	28
2. Action to Improve Air Quality	41
2.1 Air Quality Management Areas	41
2.2 Air Quality Action Plan Progress	44
3. Planning Update and Other New Sources of Emissions	85
3.1 New or significantly changed industrial or other sources	85
4. Additional Activities to Improve Air Quality	86
4.1 London Borough of [Borough Name] Fleet	87
4.3 Pan-London NRMM Auditing Project	87
4.4 Air Quality Alerts	87
Appendix A Details of Monitoring Site Quality QA/QC.....	89
A.1 Automatic Monitoring Sites	89
A.2 Diffusion Tubes	89
A.3 Adjustments to the Ratified Monitoring Data	91
Appendix B Full Monthly Diffusion Tube Results for 2024.....	97
Appendix C Map(s) of Monitoring Locations and AQMAs	102

Tables

Table A. Summary of National Air Quality and International Standards, Objectives and Guidelines	6
Table B. Details of Automatic Monitoring Sites for 2024	7
Table C. Details of Non-Automatic Monitoring Sites for 2024	8
Table D. Annual Mean NO ₂ Monitoring Results: Automatic Monitoring (µg m ⁻³)	28
Table E. Annual Mean NO ₂ Monitoring Results: Non-Automatic Monitoring (µg m ⁻³)	30
Table F. NO ₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg m ⁻³ (If available. If not, this section can be deleted)	38
Table G. Annual Mean PM ₁₀ Automatic Monitoring Results (µg m ⁻³) (If available. If not, this section can be deleted).....	39
Table H. PM ₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM ₁₀ 24-Hour Means > 50 µg m ⁻³ (If available. If not, this section can be deleted)	40
Table J. 2024 SO ₂ Automatic Monitoring Results: Comparison with Objectives (If available. If not, this section can be deleted).....	Error! Bookmark not defined.
Table K. Other Pollutants (If available. If not, this section can be deleted).....	Error! Bookmark not defined.
Table L. Declared Air Quality Management Areas	41
Table M. Delivery of Air Quality Action Plan Measures	44
Table N. Planning requirements met by planning applications in [Borough Name] in 2024	85
Table O. Bias Adjustment Factor	Error! Bookmark not defined.
Table P. Non-Automatic Monitoring Data Adjustment	92
Table T. NO ₂ Fall off With Distance Calculations	94
Table U. NO ₂ 2024 Diffusion Tube Results (µg m ⁻³).....	97

Figures

Figure A. Map of Non-Automatic Monitoring Site(s)	102
Figure B. Map of Automatic Monitoring Site(s).....	104

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 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 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?	Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
LB4	Brixton Road	Kerbside	531070	175593	NO ₂ , PM ₁₀	YES	Whole Borough AQMA	BAM1020, NO _x Analyser	0.5	0.5	2
LB5	Vauxhall Bondway Interchange	Industrial	530317	177952	NO ₂ , PM ₁₀ , SO ₂	YES	Whole Borough AQMA	BAM1020, NO _x Analyser, SO ₂ Analyser	5	3	2
LB6	Streatham Green	Background	529971	171570	NO ₂ , PM ₁₀	YES	Whole Borough AQMA	BAM1020, NO _x Analyser	15	6	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 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)
AS1	Archbishop Sumner Primary School – Kennington Road/Reedworth Road	Kerbside	531242	178675	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
AS2	Archbishop Sumner Primary School –near play area	Kerbside	531345	178627	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
BHLTN1	Crescent Lane - Harris Clapham Sixth Form	Kerbside	530089	174598	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
BHLTN2	105 Kings Avenue	Kerbside	530017	174216	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
BHLTN3	Opposite Phambra Food Store	Kerbside	530284	174044	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
BHLTN4	NTCG Brixton Community Church	Kerbside	530525	174616	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
BHLTN5	Kildoran Road Play Area	Kerbside	530138	174836	NO2	Yes - Whole	0.5	0.5	No	2.2

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)
						Borough AQMA				
BHLTN6	Richard Atkins Primary School	Kerbside	530301	173773	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT1, DT2, DT3	Brixton AQ Monitoring Station – co-located	Kerbside	531070	175593	NO2	Yes - Whole Borough AQMA	0.5	0.5	Yes	2.2
DT4	Waterloo Rd / Exton Street	Kerbside	531139	180048	NO2	Yes - Whole Borough AQMA	1.0	0.5	No	2.2
DT5	Waterloo Rd / Holmes Terrace	Kerbside	531214	179907	NO2	Yes - Whole Borough AQMA	2.0	0.5	No	2.2
DT6	98 The Cut	Kerbside	531494	179951	NO2	Yes - Whole Borough AQMA	1.0	0.5	No	2.2
DT7	278-282 Kennington Lane (between St. Oswald's Place and Vauxhall St)	Kerbside	530817	178122	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2

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)
DT8	Archbishop Tenninson School, 55 Kennington Oval	Kerbside	530868	177740	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT9	Alverstone House, Kennington Park Road	Kerbside	531196	177653	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT10	Brixton Road/Prima Road	Kerbside	531250	177464	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT11	13 Clapham Road outside Belgrave Hotel	Kerbside	531093	177419	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT12	223 Clapham Road outside Richardsdon Court and Costcutter	Kerbside	530404	176321	NO2	Yes - Whole Borough AQMA	0.2	0.5	No	2.2
DT13	Clapham Road, close to Grantham Road	Kerbside	530363	176269	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT14	378 Clapham Road (by Savoy Mews)	Kerbside	530105	175956	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2

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)
DT15	Clapham Road, outside Roy Ridley House	Kerbside	530009	175719	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT16	Clapham Common tube station, outside Joe Public Café	Kerbside	529413	175284	NO2	Yes - Whole Borough AQMA	1.0	2.0	No	2.2
DT17	8 Stockwell Park Walk	Kerbside	530916	175784	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT18	Stockwell Road/Bellefields Road	Kerbside	531020	175699	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT19	Brixton Road bus stop Q (outside KFC)	Kerbside	531027	175320	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT20	Effra Road/Kellett Road	Kerbside	531038	175092	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT21	22 Brixton Water Lane	Kerbside	531231	174607	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2

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)
DT22	St. Matthew's Estate, outside 6 Hicken Road	Kerbside	530928	174849	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT23	Brixton Hill/Horsford Road (Corpus Christi RC School)	Kerbside	530781	174682	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT24	Brixton Hill/New Park Road	Kerbside	530150	173680	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT25	Christchurch House, Christchurch Road (South Circular)	Kerbside	530461	173470	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT26	Streatham Hill/Wavertree Road	Kerbside	530452	173105	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT27	Streatham Hill Station/opposite 10 Streatham High Road	Kerbside	530255	172632	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT28	Streatham High Road/Leigham Avenue	Kerbside	530217	172353	NO2	Yes - Whole	0.5	0.5	No	2.2

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)
						Borough AQMA				
DT29	Streatham High Road/Becmead Avenue	Kerbside	530130	172013	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT30	Public space outside 316 Streatham High Road (opp Stanthorpe Road)	Kerbside	530015	171489	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT31	243A Streatham Hill (bus stop opposite Streatham Station)	Kerbside	530101	171148	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT32	Clapham High Street (Clapham Library)	Kerbside	529730	175446	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT33	Clapham, Old Town	Kerbside	529217	175648	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT34	South Circular - past bus stop	Kerbside	529130	174288	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2

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)
DT35	South Circular – Oaklands Estate, outside Hawkesworth House	Kerbside	529263	174190	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT36	South Circular – Poynders Court	Kerbside	529420	173996	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT37	South Circular – Christchurch Road/Roupell Road	Kerbside	530821	173309	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT38	South Circular – Fenstanton Primary	Kerbside	531160	173103	NO2	Yes - Whole Borough AQMA	1.0	1.0	No	2.2
DT39	South Circular – Tulse Hill/Norwood Road	Kerbside	531731	173026	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT40	South Circular – Lords Close	Kerbside	532341	172918	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT41	Norwood Road/York Hill	Kerbside	531839	172552	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2

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)
DT42	380 Norwood Road (O'Girasol)	Kerbside	531923	172225	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT43	West Norwood Bus Station	Kerbside	531936	171795	NO2	Yes - Whole Borough AQMA	2.0	2.0	No	2.2
DT44	223-225 Gipsy Road	Kerbside	533016	171534	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT45	Gipsy Hill Station	Kerbside	533328	171264	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT46	Herne Hill 1	Kerbside	531989	174329	NO2	Yes - Whole Borough AQMA	3.0	3.0	No	2.2
DT47	Herne Hill 2	Kerbside	531860	174353	NO2	Yes - Whole Borough AQMA	0.3	0.1	No	2.2
DT48	Loughborough Junction 1	Kerbside	531972	175331	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2

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)
DT49	Loughborough Junction 2	Kerbside	531856	175680	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
DT50 1	Acre Lane	Kerbside	530657	175133	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
DT51	Crown Lane School next to bus stop	Kerbside	531557	171047	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
ISA1	Immanuel and St Andrew CE Primary School	Kerbside	548267	171086	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
JP1	Jessop Primary School 1- Milkwood Road j/w Heron Rd	Kerbside	532008	175397	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
JP2	Jessop Primary School 2 – opposite 57 Heron Road	Kerbside	532086	175297	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
JP3	Jessop Primary School 3 – by main entrance of the school	Kerbside	532030	175130	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2

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)
JUB1	Jubilee Primary School	Kerbside	531176	174293	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
LO	Loughborough Primary School – on Loughborough Road near the playground	Kerbside	531651	176150	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
LTN1	At the junction with Acre Lane and Concanon Road	Kerbside	530622	175112	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN2	At the junction with Bedford Road and Clapham Park Road	Kerbside	530068	175106	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN3	At the opposite end of Bedford Road outside 7oZ Coffee	Kerbside	530043	175668	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN4	At the junction with Edithna Street and Landor Road	Kerbside	530465	175865	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN5	Where Ferndale Road bends to	Kerbside	530917	175578	NO2	Yes - Whole	0.3	0.5	No	2.2

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)
	the side by Pulross Road					Borough AQMA				
LTN7	Hillside Road - Palace Road	Kerbside	531147	172879	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
LTN8	Downtown Avenue – Faygate Road	Kerbside	530763	172840	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN9	Faygate Road - Hailsham Avenue	Kerbside	530728	172565	NO2	Yes - Whole Borough AQMA	0.3	0.3	No	2.2
LTN10	Leighame Vale – Hitherfield Road	Kerbside	531110	172389	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN11	Leigham Court Road – Culverhouse Gardens	Kerbside	530650	172226	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN12	Leigham Court Road/Valley Road/Leigham Vale.	Kerbside	530940	172132	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN13	Top of wellfield road	Kerbside	530288	171810	NO2	Yes - Whole	0.3	0.5	No	2.2

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)
						Borough AQMA				
LTN14	289 Leigham Court Road.	Kerbside	531181	171612	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN15	203/205 Valley Road.	Kerbside	530713	171417	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
LTN16	Streatham Wells LTN baseline monitoring. Corner of Hopton Road	Kerbside	530498	171054	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
Point 122	Archbishop Sumner Church of England Primary School – Outside school allotment	Kerbside	531299	178649	NO2	Yes - Whole Borough AQMA	0.3	0.3	No	2.2
RS1	Rosendale Primary School – Turney Road opposite school gate on a sign	Kerbside	532317	173611	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
SCOOT	Brixton Road – Opposite St Johns Crescent	Kerbside	531137	175822	NO2	Yes - Whole	0.3	0.5	No	2.2

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)
						Borough AQMA				
SH1	Sunny Hill Primary School – school metal fence	Kerbside	530775	171653	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
SP1	Sudbourne Primary School – Hayter Road by school entrance	Kerbside	530628	177333	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
SR1	In front of Pret A Manger	Kerbside	531267	179825	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR2	Opposite the Wellington	Kerbside	531189	179969	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR3	Tenison Way bus Stop	Kerbside	531006	180079	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR4	Next to bridge by Azzurro Italian bar Sutton Walk	Kerbside	530951	180064	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
SR5	At corner, opposite Gail's	Kerbside	530835	179873	NO2	Yes - Whole	0.3	0.5	No	2.2

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)
						Borough AQMA				
SR6	London Eye bus stop	Kerbside	530768	179896	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
SR7	Silver lamppost on grass, behind sign "Welcome to Jubille Garden"	Kerbside	530655	180011	NO2	Yes - Whole Borough AQMA	0.5	115.0	No	2.2
SR8	By bridge on Belvedere Road	Kerbside	530823	180123	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR10	By The Green Room	Kerbside	530965	180267	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR11	Opposite The Understudy	Kerbside	531020	180433	NO2	Yes - Whole Borough AQMA	0.3	70.0	No	2.2
SR12	Upper Ground and Cornwall Road	Kerbside	531118	180337	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2

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)
SR13	Upper Ground and Duchy Street	Kerbside	531287	180420	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR14	On fence by The Wharf	Kerbside	531222	180500	NO2	Yes - Whole Borough AQMA	0.3	90.0	No	2.2
SR15	Coin street and Stamford Street	Kerbside	531259	180282	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR16	Cornwall Road by "Meantime in London B&B"	Kerbside	531205	180162	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR17	Opposite Property Partners	Kerbside	531283	179951	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR18	Opposite Culture Grub	Kerbside	531418	179913	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR19	At corner, opposite KCL Maxwell Building	Kerbside	531056	180134	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2

