

London Borough of Barking and Dagenham Air Quality Annual Status Report for 2024

Date of publication: May 2025



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

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

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Abbreviations

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

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

Pollutant	Standard / Objective / Guideline	Averaging Period	Date⁽¹⁾
Nitrogen dioxide (NO ₂)	200 µg m ⁻³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	40 µg m ⁻³	Annual mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	WHO AQG ⁽²⁾ : 10 µg m ⁻³	Annual mean	
Particles (PM ₁₀)	50 µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 45 µg m ⁻³ not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM ₁₀)	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 15 µg m ⁻³	Annual mean	
Particles (PM _{2.5})	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

London Borough of Barking and Dagenham (LBBD) operates 2 automatic monitoring stations (Table B), which are both located at suburban background and within 24 and 28meters respectively from relevant exposure.

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)
(BG1)	Rush Green Primary School	Suburban Background	550652	186836	NO ₂ SO ₂	Y	Chemiluminescent, UV Florescence	28	50	4
(BG2)	Scrattons Farm	Suburban Background	548043	183320	NO ₂ PM10	Y	Chemiluminescent, Teom	24	24	3.5

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

The Council started monitoring for nitrogen dioxide by diffusion tube in the borough in 2020 at eight monitoring locations. This was increased by another twenty locations in 2021 and have since increased again by another twenty monitoring locations in 2023. The council now have forty-eight monitoring locations spread throughout the borough with one of it a triplicate location at Rush Green Primary School which is co-located with one of the council automatic monitoring stations. Table C below gives individual site details, locations for the 2024 monitoring round. All diffusion tube sites are indicative of relevant exposure from roadside, background, and urban background sites. The diffusion tubes are located at building facades of residential properties and schools or adjacent to hotspot locations where possible.

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)
DT1	Ripple Road Primary School	Roadside	544793	183783	NO ₂	Y	17	2	N	2.5
DT2	1A Westminster Gardens	Roadside	545032	183193	NO ₂	Y	3	1	N	2.5
DT3	6/7 Scrattons Terrace	Roadside	547806	183543	NO ₂	Y	5	1	N	2.5
DT4	291 Dagenham Heathway	Roadside	549035	184813	NO ₂	Y	6	1	N	2.5
DT5	Wood Lane/Valence Avenue Junction	Roadside	547789	185792	NO ₂	Y	5	2	N	2.5
DT6a	Rush Green Primary School	Suburban Background	550652	186836	NO ₂	Y	28	N/A	Y	1.5
DT6b	Rush Green Primary School	Suburban Background	550652	186836	NO ₂	Y	28	N/A	Y	1.5
DT6c	Rush Green Primary School	Suburban Background	550652	186836	NO ₂	Y	28	N/A	Y	1.5
DT7	Whalebone Lane South/Whalebone North/High Road Junction	Roadside	548544	188125	NO ₂	Y	2	2	N	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)
DT8	Outside No. 31 Eastern Avenue West (the A12)	Roadside	548359	189057	NO ₂	Y	3	12	N	2.5
DT9	St Pauls Way (Beside Abbey Green Play Area)	Roadside	544128	183662	NO ₂	Y	3	2	N	2.5
DT10	Glenny Road	Roadside	544385	184565	NO ₂	Y	3	2	N	2.5
DT11	209 New Road (A1306)	Roadside	549832	183208	NO ₂	Y	5	2	N	2.5
DT12	40 – 38 Thames Road	Roadside	546501	182713	NO ₂	Y	5	2	N	2.5
DT13	2 Choats Road	Roadside	547081	183053	NO ₂	Y	5	2	N	2.5
DT14	High Road (Chadwell Heath) A118	Roadside	548065	187998	NO ₂	Y	5	2	N	2.5
DT15	102 Renwick Road	Roadside	546935	183135	NO ₂	Y	6	2	N	2.5
DT16	1 River Road	Roadside	545296	183204	NO ₂	Y	5	2	N	2.5
DT17	95 Bastable Avenue	Roadside	545842	183144	NO ₂	Y	5	2	N	2.5
DT18	463 Lodge Avenue	Roadside	546415	183717	NO ₂	Y	5	2	N	2.5
DT19	835a Longbridge Road (A124)	Roadside	546744	185774	NO ₂	Y	5	2	N	2.5
DT20	1 Althorne Way/ Wood Lane (A124)	Roadside	549173	186755	NO ₂	Y	3	1	N	2.5
DT21	217 Whalebone Lane South (A1112)	Roadside	548733	187586	NO ₂	Y	6	2	N	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)
DT22	1249 Chequers Lane	Roadside	549078	183327	NO ₂	Y	6	1	N	2.5
DT23	623 Rainham Road South	Roadside	550263	184902	NO ₂	Y	5	2	N	2.5
DT24	Cook Road	Roadside	548487	183557	NO ₂	Y	20	2	N	2.5
DT25	Fiske Court, Kings Edward's Road (Adjacent to A13)	Roadside	544699	183650	NO ₂	Y	6	1	N	2.5
DT26	251 Valence Avenue	Roadside	547762	186888	NO ₂	Y	5	1	N	2.5
DT27	145 Fanshawe Avenue	Roadside	544339	184702	NO ₂	Y	5	1	N	2.5
DT28	102 Maplestead Road	Roadside	546731	183684	NO ₂	Y	5	1	N	2.5
DT29	143 Grafton Road	Roadside	548422	186431	NO ₂	Y	2	5	N	2.5
DT30	947 Longbridge Road	Roadside	544631	184553	NO ₂	Y	3	1	N	2.5
DT31	St Vincent's Catholic Primary School	Roadside	547209	186599	NO ₂	Y	10	1	N	2.5
DT32	Opposite 131 Upney Lane	Roadside	545942	184073	NO ₂	Y	10	2	N	2.5
DT33	196 Longbridge Road	Roadside	545124	184935	NO ₂	Y	7	2	N	2.5
DT34	150 London Road (Opposite Shell Petrol Station)	Roadside	554097	184196	NO ₂	Y	2	1	N	2.5
DT35	29 London Road	Roadside	544206	184158	NO ₂	Y	5	1	N	2.5
DT36	39 Alfred's Gardens	Roadside	545536	183446	NO ₂	Y	5	1	N	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)
DT37	Gascoigne Wharf, Alfreds Way, (Opposite Bestway)	Roadside	544667	183104	NO ₂	Y	5	1	N	2.5
DT38	6 William Hope Close	Suburban Background	545495	183310	NO ₂	Y	10	N/A	N	2.5
DT39	308 Lodge Avenue	Roadside	546618	184605	NO ₂	Y	8	1	N	2.5
DT40	91 Markyate Road	Roadside	546968	185087	NO ₂	Y	6	1	N	2.5
DT41	Goresbrook School, Cook Road	Roadside	548056	183606	NO ₂	Y	10	2	N	2.5
DT42	60 Arnold Road	Roadside	548974	184041	NO ₂	Y	5	2	N	2.5
DT43	Connections, Shankar Road, House of Faith	Roadside	549537	183284	NO ₂	Y	10	2	N	2.5
DT44	Leys Infants School, 9 Leys Avenue	Roadside	550508	184123	NO ₂	Y	7	2	N	2.5
DT45	463 Rainham Road South	Roadside	550289	184928	NO ₂	Y	8	1	N	2.5
DT46	116 Alibon Road	Roadside	548935	185402	NO ₂	Y	7	2	N	2.5
DT47	830 Dagenham Road	Roadside	550002	185912	NO ₂	Y	8	1	N	2.5
DT48	65 Marston Avenue	Roadside	549154	186114	NO ₂	Y	6	1	N	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.

1.2 Comparison of Monitoring Results with AQOs

Concentration values are those at the location of the monitoring site (bias adjusted and annualised, as required), not those following any fall-off with distance correction.

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
(BG1)	551053	187233	Suburban Background	68	-	-	-	-	17	17	16	15
(BG2)	548043	183320	Suburban Background	-	83	-	-	-	20	21	18	18

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%).

At both (LBBD) automatic monitoring station, the NO₂ trend remains steady in the last three years whilst also continued to fall in concentration or remain stable in the last two years.

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
DT1	544793	183783	Roadside	-	83.3	-	-	28.5	30.05	29.76	27.1	24.52
DT2	545032	183193	Roadside	-	91.7	-	-	26.7	28.88	24.07	23.2	22.95
DT3	547806	183543	Roadside	-	100.0	-	-	29.0	30.88	28.63	26.8	26.29
DT4	549035	184813	Roadside	-	100.0	-	-	37.3	41.65	39.57	38.7	39.10
DT5	547789	185792	Roadside	-	100.0	-	-	31.1	38.94	35.12	31.0	29.04
DT6a	550652	186836	Urban Background	-	91.7	-	-	19.8	17.11	13.58	13.4	12.69
DT6b	550652	186836	Urban Background	-	83.3	-	-	19.8	18.01	13.47	13.3	13.23
DT6c	550652	186836	Urban Background	-	83.3	-	-	19.8	15.18	13.50	13.1	13.07
DT7	548544	188125	Roadside	-	100.0	-	-	29.8	34.35	30.80	27.5	25.86
DT8	548359	189057	Roadside	-	100.0	-	-	26.8	31.68	27.69	25.3	24.29
DT9	544128	183662	Roadside	-	83.3	-	-	-	28.88	27.00	24.3	21.62
DT10	544385	184565	Roadside	-	83.3	-	-	-	25.91	24.47	23.8	23.69
DT11	549832	183208	Roadside	-	100.0	-	-	-	31.34	28.08	27.1	25.34
DT12	546501	182713	Roadside	-	100.0	-	-	-	26.51	23.40	24.4	21.67
DT13	547081	183053	Roadside	-	100.0	-	-	-	28.66	21.69	20.2	18.98
DT14	548065	187998	Roadside	-	100.0	-	-	-	32.02	32.98	33.2	28.59
DT15	546935	183135	Roadside	-	83.3	-	-	-	28.25	21.64	20.5	19.55
DT16	545296	183204	Roadside	-	91.7	-	-	-	34.63	34.86	30.9	29.62
DT17	545842	183144	Roadside	-	100.0	-	-	-	25.63	23.32	20.9	20.25
DT18	546415	183717	Roadside	-	100.0	-	-	-	39.09	36.83	34.4	32.91
DT19	546744	185774	Roadside	-	100.0	-	-	-	38.98	29.53	27.2	25.18
DT20	549173	186755	Roadside	-	100.0	-	-	-	27.02	25.97	27.0	27.05

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
DT21	548733	187586	Roadside	-	100.0	-	-	-	37.00	35.83	31.5	30.00
DT22	549078	183327	Roadside	-	100.0	-	-	-	20.59	21.76	20.0	20.18
DT23	550263	184902	Roadside	-	100.0	-	-	-	35.18	32.78	30.1	29.35
DT24	548487	183557	Roadside	-	91.7	-	-	-	31.46	32.87	30.8	26.68
DT25	544699	183650	Roadside	-	91.7	-	-	-	39.66	37.49	35.4	41.68
DT26	547762	186888	Roadside	-	100.0	-	-	-	32.76	28.07	27.3	24.88
DT27	544339	184702	Roadside	-	91.7	-	-	-	32.61	29.25	26.6	26.36
DT28	546731	183684	Roadside	-	100.0	-	-	-	31.91	30.79	29.0	28.00
DT29	548422	186431	Roadside	-	83.3	-	-	-	-	-	18.4	15.80
DT30	544631	184553	Roadside	-	91.7	-	-	-	-	-	24.5	21.85
DT31	547209	186599	Roadside	-	100.0	-	-	-	-	-	19.4	16.95
DT32	545942	184073	Roadside	-	100.0	-	-	-	-	-	24.4	22.22
DT33	545124	184935	Roadside	-	100.0	-	-	-	-	-	23.5	20.85
DT34	554097	184196	Roadside	-	75.0	-	-	-	-	-	37.7	27.72
DT35	544206	184158	Roadside	-	91.7	-	-	-	-	-	32.1	30.17
DT36	545536	183446	Roadside	-	100.0	-	-	-	-	-	27.3	24.72
DT37	544667	183104	Roadside	-	100.0	-	-	-	-	-	29.2	26.81
DT38	545495	183310	Urban Background	-	91.7	-	-	-	-	-	22.8	21.52
DT39	546618	184605	Roadside	-	100.0	-	-	-	-	-	29.9	26.57
DT40	546968	185087	Roadside	-	100.0	-	-	-	-	-	19.7	16.71
DT41	548056	183606	Roadside	-	100.0	-	-	-	-	-	31.9	26.55
DT42	548974	184041	Roadside	-	75.0	-	-	-	-	-	21.0	20.06
DT43	549537	183284	Roadside	-	100.0	-	-	-	-	-	25.7	24.51
DT44	550508	184123	Roadside	-	91.7	-	-	-	-	-	19.6	16.32
DT45	550289	184928	Roadside	-	100.0	-	-	-	-	-	23.9	22.83
DT46	548935	185402	Roadside	-	100.0	-	-	-	-	-	22.3	18.88

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
DT47	550002	185912	Roadside	-	100.0	-	-	-	-	-	30.4	27.21
DT48	549154	186114	Roadside	-	91.7	-	-	-	-	-	19.6	18.08

☒ 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%).

Neither of the two automatic monitoring stations exceeds the annual AQ objectives of $40\mu\text{g m}^{-3}$ but exceeded the WHO guidelines of $10\mu\text{g m}^{-3}$. Therefore, the annual objective has been achieved but the WHO guidelines has not been met. The hourly NO₂ objective was achieved at both monitoring locations.

All the diffusion tube results have been appropriately bias adjusted, using the Gradko Environmental national adjustment factors. Exceedances of the annual AQ objective of $40 \mu\text{g m}^{-3}$ is highlighted in bold. Only one of the passive monitoring locations (diffusion tubes) i.e. Fiske Court, Kings Edward's Road (DT25) exceeded the air quality objective whilst the Dagenham Heathway (DT4) was very close to the annual air quality objective with the concentration also slightly higher than last year. Fiske Court, Kings Edward's Road (DT25) is directly adjacent to A13, which is a major road.

Moreover, all the passive monitoring locations (diffusion tubes) exceed the WHO guidelines.

At all the (LBBD) 48 passive monitoring locations between 2021 - 2024, the NO_2 trend remains steady in the last three years whilst also continued to fall in concentration with higher percentage in the last two years. Only 2 monitoring location increased in concentration in 2024 i.e. (DT4 & DT25) which has previously stated is directly adjacent to A13. These were down from three monitoring locations in 2023 i.e. (DT12, DT14 and DT20).

Most of the data presented represents monitoring results for a 12-month period (January – December) and tubes are exposed in accordance with the UK Defra guidance LAQM TG (22).

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
(BG1)	550652	186836	Suburban Background	68	-	0	0	0	0	0	0	0
(BG2)	548043	183320	Suburban Background	-	83	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 F shows that there have been no exceedances of the hourly NO₂ objective in 2024 whilst this has remain consistent at 0 in the last seven years.

The 2024 annual Mean NO₂ Concentration in the London Borough of Barking and Dagenham is attached to this report (Appendix B).

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
(BG2)	548043	183320	Suburban Background	-	86	19	18	18	18	18	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%).

There is no exceedance of the annual PM₁₀ objective in 2024 but the WHO guidelines annual mean of 15 µg m⁻³ was exceeded.

The PM₁₀ trend remains steady in the last seven years whilst also continued to fall in concentration in the last three years.

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
(BG2)	548043	183320	Suburban Background	-	86	0	6	3	2	2	2	2

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%).

The 24-hour mean AQ objective was not exceeded in 2024 and the WHO guidelines of 45 µg m⁻³ of not more than 3-4 times a year was not exceeded either.

Table I. 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 $\mu\text{g m}^{-3}$	Number of 1-hour mean > 350 $\mu\text{g m}^{-3}$	Number 24-hour mean > 125 $\mu\text{g m}^{-3}$
(BG1)	-	75	3	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%).

None of the SO₂ objectives were exceeded for the year 2024. The WHO guidelines were not exceeded either.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMA(s)) 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(s) declared by London Borough of Barking and Dagenham can be found in Table J. The table presents a description of the 2 AQMA(s) that are currently designated within an area encompassing the whole London Borough of Barking and Dagenham with unspecified road transport as its major source declared 16th December 2008. Appendix C provides maps of AQMA(s) and the air quality monitoring locations in relation to the AQMA(s). The air quality objectives pertinent to the current AQMA designation(s) for the two pollutants are as follows:

- 200 $\mu\text{g m}^{-3}$ not to be exceeded more than 18 times a year for 1-hour mean and 40 $\mu\text{g m}^{-3}$ Annual mean for NO_2 .
- 50 $\mu\text{g m}^{-3}$ not to be exceeded more than 35 times a year for PM10 24-hour mean.

Table J. Declared Air Quality Management Areas

	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
Nitrogen dioxide (NO ₂)	Declared 16th December 2008	200 µg m ⁻³ not to be exceeded more than 18 times a year for 1-hour mean and 40 µg m ⁻³ Annual mean for NO ₂ .	An area encompassing the whole borough.	Unspecified	-	33.70 (Not Exceeded)	13 years	AQAP for AQMA, 2020 - 2025	https://www.lbld.gov.uk/community-safety-and-crime/make-report/report-air-quality-issues
Particles (PM10)	Declared 16th December 2008	50 µg m ⁻³ not to be exceeded more than 35 times a year for PM10 24-hour mean.	An area encompassing the whole borough.	Unspecified	-	2 (Not Exceeded)	13 years	AQAP for AQMA, 2020 - 2025	https://www.lbld.gov.uk/community-safety-and-crime/make-report/report-air-quality-issues

- ☒ London Borough of Barking and Dagenham confirm the information on UK-Air regarding their AQMA(s) is up to date.
- ☒ London Borough of Barking and Dagenham confirm that all current AQAPs have been submitted to GLA.

2.2 Air Quality Action Plan Progress

Table K provides a summary of London Borough of Barking and Dagenham progress against the Air Quality Action Plan, showing progress made this year.

Table K. 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
1	Monitoring and core statutory duties	Maintain the borough's monitoring network, and add an additional 20 diffusion tubes	2023	Local Authority - Environmental Protection Team.	In addition to the existing 30 NOx Diffusion Tubes in our last monitoring report, the Council also continues to maintain the additional 20 NOx tubes added from July 2023 and in the year 2024, we were able to have a full year of monitoring in all the 48 locations. In 2024, we have 100% data capture at 30 of the 48 monitoring locations, 91.7% at 11 locations, 83.3% at 7 of the locations and 75% at 2 of the remaining locations. This is nearly 50% improvement in our 100% data capture compared to the year 2023.
2	Monitoring and core statutory duties	Work with and support relative emerging AQ monitoring projects to integrate new/modern monitoring techniques, including the £1m	2025	Local Authority - Environmental Protection Team.	In 2024 the council continued to be fully involved in publicising the free air quality sensors for communities: Breathe London Communities Programme Round 3 as well as

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		C40 project delivered in partnership with the GLA.			continue to participate in its collaboration on the project with the Mayor's office, Imperial College London and other Stakeholders. The programme which provides 20 fully funded air quality sensors to community groups, as part of the Breath London network. The Council advertise this opportunity to our communities through our various available comms channels, e.g. residents' newsletters, social media as well as through the borough website etc. and leaving the flyer in places such as libraries and community sensors to expand the reach. The Council also continue to publicise and promote its project – Community Air Quality: Breathing in Barking and Dagenham running with the help of Imperial College. This was done through the social media spaces to promote the project, gather interest and get more involvement wherever possible. The project was also publicised through press release, newsletter copy, facebook, twitter

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					and LinkedIn post. https://bd.communityairquality.com/
3	Monitoring and core statutory duties	IPPC duties and inspections under the Environmental Permitting Regulations 2010	2025	Local Authority - Environmental Protection Team.	- The council continue to deliver its statutory obligations regarding this action. - Annual data statistical return on environmental permitting functions returned to Defra including number of permitted processes (A2, Schedule 13 and Part B processes) in 2024.
4	Emissions from developments and buildings	Raising awareness of and enforce the borough's Smoke Control Zone (SCZ). To include: an awareness campaign using Communications Team media platforms and active enforcement	2025	Local Authority - Environmental Protection Team.	- Our enforcement officers continue to investigate complaint of smoke nuisance and. - In 2024 the Council continued its communication with the London Port Health Authority (City of London Corporation) as regards including permanent moorings within its existing SCA.
5	Emissions from developments and buildings	Ensuring emissions from construction are minimised. All major developments must carry out an Air Quality Assessment in accordance with the GLA's guidance	2025	Local Authority - Environmental Protection Team.	100% of major planning applications adjoined with AQ. assessments, or conditioned gained through local policy mechanism.
6	Emissions from developments and buildings	Include Greater London Authority (GLA) guidance on environmental and construction best practices into	2025	Local Authority - Environmental Protection and Planning Team.	- All major planning applications conditioned with GLA best practice guidance in 2024. - The Draft Local Plan requires development to submit a

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		BeFirst/LBBD and other major developments			Construction Management Plan to mitigate the adverse effects of construction. Be First published their public realm guidelines for new developments in 2020, and planning applications are required to meet guidance through conditions or legal obligations also in 2024. Design Team use BIM & MMC to deliver to borough's 2030 net zero objectives.
7	Emissions from development and building	Ensuring enforcement of non-road mobile machinery (NRMM) air quality policies. Include NRMM requirements within local planning guidance. Planning conditions imposed asking for NRMM compliance for all relevant major developments.	2025	Local Authority - Environmental Protection and Planning Team.	- NRMM is part of the Local Plan included into Regulation 19. All relevant planning applications in 2024 include NRMM conditions with relevant sites in the borough also registered on GLA NRMM website for the year. - Of the 17 sites audited for NRMM in 2024, 14 of the sites were compliant whilst 2 were not and there is no NRMM at the other 1 site. - Policy DMSI 4 of the Draft Local Plan states the whole borough is an air quality management area, which requires the appropriate use of plant machinery and technology. Relevant planning applications include NRMM conditions.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
8	Emissions from development and building	Reducing emissions from Combined heat and power (CHP) by ensuring that air quality as well as carbon emissions are considered when assessing planning applications or where existing schemes require new or upgraded heat sources	2021	Local Authority - Environmental Protection Team.	We continue to maintain the register of CHPs plant within the borough.
9	Emissions from development and building	Enforce the GLA 'Air Quality Neutral' (AQN) policy or any preceding changes to this regional measure to all major developments	2020	Local Authority - Environmental Protection Team.	In 2024, all the major planning applications meet GLA policy on AQN.
10	Emissions from development and building	Ensuring adequate appropriate, and well-located green space and infrastructure is included in new large-scale developments	2020	Local Authority - Planning Team.	In 2023, Thames Road /Crossness development incorporates local green spaces as part of the movement strategy whilst, Barking Riverside has created The Wilds eco park as a green space.
11	Emissions from developments and buildings	Ensure that planning and development teams implement policies on Healthy Streets at an early stage for larger developments (as defined by the GLA)	2021	Local Authority - Environmental Protection and Planning Team.	- In 2023, Thames Road redevelopment is using the Healthy Streets principles to create a healthy street with active travel connections. - Proposals for Valence Avenue, Dagenham Road include Healthy Streets principals.
12	Emissions from developments and buildings	Promoting and delivering energy efficiency and energy supply retrofitting projects in	2025	Local Authority - Inclusive Growth Team.	The Council has adopted its Zero Carbon Roadmap and Climate Change Action Plan whilst, many

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		workplaces and homes through retrofit programmes such as Retrofit Accelerator and Cosy Homes. LBBD to be zero carbon from Council operations (e.g., housing and fleet) by 2030, and zero carbon Borough wide by 2050			of the workstreams mentioned in it are currently under way. - The Cosy Homes scheme with EON have continued to delivered energy efficiency measures, such as loft, cavity and external insulation and solar panels to almost 2,000 homes between 2020/22, across tenure, saving more than 15tCO₂e. This was largely funded by ECO3 and Green Homes Grant. - The Council is now working with EON to deliver additional insulation and energy conservation measures to 350 properties through Green Homes Grant LAD3 and has launched its next iteration of Cosy Homes delivering installs under ECO4 and the Great British Insulation Scheme. - Deep retrofit pilots have begun on the Becontree Estate, funded in part by Social Housing Decarbonisation Demonstrator Fund, with 3 completed and 17 more underway. - The Council have contracted to deliver Phase 1 of the Corporate

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Estate Retrofit Programme which will deploy ECMs across 15 of the most energy consuming buildings in the Council's buildings portfolio. This is expected to commence in June 2023.
13	Emissions from developments and buildings	Improve air quality in the Borough by delivering improvements to reduce building emissions and increase uptake of Decentralised Energy Networks.	2025	Local Authority - Environmental Protection and Inclusive Growth Team.	The council continues to work towards reducing emission from new development by ensuring relevant conditions are recommend at the planning stage as well as ensuring energy efficient measures are adopted for the site energy source. Installation of biomass is discouraged whilst the use of solar panel and Air Source Heat pump are encouraged.
14	Emissions from developments and buildings	Participate in the Pan-London Non-Road Mobile Machinery registration campaign in conjunction with lead Borough (London Borough of Merton), to reduce emissions from construction vehicles in line with GLA guidance.	2020	Local Authority - Environmental Protection Team.	- We continue to maintain our membership of Pan-London Non-Road Mobile Machinery registration campaign. - Of the 17 sites audited for NRMM in 2024, 14 of the sites were compliant whilst 2 were not and there is no NRMM at the other 1 site.
15	Public health and awareness raising	Public Health department taking shared responsibility for borough air quality issues and implementation of Air Quality Action Plan.	2020	Local Authority - Environmental Protection and Public Health Team.	- Our colleagues in Public Health continued to deliver on their aspect of the AQAP in 2024. - The Council publicised and promoted its involvement in on-

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		11a, Directors of Public Health (DPHs) regularly briefed on the scale of the problem in their area. 11b, DPHs incorporate up to date air quality information in their Joint Strategic Needs Assessment 11c, Air Quality Action Plans are formally signed off by the DPH. 11d, At least one Consultant grade public health specialist with air quality responsibilities in their job profile			going project – Community Air Quality: Breathing in Barking and Dagenham running with the help of Imperial College. This was done through the social media spaces to promote the project, gather interest and get more involvement wherever possible. https://bd.communityairquality.com/ The council continuing to engage with businesses on how to improve the local AQ as agreed in the council AQAP.
16	Public health and awareness raising	Engage with local businesses and support access to business-specific funding schemes which promote, sustainable transport, collaborative delivery and low emission procurement practices through business forums and newsletters distribution.	2025	Local Authority - Inclusive Growth Team.	The council continuing to engage with businesses on how to improve the local AQ as agreed in the council AQAP.
17	Public health and awareness raising	Develop and implement a communications strategy to disseminate air quality information to raise awareness	2020	Local Authority - Environmental Protection, Communication and Public Health Team.	- Clean Air Day disseminated via Comms in 2024. - Assist in promoting the clean air day through our comms team by council-wide email regarding the

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		and encourage behaviour change – may include, messages to residents with heart and lung diseases (working in partnership with local NHS services). E.g., re publicising the Mayor's pollution alerts, promotion of active travel/sustainable transport, green home grants and anti-idling messages etc.			day as well as its launch in the Reg Services Newsletter. - We were also involved in its publicity through community engagement by having a stand in the market on the day. - We also engage our education service and schools to take part.
18	Public health and awareness raising	Encourage schools to join the TfL STARS accredited travel planning programme. Promotes sustainable approach to active travel therefore reducing vehicle emissions and increasing physical activity.	2025	Local Authority - Planning Team.	In 2024, all School Streets Schools have bronze (or above) accreditation whilst current bronze accredited schools are working towards silver/gold accreditation (for July 2025 submission) and 25 schools are currently engaged.
19	Public health and awareness raising	Air quality in and around schools: Apply to the funding made available through TfL for LIPs to deliver the recommendations from the 'school streets.	2025	Local Authority - Transport Planning and Planning Team.	- Be First continues to conduct consultation on all schemes and has monitored the operation of the School Streets in place. - New School Streets are implemented on an experimental basis, and residents continue to have six months to give their views on the School Streets. - Schemes expected to launch in 2024 were delayed due to ongoing

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					procurement of new borough-wide camera supplier. - Five schemes are programmed to launch in 2025. A decision on the value and usability of diffusion tube from schools is forthcoming. - Funding has been secured for 2025-26 and we expect to invite Expressions of Interest from schools in the spring for consideration for the next round of School Streets (to be delivered in 2026).
20	Public Health and awareness raising	Use council lobbying power to increase/encourage local and regional action using a health in all policies approach. Lobbying within the BHR and NEL partnerships (including NHS and LA) to encourage other partners to consider measures to improve air quality – including their staff, residents, in their procurements and their in-house services. Lobby and work with TFL to reduce NO₂ & PM emissions from buses in LBBD, and to reduce air quality	2021	Local Authority - Environmental Protection and Public Health Team.	- Environmental Health contributed to, and supported, the lobbying work undertaken by the East London AQ Cluster Group in response to the proposed changes consulted on within the Environment Bill, 2020 and continue to do so in 2024. - Shared opportunities to work together with following stakeholders. Air quality/ active travel and health collaboration with NHS colleagues and Be First. Be First on liaison with TfL. The team fed into the NEL ICB Green Plan for LBBD.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		concentrations from TfL regulated roads.			
21	Public Health and Awareness Raising	Submit responses to relevant government and regional consultations – ensure responses focus on reducing emissions of local air pollutants and CO2.	2025	Local Authority - Environmental Protection and Public Health Team.	- In 2024 the team responded to relevant government and regional consultations – ensure responses focus on reducing emissions of local air pollutants and CO2. - The team also participated in various stakeholders meeting to discuss issues relevant to local air quality.
22	Public Health and Awareness Raising	Continued implementation of the Barking Riverside Travel Plan, to accelerate uptake of cycling walking and sustainable transport.	2020	Local Authority - Planning Team.	- Initial target of 36% of residents travelling to work by car, 5% on foot and 7% by bicycle by end of 2021. – - On the issue of no. of Pedestrian and cycle provisions, this is a bit complicated we have no record of direct improvement schemes on BR. However, Be First schemes include 1 on going on Renwick Rd/Merz Rd Junction and 2 proposed on River Rd and Dagenham Dock Quietway. - On the no. of registered members of Cycle Hub, we don't have registered numbers but there are average of 100 attendees monthly.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					On the issue of no. of registered members of Car club on site; as of May 2024, there are currently 4 car club spaces in BR, based on usage data of the current provision, an indicative maximum provision of the car club bays for the site is expected to be 40 spaces.
23	Public Health and Awareness Raising	Prepare and deliver Council-wide (LBBD) and BeFirst Travel Plans encouraging sustainable transport modes for staff and visitors.	2021	Local Authority - Planning Team.	There is no update for BFTP. Process will recommence after People Strategy is implemented.
24	Public Health and Awareness Raising	Deliver the 'Ways of Working' (LBBD Staff) Travel to Work Plan and implement deliverables for staff to travel more sustainably and safely (in response to Covid19)	2020	Local Authority - Inclusive Growth Team.	Ways of Working Travel plan still ongoing.
25	Delivery servicing and freight	Review of the process documentation templates (procurement strategy document, delegated authority documents and award contract documents) to include air quality requirements for reducing vehicle emissions.	2020	Local Authority - Procurement Team.	This measure is still on-going following the AQAP adoption in February 2021.
26	Delivery servicing and freight	Review, implementation, and approval of the 'contract rules' in tandem with Council legal	2021	Local Authority - Procurement Team.	This measure is still on-going following the AQAP adoption in February 2021.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		department with a view to adding air quality requirements for reducing vehicle emissions.			
27	Delivery servicing and freight	Reducing emissions from deliveries to local businesses and residents. Work with and support TfL to install rapid electric vehicle charging points to encourage low emission vehicles.	2020	Local Authority - Planning Team.	We continue to secure on-site ECV points on major applications in 2024.
28	Borough Fleet	Reducing emissions from council fleet. Undertake 'Grey' Fleet review with Energy Saving Trust to inform future vehicle choice and infrastructure	2020	Local Authority - Planning and Inclusive Growth Team.	Regarding the grey fleet, a review was undertaken by EST in 2020 and the Council's policies are continuing to be reviewed to follow their recommendations.
29	Borough Fleet	Investigate the feasibility of, and implement the best environmentally performing, alternative fleet vehicle fuel (e.g., Hydrogen, Electric, Gas-to Liquid)	2021	Local Authority - Fleet Management Team.	- As previously advised, the EV plans were scrapped along with the procurement of the vehicles. - Cost was the main issue with the installation of the infrastructure not being the most straightforward. Cabinet rejected the proposals because of the council's financial situation. - The current fleet plans are due to be drawn up but will be conservative and unlikely to include Electric vehicles for the next few years.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
30	Borough Fleet	Undertake an infrastructure and operational review for the Council fleet depot land space charging in the Borough to incentivise EV charging uptake at the workplace	2020	Local Authority - Inclusive Growth and Fleet Management Team.	- As previously advised, the EV plans were scrapped along with the procurement of the vehicles. - Cost was the main issue with the installation of the infrastructure not being the most straightforward. Cabinet rejected the proposals because of the council's financial situation. - The current fleet plans are due to be drawn up but will be conservative and unlikely to include Electric vehicles for the next few years.
31	Borough Fleet	Undertake annual fleet audits with a vehicle replacement programme to show continued progress in phasing out older and more polluting vehicles by 2030	2020	Local Authority - Fleet Management Team.	The EV plans had been scrapped along with the procurement of the vehicles. However, as of December 2023, the council have 9 Electric Vehicles in its fleet.
32	Borough Fleet	Complete an industry-recognised fleet driver training programme (e.g., Freight Transport Association) to improve driver/vehicle operations and reduce fleet emissions	2021	Local Authority - Fleet Management Team.	In January 2021 Fleet services undertook anti-idling training in conjunction with the pan-London (anti idling) scheme led by Camden – Nothing further.
33	Borough Fleet	25% of total fleet vehicles to be fully electrified (Battery Electric Vehicle) by 2025.	2021	Local Authority - Fleet Management Team.	The EV plans had been scrapped along with the procurement of the vehicles.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Long term target to have Council operations zero carbon by 2030 including fleet vehicles being zero tailpipe emission or as close as possible to zero tailpipe emissions using Best Available Technology.			
34	Localised Solutions	19a) Implement the published Green Infrastructure Strategy. 19b) Apply for Green Space Grants / Community Tree Planting 19c) Develop and implement a tree planting delivery programme which strategically targets high pollution areas (roads) where feasible	2025	Local Authority - Leisure Parks and Heritage/Public Realm Team.	As regards action19a: Parks Commissioning is responsible for delivering the borough's Parks and Green Spaces Strategy (POSS) and associated Action Plan which in turn supports the implementation of the borough's GI and Biodiversity Strategy and related corporate strategies including the Air Quality Action Plan. - Since it was adopted in 2017 Parks Commissioning has implemented the POSS and associated Action Plan. Parks Commissioning has delivered most improvements through external partnerships which have leveraged in £24M of grant, rather than the General Fund. - Park activities and what they offer through sport, recreation, nature, and mental health are estimated to save the NHS £111M a year in people not referring to their GP

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					and providing £34billion in wellbeing benefit. - The Corporate Natural Capital Account balance sheet shows that when £1 is invested in parks, the return to communities in terms of the value of benefits delivered by parks is in excess of £27. - In 2023 funding was identified to support a review/refresh of the Borough's POSS. - This work, which was commissioned in February 2024, and Arkwood Ltd was appointed in March 2024. - Significant progress has been made and an initial draft of the revised POSS is expected to be completed in April 2025. As regards action19b: In November 2024, Parks Commissioning secured £182,000 funding from the Carbon Offset Fund, Trees for Climate, Ward Councillors in addition to corporate investment. - Partnering with Parks & Environment, Thames Chase Community Forest and SUGi Projects Parks Commissioning aims to significantly increase tree

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					planting in our parks to meet the Council's Corporate Plan target of planting an additional 50,000 trees by 2030. - Initially, the goal was to plant 36,348 native trees in 2025 across four parks and open spaces: Castle Green, Gorsebrook Park, Heath Park Open Space, and later this year, Eastbrookend Country Park. However, with the additional funding secured, this number will increase to c42,450 native trees planted by October 2025. - Tree planting delivered by Parks Commissioning in 2024 included the following schemes: - Eastbrookend Country Park – Miyawaki Forest 2,800 native trees. - Central Park (Pitch & Putt course) – - Phase 1 tree planting completed March 2024: 580 trees planted. - Phase 2 tree planting completed November 2024: 60 trees planted

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					As regards action19c: Parks Commissioning's remit is focused on the borough's parks and green spaces. However, whilst we haven't specifically delivered tree planting schemes which target high pollution areas (roads) we have delivered schemes which directly support this objective, and which will in due course will contribute to air quality improvements in areas adjacent parks. - The Council is committed to becoming a carbon neutral authority by 2030 and supporting the wider borough in becoming so by 2050. Therefore, in support of this above objective in September 2023 the Head of Head of Sustainability, Net Zero & Parks Commissioning appointed Thames Chase Trust and Viridis Consultancy to develop and deliver appropriate schemes and obtain match-funding. This partnership is ongoing and remains focused on the delivery and promotion of: (i) strategic and targeted spend focused on nature-based solutions for carbon

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					- storge such as tree-planting and habitat restoration; and; (ii) the allocation of resources to employ the expertise to develop and translate the site-specific schemes identified in the borough's POSS and Green Infrastructure and Biodiversity Strategy into specific deliverable projects.
35	Localised Solutions	Continue to embed green infrastructure into LIP schemes.	2025	Local Authority - Planning Team.	In 2024, the council completed green infrastructure for one tree along High Road.
36	Localised Solutions	Low Emission Neighbourhood (LEN): Continue to implement and project manage the TfL-funded 'Greening the Fiddlers' LEN in Becontree Heath, Dagenham, in one of the GLA's Air Quality Focus Areas.	2022	Local Authority - Planning Team.	- The LEN project has ended. - The Becontree Heath Cycle Hub continues to run two weekday mornings and every Saturday morning.
37	Cleaner Transport	Ensuring that Transport and Air Quality policies and projects are integrated. 37a) Head of Transport should sign off AQAP. 37b) Transport officers to attend air quality steering groups.	2020	Local Authority - Transport Team.	- Transport Officers continues to attend the air quality steering group meetings and are a key stakeholder in delivering the AQAP. - BAG011 Lower Roding Crossing Strategic Outline Business Case

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					will be strictly for public and active transport to reduce private car use.
38	Cleaner Transport	Use parking policy to reduce private use vehicle emissions by reviewing borough parking permit fee banding and implement a policy to incentivise lower emission vehicles/ dis-incentivise higher emitting vehicles	2021	Local Authority - Parking Team.	New Permit charges based on emissions introduced 2020/21 continues.
39	Cleaner Transport	Review parking policy to reduce the overall number of parking permits to single household/residential tenancy. (de-incentivise higher number of cars p/house)	2021	Local Authority - Parking Team.	This is currently under review as part of Parking Strategy 2023-2030.
40	Cleaner Transport	Introduce a policy to charge commercial vehicles parking overnight and at weekends in borough roads to reduce congestion and discourage commercial vehicles.	2021	Local Authority - Parking Team.	Charges approved by Cabinet but legal information regarding implementation needs further investigation regarding traffic orders, signage etc. – Nothing further since last update.
41	Cleaner Transport	Review staff parking permits and implement a policy or management process to significantly reduce overall numbers, with the aim to reduce 'grey fleet' impacts	2021	Local Authority - Parking Team.	Staff permits were reviewed in 2022. – Nothing further since last update.
42	Cleaner Transport	Installation of Ultra-low Emission Vehicle (ULEV)	2022	Local Authority - Transport Planning and Planning Team.	In 2024 Be First continuing to support the roll out of public EV charge points, which is being

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		infrastructure to encourage low emission vehicles. e.g. On-street Electric Vehicle Charging Points			managed and delivered by Connected Kerb. - Be First received in 2024/2025 funding from the DfT for up to a sum of £34,200 to support capacity and capability in local authorities to create local EV infrastructure strategies and for the planning and delivery of local EV infrastructure. - This is a rolling programme with installations in already 10 locations in 2024 with (40 charging points)
43	Cleaner Transport	Require private developers to install Ultra-Low Emission Vehicle (ULEV) infrastructure as per the GLA London Plan for major residential and non-residential developments. E.g., electric vehicle charging points	2020	Local Authority - Planning Team.	- In 2024, the council continue to implement its ULEV infrastructure as required in the emerging Local Plan and as per existing planning policy. - New developments have to install the required GLA London Plan EV charging points for any new on-site residential parking. - There are 26 strictly car-free (no permits) developments approved in 2024.
44	Cleaner Transport	Provision of infrastructure to support walking and cycling e.g., the development of key strategic cycle routes including Barking Station to Chadwell Heath Station, cycle route CFR10 Barking Riverside to	2020	Local Authority - Transport and Planning Team.	In 2024, the council continue to develop a new LBBD Cycling & Walking Strategy, which includes an indicative programme for infrastructure investment over the next 10 years to improve cycling & walking provision.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Ilford (via Barking Town Centre) and Heathway to Becontree Heath. Potentially 'Liveable Neighbourhoods' ambition for the Becontree Estates subject to TfL funding.			- There are 10-15 new cycle hangars installed in 2024. 130 Biking Becontree Hub sessions were delivered April 2024 - Jan 2025.
45	Cleaner Transport	Discourage unnecessary idling by road vehicles. Participate in the Pan-London Anti-Idling campaign/project in conjunction with the London Borough of Camden and proactively enforce regulations to reduce idling vehicles. Focus anti-idling at school sites/roads	2025	Local Authority – Education, Fleet Management and Environmental Protection Team.	- The council continue to involve in active participation in the Pan-London Anti-Idling campaign/project in conjunction with the London Borough of Camden. - With the council "Local Schools for Local Children" project; the council has been very successful in its Borough wide school expansion programme in 2024. - We are continuing to be in a position where school places are available much closer to home meaning that families will travel shorter distances to school as we hope this will encourage pupils to walk rather than be driven. - Some travel distances are down from 5km to 2km which is far more manageable. - Anti-idling information are continued to be shared with all

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					schools with a view to onward sharing with families and carers. - Many schools are continuing to be keen to develop their own "School Street" which has a significant impact on neighbourhood air quality. - The BeFirst scheme continue to push car parking away from the school and encourages walking. - More schools continued to sign up and it should be noted that feedback from schools so far is not necessarily to do with the idling issue alone but also with success in controlling inconsiderate parking and dropping off at the school gates. 13 borough schools have a School Street with five more due to launch in 2025. - Parents and carers park further from the school and turn off their engines to walk their children to the school gate. - Schools also report that nearby families that would drive are making the switch to walking to school.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					However, feedback from schools requesting School Streets predominantly cite road safety and inconsiderate parking behaviour at the school gates, above air pollution concerns as the reason for requesting for one.
46	Cleaner Transport	Encourage behaviour change in transport modes to increase sustainable transport and decrease private car use: a) Campaigns to promote walking to school b) Campaigns to promote workplace travel plans	2020	Local Authority - Planning Team.	- In 2024, Schools are encouraged to participate in: - The Big Walk and Wheel - Walk to School Week - Cycle to School Week - All School Streets schools were offered subsidised places on WOW - The Walk to School Challenge with additional spaces available for non-School Street schools, subject to available funding. - For September 2024 - March 21, 2025, 12 schools (6596 pupils) participated in WoW, with 45% engagement whilst 304921 journeys recorded since September 2024, of which 75% are walk/wheel/scoot/skate and 88% of journeys overall, are 'active'.
47	Cleaner Transport	Develop a long-term strategy for the A13 to help improve traffic congestion, improve air	2020	Local Authority - Planning Team.	Be First are part of the Strategic Working Group with TfL to ensuring the A13 Lodge Avenue

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		quality and enable sustainable growth. Require full Environmental Impacts Assessments (EIA's) for A13 development proposals including; replacement of the Lodge Avenue flyover by TfL.			flyover replacement at Castle Green brings about public realm, walking and cycling improvements to the area. TfL and Barking and Dagenham, are looking to implement a Green Bridge over the A13. Be First are continuing to work with the City of London and consultants to produce a Strategic Transport Masterplan for the City Markets Site at Dagenham Dock. Will explore the sustainable transport options for developing the area.
48	Cleaner Transport	Work with the River Roding Trust (RRT), the Canal and River Trust or relevant bodies to raise awareness of local air pollution emissions from waterways. Engage with canal boat owners to promote sustainability, cleaner fuel burning and anti-idling to reduce emissions from boats. Two Boat Mooring sites in LBBD. 1) near Hertford Road and Gurney Close IG11 8JY (narrow boat moorings only) and,	2021	Local Authority - Environmental Protection Team.	Series of stakeholders meeting (officers from East London cluster group) and other London local authorities with publication were implemented in 2024 to address this measure.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		2) (static) barge mooring only, near Barking Creek IG11 7BW (all electrically powered only).			
49	Cleaner Transport	1) Promote World Car-Free day (22 nd September) through Communications Department 2) Explore gaining funding through the Greater London Authority Mayor's Air Quality Fund (or other funding source) to promote car free days in LBBD streets Explore allowing residents to apply for 'Play Streets' or similar that allow streets/roads to be closed from traffic and encourage community engagement	2021	Local Authority - Environmental Protection Team.	- Be First continuing to monitor and apply for funding opportunities, however the number of funding opportunities in the last four years have been fewer. - With respect to World Car Free Day - schools are encouraged to participate via e-comms from the Be First Green Travel Coordinator. - Be First Transport Officers continue to monitor funding opportunities alongside colleagues in Highways, Public Health, Education.

3. Planning Update and Other New Sources of Emissions

Table L. Planning requirements met by planning applications in London Borough of Barking and Dagenham in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	13
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>8</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>0</u>
Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>13</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>2</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. 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.	8 Whilst all relevant sites in the borough were registered on GLA NRMM website for the year, 17 of the sites were audited for NRMM in 2024, out of which 14 of the sites were compliant, 2 were not and there is no NRMM at the other 1 site.

Records of the above information on planning applications are kept in the London Borough of Barking and Dagenham internal database called Flare. This is also duplicated in the Environmental Protection Team planning folder for officers' comments and recommendations.

The council received 13 major planning applications that required AQ assessment in 2024. The NRMM record is from the annual audit report submitted to the council through its membership of Pan London NRMM as well as from the registered information on the nrmm.london website for the council.

3.1 New or significantly changed industrial or other sources

No new sources identified.

4. Additional Activities to Improve Air Quality

4.1 London Borough of Barking and Dagenham Fleet

The London Borough of Barking and Dagenham will like to confirm that, we have no update beyond of the 324-council fleet as of December 2023, eight of which were electric van and one of which was a hybrid car representing 2.7% of the overall fleet that are of a) zero emission and b) zero emission capable vehicles.

4.2 Planning Enforcement

Whilst our Environmental Protection Team is responsible for the review of every applicable submitted planning applications and recommend relevant planning conditions on environmental issues following consultation as one of the internal statutory consultees, Enforcement of such condition is the responsibility of our Planning Enforcement Team which is undertaken where such conditions have not been complied with following site visit or complaints.

4.3 Pan-London NRMM Auditing Project

We can confirm that London Borough of Barking and Dagenham will continue to support the Pan-London NRMM Auditing project in 2025 – 2026.

The standard wording use for NRMM conditions on construction/demolition sites are:

- **Non-Road Mobile Machinery- standard condition**
 - a. No works shall commence on the site until all plant and machinery to be used at the demolition and construction phases have been submitted to, and approved in writing by, the LPA. Evidence is required to meet Stage IIIB of EU Directive 97/68/EC for both NO_x and PM. No works shall be carried out on site until all Non-Road Mobile Machinery (NRMM) and plant to be used on the site of net power between 37kW and 560 kW has been registered at <http://nrmm.london/>. Proof of registration must be submitted to the LPA prior to the commencement of any works on site.
 - b. An inventory of all NRMM must be kept on site during the course of the demolitions, site preparation and construction phases. All machinery 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.

This documentation should be made available to local authority officers as required until development completion.

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

- The NRMM condition is normally apply in the decision notice and this is,
- Applicable to all relevant sites.

4.4 Air Quality Alerts

We can confirm that London Borough of Barking and Dagenham did not sign up for *airTEXT*, but its AQ direct alerts service can be accessed through the UK-AIR available through the link below on our website.

<https://uk-air.defra.gov.uk/forecasting/locations?q=barking%20and%20dagenham>

4.5 Air Quality Positive

Whilst London Borough of Barking and Dagenham strongly encourage how to maximise benefits to local air quality in and around a large-scale development sites and masterplan area while also minimising exposure to existing sources of poor air quality, we wouldn't be able provide you a specific development site for this in the current report.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

In 2024, The automatic monitoring sites routine calibrations were undertaken by Enviro Technology for the full year monthly whilst LSO duties, Audits and service/upkeep/maintenance was also contracted to the same company (Enviro Technology).

PM₁₀ Monitoring Adjustment

No PM₁₀ monitoring adjustment was done in 2024.

A.2 Diffusion Tubes

- Gradko is responsible for supplying and analysing the tubes.
- TEA 50/50
- Confirmation is given that Gradko follows the procedures set out in the Practical Guidance.
- National Bias adjustment factor of 0.88 of the spreadsheet versions issued 04/2025 was used rather than 0.96 for the local bias adjustment factor.

Discussion of Choice of Factor to Use

For the Bias adjustment factor, the national figure was used as the survey consists of tubes exposed over a range of settings, which differ from the co-location site, (see TG22 Box 7-13). Moreover, data capture from the co-location automatic analyser is less than 90%, with poor overall data capture.

Table M. 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	0.83
2022	National	03/23	0.82
2021	National	03/22	0.83
2020	National	06/21	0.82

Diffusion Tube Bias Adjustment Factors 04/25 Issue of the Spreadsheet

Laboratory	Method	Year	New (04/25) Factor	
			No. of Studies	Factor
Gradko	50% TEA in acetone	2024	12	0.88

Local Bias adjustment Factor using Rush Green Primary School

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	08/01/2024	01/02/2024	17.6	22.7	19.1	20	2.6	13	6.6
2	01/02/2024	05/03/2024	19.1	13.3	18.7	17	3.3	19	8.1
3	05/03/2024	02/04/2024	12.4	16.1	14.2	14	1.8	13	4.6
4	02/04/2024	30/04/2024	9.0	11.5	11.2	11	1.4	13	3.4
5	30/04/2024	05/06/2024	12.5						
6	05/06/2024	02/07/2024	10.5	11.3	11.4	11	0.5	5	1.3
7	02/07/2024	30/07/2024	11.4	12.6	11.9	12	0.6	5	1.4
8	30/07/2024	03/09/2024	10.9	10.8	10.9	11	0.1	1	0.2
9	03/09/2024	01/10/2024	13.8	13.1	13.6	13	0.3	2	0.8
10	01/10/2024	05/11/2024							
11	05/11/2024	03/12/2024	22.9	22.0	21.6	22	0.6	3	1.6
12	03/12/2024	07/01/2025	18.7	17.1	15.8	17	1.4	8	3.5
13									

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

Automatic Method		Data Quality Check	
Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
20.9	96	Good	Good
		Good	
		Good	
10.3	61	Good	or Data Capture
14	95		Good
11	91	Good	Good
10	100	Good	Good
10	19	Good	or Data Capture
12	61	Good	or Data Capture
19	100		Good
21.8	90	Good	Good
15.4	100	Good	Good

Overall survey -->

Good precision

Poor Overall
DC

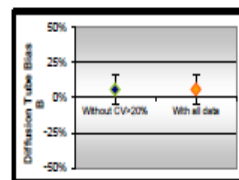
Site Name/ ID: Rush Green Primary School / (BG1)

Precision 10 out of 10 periods have a CV smaller than 20%

(Check average CV & DC from
Accuracy calculations)

Accuracy (with 95% confidence interval)	
without periods with CV larger than 20%	
Bias calculated using 5 periods of data	
Bias factor A	0.96 (0.87 - 1.07)
Bias B	4% (-7% - 15%)
Diffusion Tubes Mean:	16 μgm^{-3}
Mean CV (Precision):	7
Automatic Mean:	16 μgm^{-3}
Data Capture for periods used:	95%
Adjusted Tubes Mean:	16 (14 - 18) μgm^{-3}

Accuracy (with 95% confidence interval)	
WITH ALL DATA	
Bias calculated using 5 periods of data	
Bias factor A	0.96 (0.87 - 1.07)
Bias B	4% (-7% - 15%)
Diffusion Tubes Mean:	16 μgm^{-3}
Mean CV (Precision):	7
Automatic Mean:	16 μgm^{-3}
Data Capture for periods used:	95%
Adjusted Tubes Mean:	16 (14 - 18) μgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

Adjustment of DUPLICATE or 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 Average	Standard Deviation	CV	95% CI mean
1	08/01/2024	01/02/2024	17.6	22.7	19.1	19.8	2.64	13.34	6.57
2	01/02/2024	05/03/2024	19.1	13.3	18.7	17.0	3.27	19.20	8.12
3	05/03/2024	02/04/2024	12.4	16.1	14.2	14.2	1.85	12.95	4.58
4	02/04/2024	30/04/2024	9.0	11.5	11.2	10.6	1.35	12.76	3.35
5	30/04/2024	05/06/2024	12.5						
6	05/06/2024	02/07/2024	10.5	11.3	11.4	11.1	0.53	4.77	1.31
7	02/07/2024	30/07/2024	11.4	12.6	11.9	12.0	0.58	4.81	1.43
8	30/07/2024	03/09/2024	10.9	10.8	10.9	10.9	0.07	0.68	0.18
9	03/09/2024	01/10/2024	13.8	13.1	13.6	13.5	0.33	2.47	0.83
10	01/10/2024	05/11/2024							
11	05/11/2024	03/12/2024	22.9	22.0	21.6	22.2	0.64	2.87	1.58
12	03/12/2024	07/01/2025	18.7	17.1	15.8	17.2	1.43	8.31	3.55
13									

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

Site Name/ ID: **Rush Green Primary School / (BG1)**

Jaume Targa, for AEA
Version 04 - February 2011

Data Quality Check
Diffusion Tubes Precision Check
Good
Good
Good
Good
Good
Good
Good
Good
Good
Good

Adjusted measurement (95% confidence level)
Without periods with CV larger than 20%
Bias calculated using 5 periods of data
Tube Precision: 7 Automatic DC: 95%
Bias factor A: 0.96 (0.87 - 1.07)
Bias B: 4% (-7% - 15%)
Information about tubes to be adjusted
Diffusion Tube average: 15 μgm^{-3}
Average Precision (CV): 8
Adjusted Tube average: 14 +/- 2 μgm^{-3}

Adjusted measurement (95% confidence level)
with all data
Bias calculated using 5 periods of data
Tube Precision: 7 Automatic DC: 95%
Bias factor A: 0.96 (0.87 - 1.07)
Bias B: 4% (-7% - 15%)
Information about tubes to be adjusted
Diffusion Tube average: 15 μgm^{-3}
Average Precision (CV): 8
Adjusted Tube average: 14 +/- 2 μgm^{-3}

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Annualisation of Nitrogen Dioxide (NO₂) at (BG1) Rush Green Primary School

Whilst the data capture for NO₂ was less than 75% with the need for annualization as advised in section 7.214 of the Local Air Quality Management Technical Guidance (TG22) , this was conducted as shown in Box 7.9 of the technical guidance using the urban and suburban background sites which are: Bexley - Belvedere West, Belvedere, Enfield – Bush Hill Park and Prince of Wales School to see the likely changes in the annual concentration.

Distance Adjustment

All monitoring locations are representative of public exposure and no distance adjustment is required apart from (DT4) at 291 Dagenham Heathway and (DT25) at 61 King Edward's Road which is directly adjacent to A13.

Table N. Automatic NO₂ Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	(BG1)							
			Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)
Bexley - Belvedere West	90	13	13.4	0.989						
Bexley - Belvedere	94	15	15.4	0.967						
Enfield – Bush Hill Park	99	15	15	0.984						
Enfield – Prince of Wales School	94	14	14.1	0.998						
Average (R _a)			0.985							
Raw Data Annual Mean (M)			15							
Annualised Annual Mean (M x R _a)			14.8							

Table O. 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
DT4	1	6	39.10	16.3	30.9	
DT25	1	6	41.68	19.5	33.7	

Appendix B Full Monthly Diffusion Tube Results for 2024

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

DT ID	X OS Grid Ref (Eastings)	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 (0.88)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT1	544793	183783	31.71			22.45	27.38	25.25	25.24	23.01	28.77	32.41	34.74	27.64	27.86	24.52	24.52	
DT2	545032	183193	37.89	29.53	20.19	18.34	22.93		22.69	19.87	25.29	27.51	34.33	28.39	26.09	22.95	22.95	
DT3	547806	183543	37.23	26.78	31.06	26.28	28.88	25.71	24.44	23.37	31.56	33.50	40.45	29.31	29.88	26.29	26.29	
DT4	549035	184813	46.50	48.18	40.34	38.32	40.37	42.89	45.50	43.32	45.44	44.08	52.13	46.09	44.43	39.10	30.90	
DT5	547789	185792	40.13	30.59	33.10	29.18	29.81	28.17	31.65	32.77	34.50	37.40	37.59	31.07	33.00	29.04	29.04	
DT6a	551057	187231	17.61	19.12	12.40	9.03	12.53	10.46	11.41	10.91	13.78		22.85	18.66	14.43	12.69	12.69	
DT6b	551057	187231	22.74	13.26	16.09	11.48		11.29	12.56	10.77	13.13		22.03	17.07	15.04	13.23	13.23	
DT6c	551057	187231	19.07	18.70	14.24	11.24		11.44	11.93	10.88	13.58		21.60	15.81	14.85	13.07	13.07	
DT7	548544	188125	35.43	30.15	32.66	23.11	30.91	24.23	24.56	22.80	29.80	34.39	37.15	27.47	29.39	25.86	25.86	
DT8	548359	189057	34.35	30.48	27.66	20.70	26.74	25.54	23.49	23.48	28.26	30.20	31.53	28.87	27.61	24.29	24.29	
DT9	544128	183662	33.65	25.68	21.15		19.43		19.18	17.12	22.91	25.70	35.14	25.77	24.57	21.62	21.62	
DT10	544385	184565	34.41	28.75	22.88	20.88			19.59	23.94	28.43	34.68	28.52	27.22	26.93	23.69	23.69	
DT11	549832	183208	39.04	37.15	32.47	21.04	26.40	26.85	23.09	21.92	21.93	30.67	34.18	30.70	28.79	25.34	25.34	
DT12	546501	182713	34.21	26.89	23.95	20.83	22.05	20.85	21.09	18.83	20.20	27.84	30.80	28.03	24.63	21.67	21.67	

DT13	547081	183053	26.49	22.77	19.63	15.90	20.67	18.46	17.23	17.62	22.17	26.12	28.48	23.28	21.57	18.98	18.98	
DT14	548065	187998	42.66	43.10	41.74	26.36	35.38	25.73	26.57	26.18	26.53	33.71	33.71	28.25	32.49	28.59	28.59	
DT15	546935	183135	28.64	24.63	21.99	16.73	20.64		19.69	18.21	20.88		28.79	22.01	22.22	19.55	19.55	
DT16	545296	183204	38.15	36.38	32.65	28.00	31.45	34.07	33.28		24.59	37.03	41.41	33.23	33.66	29.62	29.62	
DT17	545842	183144	23.85	26.43	25.03	16.93	21.51	18.84	21.10	19.20	21.94	27.97	32.21	21.11	23.01	20.25	20.25	
DT18	546415	183717	42.19	44.44	35.90	34.42	35.65	37.16	37.45	32.50	37.78	36.01	39.63	35.69	37.40	32.91	32.91	
DT19	546744	185774	35.72	27.34	29.28	22.09	26.01	24.99	26.25	24.72	28.92	32.19	35.73	30.09	28.61	25.18	25.18	
DT20	549173	186755	32.26	35.52	28.24	25.20	29.44	31.26	30.42	29.84	30.14	35.29	34.00	27.22	30.74	27.05	27.05	
DT21	548733	187586	35.08	38.77	34.93	29.60	32.15	33.26	32.24	31.60	32.38	37.74	39.41	32.11	34.10	30.00	30.00	
DT22	549078	183327	32.92	24.94	23.55	18.37	22.71	19.01	19.68	15.97	19.11	26.46	29.58	22.90	22.93	20.18	20.18	
DT23	550263	184902	39.23	37.13	33.32	29.84	32.04	31.64	30.69	27.53	32.94	32.34	38.49	34.95	33.35	29.35	29.35	
DT24	548487	183557	30.82	34.02	26.50	24.86	29.25	27.71	29.02	28.36	28.91		37.65	36.41	30.32	26.68	26.68	
DT25	544699	183650	44.73	46.48	43.68	35.78	37.07		67.68	67.36	60.84	44.98	38.57	33.76	47.36	41.68	33.70	
DT26	547762	186888	39.89	25.08	28.82	22.77	27.22	26.11	26.11	20.75	29.98	32.27	33.55	26.63	28.27	24.88	24.88	
DT27	544339	184702	32.99	33.72	31.91		28.85	24.73	28.32	24.21	27.08	35.78	31.22	30.67	29.95	26.36	26.36	
DT28	546731	183684	37.50	39.02	31.12	26.90	30.01	29.85	28.60	32.68	25.97	33.72	34.53	31.76	31.81	28.00	28.00	
DT29	548422	186431	26.98	19.00	17.02	13.31	15.03	12.82	14.17	12.96			27.13	21.15	17.96	15.80	15.80	
DT30	544631	184553	33.66	29.90	26.20	16.96	21.30	18.76	19.08	20.79		27.98	31.89	26.61	24.83	21.85	21.85	
DT31	547209	186599	24.56	23.51	21.42	14.76	16.07	12.56	15.94	15.15	17.29	20.64	26.67	22.59	19.26	16.95	16.95	
DT32	545942	184073	33.72	24.55	25.49	19.61	24.31	20.48	22.17	20.35	24.99	33.68	29.76	23.96	25.25	22.22	22.22	
DT33	545124	184935	26.20	22.62	24.95	19.48	20.01	19.29	20.78	20.99	24.04	26.99	30.23	28.70	23.69	20.85	20.85	

DT34	543867	184106	41.49		39.66	30.35	29.49			24.50	27.98	31.46	29.24	29.37	31.50	27.72	27.72	
DT35	544206	184158	31.88	36.05	38.03		35.15	29.73	31.74	29.39	30.24	39.20	40.08	35.59	34.28	30.17	30.17	
DT36	545536	183446	35.55	35.13	26.67	21.72	27.00	24.43	27.95	23.60	24.86	28.54	32.15	29.50	28.09	24.72	24.72	
DT37	544667	183104	38.88	29.44	26.20	29.86	28.01	28.67	25.49	23.99	31.24	26.45	43.71	33.74	30.47	26.81	26.81	
DT38	545495	183310	34.17	23.31	21.65		22.38	19.85	19.61	17.70	25.66	28.05	33.60	23.03	24.46	21.52	21.52	
DT39	546618	184605	33.66	35.12	31.76	24.79	29.77	27.20	27.06	24.48	26.24	35.58	36.92	29.68	30.19	26.57	26.57	
DT40	546968	185087	25.37	22.82	23.28	12.93	14.81	12.72	15.86	13.71	17.16	22.40	26.92	19.97	18.99	16.71	16.71	
DT41	548056	183606	36.43	39.10	33.69	23.57	24.35	26.76	30.49	26.58	23.77	32.18	34.30	30.88	30.17	26.55	26.55	
DT42	548974	184041	31.23	23.62	20.56		19.65		17.23	16.20		26.67	26.54	23.49	22.80	20.06	20.06	
DT43	549537	183284	37.99	33.08	27.47	25.26	25.25	22.71	25.22	21.46	24.31	31.59	28.51	31.41	27.85	24.51	24.51	
DT44	550508	184123	24.72	23.68	19.78	12.72	15.50	13.74	15.10	15.10	16.59	23.48	23.10		18.54	16.32	16.32	
DT45	550289	184928	33.66	29.73	26.62	21.38	25.87	23.09	21.96	19.49	24.80	27.96	33.91	22.78	25.94	22.83	22.83	
DT46	548935	185402	32.03	22.27	22.68	12.53	18.30	16.45	18.32	16.97	18.25	25.82	28.68	25.09	21.45	18.88	18.88	
DT47	550002	185912	41.15	38.78	29.42	24.08	29.44	28.78	27.45	22.15	28.70	33.63	35.15	32.26	30.92	27.21	27.21	
DT48	549154	186114	23.08	22.08	19.73	17.37	17.94	14.64	15.79		17.66	25.87	27.42	24.40	20.54	18.08	18.08	

- ☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table P.
- ☒ Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19.
- ☐ Local bias adjustment factor used.
- ☒ National bias adjustment factor used.
- ☒ Where applicable, data has been distance corrected for relevant exposure in the final column.
- ☒ London Borough of Barking and Dagenham confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

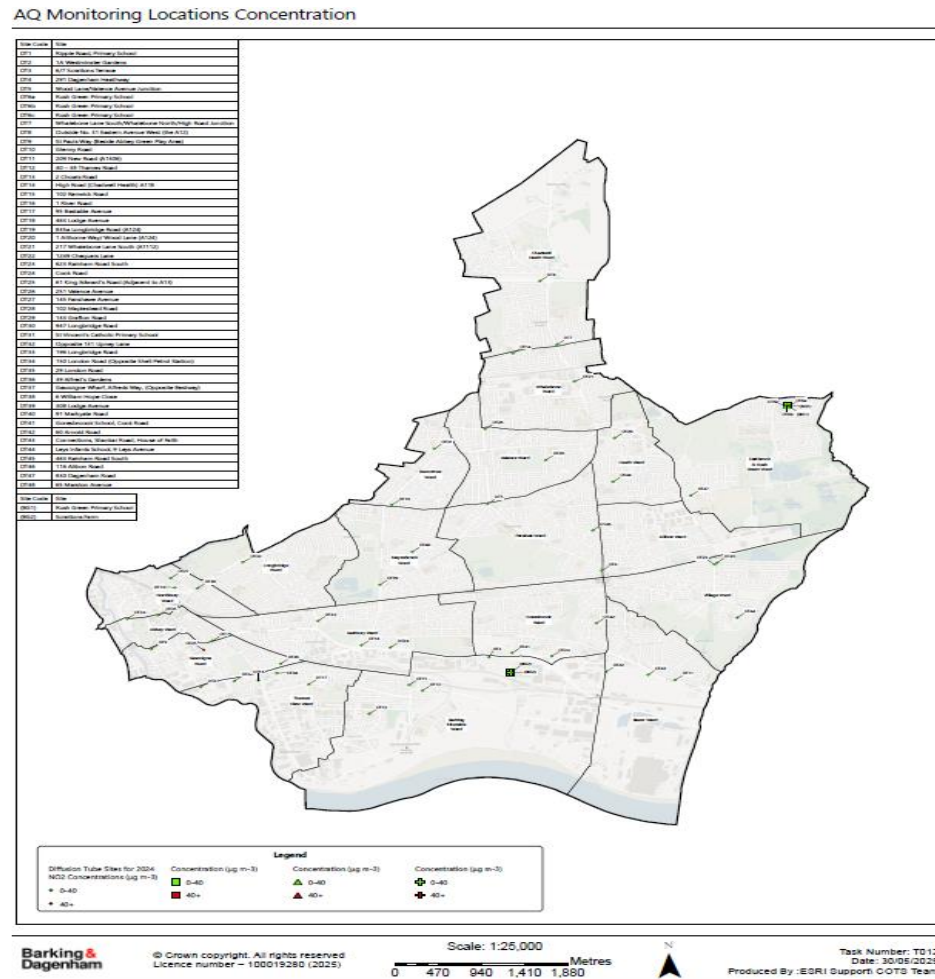
Exceedances of the NO₂ annual mean objective of 40µg m⁻³ are shown in **bold**.

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 B 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)



AQ Monitoring Locations Concentration

Map showing AQ Monitoring Locations Concentration for Barking & Dagenham. The map displays various monitoring locations across the area, categorized by concentration levels (µg m⁻³) for NO₂ and PM₁₀. The legend indicates concentration ranges: 0-40, 40+, and 40+.

Legend

Diffusion Tube Sites for 2024
NO₂ Concentrations (µg m⁻³)

- 0-40
- 40+
- 40+

Concentration (µg m⁻³)

- 0-40
- 40+
- 40+

Concentration (µg m⁻³)

- 0-40
- 40+
- 40+

Scale: 1:25,000

Metres: 0, 470, 940, 1,410, 1,880

Task Number: T012
Date: 30/05/2023
Produced By: ESRI Support COTS Team

London Borough of Barnet 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 Barnet during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process¹.