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)
SR20	On road sign on top of the stairs on bridge	Kerbside	530935	180259	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SR21	On bridge, on road sign right before the stairs	Kerbside	530902	180319	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
SS1	St Stephen's Church of England Primary School – near to the entrance to school on Dorset Road	Kerbside	530501	177330	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
ST1	Guy's and St Thomas' Hospital inside nursery play area	Kerbside	530804	179582	NO2	Yes - Whole Borough AQMA	2.0	2.0	No	2.2
STA1	St Anne's Catholic Primary School – sign post near entrance to school on Durham Street	Kerbside	530703	177997	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
STA2	St Anne's Catholic Primary	Kerbside	530621	177957	NO2	Yes - Whole	0.5	0.5	No	2.2

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)
	School – on school fence on Harleyford Road by the playground					Borough AQMA				
SW1	Palace Road, Opposite nursery	Kerbside	531063	172947	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
TP1	Telferscot Primary School	Kerbside	529631	173196	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
VP1	Vauxhall Primary School – on Tyers Terrace	Kerbside	530810	178254	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
VP2	Vauxhall Primary School – Vauxhall Street by school entrance	Kerbside	530800	178341	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
VX1 1, VX1 2, VX1 3	Opposite SIS building	Kerbside	530371	178067	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
VX2	Goding street, New Spring Gardens Walk	Kerbside	530483	178200	NO2	Yes - Whole	0.5	2.0	No	2.2

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)
						Borough AQMA				
VX3	Glasshouse walk and Vauxhall walk	Kerbside	530571	178300	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
VX4	In front of Tintagel House	Kerbside	530408	178326	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
VX5	Next to Embarkment bus stop	Kerbside	530440	178522	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
VX6	Vauxhall walk – Jonathan Street	Kerbside	530619	178466	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
VX7	Opposite Vauxhall Primary School	Kerbside	530815	178361	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
VX8	Opposite the Jolly Gardeners	Kerbside	530753	178616	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
VX9	Opposite the Fire Brigades Headquarter	Kerbside	530493	178745	NO2	Yes - Whole	0.3	0.5	No	2.2

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)
						Borough AQMA				
VX10	Opposite The Workshop	Kerbside	530565	178760	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
VX12	Old paradise street opposite 1-28 superton walk	Kerbside	530858	178878	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
VX13	Opposite Lambeth Palace (Stop SD)	Kerbside	530607	178961	NO2	Yes - Whole Borough AQMA	0.3	0.5	No	2.2
WP1	Wyvil Primary School – on signpost	Kerbside	530281	177513	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
WP2	Wyvil Primary School – school metal fence	Kerbside	530246	177510	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
WP1	Wyvil Primary School – on signpost	Kerbside	530281	177513	NO2	Yes - Whole Borough AQMA	0.5	0.5	No	2.2
WP2	Wyvil Primary School – school metal fence	Kerbside	530246	177510	NO2	Yes - Whole	0.5	0.5	No	2.2

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)
						Borough AQMA				

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 NO₂ 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
LB4 (Brixton Road)	531070	175593	Roadside	99%	99%	<u>74.2</u>	<u>60.1</u>	56.2	57.6	<u>63.6</u>	58.0	48.0
LB5 (Vauxhall Bondway Interchange)	530317	177952	Industrial	0%	0%	51.1	45.6	33.7	32.5	28.9	29.7	-
LB6 (Streatham Green)	529971	171570	Urban Background	99%	99%	33.8	31.8	25.8	27.4	23.3	24.2	17.2

Notes:

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

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

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

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 NO₂ 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
AS1	531242	178675	Kerbside	100.0	100.0	N/A	N/A	20.3	25.8	25.5	19.6	18.6
AS2	531345	178627	Kerbside	100	100.0	N/A	N/A	22.9	27.7	22.3	16.5	15.6
BHLTN1	530089	174598	Kerbside	100	100.0	N/A	N/A	N/A	N/A	26.5	23.2	16.9
BHLTN2	530017	174216	Kerbside	90.6	90.6	N/A	N/A	N/A	N/A	28.0	27.9	21.7
BHLTN3	530284	174044	Kerbside	100	100.0	N/A	N/A	N/A	N/A	24.6	18.7	14.5
BHLTN4	530525	174616	Kerbside	100	100.0	N/A	N/A	N/A	N/A	19.5	16.6	13.3
BHLTN5	530138	174836	Kerbside	81.1	81.1	N/A	N/A	N/A	N/A	19.1	15.1	15.8
BHLTN6	530301	173773	Kerbside	92.5	92.5	N/A	N/A	N/A	N/A	20.3	18.1	16.4
DT1, DT2, DT3	531070	175593	Kerbside	90.6	90.6	N/A	N/A	N/A	N/A	60.4	57.2	44.9
DT4	531139	180048	Kerbside	41.5	41.5	39.1	35.5	25.9	24.2	28.5	22.5	30.8
DT5	531214	179907	Kerbside	35.8	35.8	57.9	49.6	34.1	44.0	38.3	32.0	28.8
DT6	531494	179951	Kerbside	75	75.0	43.2	38.0	25.1	30.3	31.4	45.4	32.2
DT7	530817	178122	Kerbside	100	100.0	48.8	41.6	29.2	30.9	28.1	24.2	25.3
DT8	530868	177740	Kerbside	92.5	92.5	49.9	46.7	31.4	35.4	30.1	33.5	28.0
DT9	531196	177653	Kerbside	75	75.0	57.1	50.7	35.1	40.0	43.9	31.3	29.4
DT10	531250	177464	Kerbside	92.5	92.5	36.8	33.4	24.5	23.1	21.8	19.9	20.9
DT11	531093	177419	Kerbside	75	75.0	48.6	45.7	31.2	27.8	30.8	28.4	29.2

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
DT12	530404	176321	Kerbside	75	75.0	50.6	47.8	36.0	39.1	33.2	30.7	29.4
DT13	530363	176269	Kerbside	100	100.0	50.9	47.5	36.4	38.2	35.6	36.0	29.8
DT14	530105	175956	Kerbside	100	100.0	50.4	49.3	37.4	40.0	33.3	30.1	29.3
DT15	530009	175719	Kerbside	90.6	90.6	49.8	51.1	39.5	38.5	32.7	29.3	28.1
DT16	529413	175284	Kerbside	100	100.0	43.0	37.3	31.3	33.6	31.6	28.3	22.2
DT17	530916	175784	Kerbside	83	83.0	44.6	44.8	35.2	41.8	47.3	41.9	40.9
DT18	531020	175699	Kerbside	92.5	92.5	54.1	48.2	31.1	57.9	33.4	33.0	24.2
DT19	531027	175320	Kerbside	34	34.0	70.6	63.1	38.8	54.6	41.9	<u>41.2</u>	36.2
DT20	531038	175092	Kerbside	75	75.0	38.7	35.7	30.6	34.9	37.3	27.2	25.0
DT21	531231	174607	Kerbside	81.1	81.1	31.6	34.9	22.3	24.8	24.4	20.3	17.4
DT22	530928	174849	Kerbside	92.5	92.5	28.4	28.5	21.3	22.4	23.0	18.0	16.9
DT23	530781	174682	Kerbside	92.5	92.5	37.8	29.4	24.7	28.2	24.0	34.9	42.5
DT24	530150	173680	Kerbside	92.5	92.5	36.3	33.4	24.6	25.7	25.0	23.2	20.6
DT25	530461	173470	Kerbside	83	83.0	57.0	50.1	35.8	49.2	38.0	34.8	32.0
DT26	530452	173105	Kerbside	84.9	84.9	35.0	34.0	27.6	40.2	29.1	27.1	24.7
DT27	530255	172632	Kerbside	83	83.0	63.3	62.9	53.7	64.5	63.0	53.3	47.3
DT28	530217	172353	Kerbside	90.6	90.6	50.3	52.7	42.6	52.6	44.6	45.0	38.6
DT29	530130	172013	Kerbside	83	83.0	62.9	62.7	49.1	58.9	47.6	51.6	48.6
DT30	530015	171489	Kerbside	100	100.0	54.2	52.7	35.9	46.6	43.4	39.5	36.4
DT31	530101	171148	Kerbside	100	100.0	69.7	62.7	49.9	61.3	54.2	53.6	46.7

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
DT32	529730	175446	Kerbside	83	83.0	35.8	36.8	23.8	22.7	23.2	21.6	17.2
DT33	529217	175648	Kerbside	75	75.0	36.0	32.2	23.8	23.8	24.0	20.3	19.8
DT34	529130	174288	Kerbside	100	100.0	55.6	51.2	36.4	43.2	34.1	32.7	29.8
DT35	529263	174190	Kerbside	90.6	90.6	46.3	40.7	29.6	34.1	31.7	25.9	24.5
DT36	529420	173996	Kerbside	100	100.0	52.6	48.8	41.2	39.6	34.3	30.1	27.1
DT37	530821	173309	Kerbside	83	83.0	45.9	39.4	31.8	30.3	26.3	23.9	21.7
DT38	531160	173103	Kerbside	90.6	90.6	53.7	47.9	35.2	39.1	35.1	29.8	30.5
DT39	531731	173026	Kerbside	84.9	84.9	50.3	44.9	34.9	40.1	41.5	32.7	29.4
DT40	532341	172918	Kerbside	32.1	32.1	51.5	46.9	36.3	36.0	32.4	27.5	29.2
DT41	531839	172552	Kerbside	75	75.0	49.4	41.9	32.0	36.5	47.5	35.9	33.6
DT42	531923	172225	Kerbside	84.9	84.9	52.6	49.9	35.6	35.8	32.2	31.4	28.5
DT43	531936	171795	Kerbside	100	100.0	39.7	38.1	29.9	29.7	31.5	33.9	28.0
DT44	533016	171534	Kerbside	66	66.0	35.3	35.4	25.0	28.1	28.7	23.7	21.7
DT45	533328	171264	Kerbside	75	75.0	34.2	28.0	27.2	23.0	20.5	18.8	15.0
DT46	531989	174329	Kerbside	75	75.0	42.8	36.0	29.9	30.7	24.7	21.7	19.8
DT47	531860	174353	Kerbside	84.9	84.9	46.1	47.2	30.4	34.4	29.5	27.2	27.1
DT48	531972	175331	Kerbside	58.5	58.5	46.8	48.7	35.3	42.3	43.4	31.8	28.3
DT49	531856	175680	Kerbside	83	83.0	39.6	29.0	26.4	21.3	22.0	18.1	16.5
DT50 1	530657	175133	Kerbside	100	100.0	45.7	42.6	32.2	44.5	42.0	23.9	22.0
DT51	531557	171047	Kerbside	75	75.0	N/A	38.9	28.2	28.0	27.6	28.3	22.0

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
ISA1	548267	171086	Kerbside	75	75.0	N/A	N/A	N/A	N/A	N/A	N/A	14.6
JP1	532008	175397	Kerbside	90.6	90.6	N/A	N/A	17.4	24.9	24.2	21.0	19.1
JP2	532086	175297	Kerbside	84.9	84.9	N/A	N/A	22.8	17.1	15.2	13.7	13.0
JP3	532030	175130	Kerbside	75	75.0	N/A	N/A	N/A	17.2	18.9	15.6	20.9
JUB1	531176	174293	Kerbside	100	100.0	N/A	N/A	N/A	N/A	N/A	N/A	27.9
LO	531651	176150	Kerbside	60.4	60.4	N/A	N/A	20.4	26.3	21.4	17.9	34.3
LTN1	530622	175112	Kerbside	75	75.0	N/A	N/A	26.6	25.1	26.0	20.8	17.9
LTN2	530068	175106	Kerbside	92.5	92.5	N/A	N/A	34.7	34.8	31.4	37.3	23.2
LTN3	530043	175668	Kerbside	100	100.0	N/A	N/A	30.4	34.9	28.8	28.9	23.4
LTN4	530465	175865	Kerbside	100	100.0	N/A	N/A	24.6	23.6	21.7	19.4	22.2
LTN5	530917	175578	Kerbside	100	100.0	N/A	N/A	22.4	27.2	24.2	17.9	16.2
LTN7	531147	172879	Kerbside	100	100.0	N/A	N/A	25.8	22.5	20.8	19.6	22.2
LTN8	530763	172840	Kerbside	92.5	92.5	N/A	N/A	28.7	21.0	21.6	18.6	17.4
LTN9	530728	172565	Kerbside	83	83.0	N/A	N/A	20.7	17.0	16.8	14.8	13.3
LTN10	531110	172389	Kerbside	83	83.0	N/A	N/A	34.0	26.2	19.5	17.8	14.5
LTN11	530650	172226	Kerbside	83	83.0	N/A	N/A	42.4	48.3	34.7	30.0	20.2
LTN12	530940	172132	Kerbside	83	83.0	N/A	N/A	29.8	24.2	25.5	35.8	22.4
LTN13	530288	171810	Kerbside	75	75.0	N/A	N/A	N/A	27.8	27.7	17.4	18.2
LTN14	531181	171612	Kerbside	75	75.0	N/A	N/A	N/A	20.3	25.5	24.4	17.0
LTN15	530713	171417	Kerbside	100	100.0	N/A	N/A	N/A	25.0	23.8	19.9	16.5

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
LTN16	530498	171054	Kerbside	100	100.0	N/A	N/A	N/A	26.0	33.2	23.8	19.7
Point 122	531299	178649	Kerbside	75	75.0	N/A	N/A	N/A	N/A	24.0	17.2	15.3
RS1	532317	173611	Kerbside	75	75.0	N/A	N/A	19.5	19.3	16.6	13.6	20.6
SCOOT	531137	175822	Kerbside	49.1	49.1	N/A	N/A	35.0	46.7	33.8	32.4	23.8
SH1	530775	171653	Kerbside	92.5	92.5	N/A	N/A	22.5	18.4	17.1	15.4	13.4
SP1	530628	177333	Kerbside	90.6	90.6	N/A	N/A	21.3	19.4	19.7	15.9	23.3
SR1	531267	179825	Kerbside	81.1	81.1	N/A	N/A	28.5	31.1	30.1	27.9	26.9
SR2	531189	179969	Kerbside	100	100.0	N/A	N/A	26.6	32.8	27.9	24.9	21.5
SR3	531006	180079	Kerbside	83	83.0	N/A	N/A	38.4	40.6	41.6	43.4	39.2
SR4	530951	180064	Kerbside	56.6	56.6	N/A	N/A	35.5	43.4	43.1	43.3	33.0
SR5	530835	179873	Kerbside	75	75.0	N/A	N/A	31.7	36.9	29.7	34.4	24.8
SR6	530768	179896	Kerbside	66	66.0	N/A	N/A	30.4	29.7	33.8	27.7	32.6
SR7	530655	180011	Kerbside	45.3	45.3	N/A	N/A	23.9	26.9	22.5	23.4	30.3
SR8	530823	180123	Kerbside	58.5	58.5	N/A	N/A	24.9	28.4	27.1	43.9	43.0
SR10	530965	180267	Kerbside	75	75.0	N/A	N/A	28.7	30.1	26.3	27.8	26.0
SR11	531020	180433	Kerbside	92.5	92.5	N/A	N/A	23.5	25.0	25.0	23.5	22.1
SR12	531118	180337	Kerbside	83	83.0	N/A	N/A	24.3	25.8	30.9	25.3	24.2
SR13	531287	180420	Kerbside	90.6	90.6	N/A	N/A	23.0	24.6	24.4	23.1	19.9
SR14	531222	180500	Kerbside	83	83.0	N/A	N/A	20.4	24.1	21.2	19.3	19.2
SR15	531259	180282	Kerbside	92.5	92.5	N/A	N/A	28.9	29.8	30.2	28.6	26.1

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
SR16	531205	180162	Kerbside	100	100.0	N/A	N/A	23.6	24.6	24.9	21.6	24.0
SR17	531283	179951	Kerbside	75	75.0	N/A	N/A	24.8	25.8	24.3	26.7	22.6
SR18	531418	179913	Kerbside	90.6	90.6	N/A	N/A	26.4	26.4	23.1	21.5	20.3
SR19	531056	180134	Kerbside	92.5	92.5	N/A	N/A	31.6	36.5	34.7	33.9	32.6
SR20	530935	180259	Kerbside	34	34.0	N/A	N/A	44.1	37.4	43.3	40.4	49.5
SR21	530902	180319	Kerbside	25	25.0	N/A	N/A	29.3	36.5	33.1	32.0	75.3
SS1	530501	177330	Kerbside	75	75.0	N/A	N/A	23.0	20.4	21.4	18.6	16.8
ST1	530804	179582	Kerbside	92.5	92.5	N/A	N/A	N/A	N/A	38.1	36.1	33.1
STA1	530703	177997	Kerbside	92.5	92.5	N/A	N/A	32.1	40.2	34.0	34.4	29.5
STA2	530621	177957	Kerbside	41.5	41.5	N/A	N/A	35.2	38.4	35.3	34.4	43.8
SW1	531063	172947	Kerbside	84.9	84.9	N/A	N/A	N/A	N/A	N/A	N/A	18.8
TP1	529631	173196	Kerbside	100	100.0	N/A	N/A	N/A	N/A	N/A	N/A	15.2
VP1	530810	178254	Kerbside	75	75.0	N/A	N/A	21.1	22.1	16.5	18.0	17.9
VP2	530800	178341	Kerbside	75	75.0	N/A	N/A	21.7	22.7	21.7	17.8	14.0
VX1 1, VX1 2, VX1 3	530371	178067	Kerbside	75	75.0	N/A	N/A	29.8	24.2	26.4	26.1	23.8
VX2	530483	178200	Kerbside	92.5	92.5	N/A	N/A	23.4	21.8	21.8	19.5	20.6
VX3	530571	178300	Kerbside	92.5	92.5	N/A	N/A	21.3	22.5	20.7	18.3	18.3
VX4	530408	178326	Kerbside	41.5	41.5	N/A	N/A	32.3	35.7	29.5	28.3	23.3
VX5	530440	178522	Kerbside	66	66.0	N/A	N/A	30.3	32.0	29.6	27.6	24.8

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
VX6	530619	178466	Kerbside	83	83.0	N/A	N/A	27.1	24.3	26.1	23.3	21.4
VX7	530815	178361	Kerbside	90.6	90.6	N/A	N/A	27.3	24.3	N/A	N/A	17.7
VX8	530753	178616	Kerbside	83	83.0	N/A	N/A	26.1	25.8	23.5	19.9	21.5
VX9	530493	178745	Kerbside	90.6	90.6	N/A	N/A	34.9	37.5	31.0	29.6	28.6
VX10	530565	178760	Kerbside	75	75.0	N/A	N/A	25.5	26.2	23.9	19.4	21.1
VX12	530858	178878	Kerbside	92.5	92.5	N/A	N/A	20.2	20.1	18.0	15.9	18.6
VX13	530607	178961	Kerbside	100	100.0	N/A	N/A	31.3	33.0	32.3	29.4	27.9
WP1	530281	177513	Kerbside	81.1	81.1	N/A	N/A	25.2	27.4	27.9	22.5	22.9
WP2	530246	177510	Kerbside	75	75.0	N/A	N/A	24.5	28.9	24.1	21.6	20.0
WP1	530281	177513	Kerbside	81.1	81.1	N/A	N/A	25.2	27.4	27.9	22.5	22.9
WP2	530246	177510	Kerbside	75	75.0	N/A	N/A	24.5	28.9	24.1	21.6	20.0

☒ **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.**

Notes:

The annual mean concentrations are presented as $\mu\text{g m}^{-3}$.

Exceedances of the NO₂ annual mean objective of $40\mu\text{g m}^{-3}$ are shown in **bold**.

NO₂ annual means exceeding 60µg m⁻³, indicating a potential exceedance of the NO₂ 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 F. NO₂ 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
LB4	531070	175593	Roadside	99	99	83 (247.87)	11 (196)	1	4	9	6	0
LB5	530317	177952	Industrial	0	0	0	0	0	0	0	0 (104.1)	-
LB6	529971	171570	Urban Background	99	99	0	0	0	0	0	0 (98.4)	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 NO₂ 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 PM₁₀ 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
LB4	531070	175593	Roadside	91	91	30 (29)	25	24	25	21	18	15
LB5	530317	177952	Industrial	0	0	34	38	46	46	37	30	-
LB6	529971	171570	Urban Background	97	97	20	19	18	18	17	17	16

Notes

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

Exceedances of the PM₁₀ 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. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 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
LB4	531070	175593	Roadside	91	91	13 (46)	10 (38.1)	11	10	23	11	0
LB5	530317	177952	Industrial	0	0	45	74	142	148	128	33	-
LB6	529971	171570	Urban Background	97	97	3	5	4	1	7	1	0

Notes

Exceedances of the PM₁₀ 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%).

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMA) 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 Lambeth can be found in Table . The table presents a description of the AQMA that is currently designated within Lambeth. 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:

- NO₂ annual mean;
- NO₂ hourly mean
- PM₁₀ annual mean;
- PM₁₀ 24-hour mean

Table I. 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
Lambeth AQMA	Declared 01/09/2007	Particulate Matter PM ₁₀ - Annual Mean	An area encompassing the entirety of the London Borough of Lambeth.	NO	67	30	2 years	London Borough of Lambeth Air Quality Action Plan 2023–25 adopted Jan 2023	<u>London Borough of Lambeth Air Quality Action Plan 2023–25</u>
Lambeth AQMA	Declared 01/09/2007	Particulate Matter PM ₁₀ - 24-Hour Mean	An area encompassing the entirety of the London Borough of Lambeth.	NO	210	33	1 years	London Borough of Lambeth Air Quality Action Plan 2023–25 adopted Jan 2023	<u>London Borough of Lambeth Air Quality Action Plan 2023–25</u>
Lambeth AQMA	Declared 01/09/2007	Nitrogen dioxide NO ₂ - Annual Mean	An area encompassing the entirety of the London Borough of Lambeth.	NO	82	58	0 years	London Borough of Lambeth Air Quality Action Plan 2023–25 adopted Jan 2023	<u>London Borough of Lambeth Air Quality Action Plan 2023–25</u>

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
Lambeth AQMA	Declared 01/09/2007	Nitrogen dioxide NO ₂ - 1-Hour Mean	An area encompassing the entirety of the London Borough of Lambeth.	NO	30	6	0 years	London Borough of Lambeth Air Quality Action Plan 2023–25 adopted Jan 2023	London Borough of Lambeth Air Quality Action Plan 2023–25

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

☒ London Borough of Lambeth confirm that all current AQAPs have been submitted to GLA.

2.2 Air Quality Action Plan Progress

The London Borough of Lambeth adopted the most recent Air Quality Action Plan in January 2023. The plan covers the period between 2023 and 2025 and we anticipate that a new plan covering the period 2026 onwards will be published at the end of the calendar year 2025.

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

Table J. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress
1.2.20	Cleaner transport	Installation of rapid chargers to enable the take up of electric taxis, cabs and commercial vehicles, in partnership with TfL and/or OLEV.	2025	Local Authority Transport Strategy Team	The council are in the process of replacing the existing rapid charging network points and absorbing those into the wholly local authority owned and operated infrastructure. The council have identified potential sites to repurpose the vacant land for the use of EV rapid charging hubs. The business case for this is currently being developed.

7.1	Public health and awareness raising	Improve the provision of useful, easy to understand air quality information to residents on council estates.	2024	Local Authority Climate Change and Sustainability Team	Lambeth are working with the Environmental Research Group at Imperial College to trial using display to share useful and easy to understand air quality information. Based on the outcome of the trial we will explore installing the displays on estates.
1.2.3	Localised solutions	Progress towards a target of 25 percent of kerbside space allocated for community resilience to climate change, re-purposing street space to promote active travel and zero emission vehicles, improving local air quality.	2023	Local Authority Transport Strategy Team	The new Kerbside Strategy has been approved and adopted by Lambeth committing to a target of 25% of the kerbside to be used sustainably.

1.1.1	Borough Fleet	All of the council's fleet except those for which there is no viable zero emissions model to be electric or zero emission by 2030. Target the introduction of electric cars and vans under 3.5 tonnes between 2023-25. Report annually on the percentage of the council's vehicles that are fully electric/zero emission.	2025	Local Authority Fleet Operations Team	In 2024, the council owned or leased 130 fossil fuel vehicles, 55 electric vehicles, and 35 hybrid vehicles.
1.1.2	Borough Fleet	Audit the council's fleet, with service areas committing to using public transport, cargo bikes, and other active travel options where feasible. Commit to sizing the council's fleet in line with this objective, and in a way that is consistent with the Climate Action Plan requirement for a 27% reduction in traffic by 2030.	2023	Local Authority Fleet Operations Team	In line with the commitment to reduce vehicle miles travelled in Lambeth by 27% by 2030, all departments are routinely reviewing their need for vehicles and adopting more sustainable modes of transport where possible.
1.1.3	Borough Fleet	All new procurement of vehicles will undergo options appraisals to review the feasibility of all fuel types, as set out in the forthcoming Fleet Management Strategy.	2024	Local Authority Fleet Operations Team	All new vehicles procured are assessed to ensure that the most sustainable option is chosen.