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

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Abbreviations

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

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

Pollutant	Standard / Objective / Guideline	Averaging Period	Date ⁽¹⁾
Nitrogen dioxide (NO ₂)	200 µg m ⁻³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	40 µg m ⁻³	Annual mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	WHO AQG ⁽²⁾ : 10 µg m ⁻³	Annual mean	
Particles (PM ₁₀)	50 µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 45 µg m ⁻³ not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM ₁₀)	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 15 µg m ⁻³	Annual mean	
Particles (PM _{2.5})	10 µg m ⁻³ ⁽³⁾	Annual mean	2040
Particles (PM _{2.5})	London Mayoral Objective ⁽⁴⁾ : 10 µg m ⁻³	Annual mean	2030
Particles (PM _{2.5})	WHO AQG ⁽²⁾ : 5 µg m ⁻³	Annual mean	
Particles (PM _{2.5})	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Particles (PM _{2.5})	WHO AQG ⁽²⁾ : 15 µg m ⁻³	24-hour mean	
Sulphur dioxide (SO ₂)	266 µg m ⁻³ not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO ₂)	350 µg m ⁻³ not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO ₂)	125 µg m ⁻³ 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)
ABN1	Tally Ho	Kerbside	526344	192219	NO2, PM10, PM2.5	Yes	London Borough of Barnet whole borough	Chemiluminescent; FDMS	5.0	0.5	3.0
ABN2	Chalgrove School	Urban Background	524374	189642	NO2, PM10	Yes	London Borough of Barnet whole borough	Chemiluminescent; FDMS	0.0	N/A	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 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)
PBN1	1 Pointalls Close	Roadside	526278	190444	NO ₂	Y	6	13	N	2.5
PBN2	71 Ballards Lane	Urban Centre	525410	190980	NO ₂	Y	0 ¹	4	N	2.5
PBN3	Sanders Lane Allotments	Urban background	523754	191588	NO ₂	Y	N/A	N/A	N	2.0
PBN6	355 Hendon Way*	Kerbside	523102	188205	NO ₂	Y	8	1	N	2.5
PBN8	Tally Ho monitoring station	Urban Centre	526346	192224	NO ₂	Y	5 ¹	0.5	Y	2.5
PBN9	52 Golders Green Road	Urban Centre	524965	187505	NO ₂	Y	0 ¹	5	N	2.5
PBN10	High Street, Barnet	Urban Centre	524496	196615	NO ₂	Y	0 ¹	3	N	2.5
PBN12	1295 High Road Whetstone	Urban Centre	526381	194059	NO ₂	Y	0 ¹	10	N	2.5
PBN13	Courtland Avenue, A1	Roadside	520968	193457	NO ₂	Y	6	22	N	2.5
PBN14	William Hill, Station Road Edgware	Urban Centre	519497	192075	NO ₂	Y	0 ¹	5	N	2.5
PBN18	Rear of Golders Green Bus Station	Bus station	525278	187444	NO ₂	Y	0 ¹	N/A	N	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)
PBN19	Rear of 7-12 Dyson Court, Tilling Road	Roadside	523348	187589	NO ₂	Y	0 (façade of residential building)	10	N	2.5
PBN20	Flats above 16 Cricklewood Lane	Urban Centre	523885	185764	NO ₂	Y	0 (façade of residential building)	6	N	6
PBN21	8/9 Station Road, Mill Hill	Kerbside	521354	191991	NO ₂	Y	1.5	0.8	N	2.5
PBN22	Diploma Court	Urban Centre	527270	189372	NO ₂	Y	0 (façade of residential building)	11	N	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.

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
BN1	526344	192219	Kerbside	48.85	48.85	35.9	38.0	32.0	32.0	29.0	26.0	22.3
BN2	524374	189642	Urban Background	99.86	99.86	27.0	25.0	19.0	18.0	18.0	16.0	14.0

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 of data trends: Overview

The 7-year trend (2018 -2024) reports an overall decrease in the ambient concentrations of NO₂ at both monitoring air quality monitoring station (AQMS) locations. In 2024, neither location returned a nitrogen dioxide concentration higher than the national air quality objective after bias correction and fall off with distance calculations.

There has been a steady downward trend in nitrogen dioxide levels over the last six years at Tally Ho (BN1) and at Chalgrove for the last seven years. In the last year, 2023 to 2024, Tally Ho had a 14% decrease in its Nitrogen dioxide levels. This is a larger fractional decrease than previous years. Tally Ho AQMS is on a main route (the A1000) is a double kerb, is next to the North Finchley bus station, a major transport hub and is at one end of a busy town, North Finchley. As such it is a busy junction with a lot of stationary traffic and slow-moving traffic especially at peak times. The improvement in air quality is probably largely due to the ultra-low emission zone (ULEZ) over Greater London. Prior to 29 August 2023 this ULEZ only covered the area in Barnet South of the A406. As car engine technology has improved over the years there has been similarly an improvement in general air pollution levels however the ULEZ has accelerated this improvement. The population in Barnet has increased over this time with new developments in North Finchley bringing in more people and their vehicles. The reduction at Chalgrove is 12.5%. This is a larger fractional decrease than previous years. Chalgrove is a background site in a residential area. Again, this downwards trend is largely due to the ULEZ effect. Public transport has also improved its fleet's engines too which would have some impact too.

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
PBN1	526278	190444	Roadside	100.0	100.0	36.8	31.4	21.6	23.5	23.2	19.2	19.8
PBN2	525410	190980	Urban Centre	100.0	100.0	39.8	35.0	24.6	29.6	27.0	25.2	25.8
PBN3	523754	191588	Urban background	91.7	91.7	20.0	15.5		12.8	13.5	12.0	10.5
PBN6	523102	188205	Kerbside	91.7	91.7	41.4	37.5	33.1	35.6	33.1	37.8	38.3
PBN8	526346	192224	Urban Centre	100.0	100.0	37.7	37.1	29.9	32.7	31.6	23.7	22.9
PBN9	524965	187505	Urban Centre	83.3	83.3	43.5	39.9	27.7	36.6	38.7	29.4	29.3
PBN10	524496	196615	Urban Centre	100.0	100.0	44.0	38.6	27.5	32.8	33.7	26.9	26.9
PBN12	526381	194059	Urban Centre	100.0	100.0	39.0	39.1	29.5	31.1	31.1	25.3	23.9
PBN13	520968	193457	Roadside	83.3	83.3	29.3	27.4	19.7	19.4	19.8	15.6	15.5
PBN14	519497	192075	Urban Centre	91.7	91.7	50.4	41.6	35.5	40.5	39.1	34.2	26.4
PBN18	525278	187444	Bus station	91.7	91.7	40.3	37.5	-	36.1	35.6	28.0	25.4
PBN19	523348	187589	Roadside	100.0	33.3	47.2	41.6	29.3	34.7	31.8	29.3	31.0
PBN20	523885	185764	Urban Centre	91.7	91.7	43.1	38.7	31.0	29.6	32.7	25.5	25.0
PBN21	521354	191991	Kerbside	91.7	91.7	-	-	-	-	28.5	25.9	24.8
PBN22	527270	189372	Urban Centre	100.0	100.0	-	-	-	-	31.6	22.7	24.2

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 graph below shows all the non automatic and automatic results for the NO_2 annual mean.

Figure 1: Graph of Nitrogen Dioxide annual means from 2018 to 2024

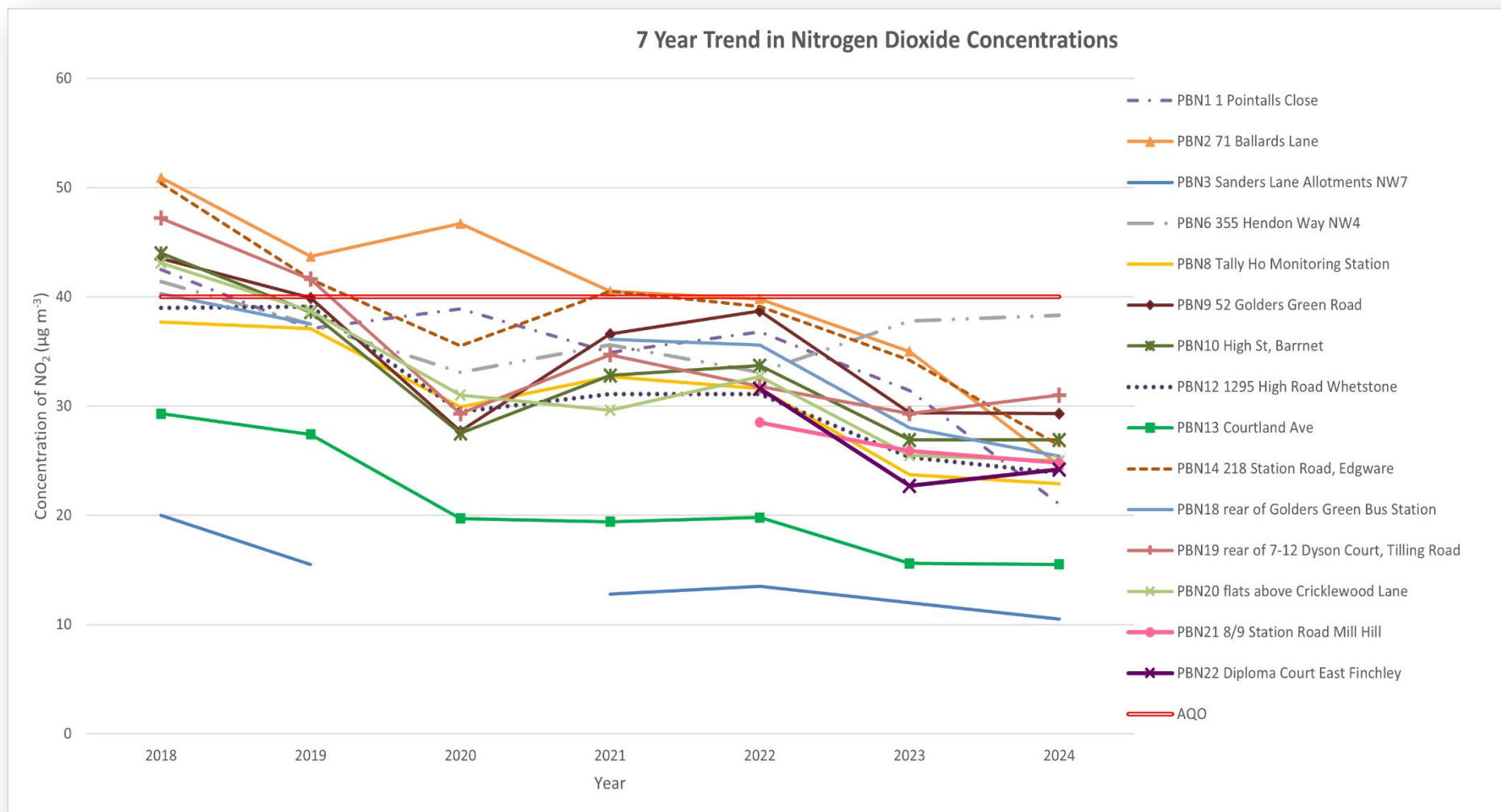


Table F. NO₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg m⁻³

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
BN1	526344	192219	Kerbside	48.85	48.85	0	0	0	0	1	0	0
BN2	524374	189642	Urban Background	99.86	99.86	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 of data trends: Overview

The 7-year trend (2018-2024) reports an overall decrease in the ambient concentrations of NO₂ at all monitoring locations. In 2024, no locations returned a nitrogen dioxide concentration higher than the national air quality objective after bias correction and fall off with distance calculations.

Concentrations of NO₂ measured by diffusion tubes in 2024 were mostly very similar to those measured in 2023, with relatively minor increases in concentration (in 5 locations) (with one exception) or decreases in concentrations (in 7 locations) and 3 staying at the same level (within 0.2ug/m³). The largest increases in concentration since 2023 were observed at PBN 22 at the front of flats at Diploma Court in East Finchley (7%) and at PBN19 Rear of flats at Dyson Court Tilling Road (6%). The largest decrease was observed at PBN14 William Hill on Station Road in Edgware town centre (23 %).

These results do not show decreases across the board as may have been expected from the air quality monitoring stations. It will be interesting to see the results for next year and whether these results stabilize or decrease.

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
BN1	526344	192219	Kerbside	51.66	51.66	21	20	19	17	19	19	16.7
BN2	524374	189642	Urban Background	97.40	97.40	17	17	17	14	16	16	15

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 of data trends: Overview

The 7-year trend (2018 -2024) reports an overall decrease in the ambient concentrations of PM₁₀ at the monitoring locations. In 2024, neither location returned a PM₁₀ annual average concentration higher than the national air quality objective.

There has been some fluctuation in PM₁₀ levels over the last seven years at Tally Ho (BN1) and at Chalgrove (BN2). At times the levels have increased despite the overall decrease since 2018. In the last year, 2023 to 2024, Tally Ho had a 12% decrease in its

PM10 levels. This is a larger fractional decrease than previous years. As detailed above in the Nitrogen Dioxide trend discussion above, again the improvement in air quality is probably largely due to the ultra-low emission zone (ULEZ) over Greater London. The reduction at Chalgrove is 6%. Chalgrove is a background site in a residential area. Again, this downwards trend is largely due to the ULEZ effect of more people using up to date less polluting vehicles.

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
BN1	526344	192219	Kerbside	51.66	51.66	4	1	1	0	1	3	0
BN2	524374	189642	Urban Background	97.40	97.40	3	1	1	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 of data trends: Overview

Barnet has seen exceedances of the 24-hour objective in the last 7 years but never had any exceedances of the permitted thirty five days' allowance of this objective. The number of days (of an exceedance of the daily mean) has decreased since 2011 at both sites. At Tally Ho, there has been no pattern; instead, the number of days exceeding this value has fluctuated over the last seven years. There was a 100% decrease from 2023 to 2024.

In Chalgrove School there have been no days of exceedance since 2021.

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
BN1	526344	192219	Kerbside	51.43	51.43	-	-	-	-	-	-	9.5

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 of data trends: Overview

Tally Ho showed that the PM_{2.5} annual average concentration at that location was 0.5ug/m³ less than the national air quality objective.

Other air quality monitoring

Atmo personal portable monitors

Public Health and Environmental Health have supported Clean Air Barnet with the purchase of 20 Atmo portable air quality monitors which are being used in a range of 'citizen science' air quality monitoring activities with groups such as Age UK, Middlesex University, and local schools. Atmo portable tubes are capable of monitoring PM1, PM2.5, and PM10 and Total Volatile Organic Compounds (TVOC).

Breathe London

Some of our Barnet community groups/ schools and organisations participate in a London wide project: Breathe London Project. The details of this and data is all available on their website: [Breathe London Communities](#).

Their monitors measure NO₂ and Fine Particulates. All groups involved are listed below. Some of the monitoring finished within the year 2023 however these groups are all included too:

- St James Primary school, East Finchley
- Chipping Barnet Food Bank / (Mary Immaculate and St Peter's church), Chipping Barnet
- Christs College School, East Finchley
- Junction of Meadway and Hampstead Way, Hampstead Garden Suburb
- Cricklewood Lane, Cricklewood
- All Saints Primary School
- Barnfield primary school
- Junction of Barnfield Road and Watling Avenue
- Burnt Oak Station
- NW7 Hub on The Broadway, near to junction of A1 and A41, Mill Hill

The data collected by these monitors are typically observable over a period of a week. We receive quarterly reports for monitoring at these locations. See below for examples of recent data output from Christs College School East Finchley taken from The

Breathe website, as above. Note that this monitor does not represent actual relevant exposure levels within the school grounds. Consideration has to be taken as to averaging the data over the relevant time period and correcting for distance drop off.

Figure 2: Graph of PM_{2.5} levels at Christ College Breathe Node (26/6/25 to 3/7/25)

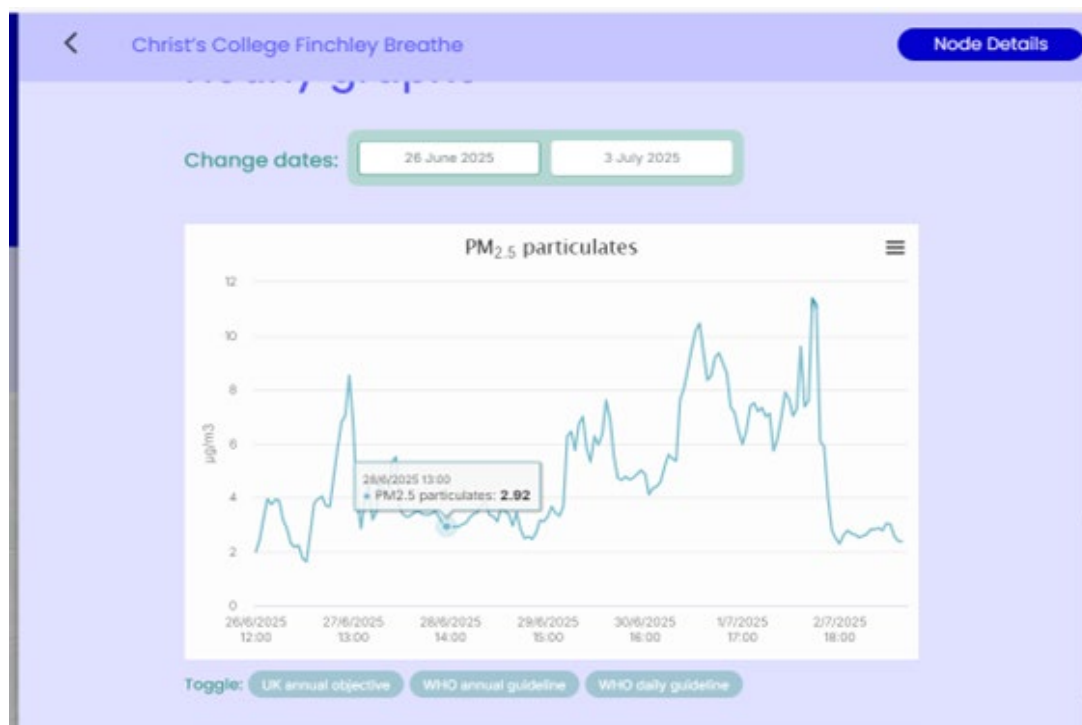
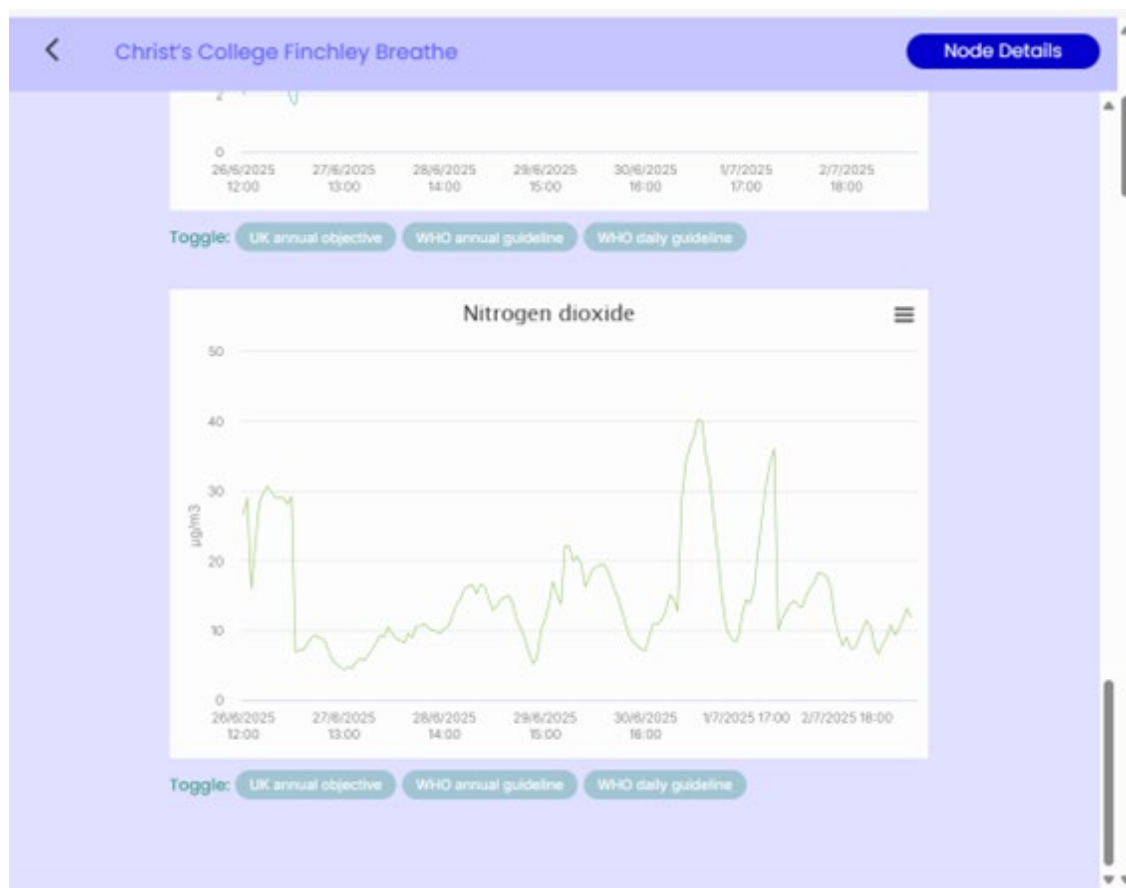


Figure 3: NO2 levels at Christ College Breathe Node (26/6/25 to 3/7/25)



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 Barnet can be found in NO₂ annual mean**
- **NO₂ 1-Hour Mean**
- **PM₁₀ 24-hour mean**

In 18/04/2001, the whole Borough was declared an Air Quality Management Area for: Nitrogen Dioxide (NO₂) Annual Mean and Particulate Matter (PM₁₀) 24-Hour Mean. Road transport along the main roads in the borough e.g.: A406, A1, A41 and M1 was the main source for exceedances for the objectives. In 2010, the AQMA order was amended to include the one hour mean for nitrogen dioxide, due to exceedances in a bus station and some high streets.

A local Air Quality Strategy is in place to prevent and reduce polluting activities. The Local Air Quality Strategy is available at [A Local Air Quality Strategy for Barnet](#)

Table J. The table presents a description of the AQMA that is currently designated within the London Borough of Barnet. 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**
- **NO₂ 1-Hour Mean**
- **PM₁₀ 24-hour mean**

In 18/04/2001, the whole Borough was declared an Air Quality Management Area for: Nitrogen Dioxide (NO₂) Annual Mean and Particulate Matter (PM₁₀) 24-Hour Mean. Road transport along the main roads in the borough e.g.: A406, A1, A41 and M1 was the main source for exceedances for the objectives. In 2010, the AQMA order was amended to include the one hour mean for nitrogen dioxide, due to exceedances in a bus station and some high streets.

A local Air Quality Strategy is in place to prevent and reduce polluting activities. The Local Air Quality Strategy is available at [A Local Air Quality Strategy for Barnet](#)

Table J. Barnet Air Quality Management Areas

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 ($\mu\text{g m}^{-3}$)	Level of Exceedance: Current Year ($\mu\text{g m}^{-3}$)	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Declared 18/04/2021	Nitrogen dioxide (NO ₂): Annual Mean of 40 $\mu\text{g m}^{-3}$	The Whole Borough	YES	60 (Y 2000) (NO _x tube at Barnet Church, High Barnet 60 (Y 2000) at Tally Ho corner Automatic monitoring station	No exceedances: Highest levels: 31 (NO ₂ tube) at both Dyson Court and 355 Hendon Way;	3	Barnet Air Quality Action Plan 2023 -2028 published August 2023	AQAP
Amended 1/07/2010	Added NO ₂ : 1-Hour of 200 $\mu\text{g m}^{-3}$	The Whole Borough	YES	161 hours exceedance at Golders Green bus station (Y 2008)	0 hours (Tally Ho corner Automatic monitoring station)	>5 years		
Declared 18/4/2001 and as amended	Particulate Matter (PM ₁₀): 24-Hour Mean	The Whole Borough	YES	48 days (Y 2001)	0 days	>5 years		

2.2 Air Quality Action Plan Progress

Table M provides a brief summary of London Borough of Barnet progress against the Air Quality Action Plan, showing progress made this year in 2024. 2022 was the year that the 2017-2022 air quality action plan for Barnet ended, and as such, many projects were completed in 2022. New projects which commenced in 2024 are shown at the bottom of the table. The current Air Quality Action Plan (2023-2028) for Barnet takes forward actions started and/or continuing throughout 2022.

Table K. Delivery of Air Quality Action Plan Measures

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/ concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
Monitoring and core statutory duties	1	Maintain the borough's 2 automatic monitors and 15 diffusion tubes. Explore the potential for additional diffusion tube monitors and seek funding for PM2.5 monitor(s) Support community monitoring initiatives such as those provided by Breathe London and Asthma and Lung UK	No direct emissions/ concentrations benefits but critical in terms of understanding emissions and concentrations and the impact of action taken. Data obtained will contribute to the basis of campaigns to support new initiatives to improve air quality in Barnet. Community monitoring will bolster support information obtained from the statutory regime and provide better resolution for air pollution levels across the borough.	Ongoing for all Air Quality monitoring stations and NOx tubes. One NOx tube discontinued at Dyson Court in May 2024 due to Brent Cross Cricklewood regeneration work in area. Not relocated yet. .	Public Health and Environmental Health have supported Clean Air Barnet with the purchase of 20 Atmo portable air quality monitors which are being used in a range of 'citizen science' air quality monitoring activities with groups such as Age UK, Middlesex University, and local schools. New PM2.5 added and PM10 monitor replaced in Tally Ho AQMS (BN1) alongside the existing NOx monitor. Only retrieved 50% data in BN1 due to electricity and air con issues. No issues with data capture for other monitors (Greater than 75% data capture) Details of our monitoring can be found on our Barnet website here
Emissions from developments and buildings	2	Raising awareness of new regulations for solid fuel and fully enforcing the borough-	It is estimated that domestic wood burning is produces approx. 38 % of total fine particulate emissions	Ongoing	Two hours response time for complaints of dark smoke. 10 complaint cases of smoke from restaurants/ industry

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/ concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
		wide Smoke Control Zone. To include: an awareness campaign, engagement with suppliers, and active enforcement	nationally. (2019). Domestic wood burning is estimated to contribute to 17% of all London-wide PM emissions (LAEI 2019 data)		2 complaint cases of solid fuel in fireplaces Details of our Smoke Control areas can be found on the Smoke Control Area Interactive Map by DEFRA
Emissions from developments and buildings	3	Ensuring emissions from construction are minimised. This is currently controlled by planning conditions. Developers are required to submit construction management/logistics plans, which abide by construction Barnet 's condition. Submissions are assessed jointly between Highways, Environmental Health, and Planning.	Reduction of relevant pollutants is relative to the potential impact construction would have without these measures in place. LAEI 2019 apportioned 19 % of PM₁₀ emissions in Barnet to construction activity.	Ongoing; 2023-28 onwards. Public complaints regarding dust and particulate emissions are assessed under nuisance, and monitoring is required from these sites if not already present. Monitoring is required at large construction sites and site action levels are implemented.	18 complaint cases of household/ minor and major construction dust complaints. Significantly reduced dust complaints at large major sites. Developers are advised to contact Barnet's planning department, to obtain advice on the requirements of the relevant planning condition(s) Barnet Planning consulting on new Local Plan and SPD to incorporate new BarNET zero strategies and update guidance for NRMM and sustainable AQ policies for adoption 2025
Emissions from developments and buildings	4	Ensuring enforcement of non-road mobile machinery (NRMM) air quality policies	Exposure is minimised for residents nearby construction sites. NRMM used in construction currently accounts for approximately 7% of Nox, 8% of PM₁₀ emissions and 14% of PM_{2.5} in London. Current applicable standards in Barnet are Stage IIIB: There will be further tightening of the standards on 1st January 2025 and 2030.	Ongoing. Barnet remains part of the London NRMM enforcement programme. NRMM is also a consideration in planning.	Significant number of the larger major sites are audited across borough but not all. In 2024, Total Audits:12; Self-compliant:5; Compliant:2; non-compliant =1 and no NRMM:3. Larger audited sites included Brent Cross Cricklewood regeneration plot 12 and Colindale tube station. No complaints received in 2024. NRMM planning condition added to all planning cases involving construction/ demolition

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
					Conditions are applied to ensure compliance. Construction sites within Barnet are audited annually and enforcement is undertaken where compliance is not found.
Emissions from developments and buildings	5	Reducing emissions from Combined Heat and Power	Emissions can be reduced where older systems require replacement. In recent years there have been no applications for the installation of CHPs in Barnet, with applicants instead choosing to install low or no emission alternatives such e.g., air/ground source heat pumps	Ongoing from 2023	Develop and implement removal / replacement plans as appropriate for older combustion-based CHP engines with cleaner, lower carbon heat sources. Monitoring number of existing combustion-based CHP engines removed/replaced with cleaner, lower carbon heat sources. 100% of any new CHP installations to be compliant with London plan Develop Phase 2 of the Local Area Energy Plan to identify and pursue any viable opportunities within the borough to install cleaner, lower carbon heat sources including heat networks, individual air source heat pumps etc. No CHP applications 2024
Emissions from developments and buildings	6	Enforce Air Quality Neutral policy. This is enforced in Barnet using planning conditions. AQN is a material consideration within the planning process.	Ensuring that new developments abide by Air Quality Neutral guidance will mitigate or lessen the impact of their emissions, by encouraging the use of development design, onsite mitigation, and/or offsetting. Large major sites need to be air quality positive (higher standard than AQ neutral).	Ongoing since introduction in the London Plan. Significantly increased compliance since February 2023	100% major and minor developments had to demonstrate their air quality neutrality prior to application approval. If sites were not deemed air quality neutral, then more mitigation had to be included within the proposal that would compensate at an appropriate and proportionate level. For major sites this was based on a Defra damage cost-based approach. Scientific Services are consulted on 90% of minor planning applications 527 Planning application cases assessed for air quality neutral.
Emissions from developments and buildings	7	Promoting and delivering energy efficiency and energy supply retrofitting projects in workplaces	Gas boilers are the second largest source of Nox in London, so participating in these programmes will directly positively impact	Existing pipeline of projects will complete by end of 25/26 year.	These programmes support the council's net zero commitments to be net zero as a council by 2030 and as a borough by 2042. By delivering RE:FIT, RE: NEW and PSDS programmes, we are expecting to save 939 tonnes of CO2 per annum

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/ concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
		and homes through EFL retrofit programmes such as PSDS, RE:FIT, RE:NEW, Government grant funding opportunities for homes in LAD, HUG and SHDF, and through borough carbon offset funds.	emissions reduction from buildings.	RE:FIT programme has completed, alongside Local Authority Delivery Scheme and Home Upgrade Grant.	Next tranche of programme will include Warm Homes Programme and Greener Schools.
Emissions from developments and buildings	8	Master planning and redevelopment areas aligned with Air Quality Positive and Healthy Streets approaches	Collaboration of relevant departments will allow efficient spatial planning of large regeneration projects, and in turn ensure that minimal emissions are generated once these projects are operational.	2023- onwards	100% of all large major applications need to be air quality positive. This needs to be demonstrated prior to approval so issues resolved, and necessary mitigation included. 2 sites confirmed as air quality positive. All sites air quality neutral as a minimum.
Public health and awareness raising	9	Public Health and Environmental Health taking shared responsibility for borough air quality issues and implementation of Air Quality Action Plans.	This measure's primary benefit is the reduction of exposure to poor air quality for the people living and working within Barnet, rather than the reduction of emissions. Secondary advantages include increased support for campaigns, and improved coordination of projects e.g., communications, and access to funding.	Ongoing.	An integrated/joined-up approach; the Director of Public Health is a signatory of statutory Annual Status Reports and all new Air Quality Action Plans, a participant in the Barnet Air Quality Steering Group, and involved in relevant projects. Air Quality data forms part of Barnet's JSNA. As part of the Burnt Oak Low Emissions Neighbourhood funded by MAQF a community engagement day was held in Burnt Oak for Car Free Day in September 2024.
Public health and awareness raising	10	Supporting a direct alerts service such as airTEXT, and promotion and dissemination of high pollution alert services	This is an initiative that will impact exposure to air pollution rather than the instance(s) of emissions. This measure will form part of the basis of campaigns to	Ongoing.	Barnet will be reintroducing airTEXT from summer 2025.

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/ concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
			change behaviours/attitudes towards air quality issues.		
Public health and awareness raising	11	Encourage schools to join the TfL Travel for Life accredited travel planning programme (Formerly TfL STARS)	The programme saves about 22 million vehicle kilometres (VKM) annually between 8-9am. Total 44m VKM a year in London, saving approx. 8000 tonnes of CO2 and 96 tonnes of NOx annually.	Ongoing.	The Safe & Sustainable Travel Department regularly keep in touch with all of the schools within the borough. Some 95 schools within the borough currently have either a bronze, silver or gold accreditation (53 Gold school, 15 Silver and 27 Bronze) and we hope to achieve the same number or higher this year. Barnet has the highest number of accredited schools in whole of London. Work is currently underway to move more schools to higher accreditations.
Public health and awareness raising	12	Air quality in and around schools; School Streets, Air Quality projects and School Air Quality Audits	This measure focuses on reducing exposure to poor air quality in and around schools. This measure will lessen the impact of air pollution on the cardiovascular, cognitive, and respiratory health of children attending school. Switching to active modes of transport may reduce exposure to pollution in surrounding roads/ neighbourhoods by up to 50 %.	Ongoing.	4 school streets delivered in 2024. No school air quality audits conducted in 2024 due to lack of capacity in the Environmental Health team. As part of the MAQF-funded project in Burnt Oak, the School Travel officer engaged with 3 schools in 2024 to promote active travel and its link to improving air quality. Clean Air Barnet, in collaboration with Middlesex University and LBB, invited 4 schools to get involved in exploring how air quality citizen science could help educators make a difference to the health and well-being of our communities and environment. Clean Air Barnet enables volunteers to become citizen scientists by using a portable air quality monitor Atmo Tube to assess personal exposure to pollutants by measuring and recording data about Particulate Matter and Volatile Organic Compounds. Hasmonaeon School, Edgware Primary, Lyonsdown and St Marys & St Johns have all registered for our free Educators Citizen Science project that has been running throughout May and June 2025 and aims to connect teachers and educators with university academics to develop resources for environmental and sustainability education.
Delivery servicing and freight	13	Update of procurement policies to reduce pollution	Barnet complies with FORS, which provides minimum standards for vehicles within the Council's Fleet, as well	2023-28 onwards. Ongoing. This is programme of works which will be	Continue to maintain FORS membership. Barnet can increase number of contracts with air quality requirements

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
		from logistics and servicing	as contractors. This ensures a minimum standard.	ongoing throughout the period of this AQAP.	Barnet intends to review social value delivery attainable through the procurement activity following the adoption of a Social Value Policy.
Delivery servicing and freight	14	Reducing emissions from deliveries to local businesses and residents	Encourage shift to use of ultra-low emission light goods vehicles (LGV) to deliver goods, more efficient deliveries (eg shared use lockers) and use of cargo bikes leading to overall reduction in pollutant emissions.	Ongoing.	The forthcoming Transport Strategy and Action Plan (to be approved in July 2025) will set out actions aimed to help deliver sustainable freight, deliveries and servicing including encouraging Ultra Low Emission Vehicle (ULEV) take-up, looking at sustainable models for town centre cargo bikes and freight consolidation. KPIs will be set as this work proceeds. Cargo bikes have been trialled in the past, but so far there financial and practical viability issues have impeded roll-out.
Borough Fleet	15	Reducing emissions from council fleets	The Council's Fleet consists of vehicle compliant with Euro VI standards, which stipulates that NOx emissions must be no higher than 80mg/km (compared to 180mg/km). Barnet also participates in FORS and has maintained a bronze membership	Plan to decarbonise Fleet by 2030	Continue to maintain FORS membership. Barnet Council currently have 10 zero emission capable vehicles within the fleet, and a pool (hire) car fleet of 10 PHEV cars and 1 Hybrid van. HVO trial on two Refuse & Recycling vehicles being undertaken to establish any benefit from alternative fuels. Increase the number of clean vehicles in Barnet's Fleet in line with Barnet's wider Sustainability Strategy, by 10% over 23-28 AQAP period Safer driving courses for all fleet drivers; once every 2 years has been discontinued due to lack of funding.
Localised solutions	16	Expanding and improving green Infrastructure (GI)	The impact of green spaces can be difficult to gauge given the variety of factors that may impact exposure to air pollution and level of emissions (e.g., foliage density, location, plant species etc.). however, there	Ongoing, policy published in 2023	Trees planted in 2023/24. 1,206 Concentrate in increased street tree planting in the south and west of the borough. Plant 1,000 street trees per annum (500 replacements, 500 new)

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/ concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
			are benefits to the improvement of urban environments and enjoyment of public spaces		i-Tree report calculates £3.24m annual value in ecosystem service benefits (Carbon sequestration, Pollution removal and stormwater retention) Carbon storage of mature trees valued at £48m
Cleaner transport	17	Ensuring that Transport and Air Quality policies and projects are integrated	The Council will be revising its Long-Term Transport Strategy, so it supports delivery of carbon reduction and wider public health policies. It is likely to give greater emphasis to improving walking/cycling infrastructure, encouraging public transport and support for electric vehicle roll-out. The experimental cycle lane on the A1000 (now made permanent) has seen a maximum of a 23 % reduction in NO2 concentrations along its route since 2019 (in comparison with 2019 modelled data and monitoring data obtained over the 2021-22 period)	Ongoing.	The Council will shortly publish a new Transport Strategy and Action Plan which will include actions to tackle air pollution from transport including encouraging modal shift to active/public transport, encourage ULEV use (including by TfL and the Council) and lobbying for strengthen idling enforcement powers. It will also set out actions for more sustainable servicing and freight (see Action 14). These documents have been developed in conjunction with Environmental Health and Public Health to ensure consistency and integration. The Council supported extension of the Ultra Low Emission Zone to the whole of the borough from August 2023. After a year of operation roadside NO2 concentrations in outer London are on average up to 4.8 per cent lower than would have been expected without the ULEZ expansion. Work continues on the A1000 cycleway which has seen a maximum of a 23 % reduction in NO2 concentrations along its route since 2019 (in comparison with 2019 modelled data and monitoring data obtained over the 2021-22 period). The new Transport Strategy sets out plans for a more comprehensive Barnet Cycle Route Network. The Council has continued its ambitious programme to roll out electric vehicle charging points with the aim of delivering 2,100 by the end of 2026
Cleaner transport	18	Discouraging unnecessary idling by taxis and other vehicles	A small-scale study by King's College suggested that concerted idling action campaigns could reduce	Ongoing.	Barnet is participating in the pan-London anti-idling MAQF-funded project -2024-2027. Public Health is leading on this. However, activities in 2024 were limited to planning and

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/ concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
			local concentrations very close to the source of idling vehicles by 20-30 per cent.		coordination on how the project and campaign would be rolled out. As part of the Burnt Oak MAQF project, 3 schools have participated in anti-idling assemblies, inter-school walking competitions and poster contests . Goldbeaters Primary School & both The Annunciation schools have created banners to display anti-idling messages outside their schools. The draft Transport Strategy will have an action to work with the Mayor and London Councils to lobby for an anti-idling enforcement framework that better relates penalties paid to the cost of enforcement.
Cleaner Transport	19	School Streets Town Centre pedestrianisation schemes/Road Layout modification	Road traffic is a very important source of air pollution in Barnet. Temporary road closures (e.g., play streets) are known to improve air quality in the immediate vicinity of the closure location.	Ongoing	The Council is considering an outline planning application for regeneration that includes removal of the Tally Ho gyratory road layout and restricting traffic on Ballards Lane. The Council continues to support play streets. We also publicise World Car Free Day Concentration monitoring of the impact of road closures/layout changes could be undertaken. Assessment of trial and consideration of further roll-out. Monitoring Increases in active travel after road layout changes and /or events. Work has continued on proposals to change highway layout in North Finchley that would remove general traffic from part of Ballards Lane For school streets, see action 12.
Cleaner transport	20	Using parking policy to reduce pollution emissions	This measure will not in itself reduce NO2 or particulate matter concentrations in the Borough, but will encourage a change in behaviours regarding the frequency and/or length of car journeys	Revision of the Council's Long-Term Transport Strategy is likely to include consideration of new approaches to parking policy to	Measuring the proportion of residential permits issued to both most polluting and cleanest vehicles. The new Barnet Transport Strategy (see action 17) has been developed to ensure it is aligned with air quality and public health policies/ strategies including this Air Quality Action Plan. Currently delivering parking strategies for Burnt Oak, Colindale and North Finchley town centres and for Edgware as part of

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/ concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
				help enable reprioritisation of space for active modes/public transport and provision for electric vehicles	consideration of town centre regeneration. All involve reduction in spaces and greater emphasis on sustainable transport Barnet is currently revising its transport strategy; this new strategy will be in alignment with air quality and public health policies/ strategies including this Air Quality Action Plan. Link to Barnet's current long-term transport strategy: Barnet's Long Term Transport Strategy 2020 to 2041 Barnet Council Currently delivering parking strategies for Burnt Oak and Colindale town centres.
Cleaner transport	21	Rollout of the requisite infrastructure to support the shift to low and zero emissions vehicles	This measure will not have a direct impact on emissions by itself. By enabling the uptake of EV (Electric Vehicle) in Barnet, vehicles with tailpipe emissions will be increasingly absent from roads in the borough. The measured total kW of charging in Barnet may be used as a proxy to estimate the amount of NO2 saved by EV miles driven, depending on estimated vehicle mix.	The Sustainability Strategy Framework outlines our commitment to installing a comprehensive network of charge points by 2030. The borough currently has over 1,500 public charge points, with funding secured to install a further 1,000.	In 2022, Barnet's new administration set the target to 'increase electric vehicle charging points working towards the FoE target of 1219 by 2030'. A target which has now been exceeded. Further targets will be set and approved within the forthcoming Barnet Transport Strategy and Electric Vehicle Infrastructure Strategy. Additionally, progress is monitored is Barnet's Corporate Performance Reporting through two measures: - number of charge points installed and - kW of charging undertaken across the network Electric vehicles in Barnet Barnet Council Long Term Transport Strategy 2020-2041 link: Barnet's Long Term Transport Strategy 2020 to 2041 Barnet Council Forthcoming Electric Vehicle Infrastructure Strategy
Cleaner Transport	22	Provision of infrastructure to support walking and cycling	Work is underway to prioritise development of walking/cycling infrastructure, particularly on major road corridors and by	Ongoing through the 2023-28 period and beyond..	Using the DfT funded Propensity to Cycle Tool (PCT), we have identified 15 potential cycle routes; both for leisure and commuting with identified destinations such as transport hubs and town centres. This is being taken forward through the

LLAQM Action Matrix Theme	Action ID	Action name and description	Expected emissions/concentrations benefit	Timescale for implementation / Estimated Actual completion date	Outputs, Targets and KPIs
			schools. Air quality is likely to be among the criteria for prioritisation. Improving facilities for active travel and public transport will be incorporated in the Council's regeneration plans (e.g., for Colindale, Edgware and North Finchley)		forthcoming new Barnet Transport Strategy and Action Plan, which set out plans for a coordinated Barnet Cycle Route Network that will include both cycle rules and smaller scale "quick wins" for local cycle-friendly routes Proposed upgrade on A1000 (3.2 km), in design and target on site during 2027/2028. Proposal for the new Barnet Loop Cycle Network (approx. 17 miles) (inclusive of the new A5 parallel route), currently under design. The A1000 Cycle Lane is dependent on funding (primarily from TfL) and site works are expected no earlier than 2027/2028.
Localised Solutions	23	Improvements in Town Centres, and Air quality focus areas (where feasible) to Create Healthy Town Centres	We are supporting local town centres and high roads to become more active, healthier, and more sustainable where possible, through our principles outlined in our developing Placemaking Framework. In the North Finchley regeneration proposals; the intention is to reduce dominance of motor vehicles, with greater priority given to active modes.	Ongoing	Healthier town centre and high street areas, which are more pleasant to use. Reduced exposure to air pollution in these locations by either reducing congestion, or aiding dispersal of pollutants. This is planned to be quantified via monitoring. Given that parts of the strategic road network (controlled by TfL) run through these areas, it is acknowledged that some options may be limited. We are currently developing our Placemaking Framework, which has a focus on sustainability and active travel through our town centres. The framework has a strong link to the Transport Strategy, due to the town centres connection to the strategic road network

3. Planning Update and Other New Sources of Emissions

Table L. Planning requirements met by planning applications in London Borough of Barnet in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	30 minimum
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>3</u>
Number of CHPs/Biomass boilers refused on air quality grounds	<u>0 No applications therefore not applicable</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 No applications therefore not applicable</u>
Number of developments required to install Ultra-Low NO _x boilers	<u>50</u>
Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>465</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>10</u>
Number of planning applications with S106 agreements including other requirements to improve air quality	<u>1</u>
Number of planning applications with CIL payments that include a contribution to improve air quality	<u>1</u>
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas)	
Number of planning applications with conditions related to NRMM included.	<u>200 approx.</u>
Number of developments registered at www.nrmm.london .	Not checked
Number of audits (based on the pan-London project report and / or inhouse auditing programme)	In 2024, Total Audits=12
% of sites unregistered prior to audit	1
% of sites compliant with Stage IIIB of the Directive and/or exemptions to the policy.	7 (and 3 had no NRMM)

3.1 New or significantly changed industrial or other sources

Barnet had no new sources of industry in 2024.

4. Additional Activities to Improve Air Quality

4.1 London Borough of Barnet Fleet

Barnet Council currently have 10 zero emission capable vehicles within the fleet, and a pool (hire) car fleet of 10 PHEV cars and 1 Hybrid van. All of Barnet's vehicles are Euro V1 standard.

HVO trial on two Refuse & Recycling vehicles being undertaken to establish any benefit from alternative fuels.

The fleet number of vehicle includes vehicles for refuse collection vehicles to ride-on lawn mowers and the number varies seasonally but the best estimate is 3% currently.

4.2 Planning Enforcement

Planning plays a large role for the scientific services team. It forms most of the work as environmental health are a statutory consultee for planning. Barnet has a large number of housing developments underway and planned, particularly in areas like Brent Cross, Colindale, and Mill Hill. It is also undergoing regeneration in areas like Dollis Valley, West Hendon, and Grahame Park. We consult on a significant number of the borough's planning applications. For air quality, we use our standard air quality related conditions which we apply at approval stage. NRMM is covered in more detail in the section below.

In terms of planning applications for Air Source Heat Pumps, in 2024 many of Barnet's schools replaced their gas fired boilers or Combined Heat and Power systems for cleaner ASHPs.

Barnet's vetting team have a list of all types of sites that need to be consulted on with us. We do all majors and most minors. We engage with the planners early on in application stage so that issues can be resolved as soon as possible. WE have built up an excellent liaison with our planning service over the years. At approval stage after assessing the documents, we apply conditions to cover all air quality issues. Our planners work closely with us to ensure compliance at planning approval (of applications) and discharge of conditions' stages. With the increased emphasis and guidance in 2023 on air quality neutrality and positivity, we responded quickly, altering our procedure so that we ensured that air quality neutrality was expected for all our minor sites, as well as major sites upfront. This meant that air quality neutrality could no longer be conditioned but had to be resolved upfront. We have been successful in

getting money from non-compliant sites up front so that it can be invested in mitigation off site. We have encouraged though mitigation to be as good as possible. Separately, planning will always refer to us if they have any air quality related concerns and try to work along side us raising issues as necessary with the developers.

4.3 Pan-London NRMM Auditing Project

We are continuing to participate in the pan London NRMM auditing project in 2025 – 2026.

With regards to the NRMM condition is added automatically alongside a condition for a Construction and Demolition Environmental Management Plan (DCEMP/CEMP) when buildings are proposed to be demolished. These conditions are used for many minors as well as all major projects. The condition for 2024 is as follows:

246C NRMM (standard condition)

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 [Login - NRMM | London City Hall](#)

Reasons: In the interest of good air quality in accordance with London Plan 2021 Policy SI1.

This condition is enforced particularly when a discharge of condition CEMP report is submitted. We check that the report mentions NRMM in their text and ensure that, before discharge, the developers update the reports if they do not contain this reference.

Breaches are really brought to our attention through auditing under the NRMM project. We have a very proactive planning enforcement team who will react quickly to any

doubt that NRMM is being not being complied with. Issues are usually addressed with a week of notification.

With regards to CEMP conditions, the reports are thoroughly checked and if issues are raised regarding any of the air quality related requirements such as monitoring or watering down then we do not advise approval until the issues are resolved.

4.4 Air Quality Alerts

The London Borough of Barnet is a member of the Air text consortium and continues to promote it on our website with links to the Air text webpage. Barnet does not currently cascade the Mayor's air quality alert messaging.

4.5 Air Quality Positive

We have had a significant number of developments in large major developments in Barnet including Brent Cross Cricklewood regeneration which is still ongoing still the Outline planning permission was granted in 2010 with a S73 Minor Amendment approved in 2014. The regeneration scheme has recently been subject to a Revised Energy Strategy changing from the proposal of a Combined Heat and Power plant for its energy production to a large bank of Air Source Heat Pumps linked to thermal and cooling stores to deliver low carbon cooling and heating. The Introduction of ASHPs is considered to be a significantly cleaner technology from which to operate the proposed Brent Cross district heating and cooling network and this approach has therefore been supported. It is set to become one of the largest fully electric main energy centres in Europe.

In terms of developments and their building emissions, all our large major developments are opting for air source heat pumps as their energy provision. Most large developments too; also, encouragingly, many minor developments. The only fossil fuels then used on site are for the emergency generators which can have unfortunately very high but very short emissions of fine particulate. They are used to provide back-up systems in the case of a fire such as lighting for escape routes and need to be tested regularly. Recent help and guidance from the GLA on the control of air pollution emissions from these generators is welcomed.

There is less take up of the other forms of energy generation such as solar cells (photovoltaic cells or PVs) and solar panels (transferring heat from the sun to heated water for occupants' usage).

In terms of transport emissions, we have had developments that are completely car free with the exclusion of a couple of disabled car parking spaces. Given that these developments are on sites where there is currently housing with car parking spaces and building much higher density housing with no spaces this is obviously air quality positive. There is usually some push back from residents because they see this as being an issue for them as car parking is displaced onto their roads. However, the developments are well connected with public transport, so transport is available to the

future occupants. IN the case of Brent Cross, a new railway station was included in the development in the heart of the development. The planning agreement was done in 2014, but this helps with reducing the need for personal transport.

We had two sites that were air quality positive in 2024.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

ABN1 (Tally Ho) and ABN2 (Chalgrove School) are routinely calibrated on a four-week cycle by Barnet Scientific Services team officers.

They are serviced and audited on a six-monthly basis to ensure data is as accurate as possible. In 2024, these site audits and data management continued to be carried out by Ricardo Energy & Environment to national standards and operational procedures defined by AURN.

Servicing and maintenance are carried out bi-annually by an external contractor. The contractor for both sites has continued to be Matts Monitors.

We had a number of issues that affected the data capture in 2024 at Tally Ho. Firstly, there was an issue with electrics cutting out for a few months in early 2024. This followed the installation of our BAM particulate monitor for PM10 and PM2.5 late in 2023. We had an issue with the air conditioning unit breaking too which needed to be replaced over a couple of months and the equipment had to be turned off to prevent overheating. We also had a problem whereby the NOx pump was allowing ozone to build up within the cabinet and this was picked up by the Ricardo engineer. Matts Monitors fixed it installed a scrubber and made an outlet to the cabinet so the exhaust could be removed from the cabinet. In the meantime (approximately a month), we had to switch off the unit, so it was safe. Therefore, our final data capture was approximately 50%.

PM₁₀ Monitoring Adjustment

No adjustments were made to Particulate Matter monitoring data which is performed by the TEOM method.

The Volatile Correction Model (VCM) is applied to the PM10 data from TEOM analyser at Tally Ho Corner and Chalgrove School. VCM allows you to correct TEOM measurements for the loss of volatile components of particulate matter that occur due to the high sampling temperatures employed by this instrument. The resulting corrected measurements have been demonstrated as equivalent to the gravimetric reference equivalent. The VCM works by using the volatile particulate matter measurements provided by nearby FDMS instruments (within 130 km) to assess the loss of PM10 from the TEOM; this value is then added back onto the TEOM measurements. This correction is automatically applied to our data and displayed at airqualityengland.co.uk.

A.2 Diffusion Tubes

The diffusion tubes for NO₂ used in all London Borough of Barnet sampling are supplied and analysed by Gradko International Ltd (UKAS 2187) and conform to BS EN 13528 Parts 1-3: 2002/3.

All the tubes used are prepared using 50% TEA/Acetone and analysed using the UKAS accredited in house method (GLM 9), by continuous flow colorimetric analyser. Gradko participates in the AIR proficiency-testing (AIR PT) NO₂ diffusion tube scheme which uses artificially spiked diffusion tubes to test each participating laboratory's analytical performance on a quarterly basis. The scheme is designed to help laboratories meet the European Standard. Gradko's analytical precision for diffusion tubes is rated "Good", for all of their 11 studies used to derive the 2024 bias adjustment factor for the 50% TEA in Acetone method.

Gradko's AIR PT results for January – February 2024, April – June 2024, July –August 2024 and September – October 2024 was that 100 % of their results were deemed to be satisfactory.

Discussion of Choice of Factor to Use

Using the most recent national bias adjustment data (Version 06/25), a bias adjustment factor of **0.88** has been applied to all the diffusion tubes in the 2024 calendar year. For comparison, in 2023 a national bias adjustment factor of 0.83 was used.

The relevant examples were selected using the spreadsheet workflow by using the same laboratory, and preparation method.

We have not used a local bias adjustment although we have one tube co-located with our air quality monitoring station at Tally Ho. This is because the value provided using the national bias is more likely to be accurate across the varying locations. The bias adjustment factor obtained from the LAQM Support Website at <https://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html> . Table O below shows the bias factors for all the Nitrogen Dioxide tubes' years' results as shown in this report.

Table M. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	06/25	0.88
2023	National	03/24	0.83
2022	National	03/23	0.82

2021	National	03/22	0.83
2020	National	03/21	0.82
2019	National	03/20	0.87
2018	National	03/19	0.92
2017	National	03/18	0.97
2016	National	03/17	1.03

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Annualisation of Diffusion Tube Data

Data annualization can now be completed through application of the new Diffusion Tube Data Processing Tool. The new Diffusion Tube Data Processing Tool (DTDPT) was used to process all our diffusion tube data for 2024.

The tool is available here: [Diffusion Tube Data Processing Tool v5.4.xlsb](#)

The tool has been developed to calculate annual mean concentrations more easily for the diffusion tube monthly data, by amalgamating the following individual LAQM processing tools:

- Annualisation tool
- Precision and accuracy tool – calculation of local bias; and
- NO₂ fall off with distance calculator.

The tool produces outputs can be uploaded to the LAQM Portal via the Diffusion Tube Data Entry System (DTDES) upload facility. It is a mandatory requirement to submit NO₂ diffusion tube data. This is to provide local authorities with a single access point to submit all relevant information regarding LAQM.

Annualisation was only required for one diffusion tube in 2024. This tube was PBN 19 tube located on the rear façade of Dyson Court, off Tilling Road, in Brent Cross. It was exposed for four months only which is 33% (lies between 25% and 75%). It had to be taken down because it was in an area due to be demolished later that year.

Data from our automatic Tally Ho monitoring station also required annualisation because we only got approximately 50% data capture for 2024 (48.85% for NO₂ and 51.66 for PM₁₀) due to electricity and overheating failures amongst others.

Distance Adjustment

The following monitoring site nearly recorded an exceedance but was not representative of public exposure (PBN6/355 Hendon Way), therefore the online the “NO₂ “Fall-Off-With-Distance-Calculator” on the DTDP Tool was used. This works using the procedure specified in LLAQM.TG (19) to estimate the concentration at the nearest receptor.

PBN6 which is at 355 Hendon Way (8 m from relevant exposure; measurement made 1 m from kerb; 17.6 µg_m⁻³ local background annual mean) was adjusted from 38.3 µg_m⁻³ (bias adjusted) to 29.1µg_m⁻³. Refer to **Table T**.

Table N. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor <Chalgrove School >	Annualisation Factor <Haringey Priory Park South >	Annualisation Factor <Site 3 Name>	Annualisation Factor <Site 4 Name>	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g m}^{-3}$)	Annualised Annual Mean ($\mu\text{g m}^{-3}$)	Comments
PBN19	0.9023	0.8057			0.8540	41.2	35.2	Value decreased significantly

Table O. Automatic NO₂ Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	Enfield Bowes Primary School		Haringey Wood Green		Islington - Holloway Road		Enfield Derby Road	
			Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)
BN1	48.85	22.6	23.888	0.983	40.832	0.994	23.995	0.977	23.455	0.986
Average (R _a)			0.985							
Raw Data Annual Mean (M)			22.6							
Annualised Annual Mean (M x R _a)			22.3							

Table P. Automatic PM₁₀ Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	Haringey Wood Green		Islington - Holloway Road					
			Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)
BN1	51.66	16.66	13.924	0.960	16.316	1.0459				
Average (R _a)			1.003							
Raw Data Annual Mean (M)			16.7							
Annualised Annual Mean (M x R _a)			16.7							

Table Q. Automatic PM_{2.5} Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	Haringey Wood Green		Welwyn Hatfield					
			Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)
BN1	51.4	9.7	9.245	0.959	6.415	1.004				
Average (R _a)			0.981							
Raw Data Annual Mean (M)			9.66							
Annualised Annual Mean (M x R _a)			9.5							

Table R. 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
PBN6	1.0	9.0	38.3	17.6	29.1	

Appendix B Full Monthly Diffusion Tube Results for 2024

Table S. 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
PBN1	526278	190444	29.9	28.6	20.5	15.8	16.8	17.7	20.7	17.8	22.6	28.9	27.0	23.9	22.5	19.8		
PBN2	525410	190980	33.2	32.1	24.4	28.7	26.8	27.0	27.9	26.6	29.5	33.3	34.5	27.6	29.3	25.8		
PBN3	523754	191588	18.7	16.6	12.0	8.7	8.5	9.4	9.0	9.5	9.9		14.3	14.1	11.9	10.5		
PBN6	523102	188205	49.0	47.4	42.8	36.1	42.4	47.1	45.0	41.9	43.7		46.6	36.4	43.5	38.3	29.1	
PBN8	526346	192224	30.5	31.8	21.5	25.7	22.3	23.7	23.1	21.3	22.4	31.5	30.4	28.3	26.0	22.9		
PBN9	524965	187505	33.0	33.8	29.4	34.2	35.1	31.7	33.4	27.2	40.0		35.2		33.3	29.3		
PBN10	524496	196615	32.4	35.3	33.4	31.0	27.8	31.0	30.1	24.7	29.2	34.2	33.9	23.4	30.5	26.9		
PBN12	526381	194059	34.9	30.8	25.2	26.5	25.0	27.0	22.3	20.8	22.9	32.4	31.3	26.4	27.1	23.9		
PBN13	520968	193457	25.6	22.5	16.1	14.6	13.1	14.1	14.2	14.5			23.7	17.6	17.6	15.5		
PBN14	519497	192075	35.5	37.7	31.0	27.7	29.7	27.4	33.5	28.4	20.7		33.3	25.6	30.0	26.4		
PBN18	525278	187444	40.9	33.1	27.6	21.8	23.6	26.7	26.3	25.6	27.6		32.1	32.8	28.9	25.4		
PBN19	523348	187589	39.2	48.0	39.2	38.6									41.2	31.0		
PBN20	523885	185764	35.1	32.4	28.9	26.7	24.6	24.3	27.5	25.5	26.6		32.4	28.2	28.4	25.0		
PBN21	521354	191991	33.9	34.3	26.5	24.3	25.0	26.5	26.6	24.5	27.2		32.2	28.7	28.2	24.8		
PBN22	527270	189372	34.9	32.4	24.4	29.4	23.5	21.1	22.0	18.3	24.9	31.6	33.5	33.3	27.5	24.2		

- ☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table S.
- ☒ Annualisation has been conducted where data capture is <75% and >25% in line with LLAQM.TG19.
- ☐ Local bias adjustment factor used.
- ☒ National bias adjustment factor used.
- ☒ Where applicable, data has been distance corrected for relevant exposure in the final column.
- ☒ London Borough of Barnet 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 Maps of Monitoring Locations and AQMAs

Figure A: Maps of Non-Automatic Monitoring Sites

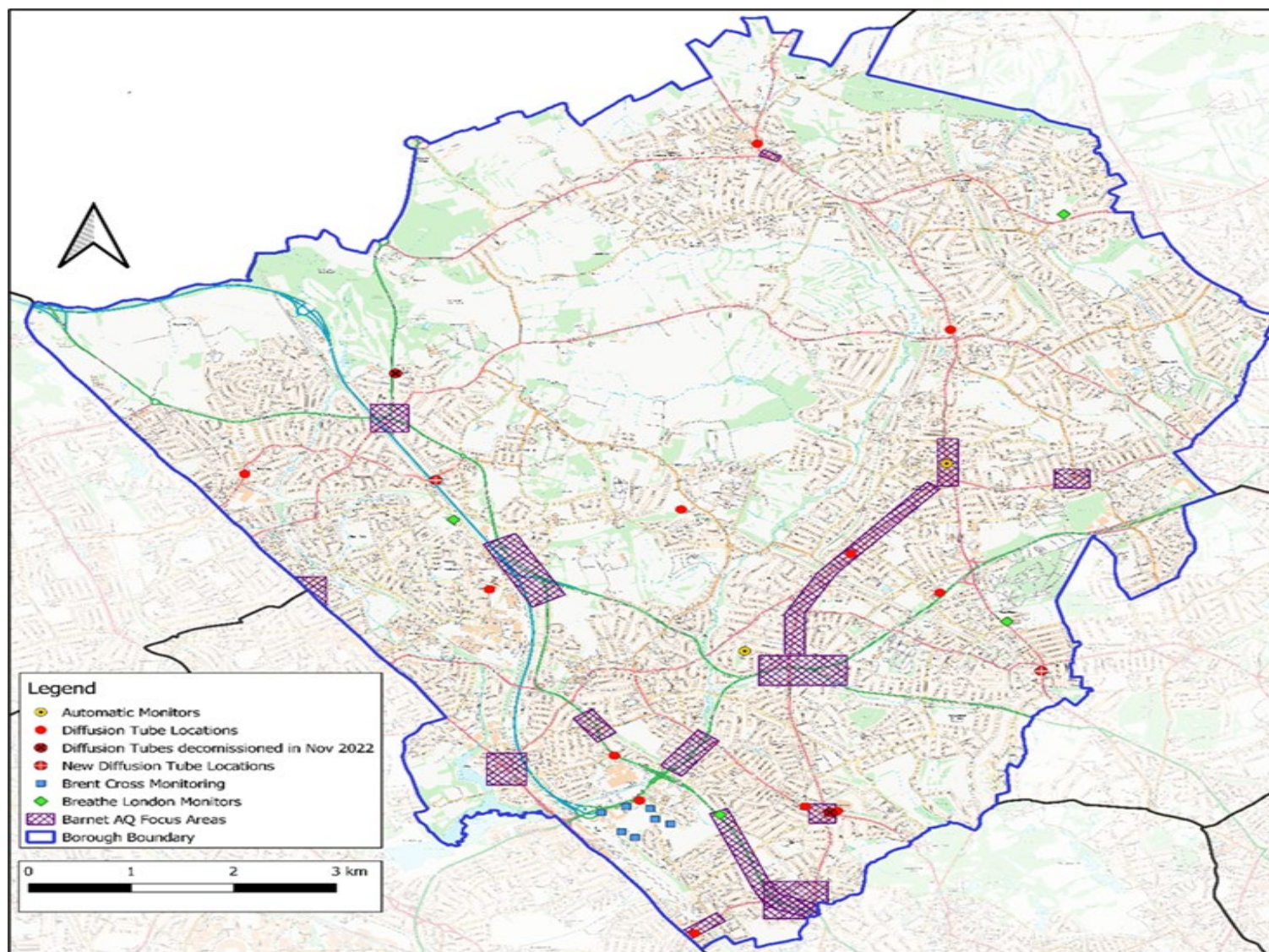


Figure A1: Map of whole borough with all monitoring locations

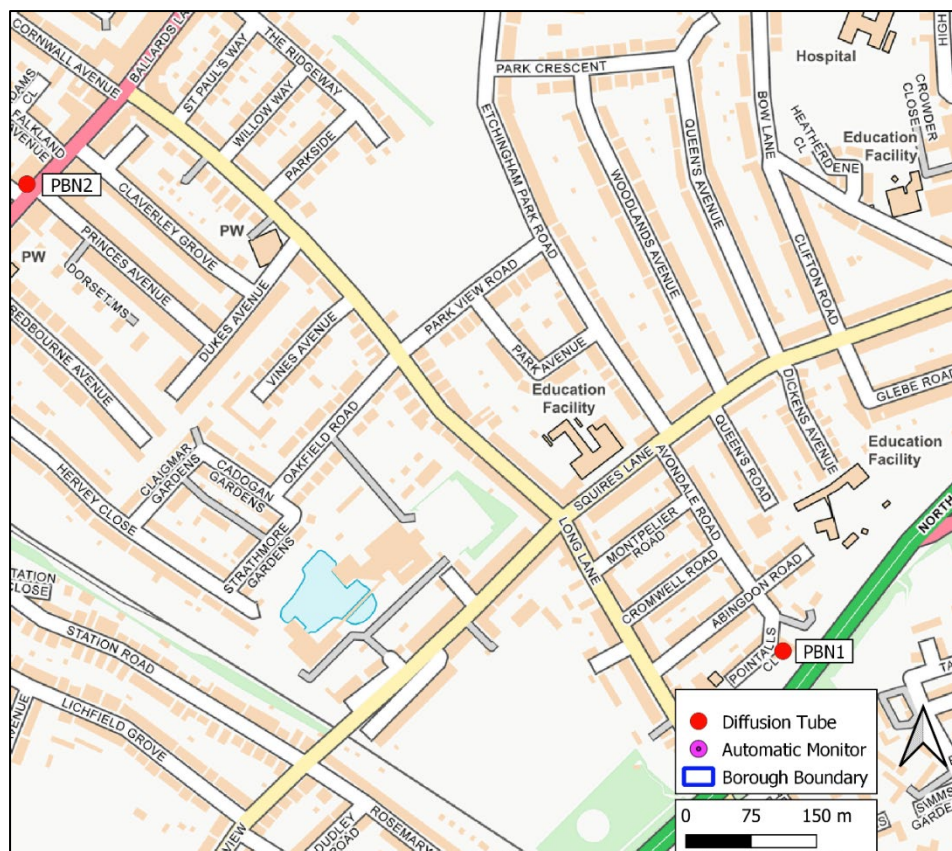


Figure A2: Map of Pointalls Close (PBN1)

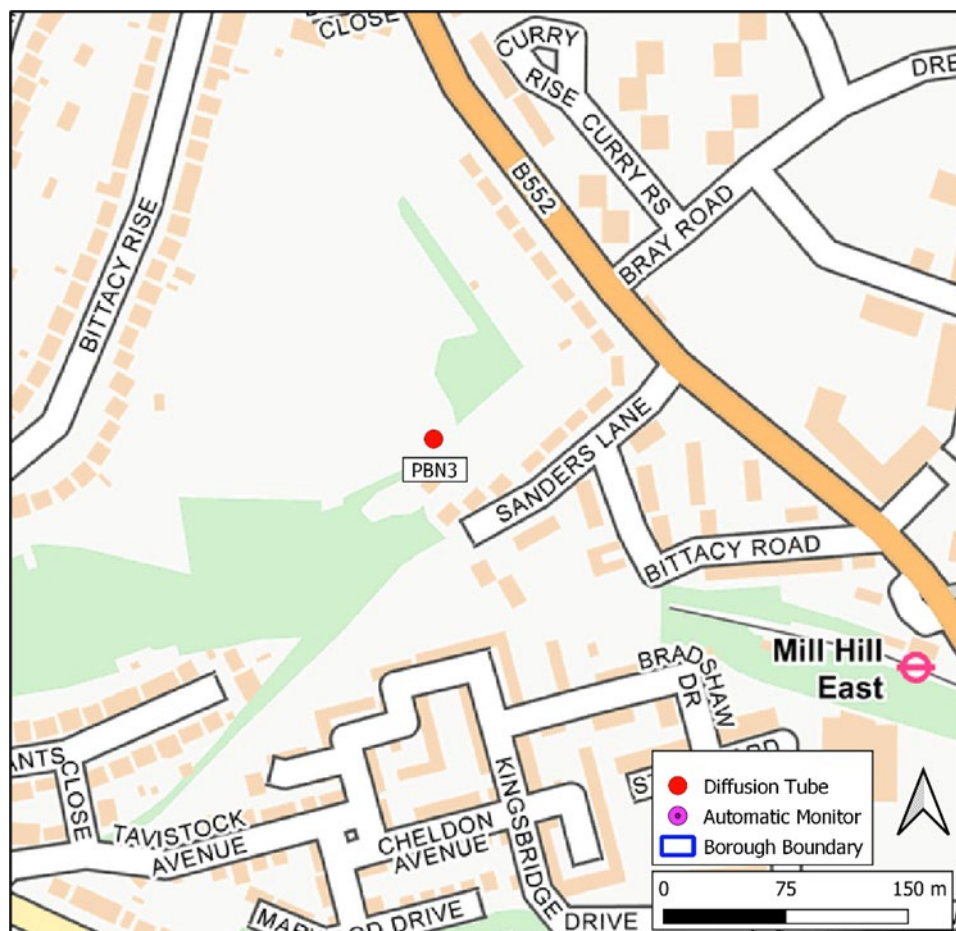


Figure A3: Map of Sanders Lane (PBN3)

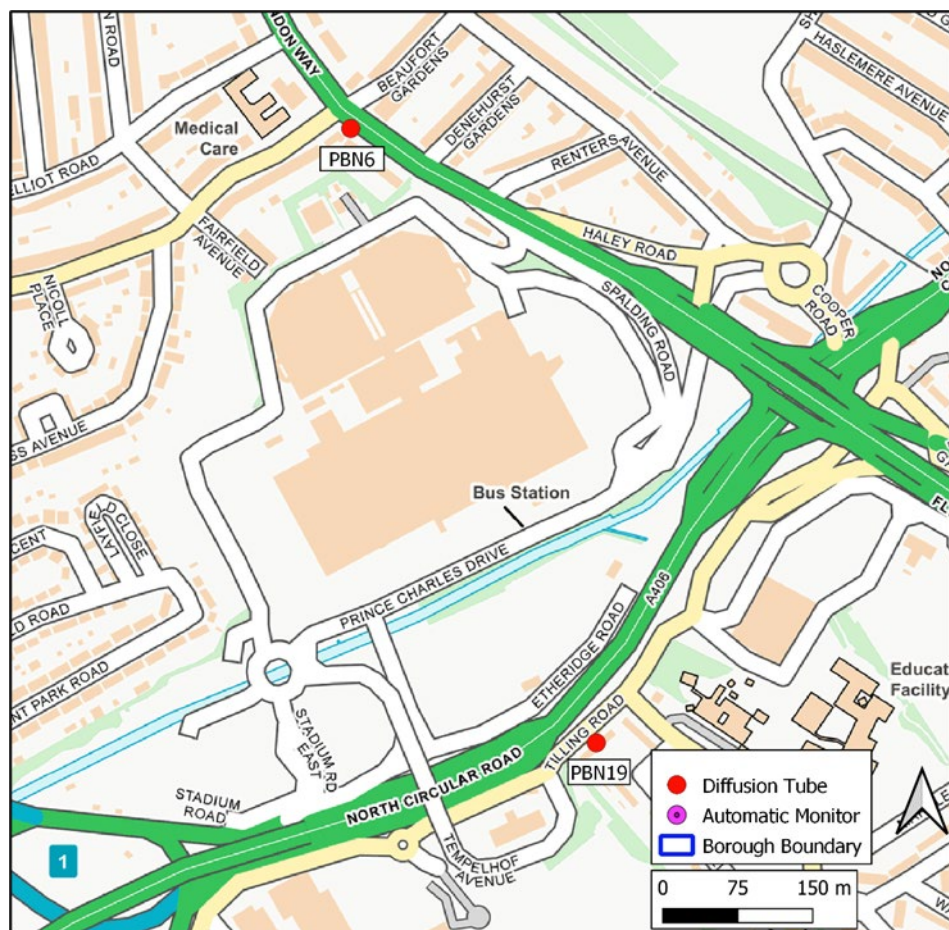


Figure A4: Map of 355 Hendon Way and behind 7-12 Dyson Court (PBN6 and 19)