1.1.4	Borough Fleet	All small vehicles supporting waste services (e.g. vans) to be fully electric.	2023	Local Authority Fleet Operations Team	All small vehicles supporting the waste service are fully electric.
1.1.5	Borough Fleet	Expand electrification of Lambeth's Refuse Collection Vehicles.	2025	Local Authority Waste and Cleansing Services	There are two eRCVs in the fleet as of 2024, which will be expanded as fossil fuel models come out of service.
1.1.6	Borough Fleet	Expand electrification of Lambeth's street cleansing fleet and aim to reduce pollution from resuspended particulate matter pollution.	2025	Local Authority Waste and Cleansing Services	Lambeth's street cleansing fleet already includes five electric small mechanical brooms (e-SMBs) and one dust cart, which will be expanded as fossil fuel models come out of service.
1.1.7	Delivery servicing and freight	Review Lambeth's Responsible Procurement Policy with a view to introducing a mandatory electric vehicle component for all contracts over £100k in which transport is a major element, stepping up to a 100% electric vehicle requirement over time.	2023	Local Authority Procurement Team	Adopted in the 2023 revision of Responsible Procurement Policy

1.1.8	Cleaner transport	All new contracts with a transport element exceeding £100k to give preferential scoring to bidders that integrate cargo bike or other active travel delivery modes, where applicable.	2023	Local Authority Procurement Team	Adopted in the 2023 revision of Responsible Procurement Policy
1.1.9	Delivery servicing and freight	All vehicles on new contracts with a transport element exceeding £100k to meet the ULEZ emissions standard.	2023	Local Authority Procurement Team	Adopted in the 2023 revision of Responsible Procurement Policy
1.1.10	Delivery servicing and freight	All new contracts for a fleet service exceeding £100k to pursue fleet optimisation and vehicle route planning to minimise mileage.	2023	Local Authority Procurement Team	Adopted in the 2023 revision of Responsible Procurement Policy
1.1.11	Delivery servicing and freight	All new contracts with a transport element exceeding £100k to commit to an anti-idling policy, and for all drivers to have undertaken anti-idling training.	2023	Local Authority Procurement Team	Adopted in the 2023 revision of Responsible Procurement Policy
1.1.12	Delivery servicing and freight	All new contractors delivering a freight service exceeding £100k to pursue freight consolidation, using freight consolidation hubs where feasible.	2023	Local Authority Procurement Team	Adopted in the 2023 revision of Responsible Procurement Policy

1.1.13	Borough Fleet	Smarter Driver Training for Lambeth fleet drivers to increase fuel efficient driving.	2025	Local Authority Fleet Operations Team	To be carried out in 2025
1.2.1	Localised solutions	Work with local communities to reduce emissions in neighbourhood areas through the council's Low Traffic Neighbourhood programme as part of a wider strategy to reduce traffic across the borough.	2025	Local Authority Transport Strategy Team	There are five permanent LTNs in Lambeth. In 2024 a trial began on an LTN in Brixton Hill and engagement in ongoing with the communities around the proposals for Slade Gardens LTN, Stockwell Gardens LTN, and West Dulwich LTN.
1.2.2	Localised solutions	Commit to increased monitoring of air quality impacts to inform the evidence based roll out of the Low Traffic Neighbourhood programme	2023	Local Authority Climate Change and Sustainability Team	The Climate Change and Sustainability team support the Transport Strategy Team in monitoring the impact of the Low traffic Neighbourhood programme and install additional infrastructure where required.
1.2.4	Cleaner transport	Deliver Healthy Routes to enable a shift towards active travel and improve air quality.	2025	Local Authority Transport Strategy Team	Approximately 5 km of Healthy Routes were delivered in the period of 2024. The programme is continuing with several schemes progressing into 2025.

1.2.5	Localised solutions	Investigate potential role of zero emission zones in Lambeth.	2025	Local Authority Transport Strategy Team	Initial investigations have started exploring the possibility of zero emissions zones. More work is being done in 2025 to assess their feasibility.
1.2.6	Public health and awareness raising	Reduce pollution in the close vicinity of schools by implementing School Streets that remove the majority of vehicles on streets with school access. School Streets to be implemented at all suitable schools by May 2026.	2025	Local Authority Parking and Network Management	There are 45 School Streets in Lambeth that cover 50 schools. We are on track to deliver School Streets to all primary schools that are not on main roads by the end of 2025. The remaining primary school that are on main roads will be considered for improvement.
1.2.7	Public health and awareness raising	Deliver a school superzone project to improve the air quality, targeting areas with high levels of deprivation and need. Lessons to be rolled out across the borough, subject to funding.	2023	Local Authority Public Health Team	As explained in our 2023 ASR, this action is now complete.
1.2.8	Public health and awareness raising	Continue to support the school daily mile programme, including the identification and promotion of clean walking routes to schools, children and parents/carers.	2025	Local Authority Public Health Team	The public health team support schools to promote routes with low exposure to air pollutants to schools.

1.2.9	Cleaner transport	Increase promotion of cycling and walking websites and apps.	2025	Local Authority Transport Strategy Team	The Big Shift Programme continues to promote walking, wheeling and cycling through online and print communications, events and public realm improvements. In 2024, we expanded our fleet of e-cargo bikes from 7 to 10 bikes across the borough. Residents and businesses can use the bikes for a small fee. We have also installed 5 parklets, which provide resting spaces and greenery to residential streets. Other street improvements include murals based on the winning submissions from the Your Streets Your Way street design competition.
1.2.10	Public health and awareness raising	Continue to actively engage with all schools in the STARS programme.	2025	Local Authority Transport Strategy Team	There are 36 schools participating in the STARS in Lambeth.
1.2.11	Public health and awareness raising	Continue to support schools to implement travel plans moving from bronze to silver to gold.	2025	Local Authority Parking and Network Management	Support is continued to be provided to schools improving their travel plans
1.2.12	Public health and awareness raising	Work to reduce pollution in the close vicinity of hospitals and support the Clean Air Hospital Framework update.	2025	Local Authority Public Health Team	To be carried out in 2025

1.2.13	Delivery servicing and freight	Continue E-cargo bike trials to enable a shift away from polluting vehicles for smaller freight trips.	2025	Local Authority Transport Strategy Team	Work has begun on a new Freight and Servicing Strategy which will include options appraisals around E-cargo bikes for deliveries.
1.2.14	Public health and awareness raising	Commission research on the effect of 15-minute neighbourhoods on vehicle mileage reduction and air quality. Research to inform next iteration of the Local Plan	2023	Local Authority Planning Team	Research delivered and informed Local Plan
1.2.15	Cleaner transport	Expansion of cycle hire schemes across the borough through allocation of S106 funds to deliver expansion of the TfL Cycle Hire Scheme, and expansion of dockless cycle hire schemes.	2024	Local Authority Transport Strategy Team	The council continues to support TfL Cycle Hire and works with dockless bike suppliers operating in the borough.
1.2.16	Public health and awareness raising	Reduce instances of idling vehicles through increased communications and enforcement of anti-idling measures.	2023	Local Authority Climate Change and Sustainability Team	Anti-idling enforcement is carried out on a responsive basis, with officers targeting areas that are raised as known hot spots. Where consistent issues persist, signage is erected to remind drivers to turn off their engines when stationary.
1.2.17	Delivery servicing and freight	Support the consolidation of freight across the borough.	2025	Local Authority Transport Strategy Team	This workstream forms part of the upcoming freight and servicing

					strategy due to be published in 2025.
1.2.18	Cleaner transport	Air quality to be a key consideration when updating and delivering a revised Electric Vehicle and Car Club Strategy that supports the uptake of electric vehicles, including e-scooters and e-bikes, car clubs and privately owned vehicles for essential trips.	2023	Local Authority Transport Strategy Team	The Lambeth EV Strategy was delivered in September 2023. The strategy will help decarbonise car trips that cannot be switched to sustainable transport, walking, or cycling, and will have a positive effect on air quality in the borough by supporting the move away from fossil fuel vehicles.
1.2.19	Cleaner transport	Installation of more residential charge points in lamp columns and take measures to ensure electric vehicle bays are free for charging.	2025	Local Authority Transport Strategy Team	The council have installed 283 new lamp column charge points. The council are also exploring the market and carrying out engagement with suppliers to trial the use of bookable EV bays in an effort to increase accessibility of charge points whilst also increasing utilisation.

1.2.21	Cleaner transport	Review feasibility of rapid charging hubs to complement slow and fast charging infrastructure, in partnership with TfL.	2025	Local Authority Transport Strategy Team	The Council have submitted a bid for LEVI funding which includes installing charge points to enable the electrification of the borough's car club vehicles. It is anticipated that once grant funding has been approved, a delivery plan will be drafted to convert the existing car club vehicles across the borough to electric and continue to expand the car club fleet, particularly in areas of high parking pressure and social housing estates.
1.2.22	Cleaner transport	Develop and implement an updated electric vehicle strategy that enables car clubs to transition towards full BEV fleets by 2025.	2023	Local Authority Transport Strategy Team	As explained in our 2023 ASR, this action is now complete.

1.2.23	Cleaner transport	Installation of electric vehicle car club bays throughout the borough.	2025	Local Authority Transport Strategy Team	The Lambeth EV Strategy commits Lambeth to include car clubs as an essential part of the charging network.
1.2.24	Cleaner transport	Review role of public charging infrastructure to support e-bikes, e-cargo bikes and shared micro mobility.	2023	Local Authority Transport Strategy Team	As explained in our 2023 ASR, this action is now complete.
1.2.25	Cleaner transport	Take steps to encourage and facilitate increased cycling among more vulnerable road users and groups with lower cycling rates.	2023	Local Authority Transport Strategy Team	Bikeability training is offered to all schools in the borough and Cycle Confident training is supported in promotional material from Lambeth.
1.2.26	Public health and awareness raising	Deliver regular car free days that raise awareness around the impacts of poor air quality and support the shift towards less polluting modes.	2024	Local Authority Transport Strategy Team	In 2024 our car free days were: Our 2024 Car Free Days were, one day of community planting and Bike Markets at Atlantic Road in partnership with the Brixton BID 24 days on Lower Marsh including a Euros Football screening, Olympic Skateboarding screening and film screenings. 15 weekends of socialising, boosting businesses, community crafts and music at Voltaire Road in partnership with Clapham BID

1.2.27	Cleaner transport	Lobby for low-emission buses to serve all routes in Lambeth.	2024	Local Authority Transport Strategy Team	Lambeth have continued to support TfL's transitions to low-emission buses.
1.2.28	Cleaner transport	Support the continued expansion of the Ultra Low Emission Zone to the whole of Lambeth and lobby for a smarter charge linked to vehicle mileage in the long-term.	2024	Local Authority Transport Strategy Team	Lambeth have continued to support the expansion of Ultra Low Emission Zone to the whole of Lambeth
1.2.29	Cleaner transport	Extend parking controls to reduce air pollution through increased coverage of Controlled Parking Zones and modification of existing zones, while advancing the primary objectives of The Road Traffic Regulation Act 1984	2023	Local Authority Transport Strategy Team	Lambeth's Kerbside Strategy published in January 2023 commits Lambeth to extend Controlled Parking Zones borough wide.
1.2.30	Cleaner transport	Create walking routes through neighbourhoods to promote greater uptake of active travel	2024	Local Authority Transport Strategy Team	Walking routes are considered and promoted as part of the ongoing Healthy Neighbourhoods and Healthy Routes programmes.
1.2.31	Cleaner transport	Apply London Plan and Local Plan transport policies to encourage a reduction in car ownership and private car trips and greater use of communal and active travel modes.	2023	Local Authority Planning Team	Policies are applied in new planning applications

1.2.32	Public health and awareness raising	Install anti-idling signage around garages and parking areas on housing estates.	2023	Local Authority Planning Team	As explained in our 2023 ASR, this action is now complete.
1.2.33	Cleaner transport	Continue to limit the provision of parking spaces on residential estates in locations that expose residents to exhaust fumes.	2025	Local Authority Housing Team	Parking spaces on residential estates continue to be limited
1.2.34	Cleaner transport	Invest £500,000 over three years to Increase the provision of cycling storage on the council's residential estates. Develop cycle routes through estates, and cycle friendly access and exit points on estates.	2024	Local Authority Housing Team	We currently have 56 cycle storage facilities with 381 spaces throughout our estates in the borough, with plans to continue increasing provision.
1.2.35	Cleaner transport	Install over 5000 secure cycle storage spaces by 2026	2026	Local Authority Parking Team	Lambeth has delivered 1768 additional secure cycle spaces as part of the cycle hangar programme; plans are in place to deliver further spaces alongside those installed on housing estates to reach the 5000 space target in 2026.

1.2.36	Cleaner transport	Increase provision of electric vehicle charging infrastructure on the council's residential estates, with a target to install units on all estates over 100 properties.	2025	Local Authority Parking Team	Lambeth has begun the process of installing 44 fast chargers on social housing estates across the borough and is working with tenant management organisations to increase provision on estates that are not directly managed by the council.
1.2.37	Cleaner transport	Increase provision of bicycle storage in Lambeth's parks and green spaces to encourage active travel.	2023	Local Authority Parks Team	The parks team continues to increase the provision of sheffield stands and other forms of bicycle storage within Lambeth parks.
1.2.38	Public health and awareness raising	Produce materials for schools to distribute to parents, to discourage engine idling at drop-off and pick-up times, as part of the Future Fit Schools Resource Pack	2023	Local Authority Climate Change and Sustainability Team	Materials distributed to schools as part of the Future Fit Schools Resource Pack
1.2.39	Cleaner transport	Commit to lobby TfL to increase the number of protected cycle routes and lanes in Lambeth	2025	Local Authority Transport Strategy Team	Lambeth continue to lobby TfL to increase the number of protected cycle routes and lanes in Lambeth

2.1.1	Emissions from developments and buildings	Planning decisionmakers will be advised about local air quality targets on PM2.5, PM10 and NO2, as set out in Lambeth's Air Quality Vision, as a material consideration alongside development plan policy.	2023	Local Authority Climate Change and Sustainability Team	As explained in our 2023 ASR, this action is now complete.
2.1.2	Emissions from developments and buildings	The council will work towards integrating local air quality targets on NO2, PM10 and PM2.5, as set out in Lambeth's Air Quality Vision, into the next iteration of the Local Plan.	2025	Local Authority Climate Change and Sustainability Team	The Climate Change and Sustainability Team will contribute towards the Local Plan Review.
2.1.3	Emissions from developments and buildings	Produce an updated air quality guidance note pulling together references to all existing policy and guidance on construction and air quality as contained in the Local Plan, London Plan, SoWN neighbourhood plan and Supplementary Planning Guidance as an aid and checklist for applicants and decision makers.	2025	Local Authority Climate Change and Sustainability Team	The Climate Change and Sustainability Team will contribute towards the Local Plan Review.