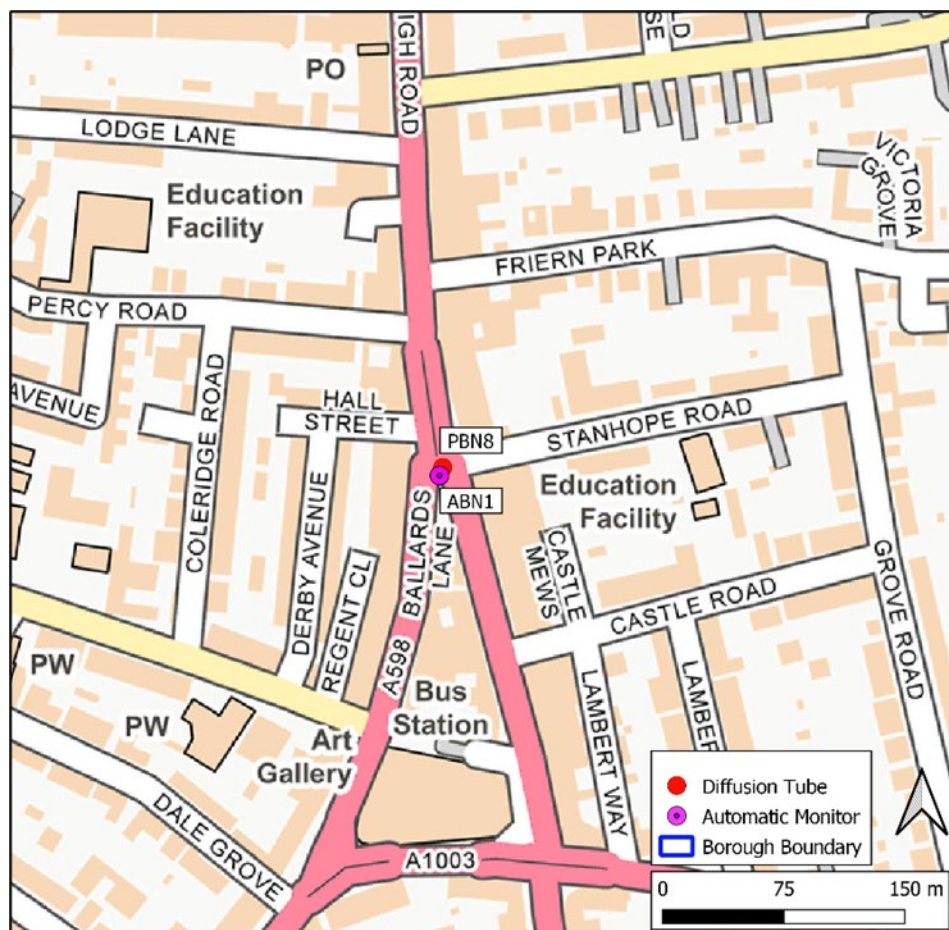


Figure A5: Map of Tally Ho (PBN8)

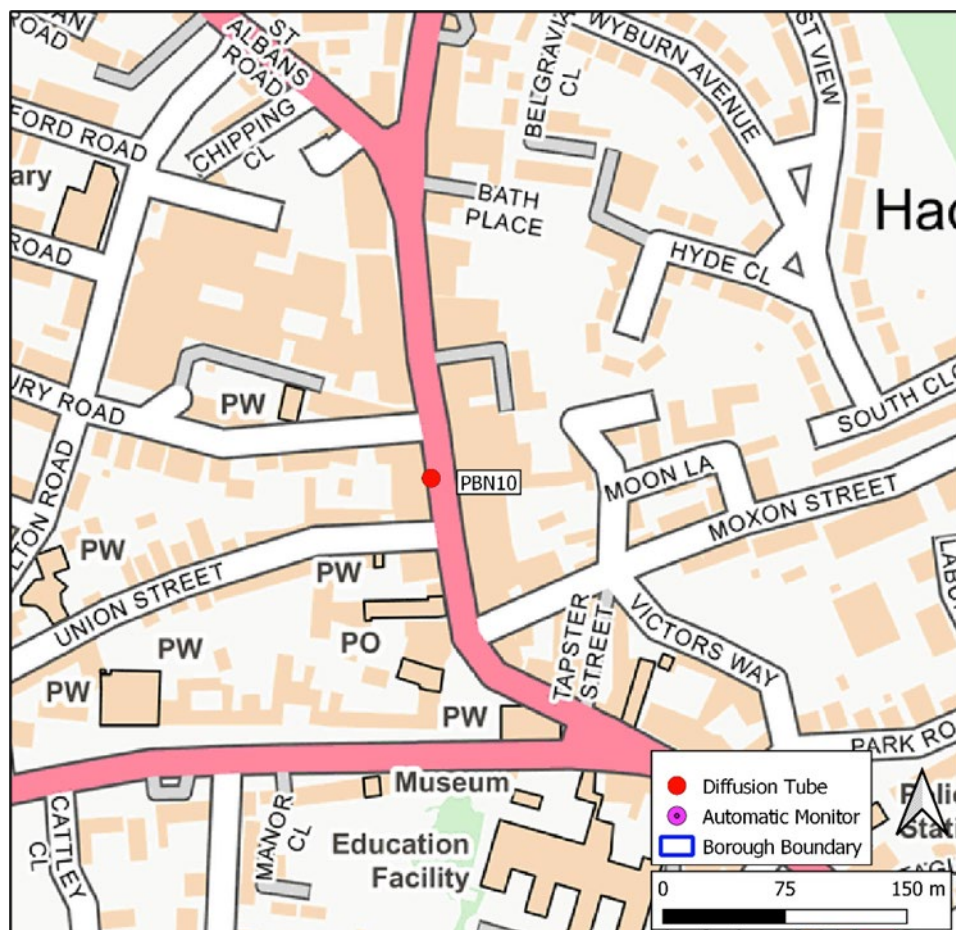


Figure A6: Map of High Street, High Barnet (PBN10)



Figure A7: Map of 1295 High Road Whetstone (PBN12)



Figure A8: Map of Courtland Avenue (PBN13)

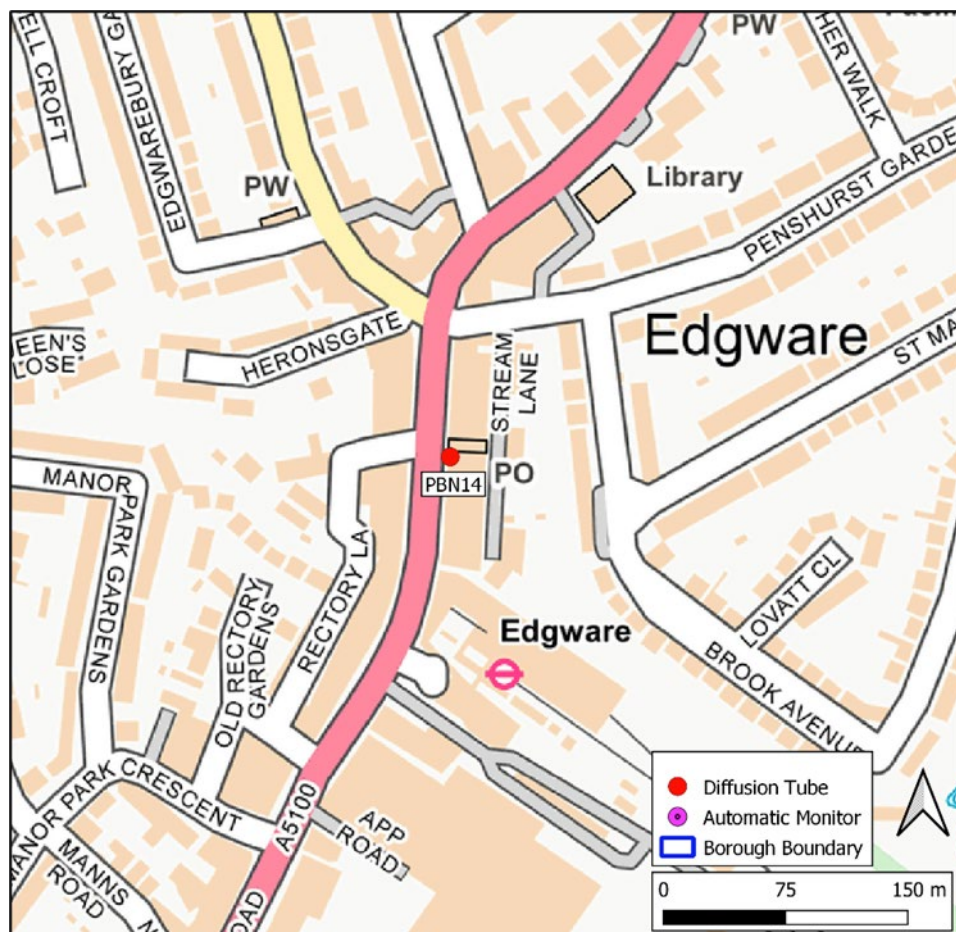


Figure A9: Map of William Hill, Station Road Edgware (PBN14)



Figure A10: Map of 52 Golders Green Road, Back of Golders Green Bus Station, Golders Green National Express stop (PBN9, 18 and 17)



Figure A10: Map of Flats above 16 Cricklewood Lane (PBN20)

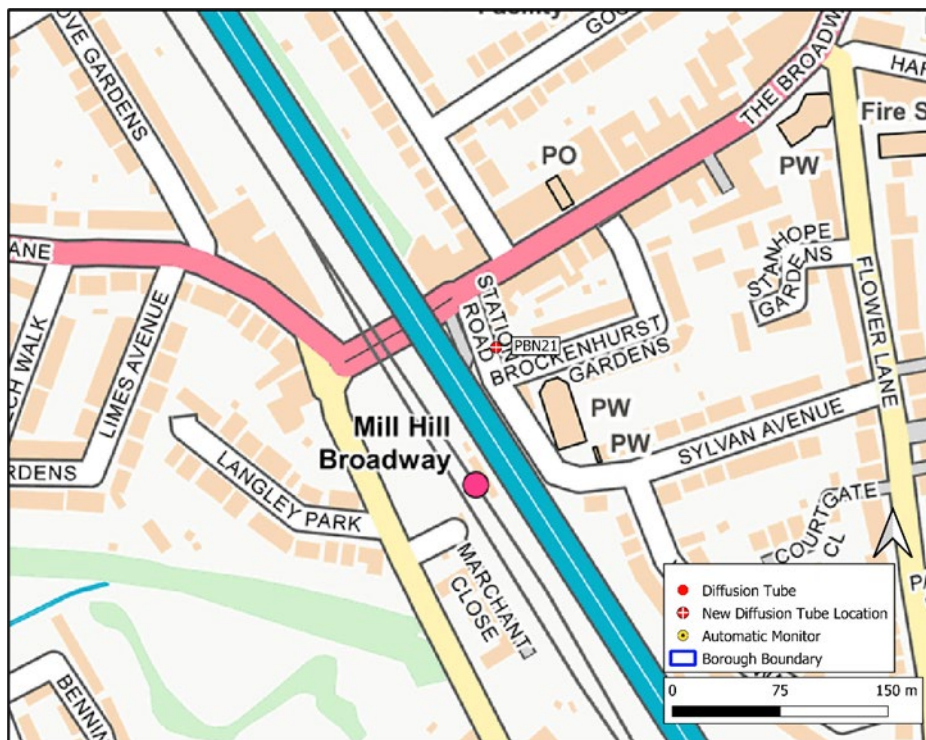


Figure A11: Map of 8/9 Station Road Mill Hill (PBN21)

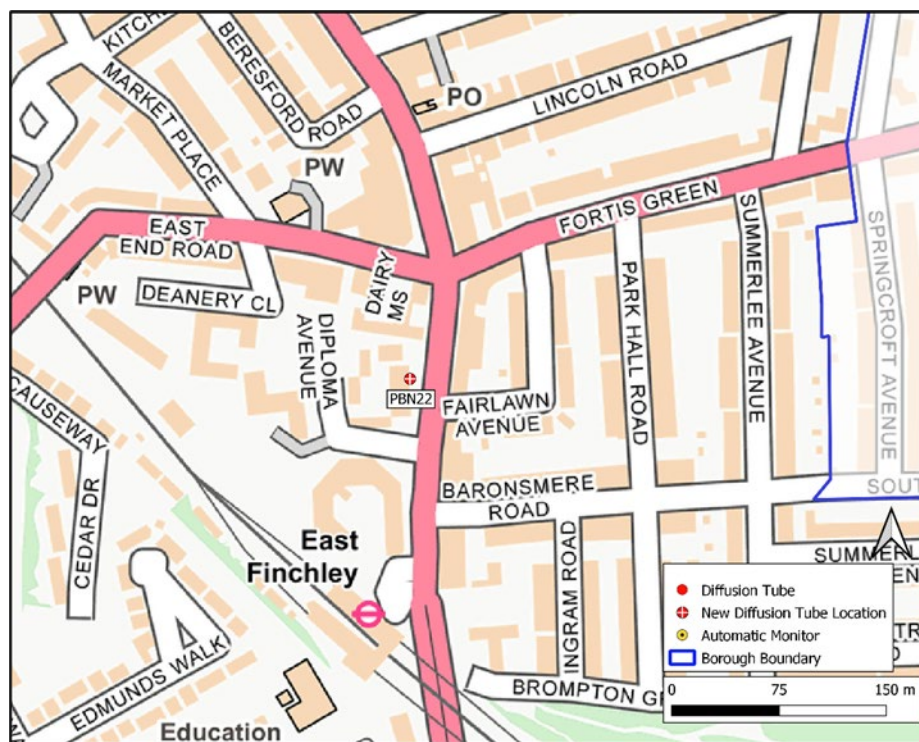


Figure A12: Map of Diploma Court East Finchley (PBN22)

Figure B. Maps of Automatic Monitoring Sites

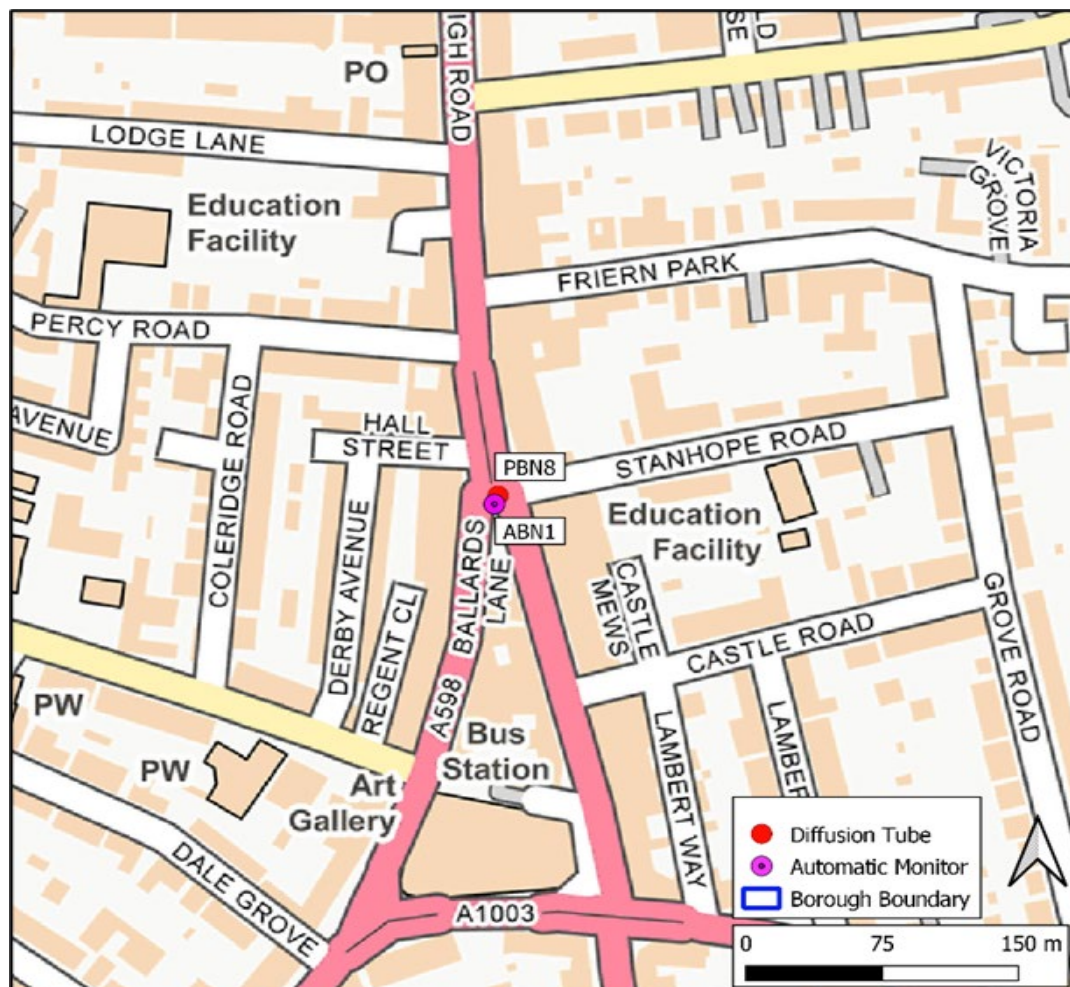


Figure B1: Map of Tally Ho Monitoring Station (BN1)

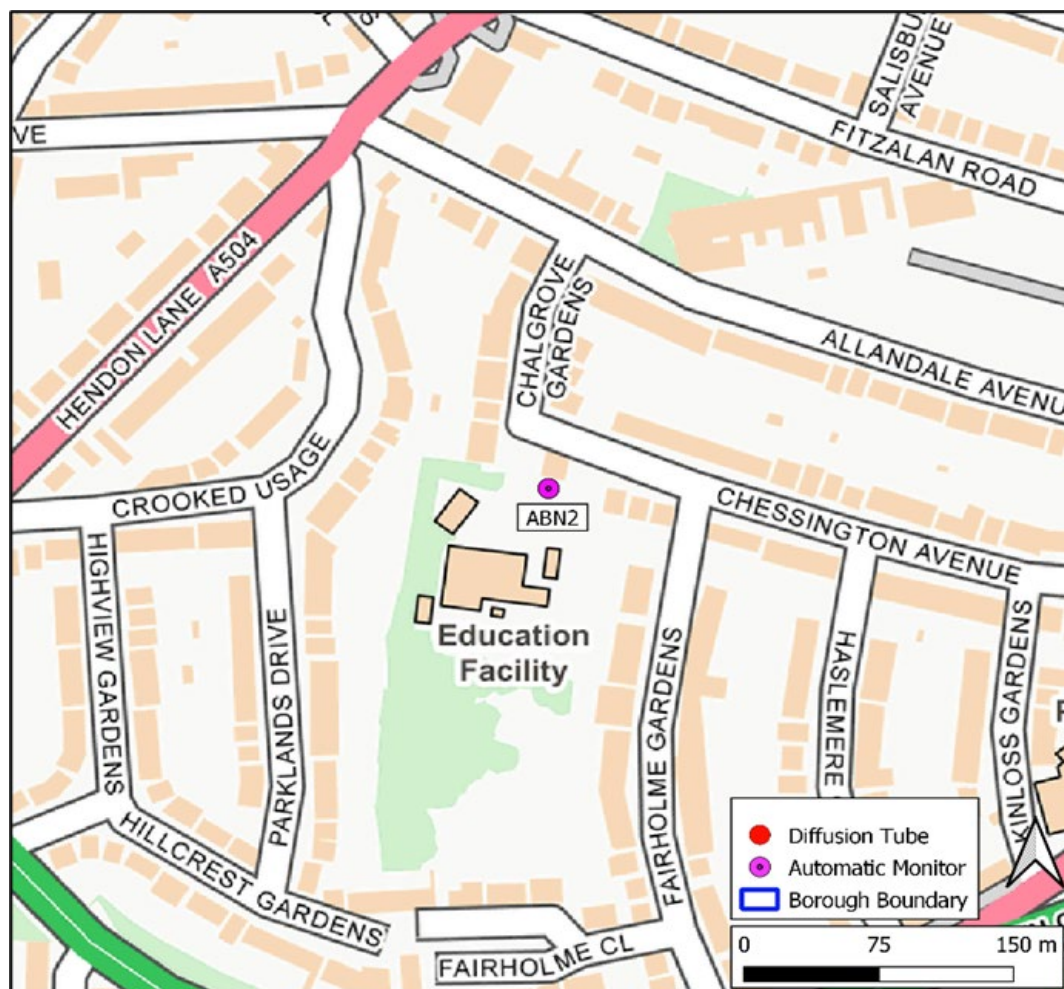


Figure B2: Map of Chalgrove School Monitoring Station (BN2)

London Borough of Brent Air Quality Annual Status Report for 2024

Date of publication: May 2024



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

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

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Abbreviations

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

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

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

Automatic Monitoring Sites

The London Borough of Brent operates four automatic monitoring sites: three are roadside sites (BT4, BT6 and BT8) and one is an industrial site (BT5). Sites BT4, BT5, BT6 and BT8 measure NO₂, PM₁₀ and PM_{2.5}; and BT4 also measures O₃. All four are located within the Council's Air Quality Management Area (AQMA). The automatic monitoring sites continuously measure pollutant levels to determine annual mean concentrations of NO₂, PM₁₀ and PM_{2.5}, 24-hour mean concentrations of PM₁₀, and 1-hour mean concentrations of NO₂. Details of automatic monitoring sites are given in Table B.

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)
BT4	IKEA	Roadside	520866	185169	NO ₂ , PM ₁₀ , PM _{2.5} , O ₃	Yes	Borough wide AQMA	Chemiluminescent; BAM	38.0	3.7	1.6
BT5	Neasden Lane	Industrial	521511	185204	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Borough wide AQMA	Chemiluminescent; BAM	35.0	4.0	2.5
BT6	John Keble Primary School	Roadside	521619	183554	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Borough wide AQMA	Chemiluminescent; BAM	10.0	2.0	2.5
BT8	Ark Franklin Primary Academy	Roadside	523716	183030	NO ₂ , PM ₁₀ , PM _{2.5}	Yes	Borough wide AQMA	Chemiluminescent; BAM	10.0	3.3	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 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	Junction of Kenton Road / Upton Gardens	Roadside	516929	188560	NO2	Yes	15.0	2.0	No	1.5
2	Harrow Road, Sudbury Court Drive	Roadside	515793	186042	NO2	Yes	10.0	1.0	No	1.5
4	Junction of Shaftesbury Avenue / Woodcock Hill	Roadside	518240	187747	NO2	Yes	6.0	1.0	No	1.5
7	Bridgewater Road / Ealing Road	Roadside	517942	183721	NO2	Yes	17.0	2.0	No	1.5
9	Junction of East Lane / Wembley Hill Road	Roadside	518499	186168	NO2	Yes	20.0	2.0	No	1.5
17	Old Church Lane junction with Neasden Lane	Roadside	520480	186537	NO2	Yes	4.0	1.0	No	1.5
21A	Central Way, Park Royal	Roadside	520077	182853	NO2	Yes	4.0	1.0	No	1.5
22	Junction of Kingsbury Road / Edgware Road	Roadside	521447	188730	NO2	Yes	5.0	1.0	No	1.5
23	Junction North Circular Road / Chartley Avenue	Roadside	521213	186125	NO2	Yes	10.0	2.0	No	1.5
26	Dudden Hill Lane junction with Willesden High Road	Roadside	522191	184821	NO2	Yes	19.0	1.0	No	1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
29	Junction Dollis Hill Lane / Cricklewood	Roadside	523191	186571	NO2	Yes	12.0	1.0	No	1.5
30	Chichele Road near Melrose Avenue	Roadside	523663	185353	NO2	Yes	9.8	1.0	No	1.5
33A	Fryent Country Park	Roadside	519572	187691	NO2	Yes	50.0	1.0	No	1.5
41	R/O 246 Neasden Lane	Roadside	521455	185920	NO2	Yes	3.0	4.0	No	1.5
48	Kilburn Park Road near junction with Shirland Road	Roadside	525196	182517	NO2	Yes	2.0	1.0	No	1.5
52A, 52B, 52C, 52D	IKEA, Hut, North Circular Road (4 tubes)	Roadside	520874	185173	NO2	Yes	10.0	1.0	Yes	1.5
53	Junction Ealing Road /Wembley High Road	Roadside	518026	185028	NO2	Yes	15.0	1.0	No	1.5
54	Ealing Road/Riverside Gardens	Roadside	518236	183207	NO2	Yes	4.0	1.0	No	1.5
60	Junction of Bridge Road/Forty Avenue	Roadside	519475	186557	NO2	Yes	35.0	1.0	No	2.0
61	Forty Lane, F/O Old Brent Town Hall	Roadside	519762	186600	NO2	Yes	40.0	1.0	No	2.0
62	Junction of Kings Drive/Forty Lane	Roadside	519667	186604	NO2	Yes	40.0	1.0	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)
63	King's Drive, Opposite 37 King's Drive	Roadside	519703	187007	NO2	Yes	7.0	1.0	No	2.5
64	The Paddocks, Opposite 9 The Paddocks	Roadside	519824	186715	NO2	Yes	20.0	1.0	No	2.1
65	Junction of Aybone Road/ NCR, Next to 517 NCR	Roadside	521313	186529	NO2	Yes	7.0	1.0	No	2.2
66	Junction of Heather Road/Tanfield Avenue	Roadside	521912	186514	NO2	Yes	20.0	1.0	No	2.1
67	Dawpool Road, F/O 24 Dawpool Road	Roadside	521651	186611	NO2	Yes	5.0	1.0	No	2.1
68	Junction of Randall Avenue/NCR, Next to 730 NCR	Roadside	521448	186626	NO2	Yes	5.0	1.0	No	2.5
69	Wrentham Avenue, F/O 65 Wrentham Avenue	Roadside	523782	183527	NO2	Yes	8.0	1.0	No	2.1
70	Junction of Peploe Road/Chevening Road, F/O 72 Chevening Road	Roadside	523828	183338	NO2	Yes	5.0	1.0	No	2.1
71	Queens Park recreational area,	Urban Background	524179	183232	NO2	Yes	25.0	45.0	No	2.1

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)
	On CCTV camera post									
72	Harvist Road, F/O 139 Harvist Road	Roadside	524142	183120	NO2	Yes	5.0	1.0	No	2.1
73	Junction of Harvist Road/Salisbury Road, Opposite Kilburn Police Station	Roadside	524607	183267	NO2	Yes	3.0	1.0	No	2.1
74	Junction of Salisbury Road/Chevening Road	Roadside	524283	183882	NO2	Yes	5.0	3.0	No	2.1
75	Junction of Woodcock Hill/Woodcock Hill	Roadside	517499	187778	NO2	Yes	15.0	3.0	No	2.1
76	Lindsay Drive, near junction with Branksome way	Roadside	518430	188406	NO2	Yes	5.0	1.0	No	2.1
77	Beverly Drive, near junction of Sandhurst road	Roadside	519100	189827	NO2	Yes	11.0	1.0	No	2.1
78	Harrow Road junction of Watford Road	Roadside	516721	185478	NO2	Yes	12.0	2.0	No	2.1
79A, 79B, 79C	Ark Franklin AQ station	Roadside	523721	183008	NO2	Yes	10.0	2.0	Yes	1.5
BRT42	Police Station, Craven Park	Roadside	521131	183995	NO2	Yes	3.0	3.0	No	1.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
BRT43	Pitfield Way	Roadside	520242	184541	NO2	Yes	20.0	2.0	No	1.5
BRT53	High Road Wembley	Roadside	518303	185181	NO2	Yes	4.0	0.5	No	1.5
BRT55	High Street, Harlesden	Roadside	521743	183361	NO2	Yes	3.0	0.5	No	1.5
BRT56	Chamberlayne Road	Roadside	523635	183153	NO2	Yes	15.0	0.5	No	1.5
BRT57	Kilburn Bridge	Roadside	525419	183612	NO2	Yes	8.0	0.5	No	1.5
BRT58	51 High Road, Willesden	Roadside	523031	184655	NO2	Yes	2.0	0.5	No	1.5
SZ1	Harlesden, Minet Avenue j/w Acton Lane	Roadside	521103	183408	NO2	Yes	0.0	0.3	No	
SZ2	Wykeham, Annesley Close j/w Aboyne Road	Roadside	521069	186250	NO2	Yes	0.0	0.5	No	
SZ3A	Elsley Primary School, Tokyngton Avenue	Roadside	518900	184774	NO2	Yes	0.0	2.0	No	
SZ3B	Esley Primary School Berkhamsted Avenue at Gaddesden Avenue	Roadside	518913	184670	NO2	Yes	0.0	2.2	No	
SZ4A	John Keble, Crownhill Road Manor Park Road to Harlesden Gardens	Roadside	521643	183579	NO2	Yes	0.0	0.5	No	

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)
SZ4B	Convent Jesus & Mary Language College, Crownhill Road Manor Park Road to Harlesden Gardens	Roadside	521718	183649	NO2	Yes	0.0	0.4	No	
SZ4C	MapleWalk, Crownhill Road Manor Park Road to Harlesden Gardens	Roadside	521781	183700	NO2	Yes	0.0	0.7	No	
SZ41	Leopold, Hawkeshead Road j/w Oldfield Road & Roundwood Road	Roadside	521624	184275	NO2	Yes	0.0	0.4	No	
SZ5A	St Joseph Primary, Goodson Road j/w Brownlow Road & Leopold Road	Roadside	521394	184264	NO2	Yes	0.0	0.4	No	
SZ5B	St Joseph Primary, Leopold Road j/w Goodson Road & Northcote Road	Roadside	521364	184185	NO2	Yes	0.0	0.4	No	
SZ6	Preston Park, College Road Glendale Gardens & Thirlmere Gardens	Roadside	517900	187137	NO2	Yes	0.0	0.8	No	

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)
SZ7	Mora, Mora Road J/W Temple Road & Wotton Road/St Michael's Road	Roadside	523119	185933	NO2	Yes	0.0	0.8	No	
SZ8	St Marys CE Primary, Garnet Road j/w Mayo Road	Roadside	521314	184712	NO2	Yes	0.0	0.4	No	
SZ10	Christ church, Clarence Road, Willesden Lane & Torbay Road	Roadside	524585	184031	NO2	Yes	0.0	0.8	No	
SZ11A	Our Lady of Lourdes, Wesley Road at Hillside	Roadside	520480	183908	NO2	Yes	0.0	0.4	No	
SZ11B	Stonebridge Primary, Wesley Road at Hillside	Roadside	520525	183861	NO2	Yes	0.0	0.4	No	
SZ12	Our Lady of Grace Infants, Dollis Hill Avenue at A5 & Mount Road	Roadside	523167	186491	NO2	Yes	0.0	0.3	No	
SZ14A	St Joseph Juniors, Chatsworth Avenue j/w Harrow Road	Roadside	518837	185102	NO2	Yes	0.0	0.3	No	
SZ14B	St Joseph Infants, W Avenuerley Avenue j/w Harrow Road	Roadside	518835	185012	NO2	Yes	N/A	0.0	No	

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)
SZ15	St Mary Magdalens, Linacre at junction with Acland Road	Roadside	522934	184702	NO2	Yes	N/A	0.6	No	
SZ16	Convent of J & M Infants, Access Road to school between 19 & 25	Roadside	523039	184745	NO2	Yes	0.0	0.6	No	
SZ17	Northview, Northview Cres j/w Southview	Roadside	521618	185525	NO2	Yes	N/A	1.9	No	
SZ18	Princes Frederica, Purves Road	Roadside	523224	183045	NO2	Yes	N/A	1.1	No	
SZ19	Ark Franklin, Kempe Road between Chamberlayne Road & Peploe Road	Roadside	523744	183076	NO2	Yes	N/A	0.4	No	
SZ20A	Queens Park Community, Aylestone Avenue between Chudleigh Road & Christchurch Avenue	Roadside	523678	183956	NO2	Yes	N/A	0.6	No	
SZ20B	Malorees I & J, Christchurch Avenue between Aylestone Avenue & Brondesbury Park	Roadside	524003	183995	NO2	Yes	N/A	0.7	No	

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)
SZ22	Kingsbury High, Bacon Lane from school to Roe Lane	Roadside	519883	189197	NO2	Yes	0.0	0.3	No	
SZ23	Kingsbury Green, Old Kenton Lane	Roadside	520065	188673	NO2	Yes	N/A	0.4	No	
SZ231	Slough Lane (St Robert Southwell Primary School)	Roadside	520211	188478	NO2	Yes	0.0	2.4	No	
SZ24	Mount Stewart I & J, Mount Stewart Avenue between Abercorn Gardens and Manning Gardens	Roadside	517739	187912	NO2	Yes	N/A	0.3	No	
SZ25A	Claremont High School	Roadside	518243	188627	NO2	Yes	0.0	1.8	No	
SZ25B	Uxendon School	Roadside	518184	188539	NO2	Yes	0.0	0.8	No	
SZ26	Sudbury Primary School	Roadside	516559	185913	NO2	Yes	0.0	0.6	No	
SZ27	Oakington Manor School	Roadside	519913	185066	NO2	Yes	0.0	1.2	No	
SZ63	Preston Manor Upper School, Hollycroft Avenue J/W Highfield Avenue	Roadside	518603	186544	NO2	Yes	0.0	0.6	No	
SZ81	Brentfield Primary, Meadow Garth by Homefield Close	Roadside	520512	184580	NO2	Yes	N/A	2.8	No	
PM14A	Lawrence Avenue	Roadside	520763	183700	NO2	Yes	N/A	2.2	No	

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)
PM14B	Craven Park	Roadside	521049	183874	NO2	Yes	N/A	1.6	No	
PM14C	Nicoll Road	Roadside	521401	183542	NO2	Yes	N/A	0.5	No	
PM14D	Connaught Road	Roadside	521321	183478	NO2	Yes	N/A	0.4	No	
PM16A	Fortunegate Road	Roadside	521348	183912	NO2	Yes	N/A	1.8	No	2.5
PM16B	Roundwood Road	Roadside	521741	184243	NO2	Yes	N/A	0.5	No	2.2
PM19A	Chamberlayne road (Manor School)	Roadside	523453	183500	NO2	Yes	0.0	2.0	No	2.3
PM19B	Tiverton Road	Roadside	523931	183500	NO2	Yes	N/A	0.3	No	2.3
PM19C	Salisbury road (Salisbury primary school)	Roadside	524520	183495	NO2	Yes	0.0	0.3	No	2.3
PM20C	Kilburn High Road, opposite The Black Lion Pub	Roadside	524908	184273	NO2	Yes	N/A	0.3	No	2.2
PM22A	Walm Lane	Roadside	523854	185249	NO2	Yes	N/A	0.4	No	
PM22B	Lydford Road	Roadside	523770	185086	NO2	Yes	N/A	0.6	No	
PM22C	Exeter Road	Roadside	524333	184827	NO2	Yes	N/A	0.5	No	
PM22D	Shoot-up Hill	Roadside	524486	184877	NO2	Yes	N/A	0.6	No	
PM22E	Dartmouth Road	Roadside	523846	184875	NO2	Yes	N/A	0.5	No	
PM23A	Chapter Road	Roadside	522708	184973	NO2	Yes	N/A	0.4	No	
PM23B	Acland Road	Roadside	522970	184812	NO2	Yes	N/A	0.3	No	
PM25A	Agave Road	Roadside	523246	185765	NO2	Yes	N/A	0.2	No	2.3
PM25B	Ashford Road	Roadside	523581	185671	NO2	Yes	N/A	0.6	No	2.4
PM25C	Anson Road	Roadside	523560	185395	NO2	Yes	N/A	1.8	No	2.4
PM26A	Gladstone Park Gardens	Roadside	522941	186263	NO2	Yes	N/A	0.5	No	2.4

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)
PM26B	Dollis Hill Lane (Our Lady of Grace School)	Roadside	522563	186233	NO2	Yes	0.0	0.6	No	2.4
PM28A	East Lane	Roadside	517811	186252	NO2	Yes	N/A	0.9	No	
PM28B	Clarendon Gardens	Roadside	518367	185872	NO2	Yes	N/A	1.2	No	
PM28C	Castleton Avenue	Roadside	518172	186004	NO2	Yes	N/A	0.9	No	
PM28D	St John's Road	Roadside	518076	185421	NO2	Yes	N/A	0.3	No	
PM28E	Meadow Way	Roadside	517952	185913	NO2	Yes	N/A	2.1	No	
PM29A	Carlton Avenue East	Roadside	517896	186958	NO2	Yes	N/A	2.0	No	2.4
PM29B	Grasmere Avenue	Roadside	518008	187311	NO2	Yes	N/A	0.8	No	2.4
PM29C	Preston Road	Roadside	518280	187411	NO2	Yes	N/A	0.2	No	2.4
PM32A	Princes Avenue	Roadside	519588	189311	NO2	Yes	N/A	0.7	No	2.4
PM32B	Brampton Road	Roadside	519432	188972	NO2	Yes	N/A	0.4	No	2.3
PM32C	Berkeley Road	Roadside	519268	188982	NO2	Yes	N/A	2.5	No	
PM36A	Cecil Avenue	Roadside	518590	185172	NO2	Yes	N/A	0.4	No	
PM36B	Harrow Road	Roadside	519200	184899	NO2	Yes		0.9	No	

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

NO₂ Concentrations

Table D provides annual mean NO₂ concentrations at automatic monitoring sites for the years 2018 to 2024 inclusive. The concentration values are those at the monitoring site. Exceedances of the 40 µg m⁻³ AQO (Table A) for annual mean NO₂ are highlighted. Details of monitoring site QA/QC for 2024 measurements are given in Appendix A.

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
BT4	520866	185169	Roadside	97.4	97.4	<u>71.0</u>	<u>63.0</u>	49.0	46.4	43.2	38.7	30.9
BT5	521511	185204	Industrial	99.5	99.5	38.0	38.0	29.0	30.0	28.0	24.8	22.9
BT6	521619	183554	Roadside	98.4	98.3	39.0	37.0	29.0	28.7	27.7	24.1	21.8
BT8	523716	183030	Roadside	99.6	99.6	46.0	41.0	29.0	31.5	28.6	23.0	23.2

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%).

All automatic monitoring sites saw a decrease in concentrations from 2023 to 2024. Since 2019, the roadside automatic monitoring stations have measured, on average, a decrease of 45% in the annual mean concentration of NO₂. The industrial site (Neasden, BT5) has seen a decrease of 39.7% since 2019.

The monitoring location BT4 (IKEA, North Circular) fell below the NO₂ annual mean AQO of 40 µg m⁻³ in 2023 for the first time in seven years. In 2024, there was a further decrease to 30.9 µg m⁻³ in 2024, taking it below the threshold of being within 10% of the AQO of 40 µg m⁻³ (Table A). In 2024, monitoring locations BT5, BT6 and BT8 were below the WHO interim 2 guideline² of 30 µg m⁻³ (Table A) but above the WHO guideline of 10 µg m⁻³ (Table A). The trends in annual mean NO₂ concentrations are illustrated in Figure 1.

Figure 1. Graph showing trend of annual mean concentrations for nitrogen dioxide from 2018-2024

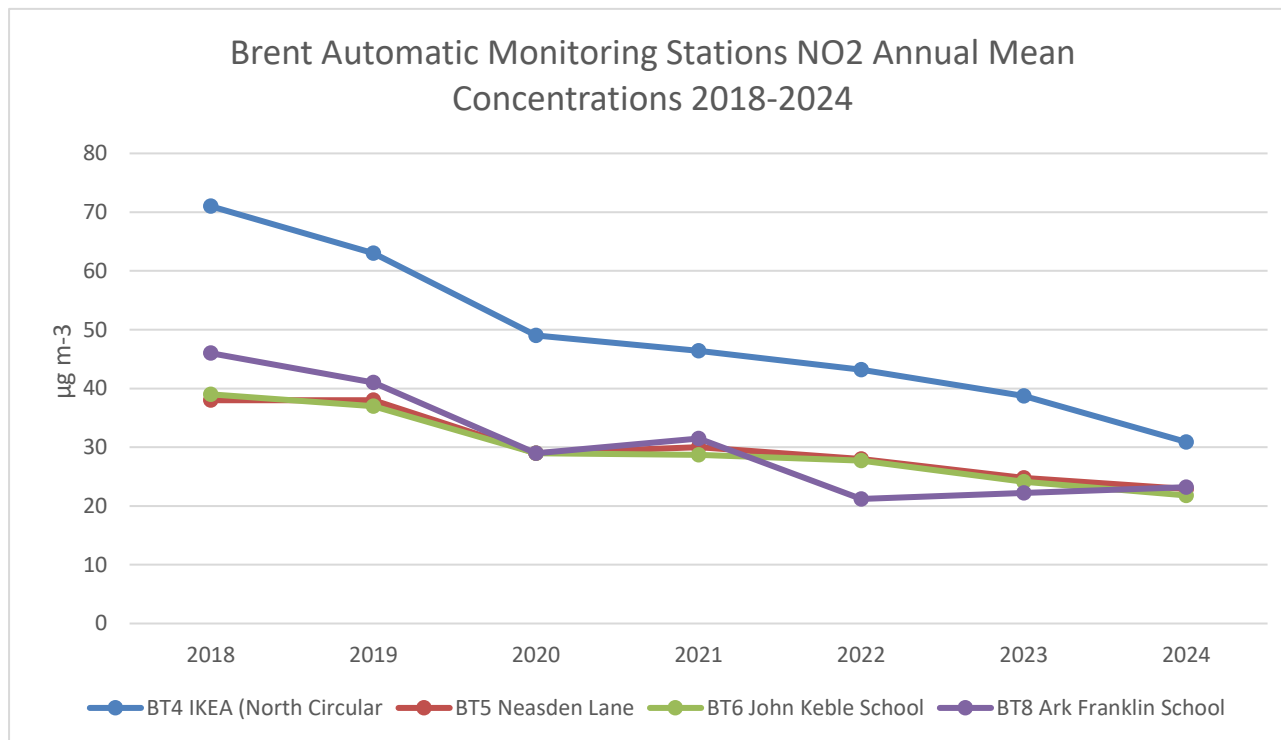


Table E. Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg m⁻³)

Table E provides annual mean NO₂ concentrations at non-automatic monitoring sites for the years 2018 to 2024 inclusive. The concentration values are those at the monitoring site. Exceedances of the 40 µg m⁻³ AQO (Table A) for annual mean NO₂ are highlighted. Details of monitoring site QA/QC for 2024 measurements are given in Appendix A.

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	516929	188560	Roadside	89.8	89.8	<u>LD</u>	39.8	28.4	31.8	27.7	22.3	20.7
2	515793	186042	Roadside	80.7	80.7	<u>LD</u>	40.6	27.4	33.9	31.4	18.9	22.9
4	518240	187747	Roadside	80.7	80.7	<u>LD</u>	37.9	28.9	30.2	30.9	22.7	22.6
7	517942	183721	Roadside	0.0	0.0	<u>LD</u>	56.2	37.2	49.8	46.7	28.0	-
9	518499	186168	Roadside	89.8	89.8	<u>LD</u>	47.4	35.1	40.5	39.2	20.3	23.7
17	520480	186537	Roadside	83.6	83.6	<u>LD</u>	51.6	36.0	39.0	40.4	22.0	30.9
21A	520077	182853	Roadside	80.7	80.7	<u>LD</u>	41.6	30.6	32.4	30.7	21.7	23.8
22	521447	188730	Roadside	98.4	98.4	<u>LD</u>	46.9	36.6	44.9	35.5	26.6	28.3
23	521213	186125	Roadside	90.6	90.6	<u>LD</u>	83.1	58.4	60.9	53.7	30.5	43.1
26	522191	184821	Roadside	98.4	98.4	<u>LD</u>	39.5	25.8	31.1	33.2	21.8	24.6
29	523191	186571	Roadside	74.3	74.3	<u>LD</u>	35.3	26.6	29.3	28.8	23.8	19.7
30	523663	185353	Roadside	90.6	90.6	<u>LD</u>	37.7	26.2	29.2	29.6	23.9	25.1
33A	519572	187691	Roadside	98.4	98.4	<u>LD</u>	40.2	26.0	29.1	27.9	17.6	20.3

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
41	521455	185920	Roadside	76.1	76.1	<u>LD</u>	42.3	43.1	50.6	46.7	40.4	42.7
48	525196	182517	Roadside	98.4	98.4	<u>LD</u>	41.8	30.1	33.3	30.3	24.6	23.4
52a, 52b, 52c, 52d	520874	185173	Roadside	98.4	98.4	<u>LD</u>	70.6	46.6	46.2	44.4	37.7	34.7
53	518026	185028	Roadside	88.5	88.5	<u>LD</u>	71.5	49.9	64.5	62.4	28.6	41.8
54	518236	183207	Roadside	98.4	98.4	<u>LD</u>	42.3	27.1	31.2	30.6	25.4	23.2
60	519475	186557	Roadside	80.2	80.2	<u>LD</u>	47.9	33.1	44.3	42.7	24.2	30.3
61	519762	186600	Roadside	90.6	90.6	<u>LD</u>	65.0	49.6	61.2	59.0	25.2	30.8
62	519667	186604	Roadside	88.5	88.5	<u>LD</u>	40.6	26.6	30.4	31.6	31.0	43.5
63	519703	187007	Roadside	98.4	98.4	<u>LD</u>	26.0	19.0	20.5	20.2	27.9	15.4
64	519824	186715	Roadside	90.9	90.9	<u>LD</u>	33.5	23.0	28.5	28.0	28.0	21.9
65	521313	186529	Roadside	98.4	98.4	<u>LD</u>	45.1	33.7	34.2	32.8	29.6	25.3
66	521912	186514	Roadside	58.2	58.2	<u>LD</u>	34.6	25.3	29.2	28.8	24.8	20.9
67	521651	186611	Roadside	92.0	92.0	<u>LD</u>	45.8	24.1	26.0	25.7	26.0	19.0
68	521448	186626	Roadside	98.4	98.4	<u>LD</u>	34.6	32.4	32.5	30.3	32.1	24.1
69	523782	183527	Roadside	98.4	98.4	<u>LD</u>	33.0	21.6	25.8	24.0	19.2	18.2
70	523828	183338	Roadside	98.4	98.4	<u>LD</u>	33.0	21.5	23.5	22.8	22.2	18.2
71	524179	183232	Urban Background	80.7	80.7	<u>LD</u>	30.2	20.1	22.8	22.4	20.4	18.3
72	524142	183120	Roadside	98.4	98.4	<u>LD</u>	35.6	24.9	26.7	25.3	20.2	19.6
73	524607	183267	Roadside	89.0	89.0	<u>LD</u>	38.1	26.0	30.0	28.5	23.4	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
74	524283	183882	Roadside	98.4	98.4	<u>LD</u>	31.4	22.4	26.2	23.7	17.9	19.3
75	517499	187778	Roadside	98.4	98.4	<u>LD</u>	31.4	19.5	22.7	21.3	18.4	16.6
76	518430	188406	Roadside	89.0	89.0	<u>LD</u>	25.9	21.8	18.3	18.0	18.5	13.8
77	519100	189827	Roadside	89.0	89.0	<u>LD</u>	31.2	23.0	24.9	23.3	16.7	16.0
78	516721	185478	Roadside	90.3	90.3	<u>LD</u>	43.8	30.7	33.2	32.1	23.4	26.3
79a, 79b, 79c	523721	183008	Roadside	64.9	64.9	<u>LD</u>	42.2	28.6	30.0	27.3	22.1	20.0
BRT42	521131	183995	Roadside	98.4	98.4	<u>LD</u>	40.2	26.8	30.6	30.9	24.4	24.1
BRT43	520242	184541	Roadside	88.5	88.5	<u>LD</u>	63.8	46.5	41.9	40.4	24.3	32.7
BRT53	518303	185181	Roadside	98.4	98.4	<u>LD</u>	66.3	74.3	57.7	65.3	29.3	40.9
BRT55	521743	183361	Roadside	91.4	91.4	<u>LD</u>	88.4	40.6	116.5	82.2	28.1	55.3
BRT56	523635	183153	Roadside	98.4	98.4	<u>LD</u>	67.5	40.7	38.4	34.4	29.0	30.7
BRT57	525419	183612	Roadside	98.4	98.4	<u>LD</u>	55.2	33.8	53.3	49.8	35.3	34.7
BRT58	523031	184655	Roadside	98.4	98.4	<u>LD</u>	48.6	40.5	38.4	35.6	31.4	32.3
SZ1	521103	183408	Roadside	74.5	74.5	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	25.6	25.8	20.5	21.8
SZ2	521069	186250	Roadside	89.0	89.0	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	25.6	25.2	24.5	19.1
SZ3A	518900	184774	Roadside	82.6	82.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	21.5	20.4	17.5	16.1
SZ3B	518913	184670	Roadside	91.4	91.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	20.5	19.7	23.8	15.8
SZ4A	521643	183579	Roadside	82.6	82.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	26.9	26.9	22.1	21.4
SZ4B	521718	183649	Roadside	83.4	83.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	27.9	28.0	19.8	21.9

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2018	2019	2020	2021	2022	2023	2024
SZ4C	521781	183700	Roadside	91.4	91.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	23.4	23.8	20.0	19.8
SZ41	521624	184275	Roadside	93.0	93.0	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	22.1	21.5	18.0	16.3
SZ5A	521394	184264	Roadside	82.6	82.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	22.6	21.9	19.3	16.8
SZ5B	521364	184185	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.6	22.9	19.9	18.1
SZ6	517900	187137	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	19.7	19.2	16.3	14.3
SZ7	523119	185933	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	23.0	22.5	18.7	17.2
SZ8	521314	184712	Roadside	80.4	80.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	25.0	25.5	19.8	19.1
SZ10	524585	184031	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.0	22.7	19.5	17.5
SZ11A	520480	183908	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	21.0	23.2	25.6	17.9
SZ11B	520525	183861	Roadside	90.6	90.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	23.7	23.1	25.4	18.2
SZ12	523167	186491	Roadside	90.1	90.1	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.1	24.4	19.1	17.5
SZ14A	518837	185102	Roadside	90.6	90.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	22.8	23.4	20.4	18.2
SZ14B	518835	185012	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.7	23.8	19.9	18.0
SZ15	522934	184702	Roadside	82.3	82.3	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	23.9	25.6	19.8	18.2
SZ16	523039	184745	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	22.4	22.2	17.9	17.1
SZ17	521618	185525	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	26.8	25.6	22.6	20.3
SZ18	523224	183045	Roadside	89.0	89.0	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	26.6	25.0	21.3	19.0
SZ19	523744	183076	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.0	23.3	19.6	21.6
SZ20A	523678	183956	Roadside	91.4	91.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	19.2	18.9	17.5	14.7
SZ20B	524003	183995	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	21.5	19.9	16.6	16.3

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
SZ22	519883	189197	Roadside	71.6	71.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	18.1	17.5	15.3	13.4
SZ23	520065	188673	Roadside	90.1	90.1	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	21.8	19.6	14.5	14.5
SZ231	520211	188478	Roadside	80.2	80.2	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	21.2	19.4	15.1	13.7
SZ24	517739	187912	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	19.2	16.9	17.2	13.4
SZ25A	518243	188627	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	19.7	19.0	17.2	13.9
SZ25B	518184	188539	Roadside	78.3	78.3	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	17.6	18.1	15.3	12.2
SZ26	516559	185913	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.8	20.7	22.5	15.9
SZ27	519913	185066	Roadside	89.0	89.0	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	22.8	23.0	21.5	18.0
SZ63	518603	186544	Roadside	92.0	92.0	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	19.8	20.0	21.2	14.4
SZ81	520512	184580	Roadside	91.4	91.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.3	23.0	20.5	18.4
PM14A	520763	183700	Roadside	89.8	89.8	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.9	25.2	21.5	20.2
PM14B	521049	183874	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	37.1	35.8	58.2	30.2
PM14C	521401	183542	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.4	24.8	20.8	18.9
PM14D	521321	183478	Roadside	65.7	65.7	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	25.1	25.2	21.0	19.9
PM16A	521348	183912	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	27.9	26.8	25.1	20.2
PM16B	521741	184243	Roadside	93.0	93.0	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	23.0	21.9	23.9	17.5
PM19A	523453	183500	Roadside	90.1	90.1	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	31.6	32.4	23.3	27.2
PM19B	523931	183500	Roadside	89.8	89.8	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.4	23.2	20.0	19.4
PM19C	524520	183495	Roadside	90.9	90.9	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	28.3	27.7	23.3	23.1
PM20C	524908	184273	Roadside	64.1	64.1	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	34.3	36.5	25.5	31.3

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
PM22A	523854	185249	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	26.1	24.3	20.0	18.8
PM22B	523770	185086	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.6	22.9	19.2	17.7
PM22C	524333	184827	Roadside	87.7	87.7	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	23.2	22.2	19.9	16.8
PM22D	524486	184877	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	43.1	44.7	27.1	27.2
PM22E	523846	184875	Roadside	90.9	90.9	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	22.7	20.9	21.8	16.2
PM23A	522708	184973	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	26.1	25.8	21.0	19.9
PM23B	522970	184812	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.0	23.8	19.7	18.2
PM25A	523246	185765	Roadside	82.0	82.0	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	25.1	23.4	19.8	19.5
PM25B	523581	185671	Roadside	82.3	82.3	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.3	23.0	19.3	16.7
PM25C	523560	185395	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	26.9	25.4	19.3	18.0
PM26A	522941	186263	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.8	23.2	19.2	17.2
PM26B	522563	186233	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.7	23.7	20.1	17.8
PM28A	517811	186252	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	41.5	38.6	20.4	26.4
PM28B	518367	185872	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	21.4	21.2	18.0	15.5
PM28C	518172	186004	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.7	23.9	18.4	17.8
PM28D	518076	185421	Roadside	90.6	90.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24.0	24.0	25.7	18.4
PM28E	517952	185913	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	22.3	21.1	22.3	16.1
PM29A	517896	186958	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	23.6	22.7	19.9	16.9
PM29B	518008	187311	Roadside	89.8	89.8	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	21.7	20.2	18.4	16.0
PM29C	518280	187411	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	34.2	32.7	18.5	19.3

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
PM32A	519588	189311	Roadside	82.6	82.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	25.4	20.7	17.0	17.8
PM32B	519432	188972	Roadside	82.6	82.6	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	22.9	21.2	18.7	16.3
PM32C	519268	188982	Roadside	70.2	70.2	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	23.4	21.5	16.4	17.5
PM36A	518590	185172	Roadside	82.3	82.3	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	28.6	27.5	23.6	25.5
PM36B	519200	184899	Roadside	98.4	98.4	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	31.2	30.0	22.8	21.9

☒ 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 $\mu\text{g m}^{-3}$.

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%).

Since 2019, annual mean NO₂ concentrations have decreased at all but two sites, ID41 (Neasden Lane) and ID62 (Kings Drive /Forty Lane), which have increased from 42.3 µg m⁻³ to 42.7 µg m⁻³ and 40.6 µg m⁻³ to 43.5 µg m⁻³ respectively. For 2024, there are six sites (23: North Circular Road, 41: Neasden Lane, 53: Ealing Road/Wembley High Road, BRT53: Wembley High Road, BRT55: Harlesden High Street, and 62: /Forty Lane) that exceed the AQO of 40 µg m⁻³ (Table A). Out of 115 sites in 2024, 82 sites (71%) saw a decrease in NO₂ concentrations from 2023. The remaining 33 sites that experienced an increase from 2023 concentrations are all at roadside. Of those sites, the concentrations at all but one reduced since 2022 (the exception being site 62: Kings Drive/Forty Lane). Please note that site ID7 (Bridgewater Road / Ealing Road) was not accessible for diffusion tube deployment for the monitoring year due to construction.

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
BT4	520866	185169	Roadside	97.4	97.4	1	9	0	2	0	2	0
BT5	521511	185204	Industrial	99.5	99.5	1	2	0	0	0	0	0
BT6	521619	183554	Roadside	98.4	98.3	0	0	0	0	0	0	0
BT8	523716	183030	Roadside	99.6	99.6	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%)

For 2024, there were no exceedances of the 1-hour mean being greater than 200 µg m⁻³ which means the air quality objective (Table A) has been met at all sites.

PM10 Concentrations

Table G provides annual mean PM10 concentrations at automatic monitoring sites for the years 2018 to 2024 inclusive. The concentration values are those at the location of the monitoring site. Details of monitoring site QA/QC for 2024 measurements are given in Appendix A.

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
BT4	520866	185169	Roadside	99.0	98.9	32.0	30.0	26.0	25.6	27.9	25.7	22.5
BT5	521511	185204	Industrial	98.0	98.0	28	26	21	21.4	18.9	16.7	19.3
BT6	521619	183554	Roadside	95.3	95.2	20	19	19	17.6	16.7	15.2	14.8
BT8	523716	183030	Roadside	98.5	98.5	19	18	17	17.6	17.2	14.8	14.6

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%).

All four automatic monitoring sites measuring PM10 have recorded decreases since 2018. All sites meet the annual mean PM10 AQO of $40 \mu\text{g m}^{-3}$ (Table A). Three of the sites (BT5, BT6 and BT8) continue to meet the WHO interim target 4 of $20 \mu\text{g m}^{-3}$ and two sites (BT6 and BT8) meet the WHO guideline of $15 \mu\text{g m}^{-3}$ (Table A). The trends in annual mean concentrations are illustrated in Figure 2.

Figure 2. Graph showing trend of annual mean concentrations for Particulate Matter 10 from 2018-2024

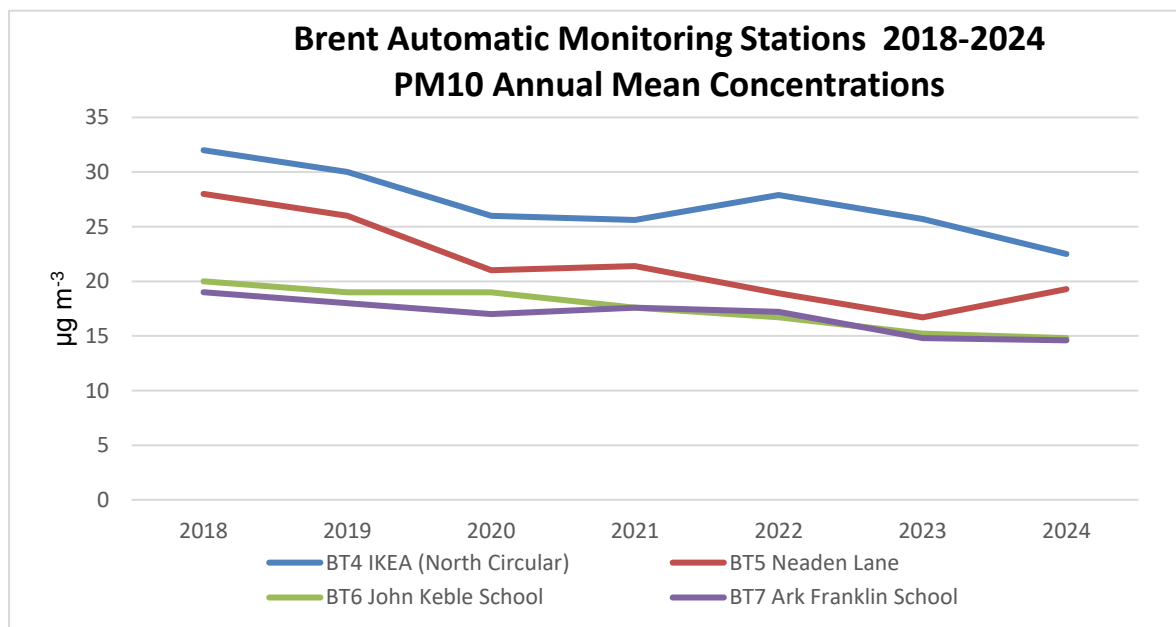


Table H gives the number of exceedances of the $50 \mu\text{g m}^{-3}$ AQO threshold for 24-hour mean PM₁₀ concentrations (Table A) at automatic monitoring sites for the years 2018 to 2024 inclusive. The values are those at the location of the monitoring site. Details of monitoring site QA/QC for 2024 measurements are given in Appendix A.

Table H. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 24-Hour Means > $50 \mu\text{g m}^{-3}$

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
BT4	520866	185169	Roadside	99.0	98.9	37	29	20	16	24	21	8
BT5	521511	185204	Industrial	98.0	98.0	22	11	3	4	3	0	3
BT6	521619	183554	Roadside	95.3	95.2	1	4	4	0	1	0	0
BT8	523716	183030	Roadside	98.5	98.5	1	1	1	1	1	0	0

Exceedances of the PM₁₀ 24-hour mean objective ($50 \mu\text{g m}^{-3}$ 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%).

For 2024, BT4 automatic monitoring location measured 8 exceedances of the $50 \mu\text{g m}^{-3}$ threshold, BT5 measured 3 exceedances, where BT6 and BT8 measured no exceedances. Therefore, the AQO for 24-hour mean PM10 (Table A) was met at these sites.

PM2.5 Concentrations

Table I provides annual mean PM2.5 concentrations at automatic monitoring sites for the years 2018 to 2024 inclusive. The concentration values are those at the location of the monitoring site. Details of monitoring site QA/QC for 2024 measurements are given in Appendix A.

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
BT4	520866	185169	Roadside	88.4	88.4	20.0	20.7	13.0	13.5	12.8	11.2	10.1
BT5	521511	185204	Industrial	97.4	93.0						8.7	7.5
BT6	521619	183554	Roadside	98.8	98.8						11.0	8.3
BT8	523716	183030	Roadside	88.4	88.4	14.6	18.9	13.7	7.4	7.5	11.9	8.9

Notes

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

Exceedances of the PM_{2.5} annual mean AQO of $10 \mu\text{g m}^{-3}$ are shown in **bold**.

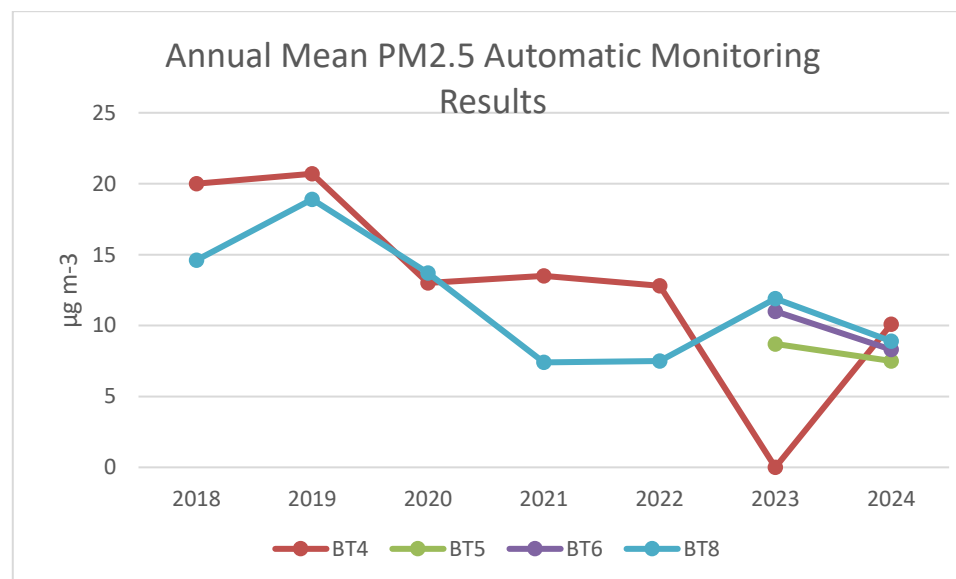
All means have been “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75% and more than 25%.

(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%).

Generally, monitored PM2.5 concentrations have declined since 2018, other than a slight increase in 2023 at monitoring location BT8. However, the monitored concentration at this location, although higher than 2021 and 2022, has reduced since 2023. BT5, BT6 and BT8 are all below the London Mayoral Objective and Environment Target Regulations of $10 \mu\text{g m}^{-3}$. All sites are above the World Health Organisation objective of $5 \mu\text{g m}^{-3}$ (Table A).

Figure 3. Graph showing trend of annual mean concentrations for Particulate Matter 2.5 from 2018-2024



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 London Borough of Brent can be found in Table . The table presents a description of the AQMA that is currently designated within the borough. 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;
- PM₁₀ 24-hour mean.

Table L. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Borough wide AQMA	June 2023	Annual mean NO2 and 24 hour PM10	The 2006 AQMA has been extended to encompass the entire Borough of Brent	Yes	82.2	43.1 (highest NO2 reading from statutory diffusion tube network for 2024	0	Air Quality Action Plan 2023 – 2027	London Borough of Brent Air Quality Action Plan 2023 to 2027

- ☒ The London Borough of Brent confirm the information on UK-Air regarding their AQMA(s) is up to date.
- ☒ The London Borough of Brent confirm that all current AQAPs have been submitted to GLA.

2.2 Air Quality Action Plan Progress

The London Borough of Brent's Air Quality Action Plan was adopted in December 2023 and details actions the Council will take to reduce air pollution and raise awareness of its health impacts from 2023 – 2027 inclusive. Table provides a summary of London Borough of Brent's progress against the Air Quality Action Plan, showing progress made in 2024.