2.1.4	Emissions from developments and buildings	Produce a construction code of practice for small developments to be used as an informative on planning consents, informed by emerging examples of best practice.	2025	Local Authority Public Protection Team	Construction Compliance Officer will be developing a guidance document in collaboration with other stakeholders in the project.
2.1.5	Emissions from developments and buildings	Reduce/mitigate pollution from construction logistics through application of current development plan policy.	2024	Local Authority Planning Team	Current policy applied
2.1.6	Emissions from developments and buildings	Aim to reduce diesel generators on construction sites wherever possible.	2024	Local Authority Planning Team	As per the Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance, diesel generators are to be avoided wherever possible.
2.1.7	Emissions from developments and buildings	Pursue Air Quality Positive development in Opportunity Areas, through application of development plan policy and guidance.	2024	Local Authority Planning Team	Lambeth is applying London Plan policy SI1 Improving air quality to all development proposals in the borough
2.1.8	Emissions from developments and buildings	Consider the cumulative impact of construction of nearby developments in order to identify, and where possible mitigate, any cumulative effects on local air quality.	2024	Local Authority Planning Team	As per the Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance, cumulative impact of developments on air quality is considered.

2.1.9	Emissions from developments and buildings	Reduce and mitigate pollution from construction and demolition through application of London Plan and Local Plan policy and the London Plan Sustainable Design and Construction Supplementary Planning Guidance and The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance.	2024	Local Authority Planning Team	Appropriate conditions applied
2.1.10	Localised solutions	As stated in Local Plan policy T1, the council will apply London Plan policy T2, Healthy Streets, in accordance with the Lambeth Healthy Routes Plan and Low Traffic Neighbourhood Plan, to facilitate trips by walking and cycling in order to reduce health inequalities. Public realm improvements should accord with TfL's Healthy Streets Approach.	2024	Local Authority Planning Team	Lambeth is applying the Local Plan policy T1 and London Plan policy T2.
2.1.11	Emissions from developments and buildings	Organise training for planning officers on air quality and the implementation of air quality policy.	2025	Local Authority Climate Change and Sustainability Team	The Climate Change and Sustainability Team will contribute towards the Local Plan Review and will

					provide training where necessary.
2.1.12	Emissions from developments and buildings	Require developers to certify, post-approval, that air quality relevant design decisions, mitigation measures and other conditions have been implemented in accordance with the agreed strategy.	2024	Local Authority Planning Team	Requirement applied
2.1.13	Emissions from developments and buildings	Develop a standard condition to be used in permissions for major developments, to secure monitoring and reporting of real time air quality data to the council during construction phase. Data will be recorded on the council's construction emissions alert and response system, and be made publicly available and accessible.	2025	Local Authority Public Protection Team	To be carried out in 2025
2.1.14	Emissions from developments and buildings	Consider potential to use developer contributions for a construction emissions alert and response system.	2023	Local Authority Public Protection Team	As explained in our 2023 ASR, this action is now complete.

2.2.1	Emissions from developments and buildings	Pilot a construction emissions alert and response system, in which construction emission spikes from major developments trigger an enforcement response. Fully develop this system, subject to results of the pilot.	2023	Local Authority Climate Change and Sustainability Team	As explained in our 2023 ASR, this action is now complete.
2.2.2	Emissions from developments and buildings	Apply and enforce NRMM policies for all relevant applications. Maintain participation in pan-London NRMM enforcement scheme and assist implementation as required, subject to continuation of the scheme.	2025	Local Authority Climate Change and Sustainability Team	Lambeth continue to enforce NRMM policies and participate in the pan-London NRMM enforcement scheme.

3.1.1	Emissions from developments and buildings	Make full use of grant funding available through the Green Homes Grant, Social Housing Decarbonisation Fund, Home Upgrade Grant, and other central government and GLA funding programmes, alongside council resources, to retrofit Lambeth's council homes, reducing gas boiler use through energy efficiency measures, and where possible removing existing gas boilers and installing low carbon, clean heating.	2024	Local Authority Climate Change and Sustainability Team	Retrofit of 100 homes was completed under SHDF wave 1 and 24 homes under the National Net Zero Retrofit Accelerator. Gas was removed entirely from the 24 homes and low carbon alternatives fitted. Work started on SHDF wave 2.2 with plans to retrofit 250 homes with fabric first measures. We have also started work on a research project with Eyesea Green/Cambridge University which collects data from homes and monitors indoor air quality, predicting risks such as over or under heating and damp and mould. We obtained funding from HNES to carry out optimisation studies on two estates with communal heating systems to look at improving efficiency and lowering carbon emissions.

3.1.2	Emissions from developments and buildings	Work with residents to demonstrate the indoor air quality benefits of replacing gas with electric cooking. Undertake a programme to replace gas cooking with electric cooking in properties where there is resident support, and subject to affordability of fuel bill impacts.	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
3.1.3	Emissions from developments and buildings	Commit to review feasibility of installing low carbon, clean heating technologies like air and ground source heat pumps in council estates/blocks/houses, each time existing gas boilers need to be replaced. Commit to installing low carbon, clean heating technologies where technically feasible, within available budgets, and with affordable fuel bill impacts.	2025	Local Authority Housing Team	Reviews of the council's housing stock and the potential to install low carbon heating where feasible are ongoing.
3.1.4	Emissions from developments and buildings	Eliminate solid fuel heating in all council properties.	2023	Local Authority Housing Team	Lambeth are not aware of any council properties that rely on solid fuel to heat their homes.

3.1.5	Emissions from developments and buildings	Make full use of grant funding available through the Public Sector Decarbonisation Scheme and other central government and GLA funding programmes, alongside council resources, to retrofit Lambeth's council's non-residential buildings, reducing gas boiler use through energy efficiency measures, and where possible removing existing gas boilers and installing low carbon, clean heating.	2025	Local Authority Climate Change and Sustainability Team	PSDS 1 Corporate – 5 libraries and 1 community centre • Year 2 performance monitoring stage. Awaiting data on energy and carbon savings. • Year 1 report shows 83,845 kWh of gas replaced. PSDS 1 Brockwell Hall • Works completed in April 2025. • 280,927 kWh/yr expected gas savings. PSDS 1 Schools – 21 schools • Waiting for commissioning at 1 site. • 4,959,102 kWh/yr expected gas savings. PSDS 3a – 1 library and 1 community building • Awaiting Year 1 performance monitoring report. • 162,766 kWh/yr expected gas savings. PSDS 3b – 10 schools and 2 leisure centres • Close to sectional completion for all but three sites with DNO

					related delays. • 7,910,431 kWh/yr expected gas savings. PSDS 4 – 2 schools • Grant funding awarded. • 2-year project with design in current FY and delivery from next FY. • Mobilisation stage. • 664,471 kWh/yr expected gas savings.
3.2.1	Emissions from developments and buildings	Maximise onsite renewable energy generation and low carbon production for all major developments in accordance with London Plan policy and guidance.	2024	Local Authority Climate Change and Sustainability Team	Onsite renewable energy generation and low carbon production for all major developments is being maximised in line with the London Plan

3.2.2	Emissions from developments and buildings	Develop a Local Area Energy Planning process for whole energy system decarbonisation, including upgrading key utilities and electricity infrastructure to enable our energy to come from 100% renewable and zero carbon sources.	2024	Local Authority Climate Change and Sustainability Team	Local Area Energy Planning process develop is ongoing.
3.2.3	Emissions from developments and buildings	Apply London Plan Air Quality Positive Guidance on reducing emissions from combustion plant.	2024	Local Authority Planning Team	London Plan Air Quality Positive Guidance applied
3.2.4	Emissions from developments and buildings	Wherever possible, seek to curb the use of biomass in accordance with The Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance, The London Plan, and emerging Air Quality Positive/Air Quality Neutral London Plan Guidance.	2024	Local Authority Planning Team	As per the Control of Dust and Emissions during Construction and Demolition Supplementary Planning Guidance the use of biomass boilers are avoided where possible.

3.2.5	Public health and awareness raising	Improve indoor air quality in the private rented sector by tackling damp and mould. This will include: • Promoting simplified guidance for tenants on their rights, and the process for the council to take enforcement action against landlords that refuse to make necessary repairs to tackle damp and mould • Undertaking a communications campaign to ensure Lambeth residents are aware of their rights, and steps they can take if they are living with damp and mould • Promoting new guidance for tenants and landlords on preventing the formation of damp and mould • Making template letters available to support tenants to initiate the process • Updating the council webpages with the latest information and guidance	2023	Local Authority Climate Change and Sustainability Team	As explained in our 2023 ASR, this action is now complete.

3.2.6	Public health and awareness raising	Launch a communications campaign to dissuade Lambeth residents from burning wood in their homes.	2025	Local Authority Climate Change and Sustainability Team	Regular communications are sent to explain the risks of solid fuel burning and messaging is reinforced by the findings from the London Wood Burning Project.
3.2.7	Public health and awareness raising	Enforcement officers to undertake training on restrictions on the sale of coal, wet wood and manufactured solid fuels that can be burned in the home.	2023	Local Authority Public Protection Team	As explained in our 2023 ASR, this action is now complete.
3.2.8	Public health and awareness raising	Promote uptake of central government and GLA grant funding to individual households, social and private landlords, to reduce gas boiler use through energy efficiency measures, and where possible remove existing gas boilers and install low carbon, clean heating.	2024	Local Authority Climate Change and Sustainability Team	Wherever grant funding available for decarbonisation and energy efficiency improvements, the council encourages residents to take up the offer.

4.1	Monitoring and other core statutory duties	The Climate Change and Sustainability team to review Cabinet Member Delegated Decision Reports and Officer Delegated Decision Reports, and provide recommendations to ensure consistency of council decisions with air quality policy.	2024	Local Authority Climate Change and Sustainability Team	The Climate Change and Sustainability team review all Cabinet Member and Officer Delegated Decision Reports and provides recommendations to ensure consistency with air quality policy.
4.2	Public health and awareness raising	Work to eliminate mould and damp due to structural issues in council properties.	2024	Local Authority Housing Team	Work to tackle damp and mould due to structural issues in council properties is ongoing.
4.3	Public health and awareness raising	Launch a communications campaign to inform residents about steps they can take to improve indoor air quality.	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
4.4	Public health and awareness raising	Provide air quality training to housing officers to enable more effective interventions and better communication with residents	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025

4.5	Emissions from developments and buildings	Use water-based paints for indoor refurbishments on council housing estates, and audit materials used for refurbishment for potential negative indoor air quality impacts, reducing exposure to formaldehyde and other toxins wherever possible.	2023	Local Authority Housing Team	Water based paints are used in refurbishment works in council housing estates.

4.6	Public health and awareness raising	Take action to limit air pollution from events, in particular large and major events, by strengthening the requirements in the council's Green Events Guide. This will include: - Minimising deliveries through consolidation and use of local companies where possible - Reviewing the availability of electric vehicle charging points, for use by organisers, suppliers and traders - Encouraging attendees on all communications to travel to events through walking, cycling or public transport - Review feasibility and introduce new requirements to maximise bike storage at large events - Implementing on-site renewable power generation, or batteries charged with solar/renewable energy off-site, where feasible - Ensuring that generators are not left idling when not being used - Where generators are unavoidable, expecting the use of hybrid generators	2025	Local Authority Climate Change and Sustainability Team	To commence when the next Green Events Guide consultation begins

		Using mains power where available rather than temporary power Prohibiting the burning of wood, and only permitting smokeless fuels and designs for stoves and bonfires			

4.7	Public health and awareness raising	Conduct an annual review of parks machinery, including ground care machinery, leaf blowers, and hedge cutters, and commit to introducing electric/zero emissions machinery where feasible	2024	Local Authority Parks Team	Annual reviews undertaken
4.8	Public health and awareness raising	Invest in power infrastructure upgrades in and around Lambeth's parks to reduce pollution from idling ice cream vans, diesel generators and other fossil fuel uses by food and drink outlets	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
4.9	Public health and awareness raising	Restrict access of ice cream vans with freezers powered by diesel and petrol engines, to streets next to schools, to reduce exposure of school children to pollution from idling engines, as part of the school superzone project	2023	Local Authority Public Health Team	As explained in our 2023 ASR, this action is now complete.

4.1	Public health and awareness raising	Minimise the potential negative impact of tree planting on local air quality (e.g. the build-up of pollution within street canyons by reducing air-flow, or increased BVOC emissions) through appropriate species selection and location of new trees	2023	Local Authority Transport Strategy Team	Appropriate trees and locations selected
4.11	Public health and awareness raising	Work towards the following borough-wide commitments set out in the Climate Action Plan: Increase the diversion rate away from landfill and incineration to at least 70% by 2030; reduce organics disposal to landfill and incinerators by 25% by 2030; enable 3-stream segregated waste collection including food/recyclables/ residual by 2026	2023	Local Authority Waste and Cleansing Services	Lambeth Municipal Waste management Strategy published 2023 committing Lambeth to introduce fortnightly non-recyclable waste collection, expand food waste services and promote food waste reduction
4.12	Public health and awareness raising	Reduce residual waste from 397 kg per household in 2017/18 to less than 375 kg by 2025. By 2025 achieve a 37% household recycling rate and 60% recycling rate of local authority collected commercial waste.	2023	Local Authority Waste and Cleansing Services	Lambeth Municipal Waste management Strategy published 2023 committing Lambeth to introduce fortnightly non-recyclable waste collection, expand food waste services and promote food waste reduction.