Table M. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
M5	Monitoring and other core statutory duties	Share air quality monitoring data in an easy-to access format	A dedicated Air Quality dashboard has been developed which enables residents to more easily find monitoring data at locations relevant to them and to compare the data from previous years. It enables comparison with the World Health Organisation guidelines as well as the UK air Quality Objectives. This is accessible via Brent's Open Data site Brent Joint Strategic Needs Assessment (JSNA) 2023 Brent Open Data
RA4	Public health and awareness raising	Work with schools and nurseries to improve air quality and to raise awareness about pollution in the local areas	A Defra funded "Healthy Routes to School" project was delivered over the course of 2024. This project aimed to raise awareness of the benefits of walking on quieter roads on the way to and from school. Key outcomes were: - "low pollution route maps", presentations, lesson plans and scripts made for 93 schools. - 59 workshops were delivered

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			- 6,200 students taught - 4 parent workshops delivered with 35 parents engaged - 1 "Clean Air" mural painted - A citizen science day held
CT12	Cleaner transport	Encourage walking and cycling in the borough by providing support	The council ran a range of activities to help make cycling help facilitate cycling in the borough: - 481 adults and 1284 children participated in cycle training sessions. - 45 residents hired bikes via the Try Before you Bike scheme. - 48 Dr Bike sessions were held across the borough. During these events, 473 bikes were repaired Also to help make walking and cycling safer and easier, there are now 31 school streets across the borough. In 2024, we consulted on three new trial schemes, two of which will be trialled in 2025.
M1	Monitoring and other core statutory duties	Maintaining and where possible expanding monitoring networks, and fulfilling other statutory duties	Brent Council maintains four automatic monitoring stations (three are roadside and one is industrial). Of these, all four measure NO₂ and PM₁₀ and PM_{2.5} and one measure O₃. All automatic stations are calibrated fortnightly and received preventative maintenance visits every six months during 2024.. Our service contract provides a 48hr breakdown response service and telephone diagnostic support, to maintain a high data capture. There are 121 diffusion tubes in Brent Council's jurisdiction for 2024. All existing sites have been retained and maintained throughout 2024 with the exception of two sites which were project related (Church End). 50 of these diffusion tubes are part of

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			Brent's statutory air quality monitoring network and 71 tubes are deployed for monitoring School Streets and HealthyNeighbourhood schemes. All diffusion tubes are analysed in UKAS accredited labs and the data has been bias adjusted, where appropriate. Brent Council holds membership of the London Air Quality Network. This includes data management and ratification from the automatic monitoring site data in periodic LAQN reporting mechanisms Brent Council has also continued to support Defra with the maintenance of the the polycyclic aromatic hydrocarbon (PAH) monitor situated within the grounds of Kingsbury High School. During 2023, three of the four automatic monitoring stations received an overhaul of equipment, replacing TEOM analysers with BAM monitoring equipment. In addition, BT5 and BT6 started monitoring PM_{2.5}. The new equipment performed well during 2024, with no significant issues reported. Results from the automatic monitoring stations and diffusion tubes are collated in the Annual Status Report which is made available on Brent's Air Quality section of the website. The 2023 Annual Status Report was submitted in accordance with the timescales and in accordance with the local authorities' responsibilities under Part IV of the Environment Act 1995. When the report was agreed by the Greater London Assembly (GLA), it was made publicly available via the councils website.
M2	Monitoring and other core statutory duties	Review Brent's monitoring network identifying areas which require further monitoring to ensure it meets our aim of	Officers have conducted analysis to identify which Air Quality Focus Areas and schools currently do not have monitoring. Diffusion tube monitoring at 11 extra schools/nurseries planned for 2025.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		protecting the most vulnerable in the borough	
M3	Monitoring and other core statutory duties	Support new monitoring technologies e.g. supporting the GLA/ICL Breathe London monitoring regime	Brent Council maintained the five Breathe London nodes were in place until the end of 2024. Brent Council have supported Breathe London with the transition to a new sensor provider and have provided prompt assistance to investigating data failures and responding to breakdowns when they have been reported. Brent Council sits on the Breathe London working group.
M4	Monitoring and other core statutory duties	Monitor the impact of Transport schemes implemented in the borough by working with Healthy Streets and Parking	Diffusion tube monitoring is included in all new school streets schemes implemented. This will also be implemented in future healthy neighbourhoods when introduced. Data from these studies are included in the air quality annuals status reports and published on the Council's website.
M5	Monitoring and other core statutory duties	Share air quality monitoring data in an easy-to access format	Membership was renewed for the 2023/24 period with Imperial College London who provide the LondonAir service. This website allows users to request weekly, quarterly and annual site reports as well as seeing live station data A dedicated Air Quality dashboard has been developed as part of the Air Quality Needs Assessment. This is accessible via Brent's Open Data site Brent Joint Strategic Needs Assessment (JSNA) 2023 Brent Open Data
HD1	Homes, buildings, and developments	Ensuring emissions from construction are minimised by adhering to London Plan and LBB planning policy	2024 quarterly figures for Dust complaints are: 1st Quarter = 9 2nd Quarter = 7 3rd Quarter = 9 4th Quarter = 7 Dust from building sites or commercial premises is reported through Brent Council's Noise and Nuisances webpage.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			The SPD adopted in June 23 contains reference to dust monitoring in certain scenarios being monitored. Where necessary a dust monitoring plan is put in place/ conditioned in association with an application. All major developments are required to submit Demolition and Construction Management plans to cover dust controls. A Construction Method Statement (CMS) condition is attached to consents for sites with dust risk, which includes a requirement for monitoring protocols
HD2	Homes, buildings, and developments	Ensuring enforcement on non-road mobile machinery (NRMM) air quality policies	Throughout 2024, the most up to date NRMM wording has been used for planning conditions. Brent Council maintained its membership for the pan-London NRMM project during 2024, provided by the London Borough of Merton. 15 audits were undertaken, with 11 being compliant.
HD3	Homes, buildings, and developments	Reducing emissions from Combined Heat and Power	For 23/24, where Planning policy applied, all developments met the minimum 35% carbon reduction, with one development achieving 54%. <u>District Heat Networks</u> Brent Council aims to supply heat to over 30 buildings, including ~2,600 dwellings, two schools and multiple commercial buildings in South Kilburn through a district heat network. A district heat network involves hot water being pumped from an energy centre. This is a more efficient way of producing heat and hot water.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			The South Kilburn District Heat Network has been designed to RIBA 3; Brent is at final tender stage of the procurement for the main contractor to design, build, then operate and maintain it for a period of fifteen years plus ten. The key performance indicators that have been negotiated as part of the procurement include carbon savings targets during operation. The average annual carbon savings for the South Kilburn District Heat Network are 980 tCO₂e avoided per annum. And cumulative savings of 24,499 cumulative tCO₂e avoided over project lifetime (assuming 25 years).
HD4	Homes, buildings, and developments	Enforce Air Quality Neutral, Air Quality Positive policy	Air Quality Positive Assessments are required for major developments within Air Quality Focus Areas (AQFAs) and Growth areas. Air Quality Neutral Assessments are required for all other areas
HD5	Homes, buildings, and developments	Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new and existing developments Air quality and parks officers to jointly comment on green infrastructure	When required, Urban Greening Factors is generally achieved, or at least maximised as far as is practicable.
HD6	Homes, buildings, and developments	Promote and enforce Smoke Control Zones and ensuring they are fully promoted and enforced	Brent Council's smoke control and bonfires webpages have been updated to include stronger advice on the health impacts of Particulate Matter 2,5, to strongly encourage residents to not burn solid wood, and advice about burning wood as a fuel if they choose to do so. It contains a link to Defra's Burn Better guidance. While no proactive checks were carried out of fuel retailers during 2024, no non-compliant fuel was reported or observed by officers while conducting routine inspection work.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			Brent sits on the London Wood Burning Project Group, a project which is reviewing the smoke control enforcement process and standardising across boroughs. It also planned for an awareness raising campaign for 2025. Smoke from bonfires is reported on the Council's webpage. In 2024, 199 complaints of statutory nuisance due to bonfires were received. One smoke nuisance abatement notices was issued. Nuisance Control Team and Waste Enforcement have produced an advisory/ warning leaflet targeting commercial bonfires.
HD7	Homes, buildings, and developments	Promoting and delivering energy efficiency and retrofitting projects in workplaces and homes throughout Brent	Brent for Business Energy Saving Scheme Brent Council appointed Groundwork London to support with the design and delivery of the Brent for Business Energy Saving scheme. A total of 90 SMEs submitted an EOI, out of which 39 received free energy audits and a further 15 received a free energy audit and grant towards the cost of one or more energy efficiency measures. Measures included, in order of frequency: - LED lighting systems - New / retrofits to existing fridges / freezers - Solar panel systems - Air-conditioning systems - Improved insulation - Radiators & water heater - Solar battery systems - Double-glazing systems - Briquette-making system - Specialist oven

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			The total cost of interventions that received a grant was £276,532, of which £148,417 was funded by the grant component. This equates to an average grant of £9,894, representing around 54% of total cost - less than the maximum of 60% that was offered to businesses. Headline projections as a result of funded interventions from the related energy efficiency audits include: - Annual saving of over 36 tCO₂e (emissions) - Annual saving of over 75,000 kWh of energy - Annual saving of over £20,000 in energy costs - An average of around a 60% reduction in payback period of funded interventions for businesses as a result of the grant. Brent Climate Charter Businesses are being asked to sign up to the charter, which is being promoted via targeted emails, newsletters and on social media. We have been encouraging businesses in Brent to sign up to and demonstrate their support for the net zero agenda and Brent's aspirations. The charter asks businesses to commit to a minimum of three of the following pledge areas, depending on which is most relevant to their business: 1. Reduce energy use 2. Cut waste 3. Use water responsibly 4. Procure sustainability 5. Promote climate action 6. Choose active travel 7. Enhance local biodiversity 21 businesses are currently signed up to the Brent Climate Charter. If there is enough demand, a network of like-minded businesses may be formed to meet, for example, once a quarter to network and discuss opportunities for working together. This project is funded from existing climate emergency budgets.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			Camden and Brent Business Climate Challenge The boroughs of Brent and Camden launched the Camden and Brent Business Climate Challenge: energy efficiency programme for SMEs addressing the cost-of-living, energy and climate. The programme supported 28 Brent business through an energy audit and training workshop, and 10 Brent businesses went on to successful bid for £120k worth funding to enact energy efficiency works. The Brent Well and Warm scheme The Brent Well and Warm scheme supports residents struggling to keep their homes warm in winter. The service provides free, expert energy advice to residents to help them save money on their energy bills while keeping their homes comfortable. Brent has partnered with Groundwork (Green Doctors) to deliver 1,000 energy advice consultations via telephone or home visits. The project began in November 2022. Staff and partners working with vulnerable residents can refer residents to the scheme via an online form, which is directed to Groundwork Team. Residents can also self-refer online. The Well and Warm service was extended to run during 2024-25 (and has subsequently been extended for 2025-26). 941 consultations have been undertaken to date (783 telephone consultations and 158 home consultations). RE:FIT projects Brent Council commissioned Turner & Townsend in September 2024 to undertake a Corporate Estate Heat Decarbonisation Plan Project, with the aim to understand the energy efficiency and decarbonisation options available for Brent's corporate estate. Funded by the Carbon Offset Fund, Turner & Townsend advised how Brent Council can reduce emissions at these sites through preferred decarbonisation options and moreover supported the Council in submitting a bid for PSDS Phase 4 in November 2024, to gain funding for the energy conservation measures identified. On 21st March 2025, the Energy Team learned it was successful in the bid, covering 2 sites

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			(Willesden New Cemetery & Willesden Green Library), a total of 11 measures and grant funding worth £667,628 which includes a minimum recipient (Brent) contribution of £138,911. The low carbon energy projects are to be installed and delivered in 2025/26 using the RE:FIT Framework. Decarbonising schools All schools have access to information on reducing energy use via the Brent Schools Climate Action Guide which includes a specific step on decarbonisation. The guide has been promoted via all available media channels, set out to all schools in the Headteachers bulletin and spoken about at the Brent headteacher's school planning meeting. 20 primary schools are taking part in a programme called Our Schools Our World where they have committed to a whole school approach to sustainability, including reducing energy usage and including decarbonisation as part of their Climate Action Plans. Decarbonising Brent's housing stock Brent Council successfully secured funding through Wave 3 of the Warm Homes: Social Housing Fund, as part of a pan-London strategic partnership with 27 boroughs and housing associations. Led by London Councils, the GLA, and Camden as the Lead Local Authority, the consortium received confirmation of its bid approval from DESNZ in March 2025. Brent Council will receive £3,150,911 in funding—comprising £2,068,558 from the Carbon Offset Fund and £1,082,353 in government grants—to retrofit 80 homes across two blocks (The Oaks – Roundwood Ward & Pharamond – Brondesbury Park Ward).

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
CT1	Cleaner Transport	Ensure that Transport and Air Quality policies and projects are integrated	Transport and Air Quality Officers work closely together on projects. Transport Planners design projects in order to improve travel connectivity, improve access to open space, reduce collision figures and to improve local air pollution. An example of this is the Neasden project. Over 2024, options were developed to alter highway alignments around Neasden town centre in order to improve active travel connectivity and easier bus service movements, enhance town centre place functions, improve access to existing green open spaces, all with the aim to reduce car use, collision figures and local air pollution. Secured GLA funding and identified SCIL funds to fund first section of proposed changes. Set in motion to initiate further modelling work ensure workable solutions are arrived at.
CT2	Cleaner Transport	Update Council Procurement policies to reduce pollution from logistics and servicing	The Procurement Sustainability policy has a process that identifies any procurements that have a sustainability impact will require KPI's and quality questions to be included in the tender process along with Circular economy questions. There have been no procurements related to vehicle and transport tenders during 2024
CT3	Cleaner transport	Installation of Ultra-low Emission Vehicle (ULEV) infrastructure	£7.54m was awarded to a partnership of 6 boroughs including Brent through the 2023/24 Local Electric Vehicle Infrastructure (LEVI) Capital Fund. In 2024, 160 Zest chargers were installed and funded by the CPO and Uber. Use of ChargePoint Navigator tool to identify where to locate charging infrastructure ensuring residents with no off-street parking have access to a charging point within walking distance. Using Nevis Projections for EV car and van numbers and corresponding EV charging infrastructure need to establish what numbers and type of EV charging points will be required to meet expected charging demand up to 2030 and beyond.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			Brent Council are researching home charging solutions and bench marking with other boroughs to identify potential solutions for residents with no off-street parking.
CT4	Cleaner transport	Continue to work in partnership with TfL to prioritise actions required to improve local air quality in Brent	We continue to work closely with TfL on a range of projects/initiatives. TfL are continuing to roll-out electric and other zero emission buses across London – new electric buses introduced on route 187 (Central Middlesex Hospital – Swiss Cottage Station via Queens Park/Kensal Rise stations) in March this year
CT5	Cleaner transport	Encourage Car Clubs to use low emission and alternative fuel vehicles in their fleet by increasing the proportion of electric, hydrogen and low emission vehicles	The need for a shared mobility action plan has been identified and in this context Brent is continuing to support shared mobility by identifying consulting on delivering 200 dedicated shared hire bike parking facilities across the borough. Brent officers are continuing to engage in TfL led discussions regarding a pan London approach to shared hire bikes. A review of Brent's car club policy, approach to operator procurement and electrification of the car club is planned to progress during 2025/26.
CT6	Cleaner transport	Hold regular temporary car free days	Brent supported Car Free Day in Bacon Lane, Kingsbury in November 2024 (the event had to be postponed from September). The road was designated a Play Street and there was also a consultation on design ideas for walking, wheeling, cycling and greening improvements in the Kingsbury Green Neighbourhood area. In 2024, 10 play streets were held across the borough.
CT7	Cleaner transport	Discourage unnecessary engine idling	11 idling events were held during 2024/25. During these events, a total of 45 drivers were engaged.
CT8	Cleaner transport	Provision of infrastructure to support walking and cycling	Active Travel Implementation Plan published in 2024 and sets out our commitments to improve conditions for and to get more people walking and cycling. brent-active-travel-implementation-plan-accessible-version-final.pdf

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			As part of Grand union development in Alperton, work is progressing on design of a pedestrian/cycle footbridge across the Grand Union Canal which has the support of the Canal and Rivers Trust A public consultation on the Wembley to Willesden Junction Healthy Streets scheme was held between 10 November and 21 December 2023 and a consultation report to explain the outcomes of the consultation was published in March 2024. Since then, we have been working closely with TfL to further develop the proposals. The feedback we heard from local people and other stakeholders during our consultation has informed this work, along with further surveys and assessments. An updated set of designs for these improvements will be shared with Brent Councillors in the next few months, who will then make a decision on whether to progress the proposed design solution to construction, which could potentially commence in late 2026.
CT9	Cleaner transport	Use parking policy to reduce pollution emissions	In April 2021, the price for the diesel surcharge had its final increase to £100.00. For the year 2021-2022 a total of 7,955 permits were issued to diesel vehicles representing 22.9% of all resident permit sales. In 2023-2024, diesel vehicles fell to 6319, reducing the number to 17.8%.
CT11	Cleaner transport	Reducing emissions from council fleets/ accelerate uptake of new low emission vehicles in borough fleet	The Corporate Travel Plan was approved and launched in 2024, and was advertised to staff on the Intranet to encourage colleagues to walk and cycle to work where possible. Two fully electric adapted minibuses were hired and trialled over 6 months to test real world performance and reliability. The vehicles performed well for comparable hire and running costs to diesel alternatives, and service users liked the quieter ride. The test showed that if charging infrastructure and maintenance provision issues can be overcome, electric minibuses should be considered at the next fleet renewal point(s).

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
CT12	Cleaner transport	Encourage walking and cycling in the borough by providing support	481 adults and 1284 children participated in cycle training sessions. 45 residents hired bikes via the Try Before you Bike scheme which was advertised at Green Neighbourhood events and via social media posts and on the website. Offered 6 month free trial of Try Before you Bike scheme in the Green Neighbourhoods. All 25 social prescribing vouchers were used, of which 5 bikes are still being rented, 4 people purchased the bike, and 16 returned the bikes. 48 Dr Bike sessions were held across the borough. During these events, 473 bikes were repaired
RA1	Public health and awareness raising	Public Health department taking shared responsibility for borough air quality issues and implementation of Air Quality Action Plans	A Children and Asthma Lead established within the Brent Health Matters Children and Young People Team in 2024. The focus is around reducing health inequalities for children and young people in Brent with a focus on asthma management and care. - As part of this work, we are raising awareness of the impacts of indoor air pollution on asthmatic children and sharing information including the council's damp and mould booklet. This is done through engagement events and health promotion in the community. - Planning to put in place a damp and mould pathway. - We have also supported at one community walking loop event and 2 breathe clean brent pop ups sharing information on the impacts of air pollution on asthma. - An event was held in February half-term focused on asthma looking at it holistically and bringing together different services to support, including air quality, brent hubs, emotional wellbeing, nutrition etc, so families could access support and information in relation to a range of areas that could impact their asthma.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
RA2	Public health and awareness raising	Raise awareness of the health impacts of air pollution, encouraging community action through the Brent Environmental Network, Brent Schools' Climate Champion Network, and through Brent volunteering organisations	Clean air day and car free day is celebrated on an annual basis. Clean Air Night supported with social media. Clean Air Day event held in Roundwood Park with activities such as scooter repair, a bike market, quizzes, and two workshops on clean air held. 80 attendees participated. Defra funded "Healthy Routes to Schools" project delivered. Key outcomes: <u>Low pollution route maps</u> "low pollution route maps", presentations, lesson plans and scripts made for 93 schools. 59 workshops were delivered 6,200 students taught 4 parent workshops delivered with 35 parents engaged - Community workshops held to create a "Clean Air Mural" in a Harlesden school "Clean Air" mural painted at St Claudine's school, park parade - A citizen science day was held at Furness Primary School, raising awareness within the local community by providing information about the health risks and the benefits of avoiding pollution hotspots. The also project included the following elements: - Monitoring pollutant concentrations along both a higher pollution route and a lower pollution route to school to quantify the difference; - Holding a citizen science day with the school community which included an active travel breakfast, and all school assembly, and a parent engagement pop up; and - Producing a high quality case study video. Brent Environmental Network newsletter is still sent out on a monthly basis which includes sustainability related articles, including regular reference to air quality and

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			sustainable travel initiatives. The Brent Environmental Network now has just over 3700 members. The localised Brent Environment Network group is continuing to meet regularly in Church End and Roundwood. We are in the process of hoping to set up a similar group in the new South Kilburn Green Neighbourhood. The Brent Schools' Climate Champion Network is now spearhead by the Our School, Our World climate programme which Brent is one of only four Local Authorities in the country to have received funding for. 20 Primary Schools across the borough signed up to the programme last academic year. - Programme kickstarted with three days of training in November, ran alongside the team from Brighton & Hove. This took place at Brent Community Enterprise Hub and involved different members of the school leadership team. Successful engagement with over 100 members of school staff over 3 days - For Spring 1, visits to each school as part of first OSOW Review have been taking place. This involved meeting with each sustainability team to check their progress towards the OSOW Framework and tracking this as part of the monitoring and evaluation of the programme. - Programme is structured for schools to explore one of the following themes each term – energy, water, biodiversity, food, travel and waste & consumption. Schools to start termly theme in Summer 1. Creates opportunity for working more closely with different council teams, depending on theme focus. - Further work to be done on involving the local community with each school's sustainability goals. Best practice on this to be captured and shared with schools across the borough, and where possible, extended to schools across the country.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
RA3	Public health and awareness raising	Ensure schools join the TfL STARS accredited travel planning programme	All schools are encouraged to participate in the TfL STARS programme and support available when required. 48 schools have an accredited travel plan (up from 39 schools in 2023) of which 39 are gold, 2 silver and 7 bronze (compared with 29, 6, and 4). Over 2024 a programme of theatre workshops was delivered to Yr 6 pupils as part of the STARS programme. The key messages included air quality, road safety, and active travel. 2250 pupils from 38 schools attended the workshops. Breathe Clean promoted through STARS programme
RA4	Public health and awareness raising	Work with schools and nurseries to improve air quality and to raise awareness about pollution in the local areas	Pollution alerts have been circulated to Early Years Settings through internal mailing lists and to schools through the Mayors Air Pollution Alert system. Over 2024 a programme of theatre workshops was delivered to Yr 6 pupils as part of the STARS programme. The key messages included air quality, road safety, and active travel. 2250 pupils from 38 schools attended the workshops. <u>Low pollution route maps</u> The Defra funded “Healthy Routes to School” project was delivered, with “low pollution route maps”, presentations, lesson plans and scripts made for 93 schools. Key outcomes: - 59 workshops were delivered - 6,200 students taught - 4 parent workshops delivered with 35 parents engaged <u>School Streets</u>

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			A total of 31 school streets in operation, all enforced using CCTV. In 2024, consulted on three new trial schemes, two of which will be trialled in 2025. Four schemes were expanded in 2024 to help mitigate the parking displacement problems and a decision will be made in 2025 as to whether that will be a permanent change
RA5	Public health and awareness raising	Engage with businesses, supporting them to reduce emissions from their operations	The Green Business Guides published on the Councils website contains relevant guidance for businesses from a variety of sectors to reduce emissions. In late 2023 we launched the Brent Business Climate Charter. Our new Climate Charter is a way for local faith and community organisations and businesses to make a public pledge to doing their bit to tackle the climate and ecological emergency, whilst being supported through access to resources from the council to help businesses to achieve this. Organisations are required to submit at least 3 pledges when signing the charter. The pledges are as follows; • Cut waste through reducing operational waste, especially plastic and food waste, and prioritising repair, re-use and recycling. This could also be through providing a product or service that helps others reduce their waste, such as a repair service. • Enhance local biodiversity in creative ways – whether by “greening” your workplace, installing window bird feeders or supporting local nature conservation projects. • Procure sustainably by using spending power to purchase sustainable goods and services.

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			Promote climate action by enabling and encouraging your workforce, clients, customers, suppliers, stakeholders and the local community to help tackle the climate emergency. Reduce energy impact to cut associated carbon emissions and reach net zero. This could be through measures like improving the energy efficiency of buildings, using electric vehicles, or using renewable energy. Travel sustainably by choosing active travel or using cargo bikes, public transport or electric alternatives in your operations rather than relying on private petrol and diesel vehicles. Use water responsibly through measures that reduce water waste in building use, recycling rainwater, or providing a product or service that helps others use water sustainably. To date we have had 21 organisations sign the charter.
RA6	Public health and awareness raising	Work with Public Health and Brent's NHS Integrated Care Board to reduce exposure of patients to poor air quality, both indoor and outdoor	Brent Council's Public Health Team are members of the Paediatric Asthma working group with the NHS North West London ICB and collaborate on issues such as housing and indoor air pollution.
RA7	Public health and awareness	Promote air pollution alerts and route planner tools	The Council subscribes to airTEXT. The Defra funded "Healthy Routes to School" project was delivered, with "low pollution route maps", presentations, lesson plans and scripts made for 93 schools. Key outcomes: - 59 workshops were delivered - 6,200 students taught - 4 parent workshops delivered with 35 parents engaged

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
RA8	Public health and awareness	Raise awareness of indoor air pollution and how to reduce exposure	Brent Council has indoor air pollution exposure information on the website What can you do about air pollution Brent Council Damp and mould webpages updated Damp and mould Brent Council
RA9	Public health and awareness	Share air pollution data transparently with residents, reporting against both UK Air Quality Objectives and World Health Organisation Targets	A dedicated Air Quality dashboard has been developed as part of the Air Quality Needs Assessment. This is accessible via Brent's Open Data site Brent Joint Strategic Needs Assessment (JSNA) 2023 Brent Open Data
L1	Localised Solutions	Expand and improve green infrastructure across the borough	The new North Brent community garden was completed in summer 2024. Green Corridors study was completed in Church End and Roundwood. We have subsequently been successful in obtaining £3m from SCIL funding to begin to implement the scheme in full. Highways Green Infrastructure Design and Maintenance Guide was completed in 2023. A pilot study planned to plant 200m² of wildflowers on green verge across Kingsbury Green Neighbourhood is expected to be trialled in Summer 2025. New rain garden completed in Kensal Corridor. Green and Healthy Streets schemes completed outside of Leopold School, Oakington Manor, Our Lady of Grace, with a fourth scheme in Crownhill Road due for completion in 2025. Draft Tree Strategy is due to go to Cabinet for public consultation in May 2025. 900 trees/whip saplings have been planted in Longstone Avenue Open Space as part of the Church End & Roundwood Green Neighbourhoods project. The Highways

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			Unit planted 140 street trees in 2024/25 and 13 on Brent Housing Management estates. New community biodiversity noticeboards implemented in 21 Brent parks New biodiversity infrastructure implemented in Willesden New Cemetery as part of the Church End and Roundwood Green Neighbourhood project – bird boxes, bat boxes, bug hotels, new planting, planters etc New community planting planned in Longstone Avenue Open Space
L2	Localised Solutions	Introduce Green Neighbourhoods across the borough, with the aim of focussing sustainable solutions in priority areas	The Green Neighbourhoods programme in Church End and Roundwood has continued and rolled over into the 2024-26 programme. The successes to date include: - Delivery of visible projects/infrastructure: school streets, bike hangars, EV charging points, rain gardens, Lime docking bays, community orchard at Longstone Avenue, BEE Colourful, Leybourne Open Space improvements - Green Corridors Feasibility Study in Church End & Roundwood completed by Sustrans following extensive local engagement - Increased engagement and action across the Kingsbury GN schools cluster, including enhanced curriculum CPD climate training for teachers, workshops for pupils, themed assemblies, webinars and schools-led community action - Regular engagement with resident/community groups and businesses in Church End & Roundwood - Resident involvement in delivering schemes – e.g. BEE Colourful, Leybourne Open Space and the community orchard - New signage to provide visibility in streets in both areas

Measure	LLAQM Action Matrix Theme	Action	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
			Place-based projects have made bidding for external grant funding easier e.g. Social Housing Decarbonisation Fund, Green and Resilient Development Fund, Schools Superzones funding
L3	Localised Solutions	Ensure AQAP is aligned with LBB Climate Emergency strategy	Air Quality Officer sits on Climate Emergency working groups. Climate Emergency Officers attended Air Quality Steering Group meeting.
L4	Localised solutions	Develop location specific action plans for Air Quality Focus Areas as part of the Local Implementation (LIP) programme	Harlesden Town Centre options appraisal completed in 2024 as part of the Defra funded “Healthy Routes to School Project”. The options appraisal is an area wide study into strategies which could be deployed to improve air quality across the Harlesden AQFA. The strategies focus on the dual approach of reducing pollution at source and mitigating the impact of residual pollution through green infrastructure. The strategies therefore focus on reducing pollution from vehicular transport and providing mitigation through urban greening. Two community engagement events took place to inform the study, with the final one on Saturday 22nd March, when the project manager attended the Harlesden Neighbourhood Forum AGM to present the proposed options to the local community. The project manager explained the intended benefits of each design option and how each would contribute to reducing air pollution in the AQFA. Queens Park Healthy Neighbourhood Feasibility Study was completed in 2024. Reports can be found online Queens Park Healthy Neighbourhood Brent Council

3. Planning Update and Other New Sources of Emissions

Table N. Planning requirements met by planning applications in London Borough of Brent in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	35
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)	Data not available
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	29
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	1
Number of planning applications with S106 agreements including other requirements to improve air quality	0
Number of planning applications with CIL payments that include a contribution to improve air quality	0
NRMM: 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.	122 NRMM conditions included 26 developments registered 15 audits 3 developments non-compliant

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 Brent Fleet

There is currently 1 zero emission vehicle within the borough's fleet (an electric cargo bike). Over 2024, two fully electric adapted minibuses were hired and trialled over 6 months to test real world performance and reliability. The vehicles performed well for comparable hire and running costs to diesel alternatives, and service users liked the quieter ride. The test showed that if charging infrastructure and maintenance provision issues can be overcome, electric minibuses should be considered at the next fleet renewal point(s). A Brent Fleet Management Review was conducted in 2023 to identify next steps for decarbonising the Council's fleet of thirty-four vehicles.

4.2 Planning Enforcement

An Environmental Health Officer (EHO) reviews planning applications to ensure that local air quality management is considered. Each application is reviewed to establish the potential air quality impact of the development as well as considering the impact on any new sensitive receptors brought to the area because of the development. Air Quality Assessments (AQAs) are requested for applications dependent on the size, location and type of development. The department follows Brent's Local Plan for developments that require an Air Quality Neutral (AQN) and Air Quality Positive (AQP) assessments. NRMM conditions are considered appropriate for both major and minor developments within the area.

4.3 Pan-London NRMM Auditing Project

Brent Council are committed to supporting the auditing project in 2025-2026.

An example wording used for NRMM conditions on construction/ demolition sites is "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: to protect local amenity and air quality in accordance with Brent Policy BSUI2 and London Plan Policy SI 1".

The above example NRMM condition is applied to both major and minor developments that has a CMS.

4.4 Air Quality Alerts

Brent Council supports airTEXT and currently has 279 subscribers, an increase of 16 compared to the end of 2023. The Mayor's air quality alert messaging is cascaded to the Council's internal mailing list of Early Year's Settings.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

QA/QC for Brent's automatic monitoring stations is provided by ERG Imperial College London. These stations are calibrated fortnightly by their local site operator (LSO), with annual audits carried out by the National Physics Laboratory.

PM₁₀ Monitoring Adjustment

No adjustments have been made to the PM10 data.

A.2 Diffusion Tubes

All diffusion tubes are prepared and provided by Gradko International Limited. The tubes are set up and collected by the local site operator 'We Care4 Air' and analysis

undertaken by Gradko using UKAS Accredited Methods. Tubes are prepared using the preparation method 20% Tri-ethanolamine (TEA) in de-ionised water.

Factor from Local Co-location Studies

Site BT4 (Ikea) was used in the local co-location study. Site BT8 (Ark Franklin) also has co-located diffusion tubes however the data was considered too incomplete to use for this purpose

BT4 is a roadside site and has four diffusion tubes co-located (ID 52). As the co-location study requires either duplicates or triplicates, 52D was not included in the calculations. The omission of this tube was decided as it had the lowest data capture out of the four diffusion tubes. BT4 was calculated as having a local bias adjustment factor of 0.76 using the Diffusion Tube Data Processing Tool v5.2.

Discussion of Choice of Factor to Use

Diffusion tube adjustment factors were obtained from the national bias adjustment calculator. Tubes were analysed by Gradko as detailed in the table below. As shown in the table, national bias adjustment factors over the past four years have remained relatively similar. Also, in comparison with the local factor, the national factor is higher and so provides a “worst case scenario” at each site. Therefore, the national factor of 0.84 was used for bias adjustment.

Table O. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor used
2019	National	03/20	0.91
2020	National	03/21	0.81
2021	National	03/22	0.84
2022	Local	03/23	0.92 (national was 0.83)
2023	National	03/24	0.81
2024	National	03/25	0.84

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

A final measurement data set was produced by ERG Imperial following retrospective ratification of the measurements using procedures which comply with the requirements of LLAQM.TG (19). During ratification, information from regular calibration, audits and daily manual validation were used to establish an operational and calibration history of the instruments. The pollution measurements were then corrected to establish traceability to National Meteorological Standards. Details of the monitoring site and the final data set can be found at www.londonair.org.uk.

Where data capture is less than 75% and greater than 33% of a full calendar year (less than 9 months), the mean was 'annualised' – i.e. adjusted using the methodology outlined in LLAQM.TG (19) before being compared to annual mean objectives. 10 diffusion tubes were annualised since data capture at the sites was reported below 75% during 2024. Three background automatic monitoring sites were used to undertake the annualisation calculations (Arsenal, Wandsworth, and Haringey). These were chosen as they are the closest background automatic monitoring sites to the diffusion tubes. Monitoring sites in background locations were prioritised to avoid any local effects that may occur at Urban Centre, Roadside or Kerbside sites. 2024 automatic monitoring data was obtained from Defra. Details of the annualisation calculations are provided in Table P.

No automatic monitoring data required annualization for 2024.

Distance Adjustment

If the monitored concentration is above $36 \mu\text{g m}^{-3}$ (10% below the relevant AQO) at a monitoring site which is not representative of public exposure, the procedure specified in LLAQM.TG(19) was used to estimate the concentration at the nearest receptor. Table Q contains the results of distance adjustment.