4.13	Public health and awareness raising	Review current smoking cessation promotion materials to include links with- and highlight the importance of indoor air quality.	2023	Local Authority Public Health Team	As explained in our 2023 ASR, this action is now complete.
4.14	Public health and awareness raising	Create an internal awareness raising campaign for council staff on air quality, aligned to the workplace health objectives.	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
5.1	Public health and awareness raising	Identify council housing properties with poor ventilation as part of a stock condition survey, and implement a programme to improve ventilation, prioritising mechanical ventilation for properties most exposed to pollution sources.	2024	Local Authority Housing Team	Stock condition survey is completed
5.2	Public health and awareness raising	Identify housing estates with the highest exposure to air pollution, and develop estate-based action plans, developed by residents working with the council.	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
5.3	Public health and awareness raising	Invest in green screens and other physical barriers at Lambeth schools most exposed to roadside pollution	2023	Local Authority Public Health Team	As explained in our 2023 ASR, this action is now complete.

5.4	Public health and awareness raising	Introduce green infrastructure on housing estates, including new trees and hedgerows, to reduce the exposure of residents on estates to pollution from busy roads	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
5.5	Public health and awareness raising	Expand green infrastructure in parks where appropriate to limit the exposure of people using parks and green spaces to local pollution sources	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
5.6	Public health and awareness raising	As part of Lambeth's Tree Planting Strategy, prioritise the achievement of local air quality benefits through appropriate species selection and location of new trees	2023	Local Authority Parks Team	Lambeth's Urban Forest Strategy was published in November 2023, which outlines how tree planting can help to mitigate environmental risks including poor air quality.
5.7	Public health and awareness raising	Investigate the effectiveness of outdoor air filtration/purification systems in enclosed/semi-outdoor spaces	2024	Local Authority Climate Change and Sustainability Team	Investigation carried out exploring the effectiveness of outdoor air filtration

5.8	Emissions from developments and buildings	Ensure adequate, appropriate, and well-located green space and green infrastructure is included in new developments, in accordance with Local Plan policy EN1 and London Plan policy G5 (Urban Greening Factor).	2024	Local Authority Planning Team	Local Plan policy EN1 and London Plan policy G5 (Urban Greening Factor). are being applied
5.9	Emissions from developments and buildings	Protect, expand and improve green Infrastructure, including trees, across the borough in accordance with Local Plan policies EN1 and Q10.	2024	Local Authority Planning Team	Local Plan policies EN1 and Q10 are being applied
5.1	Emissions from developments and buildings	Promote the use of green infrastructure as a part of Air Quality Positive proposals, in accordance with emerging London Plan Air Quality Positive guidance.	2024	Local Authority Planning Team	London Plan Air Quality Positive guidance is being applied
5.11	Reducing exposure to pollution	Continue to support the use of empty and derelict space in the borough to promote and support food growing and tree planting. Expand this work, subject to funding.	2025	Local Authority Planning Team	Lambeth supports using empty space in the borough to promote and support food growing and tree planting.

6.1	Monitoring and other core statutory duties	• Develop an advanced air quality information service. This will include: - o A new monitoring network of lightweight air quality monitors across Lambeth, measuring NO2, PM2.5 and PM10 for at least 30 locations. Sensors will be located to prioritise sensitive receptors and areas with poorer air quality, while ensuring geographic spread across the borough. - o Continued operation of the council's 3 air quality monitoring stations, and over 100 diffusion tubes. - o The creation of an online interface, accessible through the council's website, for residents to access accurate, accessible and up-to-date air quality data and analysis. Promotion of this information so it is accessible to all. - o Air quality modelling in or close to schools, care homes and other locations where those vulnerable to air pollution spend time, including modelling of potential impacts of mitigation measures. Modelling results will be	2025	Local Authority Climate Change and Sustainability Team	Lambeth has committed to joining the Air Aware system that makes air quality data and contextual information available to interested parties. Onboarding process is ongoing, with agreements made between lightweight sensor suppliers and Lambeth IT and digital teams.

		published online. o The redevelopment of airText to provide air quality information and advice in a way that is accessible and useful to members of the public, including as a purpose-built app for smartphone use. This redeveloped service will be promoted to Lambeth residents for wide take up, with targeting of groups that are most vulnerable to pollution.			

6.2	Monitoring and other core statutory duties	Coordinate with and support the rollout of air quality monitors by partner organisations across Lambeth.	2023	Local Authority Climate Change and Sustainability Team	Lambeth's Climate Change and Sustainability Team have supported a community group to install a Breathe London node with a council managed park space, and will continue to support residents or community groups to install monitoring infrastructure wherever possible.
6.3	Monitoring and other core statutory duties	Use air quality data to shape council decision making, and inform the allocation of resources to mitigate air pollution.	2023	Local Authority Climate Change and Sustainability Team	Air quality data is collected and processed and informs decisions made by Lambeth.
6.4	Monitoring and other core statutory duties	Develop a set of indicators to measure the impact of council and partner interventions to tackle air pollution.	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
7.2	Public health and awareness raising	Monitor air quality in Lambeth's parks and green spaces, and communicate the health benefits of spending time in these spaces.	2024	Local Authority Parks Team	The parks team continues to promote the health benefits of utilising green spaces.
8.1	Public health and awareness raising	Work with businesses, institutions and other stakeholders across the borough to develop a Clean Air Pledge, working together to drive down pollution.	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025

8.2	Public health and awareness raising	Collaborate with partner institutions to deliver Lambeth's Climate Action Plan	2025	Local Authority Climate Change and Sustainability Team	The Climate Change and Sustainability Team continue to lead on the implementation of the actions, by the council and partners, laid out in the Climate Action Plan.
8.3	Public health and awareness raising	Recruit for and launch an Air Quality Community Forum, comprising residents and local stakeholders, to help shape the council's approach to tackling air pollution, and hold the council to account for its progress towards its air quality targets.	2025	Local Authority Climate Change and Sustainability Team	In partnership with Impact on Urban Health, Lambeth appointed Centric Community Research to co-design with community researchers for the Air Quality Community Forum. Co-design process is ongoing.
8.4	Public health and awareness raising	Support a thriving network of community groups that through greening and other measures, improve air quality and exposure to better air quality for Lambeth residents.	2025	Local Authority Climate Change and Sustainability Team	To be carried out in 2025
8.5	Public health and awareness raising	Coordinate the Council's efforts with large institutions, community groups, local businesses and residents to promote active travel, reduce road freight and electrify road transport.	2023	Local Authority Climate Change and Sustainability Team	The Climate Change and Sustainability are the first point of contact for community groups, local businesses and residents interested in making interventions to reduce air pollutant emissions. The team signposts those in need of support and assists wherever possible

8.6	Public health and awareness raising	Strengthen engagement with Lambeth's Clinical Commissioning Group/ICS and GP surgeries on air quality issues, to better target residents with respiratory and cardiovascular conditions.	2023	Local Authority Public Health Team	Engagement with Lambeth's Clinical Commissioning Group/ ICS and GP surgeries is ongoing and air quality as a major public health risk is made a priority.
8.7	Public health and awareness raising	Create a 'train the trainer' programme on air quality with GP surgeries in the borough using a whole practise approach to help create better awareness with residents on health impacts of air quality and what to do to help limit the effects of air quality on health.	2025	Local Authority Public Health Team	To be carried out in 2025

3. Planning Update and Other New Sources of Emissions

Table K. Planning requirements met by planning applications in London Borough of Lambeth in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	21
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)	<u>9</u>
Number of CHPs/Biomass boilers refused on air quality grounds	<u>0</u>
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions as detailed in Air Quality Neutral LPG (london.gov.uk) point 3.1.5.	<u>0</u>
Number of developments required to install Ultra-Low NO _x boilers	<u>3</u>
Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>15</u>
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	<u>0</u>
Number of planning applications with S106 agreements including other requirements to improve air quality	<u>0</u>
Number of planning applications with CIL payments that include a contribution to improve air quality	<u>0</u>
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas	
Number of planning applications with conditions related to NRMM included.	5 conditions included
Number of developments registered at www.nrmm.london .	5 registered
Number of audits (based on the pan-London project report and / or inhouse auditing programme)	5 audits
% of sites unregistered prior to audit	0% sites unregistered prior to audit
% of sites compliant	100% sites compliant after audit
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 planning applications with conditions related to NRMM included.	10 conditions included
Number of developments registered at www.nrmm.london .	10 registered
Number of audits (based on the pan-London project report and / or inhouse auditing programme)% of sites unregistered prior to audit	10 audits
% of sites compliant with	0% sites unregistered prior to audit
Stage IIIB of the Directive and/or exemptions to the policy.	100% sites compliant after audit

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 Lambeth Fleet

As of 2024, Lambeth Council's vehicle fleet included 55 battery electric vehicles, constituting 25% of the total fleet.

4.2 Pan-London NRMM Auditing Project

Lambeth continues to work with LB Merton and the Regulatory Services Partnership (LBs Merton, Richmond and Wandsworth) on the pan-London NRMM project.

4.4 Air Quality Alerts

Lambeth supports promotion of airTEXT. In 2021 Lambeth submitted a joint funding bid with Southwark to redevelop the current airTEXT alert system to improve sign ups and reach and create a new digital alert system to be used by schools and health care settings within both boroughs.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

Routine calibrations of equipment and periodic site audits were carried out by Enviro Technology, and Imperial College London's Environmental Research Group (ERG).

Routine calibrations took place every two weeks

Matts Monitors Ltd have been awarded a contract to deliver the routine calibrations and site audits to March 2024. Ricardo PLC is contracted by Matts Monitors to deliver fortnightly LSO visits.

We continue to be members of the London Air Quality Network, and ERG at Imperial College London is responsible for the automatic monitoring stations' data collection and data processing.

PM₁₀ Monitoring Adjustment

Routine calibrations of equipment and periodic site audits were carried out by Enviro Technology, and Imperial College London's Environmental Research Group (ERG). Routine calibrations took place every two weeks.

Matts Monitors Ltd deliver the routine calibrations and site audits. Ricardo PLC is contracted by Matts Monitors to deliver fortnightly LSO visits. We continue to be members of the London Air Quality Network, and ERG at Imperial College London is responsible for the automatic monitoring stations' data collection and data processing.

A.2 Diffusion Tubes

Analysis was performed by Gradko International Ltd. Tubes are prepared with 20% Triethanolamine (TEA) in Water. Tubes are analysed by UV Spectrophotometry. The preparation procedures adhere to the guidance detailed in the document 'Diffusion Tubes for Ambient NO₂ Monitoring: Practical Guidance for Laboratories and Users', Issue 1a Feb.2008 (issued by AEA Energy and Environment). Gradko participate in the independent AIR-PT scheme and partake in the annual co-location study. Co-located diffusion tubes are installed at Brixton Road air quality monitoring station LB4. We have compared the diffusion tube data at our colocation site to reference equivalent NO₂ analysers.

Discussion of Choice of Factor to Use

A national bias-adjustment factor of 0.83 has been used (Gradko bias adjustment factor for 20% TEA in Water in 2022), instead of a local bias-adjustment factor.

Table M. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.84
2023	National	06/24	0.81
2022	National	03/23	0.83
2021	National		0.84
2020	National		0.81
2019	National		0.93
2018	National		0.93
2017	Local		0.84

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Data capture by our diffusion tubes was less than 75% at 17 sites. Therefore, the means at those sites had to be annualised. The annualization factor is presented in Table M. We have used background data from the following sites: LB4 Brixton Road, LB6 Streatham Green, SK5 A2 Old Kent Road and WM5 Covent Garden. All stations had at least 85% data capture in 2024. All sites outside of Lambeth are well within the recommended radius of under 50 miles and are all representative of typical London urban background locations.

Distance Adjustment

Distance correction has been completed for 14 sites, due to the NO₂ Annual Mean Concentration (bias adjusted and annualised) being greater than 36 µg m⁻³ (within 10% of the annual mean objective) and receptors not being located at a point of relevant exposure. This is to estimate the concentration at the nearest receptor. The Fall off with Distance Adjustment calculator included within the Diffusion Tube Data Processing Tool v4.1 published by Defra has been used to perform the calculations. We have used an average of LB4 Brixton Road, LB6 Streatham Green, SK5 A2 Old Kent Road and WM5 Covent Garden.

Table L. Non-Automatic Monitoring Data Adjustment

Diffusion Tube ID	Annualisation Factor LB 4 - Brixton Road	Annualisation Factor LB6 - Streatham Green	Annualisation Factor SK5 - A2 Old Kent Road	Annualisation Factor HP1 - Honour Oak Park	Average Annualisation Factor	Raw Data Simple Annual Mean ($\mu\text{g}/\text{m}^3$)	Annualised Data Simple Annual Mean ($\mu\text{g}/\text{m}^3$)	Comments
DT4	1.0433	1.0314	0.9776	1.0514	1.0259	35.8	36.7	
DT5	0.9443	0.9045	0.9157	0.8891	0.9134	37.5	34.3	
DT19	1.0253	0.9720	0.9477	0.9977	0.9857	43.7	43.1	
DT40	1.0742	1.2119	1.1222	1.2037	1.1530	30.1	34.8	
DT44	0.9961	1.0578	1.0232	1.0057	1.0207	25.4	25.9	
DT48	1.0014	0.9801	0.9518	0.9355	0.9672	34.9	33.7	
LO	1.0056	1.0267	1.0067	1.0388	1.0195	40.0	40.8	
SCOOT	1.0366	1.0709	1.0340	1.0058	1.0368	27.4	28.4	
SR4	0.9577	0.8464	0.9142	0.8741	0.8981	43.7	39.2	
SR6	1.0104	1.0488	1.0376	1.1325	1.0573	36.7	38.8	
SR7	0.9914	0.9733	0.9528	0.9967	0.9786	36.8	36.0	
SR8	0.9981	0.9472	0.9840	1.0212	0.9876	51.8	51.2	
SR20	0.9844	0.8866	0.9089	0.8813	0.9153	64.4	59.0	
SR21	1.0411	1.2490	1.1228	1.0875	1.1251	79.7	89.6	

STA2	0.9609	0.9306	0.9371	0.9185	0.9368	55.7	52.2	
VX4	0.9420	0.8271	0.9161	0.8119	0.8743	31.7	27.7	
VX5	0.9703	0.9281	0.9666	0.9619	0.9567	30.8	29.5	

Table M. NO₂ Fall off With Distance Calculations

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted ($\mu\text{g m}^{-3}$))	Background Concentration ($\mu\text{g m}^{-3}$)	Concentration Predicted at Receptor ($\mu\text{g m}^{-3}$)	Comments
DT1, DT2, DT3	0.5	1.0	44.9	18.1	41.6	<i>Predicted concentration at Receptor above AQS objective.</i>
DT17	0.5	1.0	40.9	18.1	38.1	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
DT19	0.5	0.8	36.2	18.1	34.7	
DT23	0.5	1.0	42.5	18.12	39.5	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
DT27	0.5	1.0	47.3	18.12	43.7	<i>Predicted concentration at Receptor above AQS objective.</i>

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted ($\mu\text{g m}^{-3}$))	Background Concentration ($\mu\text{g m}^{-3}$)	Concentration Predicted at Receptor ($\mu\text{g m}^{-3}$)	Comments
DT28	0.5	1.0	38.6	18.1	36.0	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
DT29	0.5	1.0	48.6	18.1	44.9	<i>Predicted concentration at Receptor above AQS objective.</i>
DT30	0.5	1.0	36.4	18.1	34.1	
DT31	0.5	0.8	46.7	18.1	44.3	<i>Predicted concentration at Receptor above AQS objective.</i>
SR3	0.5	0.8	39.2	18.1	37.5	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted ($\mu\text{g m}^{-3}$))	Background Concentration ($\mu\text{g m}^{-3}$)	Concentration Predicted at Receptor ($\mu\text{g m}^{-3}$)	Comments
SR8	0.5	0.8	43.0	18.1	40.9	<i>Predicted concentration at Receptor above AQS objective.</i>
SR20	0.5	0.8	49.5	18.1	46.9	<i>Predicted concentration at Receptor above AQS objective.</i>
SR21	0.5	0.8	75.3	18.1	<u>70.5</u>	<i>Predicted concentration at Receptor above AQS objective.</i>
STA2	0.5	1.0	43.8	18.1	40.7	<i>Predicted concentration at Receptor above AQS objective.</i>

Appendix B Full Monthly Diffusion Tube Results for 2024

Table N. NO₂ 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 <(x.x)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
AS1	531242	178675	23.3	24.9	21.7	17.6	20.8	16.2	18.9	17.8	24.1	24.8	32.5	23.0	22.1	18.6		
AS2	531345	178627	25.9	21.9	19.5	13.9	16.0	12.3	14.7	11.3	16.3	21.9	28.3	21.4	18.6	15.6		
BHLTN1	530089	174598	23.3	22.7	20.5	14.8	20.2	16.8	16.9	15.3	20.3	22.8	27.0	20.4	20.1	16.9		
BHLTN2	530017	174216	30.7		27.9	22.3	26.2	22.2	23.2	20.9	26.0	28.5	29.6	26.1	25.8	21.7		
BHLTN3	530284	174044	23.1	19.1	18.4	12.8	15.4	11.9	12.9	12.5	16.0	21.4	26.2	17.7	17.3	14.5		
BHLTN4	530525	174616	25.6	20.1	18.9	13.2	15.9	12.2	13.4	12.6	16.6	16.3	4.7	20.6	15.9	13.3		
BHLTN5	530138	174836	28.0		15.8	13.6	16.9	14.0	14.7		18.4	20.1	26.5	19.9	18.8	15.8		
BHLTN6	530301	173773		21.8	20.7	15.4	19.0	15.1	16.6	15.5	20.4	22.8	28.0	20.1	19.6	16.4		
DT1	531070	175593			57.4		55.1	54.6	57.7		56.8	56.7	69.1	47.0	-	-		Triplicate Site with DT1, DT2 and DT3 - Annual data provided for DT3 only
DT2	531070	175593			55.4	59.4	49.0	54.2	56.3		60.7	57.1	58.2	52.9	-	-		Triplicate Site with DT1, DT2 and DT3 - Annual data provided for DT3 only
DT3	531070	175593	52.8	55.3	57.4	1.1	55.7	52.8	57.1		64.1	58.7	57.9	47.7	53.5	44.9	41.6	Triplicate Site with DT1, DT2 and DT3 - Annual data provided for DT3 only
DT4	531139	180048	31.1		55.7	22.9	24.0							45.3	35.8	30.8		
DT5	531214	179907					39.1			31.1		35.3	44.6		37.5	28.8		
DT6	531494	179951	53.1				63.9	54.8	21.2	44.1	22.7	26.7	30.9	27.2	38.3	32.2		
DT7	530817	178122	33.5	30.5	26.1	25.9	28.4	27.8	28.3	24.5	33.1	32.1	39.8	31.0	30.1	25.3		
DT8	530868	177740	34.4	29.7	30.1	32.0	41.9	27.9	27.7	20.4		56.7	38.3	27.5	33.3	28.0		
DT9	531196	177653	38.3	35.5			35.9	34.7	33.8	28.7		57.7	38.4	12.2	35.0	29.4		
DT10	531250	177464	48.4	25.0	21.6	16.5	21.4	17.1		29.5	22.3	25.9	22.4	23.8	24.9	20.9		
DT11	531093	177419	30.3	29.0	29.4		28.8	23.8	28.2		58.6	31.6		53.3	34.8	29.2		

DT12	530404	176321	36.4	36.2	33.7		33.5	32.8		31.7	32.8		41.1	36.5	35.0	29.4		
DT13	530363	176269	58.3	54.6	34.7	25.8	32.4	27.7	30.3	27.6	33.2	31.7	41.4	28.0	35.5	29.8		
DT14	530105	175956	38.2	37.5	32.9	31.7	36.0	34.0	32.8	29.0	39.7	37.4	38.5	30.3	34.8	29.3		
DT15	530009	175719	34.1	35.5	33.9	31.9	34.9	35.2	30.0	30.2	34.9		35.9	31.1	33.4	28.1		
DT16	529413	175284	29.3	28.8	28.1	22.4	25.2	23.8	24.2	23.3	26.9	29.3	32.0	24.1	26.4	22.2		
DT17	530916	175784	73.9	62.7	37.7		65.4	40.2	39.8	35.6	44.6	40.8	45.9		48.6	40.9	38.1	
DT18	531020	175699	33.8	33.1	15.9	25.0	33.2	26.7	31.1	24.7	28.3	38.0		26.7	28.8	24.2		
DT19	531027	175320	49.0		42.1		45.7							38.1	43.7	36.2	34.7	
DT20	531038	175092	35.4		29.2	27.5	29.3	29.7		28.0	27.0		34.7	26.9	29.8	25.0		
DT21	531231	174607	26.7	23.2	20.7	15.2	18.7	18.4	16.8		19.1		27.5	20.8	20.7	17.4		
DT22	530928	174849	26.9	21.2	20.0	16.6	17.3	15.1	15.3	15.1		23.4	29.7	20.1	20.1	16.9		
DT23	530781	174682	39.1	71.9		50.8	94.3	42.5	43.0	34.9	41.8	48.2	54.7	35.0	50.6	42.5	39.5	
DT24	530150	173680	31.4	25.7	24.8	21.7	28.3		19.7	18.4	23.4	29.2	30.6	16.1	24.5	20.6		
DT25	530461	173470	38.3	34.6		62.3		33.2	34.4	32.6	39.1	40.0	40.9	26.2	38.2	32.0		
DT26	530452	173105	37.0	26.5		46.3	27.7	24.2	23.0	20.3		25.7	35.2	27.8	29.4	24.7		
DT27	530255	172632			54.4	55.2	60.6	61.4	58.6	50.7	58.0	57.3	53.4	52.7	56.3	47.3	43.7	
DT28	530217	172353	49.1	52.0	55.6	46.8	48.1	42.2	43.5	36.0	42.0		51.8	37.7	45.9	38.6	36.0	
DT29	530130	172013	58.7			61.6	95.3	55.5	56.7	45.9	58.3	52.7	52.1	42.1	57.9	48.6	44.9	
DT30	530015	171489	52.4	43.7	44.3	45.6	47.5	44.8	40.4	34.2	48.5	39.0	45.0	34.3	43.3	36.4	34.1	
DT31	530101	171148	50.7	47.0	48.2	52.0	65.7	66.8	60.5	49.4	69.4	51.9	58.6	47.3	55.6	46.7	44.3	
DT32	529730	175446			22.3	15.7	20.0	16.1	16.6	17.0	21.2	24.3	28.4	23.5	20.5	17.2		
DT33	529217	175648				35.4	17.9	15.5	16.8	15.6	20.4	41.4	28.9	20.7	23.6	19.8		
DT34	529130	174288	41.4	33.9	32.3	34.8	37.6	38.9	35.0	28.2	39.5	34.8	39.8	29.8	35.5	29.8		
DT35	529263	174190	33.2		30.4	24.6	26.0	36.1	26.7	23.9	29.1	30.9	35.0	24.8	29.2	24.5		
DT36	529420	173996	33.1	29.0	29.7	30.3	36.0	35.8	31.9	30.2	36.0	31.4	36.7	26.5	32.2	27.1		
DT37	530821	173309		43.3	24.5	18.4	24.5	20.5	21.7	18.6	25.9	29.2	32.0		25.9	21.7		
DT38	531160	173103	54.6	66.4	29.3	27.7	32.5	31.8	31.6	27.5	35.3		33.6	29.0	36.3	30.5		
DT39	531731	173026	32.4	35.5	37.7	27.7	35.5			31.7	39.5	37.5	41.7	30.1	34.9	29.4		
DT40	532341	172918			32.3	26.5	33.4	28.4							30.1	29.2		
DT41	531839	172552			43.2	34.4	37.9	43.8	43.2	38.4	40.8	41.5		36.4	40.0	33.6		
DT42	531923	172225		35.4	38.4		31.4	33.8	34.7	32.0	36.9	32.9	0.6	62.6	33.9	28.5		
DT43	531936	171795	31.0	39.9	41.5	30.6	29.4	26.8	31.3	29.6	33.1	38.0	37.7	30.8	33.3	28.0		
DT44	533016	171534				37.9		21.9	21.5	19.5	25.5	26.3	30.1	20.1	25.4	21.7		
DT45	533328	171264			19.7	14.4	17.1	14.3		15.0	16.8	21.6	24.1	17.8	17.9	15.0		
DT46	531989	174329		27.6	27.2	20.2	24.4	16.5	25.3		23.9		29.8	16.9	23.5	19.8		
DT47	531860	174353		29.8	31.0	26.0	35.0	35.0	35.2	33.4		34.3	37.4	26.1	32.3	27.1		
DT48	531972	175331				41.2	32.3		14.5		36.9	40.0	42.6	36.5	34.9	28.3		
DT49	531856	175680	27.1	24.2	20.8	17.2	18.8	16.1	16.0	14.8	20.2	21.3			19.6	16.5		

DT50 1	530657	175133	47.6	27.6	25.8	19.2	24.0	20.6	21.3	19.1	24.8	29.1	31.7	23.8	26.2	22.0		
DT51	531557	171047	48.2		25.3	18.1	21.2			19.4	22.5	25.8	33.4	21.9	26.2	22.0		
ISA1	548267	171086		33.5	15.1	12.2	15.6			10.9	14.1	18.5	19.0	17.0	17.3	14.6		
JP1	532008	175397	36.6	30.6	6.6	21.7	16.4	19.6	20.0	20.8	25.3	24.3	28.0		22.7	19.1		
JP2	532086	175297	23.0	19.8	15.9	11.1	13.6	11.3		10.2	14.8	19.1		15.5	15.4	13.0		
JP3	532030	175130		34.8	15.7	43.5	23.1		24.4	11.5	16.2	19.3		35.6	24.9	20.9		
JUB1	531176	174293	57.1	1.0	31.7	30.9	36.5	34.5	37.2	27.9	37.8	37.7	0.6	65.9	33.2	27.9		
LO	531651	176150	46.7		54.1		32.1	34.3		37.8		35.0		40.1	40.0	34.3		
LTN1	530622	175112				19.4	21.8	18.3	17.7	13.5	22.3	26.1	30.6	22.0	21.3	17.9		
LTN2	530068	175106		28.4	21.6	24.1	28.4	27.6	27.0	23.2	29.2	32.8	36.1	25.6	27.6	23.2		
LTN3	530043	175668	34.5	26.6	29.0	24.4	30.3	24.5	25.1	22.3	26.9	30.1	34.1	26.4	27.8	23.4		
LTN4	530465	175865	29.7	56.2	25.6	33.6	20.5	16.5	17.3	17.1	21.8	26.5	30.4	21.8	26.4	22.2		
LTN5	530917	175578	24.5	21.0	18.7	14.3	18.8	14.1	15.5	14.4	19.4	25.5	27.8	16.7	19.2	16.2		
LTN7	531147	172879	23.3	71.4	40.8	17.2	18.9	17.4	17.8	17.1	20.7	22.1	26.5	23.5	26.4	22.2		
LTN8	530763	172840		21.2	23.0	18.1	17.5	17.8	17.4	16.6	21.4	23.8	30.5	20.5	20.7	17.4		
LTN9	530728	172565	23.5	19.6	17.0	12.9			11.8	11.7	15.6	20.5	25.5	0.5	15.8	13.3		
LTN10	531110	172389			20.3	13.4	20.0	16.2	15.4	11.6	19.5	12.7	23.6	20.2	17.3	14.5		
LTN11	530650	172226	29.5	24.8	0.6	41.2	24.3		20.7	20.0	26.3	24.0	29.0		24.0	20.2		
LTN12	530940	172132			29.1	21.6	24.7	26.9	24.1	22.2	27.4	29.9	33.0	27.7	26.7	22.4		
LTN13	530288	171810	42.9			14.4		15.0	14.6	14.8	20.0	22.0	32.8	18.1	21.6	18.2		
LTN14	531181	171612			20.8	16.4	18.8	17.4	17.2		20.6	22.5	27.7	21.0	20.3	17.0		
LTN15	530713	171417	23.6	19.4	20.7	14.2	19.4	16.0	15.5	14.2	22.2	24.5	26.2	20.5	19.7	16.5		
LTN16	530498	171054	22.9	23.8	26.7	20.0	22.4	20.6	20.8	20.1	23.2	26.0	30.8	24.6	23.5	19.7		
Point 122	531299	178649	25.9	20.6	19.1	13.6		13.9	15.1	14.3	18.7	23.0			18.2	15.3		
RS1	532317	173611			16.6	12.1	12.5	11.6	12.0	11.4	93.2	28.3	23.0		24.5	20.6		
SCOOT	531137	175822			1.0	30.0			34.3		34.5	34.1		30.3	27.4	23.8		
SH1	530775	171653		18.5	17.2	12.7	14.9	11.6	12.2	12.1	16.2	19.6	24.9	16.3	16.0	13.4		
SP1	530628	177333	24.9	17.2	16.9	138.2		10.8	11.3	10.8	14.8	18.2	23.4	18.3	27.7	23.3		
SR1	531267	179825	35.5	33.9	32.0	29.3	31.6	29.5	21.3	27.5	36.4		43.2		32.0	26.9		
SR2	531189	179969	32.1	32.1	0.6	22.8	27.0	24.2	26.2	21.9	27.2	27.7	34.3	30.6	25.6	21.5		
SR3	531006	180079	83.7	50.6	47.6	47.9	6.2	45.4	50.6	43.1	46.0	45.6			46.7	39.2	37.5	
SR4	530951	180064	39.6	43.3	43.2	36.8					51.7	42.9	48.2		43.7	33.0		
SR5	530835	179873	41.7			28.3	34.2	35.6	37.1	34.0	36.9	17.3		0.5	29.5	24.8		
SR6	530768	179896	38.4			39.9	35.9	33.5	36.2	36.0	34.2	39.1			36.7	32.6		
SR7	530655	180011	47.7				37.9			4.5		41.5		52.4	36.8	30.3		
SR8	530823	180123	54.9	72.7		43.8	52.0	52.6			55.0	31.9			51.8	43.0	40.9	
SR10	530965	180267	34.3	28.1		26.9	30.5	28.5	33.6	25.7			39.7	31.5	31.0	26.0		
SR11	531020	180433	31.9	30.4	25.8	21.3	23.0	19.2		21.7	24.3	29.5	33.4	29.0	26.3	22.1		

SR12	531118	180337	34.1		27.1	19.9	24.3	21.2		37.2	27.7	30.5	35.7	30.7	28.8	24.2		
SR13	531287	180420	29.6	25.8	27.1	21.7		16.4	18.2	18.1	24.7	24.8	32.1	22.8	23.7	19.9		
SR14	531222	180500	27.3	22.9	37.4	17.3	20.2	16.0		16.1	21.1		27.7	22.1	22.8	19.2		
SR15	531259	180282		37.4	32.8	24.4	26.0	27.8	30.4	24.0	31.2	32.1	40.0	35.2	31.0	26.1		
SR16	531205	180162	51.5	26.6	24.0	19.5	23.1	19.5	20.8	18.2	38.7	40.4	34.8	26.2	28.6	24.0		
SR17	531283	179951	21.3	32.0		44.5	23.7	19.1		19.8	23.3		31.1	27.8	26.9	22.6		
SR18	531418	179913	32.0		25.0	19.3	22.0	19.2	20.4	19.1	23.6	24.9	33.4	27.4	24.2	20.3		
SR19	531056	180134	41.7	36.8		33.8	42.2	35.3	37.0	30.5	46.1	37.6	48.5	37.3	38.8	32.6		
SR20	530935	180259	62.0		70.2							65.6		59.9	64.4	49.5	46.9	
SR21	530902	180319			77.5					98.3				63.3	79.7	75.3	70.5	
SS1	530501	177330	25.9	23.9	21.8	23.3	17.5			9.5	18.8	21.8		17.2	20.0	16.8		
ST1	530804	179582		37.9	39.3	40.2	43.2	37.7	39.4	38.6	42.7	34.4	43.6	37.1	39.4	33.1		
STA1	530703	177997	36.1	37.0	36.0	31.8	35.6	34.5	36.8	32.8	35.3	36.1		34.3	35.1	29.5		
STA2	530621	177957	64.2		70.9					70.3			42.0	31.0	55.7	43.8	40.7	
SW1	531063	172947		16.0	15.8	59.1	20.6	25.4	10.3	9.8		26.9	22.7	16.9	22.3	18.8		
TP1	529631	173196	24.5	20.3	18.4	14.5	8.4	13.9	15.2	13.8	19.9	23.4	27.2	17.4	18.1	15.2		
VP1	530810	178254	40.6	21.1	18.9		25.2	13.3	14.7	18.1	17.3	22.9			21.4	17.9		
VP2	530800	178341		23.5			0.2	0.6	15.6	14.1	17.7	24.5	29.7	23.9	16.6	14.0		
VX1 1	530371	178067	33.0	27.6	27.6	26.6	30.6	22.4	20.6	22.3	29.0	34.3	35.1	29.0	-	-		Triplicate Site with VX1 1, VX1 2 and VX1 3 - Annual data provided for VX1 3 only
VX1 2	530371	178067			25.1	26.1	30.6	25.1	17.6	21.0	30.1	35.5	35.8		-	-		Triplicate Site with VX1 1, VX1 2 and VX1 3 - Annual data provided for VX1 3 only
VX1 3	530371	178067			30.6	23.7		22.4	27.0	23.2	28.6	30.3	38.5	28.7	28.3	23.8		Triplicate Site with VX1 1, VX1 2 and VX1 3 - Annual data provided for VX1 3 only
VX2	530483	178200	28.3	26.3	23.6	17.5	21.3	18.5		30.0	22.5	25.7	29.9	25.9	24.5	20.6		
VX3	530571	178300	25.0	22.1	21.0	16.1	19.3		30.5	15.4	18.7	22.0	28.9	21.2	21.8	18.3		
VX4	530408	178326		53.6	4.8						31.4	32.4	36.5		31.7	23.3		
VX5	530440	178522	35.0	35.2		26.2			26.5	23.1	34.1	30.8	35.7		30.8	24.8		
VX6	530619	178466	30.3		27.6	23.0	25.8		22.9	19.0	21.9	24.5	34.2	25.7	25.5	21.4		
VX7	530815	178361	25.1	22.1	20.4	14.7		32.7	14.6	13.5	18.0	22.0	28.7	20.6	21.1	17.7		
VX8	530753	178616	27.7		44.2	18.1	21.8	17.3	18.8	17.3	21.0	25.7		43.5	25.5	21.5		

VX9	530493	178745	49.0	35.0	35.2	27.8	30.7	26.3	30.7		33.8	32.6	39.8	33.1	34.0	28.6		
VX10	530565	178760	30.4			21.5	22.6	20.8		20.4	26.8	28.8	31.0	23.9	25.1	21.1		
VX12	530858	178878	24.7	21.5	26.0	18.9	19.6	15.8	16.9	15.7	20.5	23.5		40.6	22.2	18.6		
VX13	530607	178961	34.5	35.3	31.6	30.3	32.3	30.3	30.1	28.0	35.7	36.4	40.6	33.1	33.2	27.9		
WP1	530281	177513	28.6	25.2	49.4	42.1		20.1	21.3		25.1	25.4	34.7	0.5	27.2	22.9		
WP2	530246	177510	28.8			18.0	22.1	18.7	20.0		24.6	26.4	31.9	24.0	23.8	20.0		
WP1	530281	177513	28.6	25.2	49.4	42.1		20.1	21.3		25.1	25.4	34.7	0.5	27.2	22.9		
WP2	530246	177510	28.8			18.0	22.1	18.7	20.0		24.6	26.4	31.9	24.0	23.8	20.0		

☒ All erroneous data has been removed from the NO₂ 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 (confirm by selecting in box).

☒ London Borough of Lambeth confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System (confirm by selecting in box).

Notes:

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

NO₂ annual means exceeding 60µg m⁻³, indicating a potential exceedance of the NO₂ 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

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

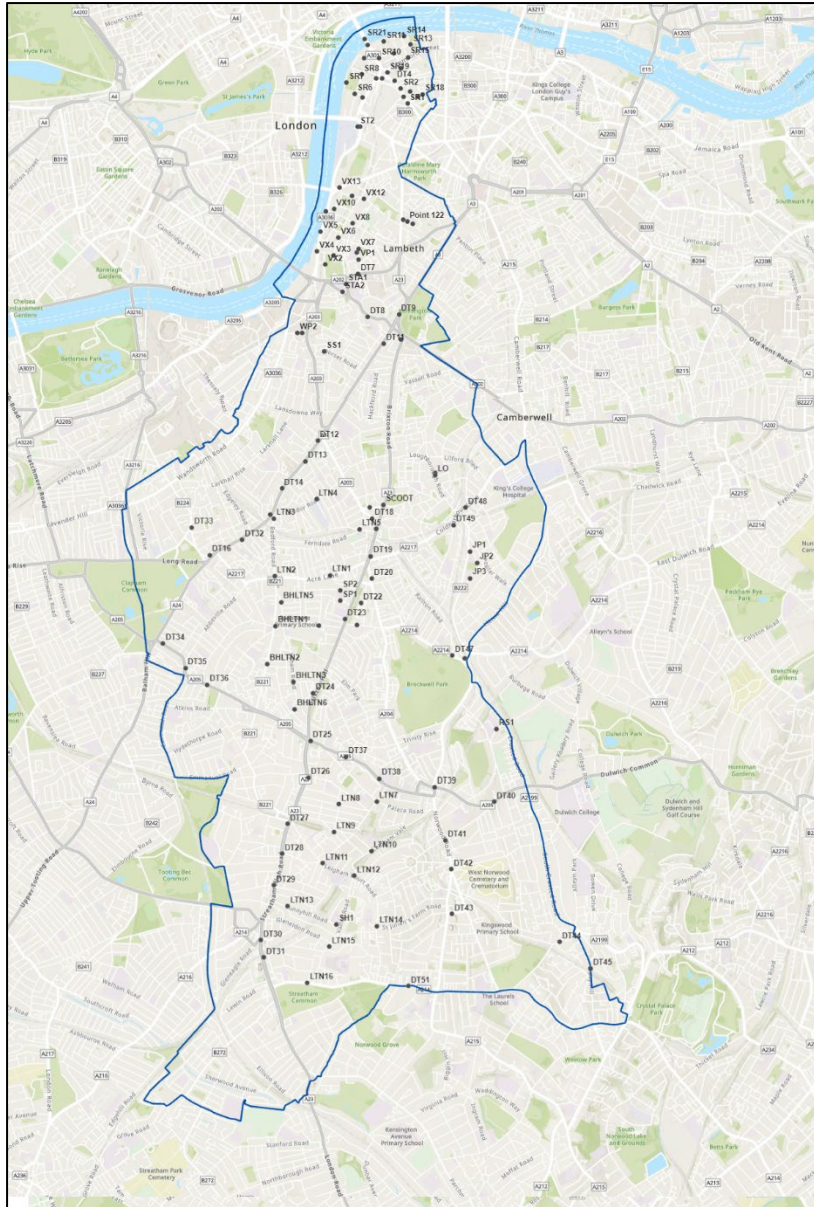


Figure B. Map of Automatic Monitoring Site(s)