Table P. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor London Islington - Arsenal Urban Background	Annualisation Factor London Wandsworth (Putney) Urban Background	Annualisation Factor London Haringey (Priory Park South) Urban Background	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g m}^{-3}$)	Annualised Annual Mean ($\mu\text{g m}^{-3}$)
29	0.9662	0.9934	0.9690	0.9762	24.0	23.5
66	1.0590	1.0303	1.1286	1.0726	23.2	24.9
79a	0.8973	0.8979	0.8240	0.8730	27.9	24.4
79b	0.8734	0.8988	0.7962	0.8561	28.0	23.9
79c	0.8734	0.8988	0.7962	0.8561	26.8	23.0
SZ1	1.0524	1.0937	1.0683	1.0715	24.2	25.9
SZ22	1.0389	1.0347	1.0490	1.0490	15.3	16.0
PM20c	0.9709	1.0340	1.0310	1.0120	36.8	37.2
PM32c	1.0333	1.0179	1.0633	1.0382	20.1	20.8
PM14D	1.0017	1.0332	1.0201	1.0183	23.3	23.7

Table Q. 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
23	2.0	12.0	43.1	18.6	32.8	
41	4.0	7.0	42.7	19.5	39.0	<i>Predicted concentration at Receptor within 10% the AQS objective.</i>
53	1.0	16.0	41.8	16.7	27.8	
62	1.0	41.0	43.5	16.3	23.1	<i>Warning: your receptor is more than 20m further from the kerb than your monitor - treat result with caution.</i>
BRT53	0.5	4.5	40.9	16.6	31.5	
BRT55	0.5	3.5	55.3	19.0	42.8	<i>Predicted concentration at Receptor above AQS objective.</i>

Appendix B Full Monthly Diffusion Tube Results for 2024

Table R. 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 (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
1	516929	188560	31.2	28.8	27.6	23.0	17.2	19.5	22.8		23.2	28.4	30.5	22.4	24.7	20.7		
2	515793	186042	31.8	30.2	28.7			20.0	25.2	20.9	26.4	30.3	37.9	24.2	27.3	22.9		
4	518240	187747	31.6	27.6	30.1			21.7	23.2	20.4	26.4	32.4	35.7	22.4	26.9	22.6		
7	517942	183721														-		
9	518499	186168	34.2	34.0	31.9	26.9	22.3	24.4	25.2		26.6	28.1	34.4	24.8	28.2	23.7		
17	520480	186537		43.6	41.6	37.0	30.4	35.7	37.6	33.8	35.7		40.5	33.5	36.8	30.9		
21a	520077	182853	38.2	33.4	30.0			16.1	24.7	22.4	28.2	31.6	35.7	26.3	28.4	23.8		
22	521447	188730	34.5	31.4	34.9	34.9	30.2	28.0	33.0	26.2	36.6	34.3	53.2	31.2	33.7	28.3		
23	521213	186125	63.1	59.9	56.4		45.5	45.5	47.3	44.9	51.9	48.7	60.4	47.1	51.3	43.1	32.8	
26	522191	184821	36.6	34.2	35.1	26.3	22.7	22.0	26.4	22.8	31.0	31.3	39.0	28.5	29.3	24.6		
29	523191	186571	33.9		27.2		15.1	13.8		18.1	27.0	28.7	35.7	23.3	24.0	19.7		
30	523663	185353	34.3	29.8	29.3		39.5	24.8	26.4	23.3	32.4	32.6	36.0	22.7	29.9	25.1		
33a	519572	187691	28.3	27.2	25.6	23.4	19.5	21.5	24.5	19.2	25.2	26.9	31.5	20.8	24.2	20.3		
41	521455	185920			57.6	51.5	51.2	55.1	17.8	49.4	55.5	61.2		51.9	50.8	42.7	39.0	
48	525196	182517	35.8	30.5	29.7	27.7	22.8	20.8	24.9	23.8	28.1	28.5	37.5	27.7	27.8	23.4		
52a	520874	185173	44.9	49.3	48.0	41.4	35.9	37.5	41.0	37.8	44.8	44.4	45.5	31.0	41.8	35.1		
52b	520874	185173	44.9	45.5	44.7	40.1	37.1	35.8	42.5	36.2	43.6	44.0	44.9	29.4	40.7	34.2		
52c	520874	185173	44.5	45.7	46.7	41.4	37.2	33.7	42.5	37.9	45.5	42.7	41.8	32.2	41.0	34.4		
52d	520874	185173	42.1	46.9	47.1				42.0	37.8	44.8	41.9		32.6	41.9	35.2		
53	518026	185028	51.2	56.5	55.6	42.7		44.0	54.6	46.8	48.1	53.8	54.3	41.2	49.7	41.8	27.8	
54	518236	183207	33.4	32.4	30.3	25.9	21.2	24.9	27.2	26.0	26.8	26.6	34.0	25.9	27.6	23.2		
60	519475	186557	35.6	37.1	40.4	34.3	30.1	31.8	41.2	34.8	33.9	41.7			36.1	30.3		
61	519762	186600	33.8	31.9	32.4		49.6	53.2	61.5	29.5	28.4	32.7	31.4	22.6	36.6	30.8		
62	519667	186604	57.0	69.5	52.6	58.3		27.2	30.8	55.9	55.3	52.0	56.1		51.8	43.5	23.1	
63	519703	187007	26.6	23.8	24.0	13.8	10.6	12.0	14.1	12.9	16.3	23.4	26.3	18.8	18.4	15.4		
64	519824	186715	32.5	29.8	30.1	26.2	21.5	24.3	26.4	18.9	27.1	29.4		23.7	26.1	21.9		
65	521313	186529	36.3	40.5	38.3	27.0	21.9	22.9	27.0	26.1	27.1	34.4	35.4	26.9	30.2	25.3		
66	521912	186514					19.1	18.7	20.5	19.6	24.8		32.8	27.5	23.2	20.9		
67	521651	186611	33.1	27.6	26.1	19.3	15.9	14.3	18.0	16.0		25.4	30.6	26.0	22.7	19.0		
68	521448	186626	33.6	32.9	30.1	28.8	23.3	25.2	26.2	22.3	30.5	28.1	36.6	29.2	28.6	24.1		
69	523782	183527	30.9	25.1	24.3	19.3	16.2	17.6	19.1	17.0	23.2	16.6	31.1	23.9	21.6	18.2		
70	523828	183338	31.1	26.5	24.2	18.8	15.9	15.7	17.9	16.1	19.6	24.3	30.3	22.1	21.6	18.2		
71	524179	183232	30.1	25.4	22.9			14.4	16.9	14.8	19.8	23.8	28.8	22.7	21.8	18.3		
72	524142	183120	32.7	28.3	27.1	17.9	17.8	17.5	18.5	17.3	22.7	27.1	31.2	23.9	23.3	19.6		
73	524607	183267	32.9	29.6	29.7	25.0	21.8	22.7	26.0	20.0	29.5		30.8	24.6	26.2	22.0		
74	524283	183882	30.4	25.8	25.9	20.4	19.0	18.3	19.3	16.1	24.0	25.2	32.5	22.2	23.0	19.3		
75	517499	187778	26.0	24.2	23.1	17.2	14.3	14.5	16.0	14.6	16.1	24.2	28.3	20.1	19.8	16.6		
76	518430	188406	26.1	19.8	20.2	14.1	10.6	10.4	12.5	12.8	13.9		25.4	18.0	16.4	13.8		
77	519100	189827	28.3		24.4	18.0	13.7	7.5	17.2	11.7	17.8	24.1	28.1	21.8	19.1	16.0		
78	516721	185478	35.1	31.4	33.9	28.4	24.6		29.1	26.0	29.7	36.7	42.0	30.5	31.4	26.3		
79a	523721	183008	30.6	25.2	26.0	21.8					28.2	32.6	34.6	25.9	28.1	20.5		
79b	523721	183008	32.2	26.4	26.5	22.0						30.8	33.9	26.0	28.2	20.1		
79c	523721	183008	33.9	23.8	27.3	20.7						28.1	33.9	23.9	27.6	19.3		
BRT42	521131	183995	33.6	30.0	33.0	26.1	24.0	24.3	27.5	24.2	30.2	34.9	36.4	23.5	28.6	24.1		

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 (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
BRT43	520242	184541	42.5	42.9	44.2	36.4		32.7	38.1	34.9	38.8	41.9	43.8	33.4	38.9	32.7		
BRT53	518303	185181	50.5	50.0	51.8	47.1	38.6	44.9	55.5	48.0	53.8	59.2	50.1	40.8	48.7	40.9	31.5	
BRT55	521743	183361	71.9	71.3	66.2	79.8	66.7	68.7		54.8	72.3	61.1	67.0	52.8	65.8	55.3	42.8	
BRT56	523635	183153	41.9	35.7	36.3	32.8	31.9	40.5	35.5	32.5	38.8	36.0	46.3	34.7	36.5	30.7		
BRT57	525419	183612	49.9	47.0	44.5	42.2	34.4	41.1	42.2	36.4	41.6	40.9	45.1	36.4	41.3	34.7		
BRT58	523031	184655	44.0	42.2	42.4	40.2	31.3	33.3	38.9	36.4	44.2	39.1	43.9	31.8	38.4	32.3		
SZ1	521103	183408	32.6	28.6	27.0	23.7	19.6	20.4		18.6	25.9			24.9	24.2	21.8		
SZ2	521069	186250	32.5	29.6	28.0	19.2	16.3	17.2	19.2	18.7	22.2		29.8	21.7	22.8	19.1		
SZ3A	518900	184774	25.9		21.8	16.9	13.9	12.6	15.1	15.6		23.8	26.3	21.9	19.2	16.1		
SZ3B	518913	184670	24.7	23.0	21.1	13.9	13.2	12.3		14.3	17.0	23.0	25.2	20.2	18.8	15.8		
SZ4a	521643	183579	32.1	30.9	30.3	23.3	18.0	20.0	23.1	20.0			35.5	25.6	25.5	21.4		
SZ4b	521718	183649	36.1	31.4	31.6	23.4	18.6	18.6	22.3			23.9	35.0	24.6	26.1	21.9		
SZ4c	521781	183700	32.5	26.6	27.2	20.0	16.6	16.7		17.9	22.9	26.2	33.9	23.2	23.6	19.8		
SZ41	521624	184275		23.7	23.0	15.1	14.2	13.7	16.8	14.1	19.4	24.1	27.1	21.4	19.4	16.3		
SZ5a	521394	184264	29.0	22.0	22.3	17.2	14.8	14.7	18.6	15.5			29.3	21.0	20.0	16.8		
SZ5b	521364	184185	29.4	26.7	23.8	18.6	15.4	16.6	18.0	16.9	20.2	21.7	31.2	22.7	21.5	18.1		
SZ6	517900	187137	24.8	21.0	20.2	13.8	10.6	11.3	13.1	12.3	14.9	21.2	24.0	18.8	17.0	14.3		
SZ7	523119	185933	28.6	25.2	23.7	15.5	15.0	14.0	17.0	15.6	20.3	24.3	29.8	19.7	20.5	17.2		
SZ8	521314	184712	33.5	28.2	25.9	20.1	16.1	16.4	16.9		21.4		31.9	21.4	22.8	19.1		
SZ10	524585	184031	29.2	25.3	24.0	17.3	14.9	14.7	18.4	15.3	18.4	21.2	30.6	23.5	20.8	17.5		
SZ11A	520480	183908	28.0	22.7	22.2	16.6	27.6	15.2	15.8	16.7	19.7	23.2	28.8	19.6	21.3	17.9		
SZ11b	520525	183861	32.3	25.9	24.6		14.8	15.2	16.7	15.0	19.9	24.1	32.7	21.0	21.6	18.2		
SZ12	523167	186491	29.0	25.5		19.3	16.7	16.2	16.2	14.9	21.9	21.2	30.1	21.5	20.8	17.5		
SZ14A	518837	185102	28.8	23.4	24.8		15.4	14.3	16.3	14.8	37.1	21.0	27.0	21.8	21.6	18.2		
SZ14B	518835	185012	27.8	23.0	25.2	18.0	15.8	14.3	18.8	17.0	21.7	25.8	30.2	21.6	21.4	18.0		
SZ15	522934	184702	31.3	25.7			15.9	15.1	18.0	15.3	20.8	23.8	30.6	23.3	21.6	18.2		
SZ16	523039	184745	28.8	25.8	24.3	16.2	13.7	13.4	16.0	14.5	18.8	23.7	29.7	21.6	20.4	17.1		
SZ17	521618	185525	32.0	33.4	27.3	20.8	17.5	18.1	15.6	19.4	22.8	27.3	30.2	26.5	24.2	20.3		
SZ18	523224	183045	30.9		25.6	22.2	19.9	15.5	17.5	16.3	23.0	25.5	32.0	23.3	22.6	19.0		
SZ19	523744	183076	30.0	28.0	25.5	20.3	17.4	35.5	34.4	19.6	21.5	25.6	30.2	25.0	25.8	21.6		
SZ20A	523678	183956	24.5	19.9	19.8	13.5	12.7	11.1		11.6	15.8	21.9	26.0	18.7	17.5	14.7		
SZ20B	524003	183995	27.9	22.2	23.2	14.8	13.4	13.3	14.6	13.3	19.5	22.3	29.4	21.4	19.4	16.3		
SZ22	519883	189197	22.5		18.3	13.7		9.5	12.0	10.8	14.3	19.6		17.8	15.3	13.4		
SZ23	520065	188673	25.7	18.2		15.5	12.4	12.2	14.2	12.7	16.3	22.1	24.4	18.7	17.3	14.5		
SZ231	520211	188478	24.6	21.0	21.2	14.1	11.8	11.2	12.2	12.0	15.7	20.8			16.3	13.7		
SZ24	517739	187912	23.1	19.3	18.9	12.3	10.0	10.3	11.4	11.3	14.3	21.1	24.4	16.8	15.9	13.4		
SZ25A	518243	188627	23.6	21.8	20.2	13.7	10.3	9.8	12.4	11.1	13.7	19.0	25.0	18.9	16.5	13.9		
SZ25B	518184	188539	22.5	18.8	17.2	12.4	9.3	9.8	11.4	12.3	13.3		21.7		14.6	12.2		
SZ26	516559	185913	27.6	22.8	22.5	16.1	13.4	13.2	15.4	13.2	16.1	21.8	27.9	20.1	19.0	15.9		
SZ27	519913	185066	29.7		27.2	17.5	16.2	15.6	19.1	17.5	21.4	23.0	28.7	23.2	21.4	18.0		
SZ63	518603	186544	25.3	20.9	20.9	13.5	10.7	11.4	12.9	12.5		20.9	22.8	19.0	17.1	14.4		
SZ81	520512	184580	31.1	25.5	22.1	17.7	16.3	15.6		16.2	22.0	23.6	30.5	23.5	21.8	18.4		
PM14A	520763	183700	32.9	28.2	27.7	21.1	17.0	17.5	19.8		21.5	27.3	29.8	24.4	24.1	20.2		
PM14b	521049	183874	42.5	35.2	38.8	33.6	28.2	37.4	39.6	37.1	40.8	34.4	42.2	29.6	35.9	30.2		
PM14C	521401	183542	31.7	27.2	24.7	19.6	16.0	16.9	17.6	17.4	20.6	26.4	31.4	23.3	22.5	18.9		
PM14D	521321	183478	35.2	28.0	26.7		16.3		20.1	18.3	22.4			23.5	23.3	19.9		
PM16a	521348	183912	33.1	26.6	26.8	20.9	18.1	18.9	20.6	18.4	23.6	25.6	35.1	24.4	24.0	20.2		
PM16b	521741	184243		24.8	24.0	19.3	16.1	16.6	17.9	16.1	19.2	24.2	29.1	21.9	20.9	17.5		
PM19a	523453	183500	41.0	32.5		28.7	25.3	26.6	29.9	25.9	33.1	39.6	43.7	33.5	32.4	27.2		

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 (0.84)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
PM19b	523931	183500	31.3	26.7	25.2	21.1	18.5	19.0	20.6		14.2	23.9	33.2	22.2	23.1	19.4		
PM19c	524520	183495	34.7	29.8	29.6	27.8	23.9	25.3	27.4	23.1	31.5	30.3		23.9	27.5	23.1		
PM20c	524908	184273	39.8	36.9	41.0		34.6	34.5	37.3	29.1			43.3		36.8	31.3		
PM22A	523854	185249	29.7	25.1	26.0	20.2	16.3	16.2	17.6	17.0	21.3	24.4	32.2	24.4	22.3	18.8		
PM22B	523770	185086	30.2	23.9	23.6	19.7	15.5	15.1	17.2	16.5	19.5	24.0	28.4	21.8	21.0	17.7		
PM22C	524333	184827	28.4	25.0	23.2	19.3	14.6	14.9	13.9	12.1	19.5	21.6	31.3		20.1	16.8		
PM22D	524486	184877	32.7	33.1	34.6	34.8	31.3	33.3	34.0	30.0	35.5	30.8	36.5	26.2	32.4	27.2		
PM22E	523846	184875	25.3	24.0	23.1	16.0	14.2	15.0	16.2	15.3	18.1	22.9		21.9	19.3	16.2		
PM23A	522708	184973	32.7	26.3	27.8	20.1	18.3	19.1	19.2	19.2	26.3	26.2	31.3	22.5	23.7	19.9		
PM23B	522970	184812	30.6	24.3	24.6	19.1	14.7	15.1	17.6	15.8	20.7	25.8	31.9	22.6	21.6	18.2		
PM25a	523246	185765	31.3	26.2	25.0		14.6	15.7	19.6		23.8	25.3	32.4	22.1	23.2	19.5		
PM25b	523581	185671	27.5	24.4			15.5	15.4	16.5	15.4	21.3	23.5	29.0	15.2	19.9	16.7		
PM25c	523560	185395	31.3	25.3	23.6	20.4	16.0	15.3	16.9	14.7	21.2	24.7	29.7	21.5	21.4	18.0		
PM26a	522941	186263	30.5	23.1	25.2	16.7	14.5	13.7	16.1	15.6	20.0	24.3	25.8	22.3	20.4	17.2		
PM26b	522563	186233	29.1	26.7	24.5	18.3	15.0	15.8	16.9	15.6	18.7	23.0	30.8	22.2	21.2	17.8		
PM28A	517811	186252	37.4	32.0	33.7	29.4	25.3	29.2	31.8	27.7	33.6	35.7	37.3	28.8	31.5	26.4		
PM28B	518367	185872	27.1	22.4	21.4	15.6	12.7	13.2	15.4	14.4	17.9	17.4	27.4	19.7	18.4	15.5		
PM28C	518172	186004	29.0	26.8	24.8	17.6	13.9	14.6	17.9	16.0	20.1	21.8	31.7	22.6	21.1	17.8		
PM28D	518076	185421	28.8	26.8	26.3		15.8	16.2	18.4	18.0	19.6	24.9	29.6	19.7	21.9	18.4		
PM28E	517952	185913	27.1	23.4	22.8	16.1	13.4	14.0	16.0	14.9	18.5	20.6	27.5	19.1	19.2	16.1		
PM29a	517896	186958	27.2	26.0	24.4	16.7	14.0	13.7	15.4	17.0	18.5	21.7	27.3	21.3	20.1	16.9		
PM29b	518008	187311	25.8	22.7	22.5	15.4	12.3	12.8	13.8		16.7	22.4	26.9	19.5	19.0	16.0		
PM29c	518280	187411	30.4	27.0	26.4	19.9	17.8	17.8	20.9	17.4	22.9	25.0	31.3	22.4	23.0	19.3		
PM32a	519588	189311	31.0	25.2	25.6	18.4	14.6	15.6	18.1	15.6			31.0	21.5	21.2	17.8		
PM32b	519432	188972	28.5	22.6	23.1	17.8	13.5	14.0	15.4	13.9			29.5	19.7	19.4	16.3		
PM32c	519268	188982	29.5	25.3	23.6	17.8		12.0	15.9	15.1	18.3	23.8			20.1	17.5		
PM36A	518590	185172	32.2	28.7			30.5	28.3	33.2	26.7	20.6	33.0	41.7	29.4	30.4	25.5		
PM36B	519200	184899	32.9	28.7	30.4	24.5	21.6	19.6	24.3	23.8	27.0	30.3	28.5	24.6	26.1	21.9		

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

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

☐ Local bias adjustment factor used.

☒ National bias adjustment factor used.

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

☒ London Borough of Brent 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 4. Map of Non-Automatic Monitoring Site(s)

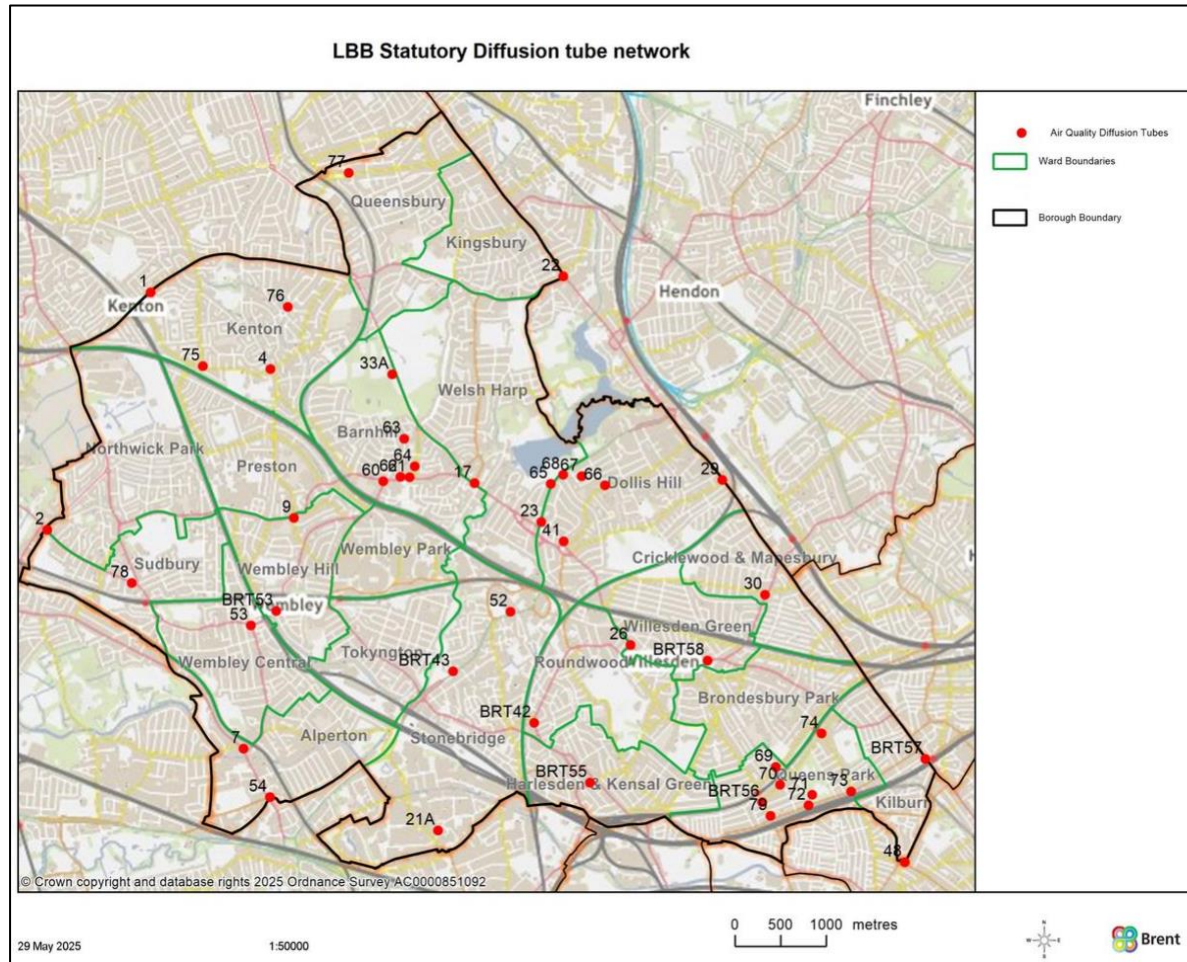
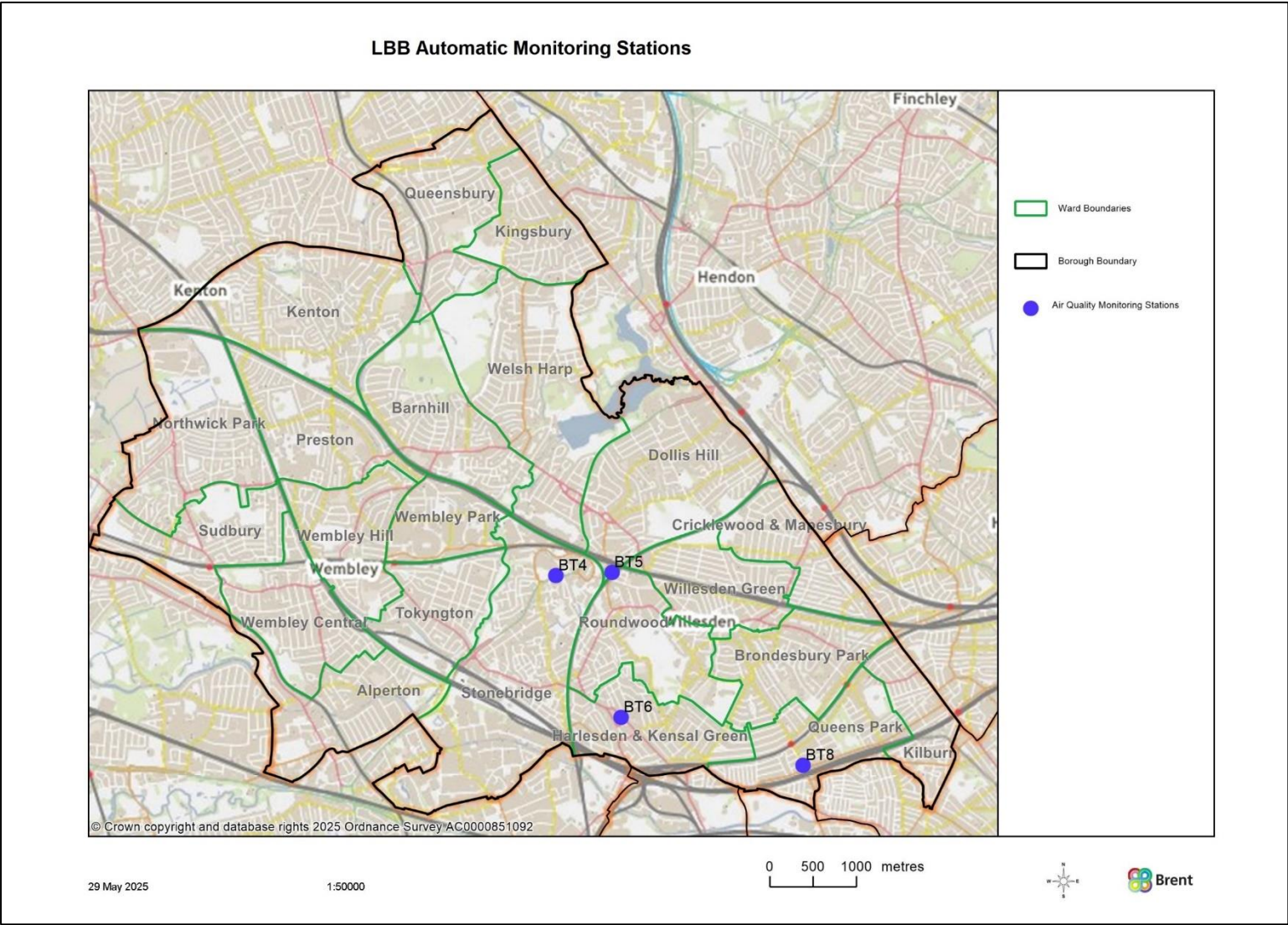


Figure 5. Map of Automatic Monitoring Site(s)



London Borough of Bromley

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 Bromley during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process¹.

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

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Abbreviations

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

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

Pollutant	Standard / Objective / Guideline	Averaging Period	Date ⁽¹⁾
Nitrogen dioxide (NO ₂)	200µg m ⁻³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	40µg m ⁻³	Annual mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	WHO AQG ⁽²⁾ : 10µg m ⁻³	Annual mean	
Particles (PM ₁₀)	50µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 45µg m ⁻³ not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM ₁₀)	40µg m ⁻³	Annual mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 15µg m ⁻³	Annual mean	
Particles (PM _{2.5})	10µg m ⁻³ ⁽³⁾	Annual mean	2040
Particles (PM _{2.5})	London Mayoral Objective ⁽⁴⁾ : 10µg m ⁻³	Annual mean	2030
Particles (PM _{2.5})	WHO AQG ⁽²⁾ : 5µg 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⁾ : 15µg m ⁻³	24-hour mean	
Sulphur dioxide (SO ₂) ⁽⁵⁾	266µg m ⁻³ not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO ₂)	350µg m ⁻³ not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO ₂)	125µg 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⁾ : 40µg 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) Air quality target under the Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 under the Environment Act 2021.

(4) London Mayoral Objective

1. Air Quality Monitoring

1.1 Locations

The London Borough of Bromley has historically monitored at 6 continuous monitoring sites within the Borough, 5 of which are now closed. The remaining operational monitoring station is located at Harwood Avenue, in central Bromley, monitoring NO₂, PM₁₀ and PM_{2.5}. Table B and Figure 1 provide details of this monitoring site. Monitoring at the site has been operated by the Council since July 2011. Details of the relevant Quality Assurance/Quality Control (QA/QC) procedures that have been followed throughout the monitoring period are provided in Appendix A.

Bromley carries out passive monitoring using NO₂ diffusion tubes at 32 locations in the Borough. All the diffusion tube sites are either at roadside or kerbside locations. The Harwood Avenue diffusion tube site is co-located with the Harwood Avenue automatic monitor. Up until the end of 2020, there were 10 triplicate diffusion tube monitoring locations, at which point 22 additional diffusion tube locations were installed with all monitoring locations commissioned with one tube. Table C and Figure 1 provide details of the operational diffusion tube sites within the Borough during 2024.

Table B. Details of Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
BRY-CM3	Harwood Avenue	Kerbside	540523	169326	NO ₂ , PM _{2.5} and PM ₁₀	YES	Chemiluminescence, Beta attenuation monitoring (BAM)	10.8	0.4	3.5

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?	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	Homesdale Road	Kerbside	541047	168231	NO ₂	Yes	4.3	0.7	No	2.2
2	Chatterton Road	Roadside	541679	167931	NO ₂	Yes	5.4	1.7	No	2.5
3	Hastings Road, McDonalds	Kerbside	542402	166012	NO ₂	Yes	19.0	0.8	No	2.1
4	College Road	Kerbside	540336	170258	NO ₂	Yes	10.0	0.5	No	2.3
5	London Road	Roadside	539790	170050	NO ₂	Yes	7.1	1.4	No	2.3
6	Shortlands Road	Roadside	539486	169399	NO ₂	Yes	8.2	1.8	No	2.2
7	Beckenham Road	Kerbside	535947	169765	NO ₂	Yes	12.2	0.4	No	2.3
8	Worsley Bridge Road	Kerbside	536941	171320	NO ₂	Yes	7.2	0.9	No	2.2
9	Links Way	Kerbside	537511	167277	NO ₂	Yes	11.5	0.8	No	2.3
10	Elmers End Road	Roadside	536076	168434	NO ₂	Yes	6.5	1.6	No	2.3
11	Anerley Road	Kerbside	535006	169590	NO ₂	Yes	16.2	0.7	No	2.2

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
12	Anerley Hill	Kerbside	533949	170624	NO ₂	Yes	7.2	0.5	No	2.2
13	Hamlet Road	Kerbside	534052	170237	NO ₂	Yes	13.4	0.6	No	2.3
14	Belvedere Road	Kerbside	533702	170354	NO ₂	Yes	12.3	0.7	No	2.5
15	Glebe Way	Kerbside	538398	165925	NO ₂	Yes	9.9	0.5	No	2.3
16	Ridgeway	Kerbside	540228	165941	NO ₂	Yes	13.4	0.5	No	2.2
17	Crofton Road	Kerbside	543303	165256	NO ₂	Yes	15.1	0.7	No	2.3
18	Towncourt Lane	Roadside	544779	166831	NO ₂	Yes	3.8	2.3	No	2.3
19	High Street, Orpington	Roadside	546190	166135	NO ₂	Yes	6.2	2.7	No	2.6
20	Cardinham Road	Roadside	545861	164813	NO ₂	Yes	5.6	1.6	No	2.2
21	Farnborough Hill	Kerbside	545439	164034	NO ₂	Yes	9.6	0.8	No	2.4
22	Poverest Road	Roadside	546821	167564	NO ₂	Yes	10.9	1.6	No	2.2
23	High Street, St Mary Cray	Roadside	547168	167471	NO ₂	Yes	51.0	1.3	No	2.2

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
24	Midfield Way	Kerbside	546984	169905	NO ₂	Yes	18.9	0.7	No	2.2
25	Ashfield Lane	Roadside	544437	170464	NO ₂	Yes	11.9	1.6	No	2.2
26	Park Road	Kerbside	543930	170934	NO ₂	Yes	3.6	0.9	No	2.3
27	Harwood Avenue	Kerbside	540525	169325	NO ₂	Yes	10.8	0.4	Yes	2.3
28	Widmore Road	Roadside	540519	169403	NO ₂	Yes	15.0	3.8	No	2.3
29	Blackbrook Lane	Roadside	542980	167735	NO ₂	Yes	14.0	1.4	No	2.2
30	Old Hill	Kerbside	543452	169793	NO ₂	Yes	6.7	0.4	No	2.2
31	Mottingham Road	Roadside	542847	172021	NO ₂	Yes	19.6	1.8	No	2.2
32	Page Heath Lane	Kerbside	541960	168841	NO ₂	Yes	2.8	0.5	No	2.4

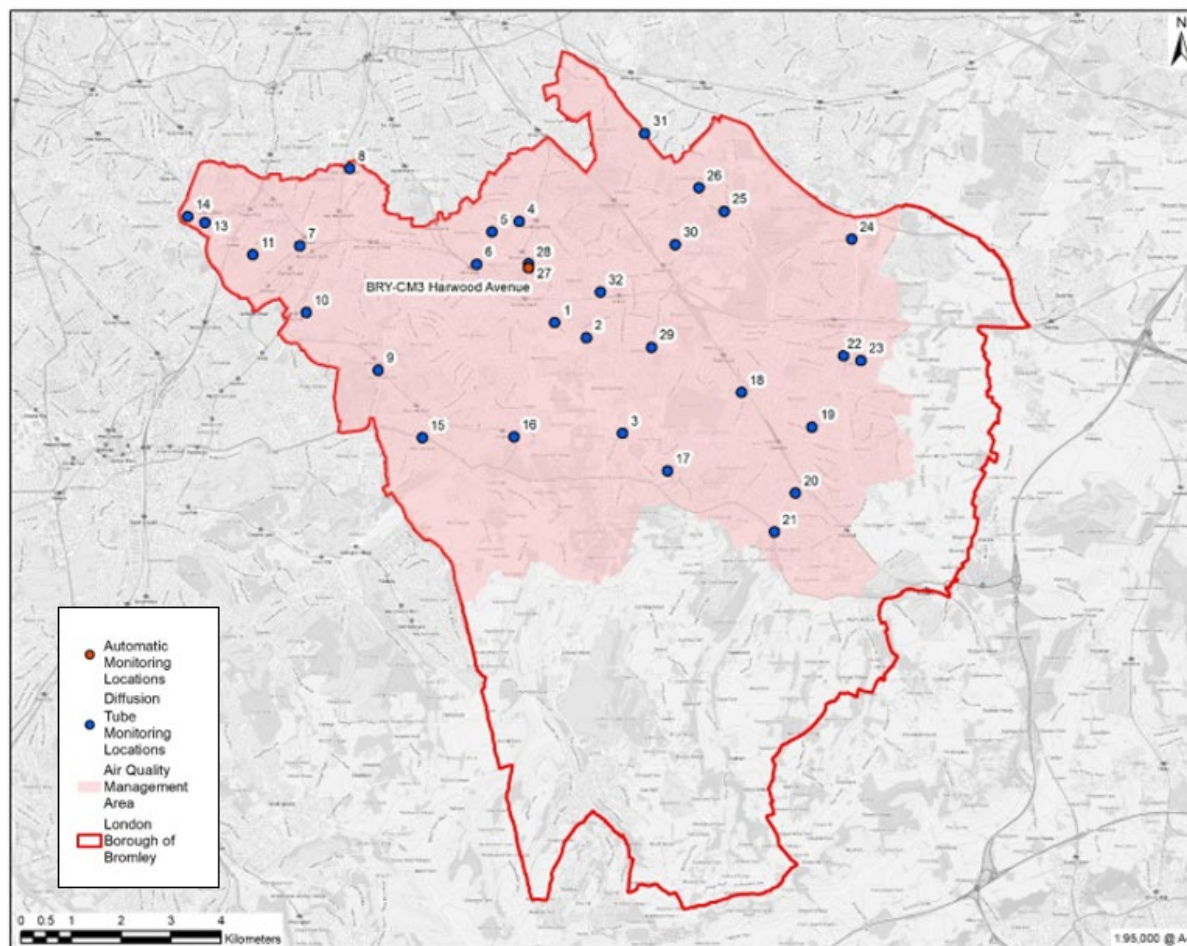
Notes:

(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.

Figure 1. Map of Monitoring Sites

The monitoring site numbers indicated on the map below correlate to the Diffusion Tube Identification numbers listed in Table C.



1.2 Comparison of Monitoring Results with AQOs

Annual mean NO₂ concentration results from the automatic monitoring station and diffusion tube monitoring locations, since 2018, are presented in Tables D to I. These results have been adjusted for annualisation and bias, with detailed explanations provided in Appendix A.

The BRY-CM3 Harwood Avenue NO₂ automatic monitor did not exceed the NO₂ annual mean objective of 40µg m⁻³ in 2024 and achieved an 85% data capture rate. This rate falls below the 90% required by Defra, meaning the annual mean NO₂ value for 2024 may not fully represent the entire year and should be used as guidance only. Table F shows the number of 1-Hour means exceeding 200µg m⁻³. No exceedances were recorded in 2024. All data has been ratified, with details of the ratification process provided in Appendix A.

The 2024 diffusion tube monitoring results have been adjusted for annualisation and bias, with detailed explanations in Appendix A. Since the data capture for the diffusion tubes was 75% or higher, annualisation was not necessary. Appendix A also summarises the QA/QC procedures applied to the diffusion tube results.

In 2024, all but one NO₂ diffusion tube monitoring locations met the annual mean concentration objective of 40µg m⁻³. The diffusion tube located at Site 19 in Orpington High Street recorded an annual mean NO₂ concentration of 40.1µg m⁻³, marginally exceeding the objective. As this site is not a point of relevant exposure, Defra's Diffusion Tube Data Processing Tool² has been used to estimate the annual mean NO₂ concentration at the nearest location of relevant exposure reducing this to 31.8µg m⁻³, this is detailed in Appendix A.

No diffusion tube locations recorded an annual mean concentration above 60µg m⁻³, indicating that the 1 hour mean NO₂ objective is unlikely to have been exceeded.

Concentration values are those at the location of the monitoring site (bias adjusted and annualised, as required), not those following any fall-off with distance correction.

² Defra (2025), Diffusion Tube Data Processing Tool (V5). Available at: [Diffusion Tube Data Processing Tool | LAQM \(defra.gov.uk\)](#) Accessed 28/03/2025.

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	Trend from 2023-2024
BRY-CM3	540523	169326	Kerbside	85.0	85.0	25.7	24.7	21.3	21.8	20.1	19.0	20.0	↑

Notes:

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

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

NO₂ annual means more than 60µg 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 were 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	Trend from 2023-2024
1	541047	168231	Diffusion tube	100.0	100.0	43.5	39.4	29.3	30.9	28.6	24.2	22.6	↓
2	541679	167931	Diffusion tube	100.0	100.0	-	-	-	18.3	18.1	14.8	13.6	↓
3	542402	166012	Diffusion tube	100.0	100.0	-	-	-	27.5	27.6	24.1	24.6	↑
4	540336	170258	Diffusion tube	92.4	92.4	35.6	33.1	25.7	25.5	25.6	23.0	21.8	↓
5	539790	170050	Diffusion tube	100.0	100.0	37.6	37.6	27.7	26.8	24.6	22.4	18.6	↓
6	539486	169399	Diffusion tube	90.8	90.8	35.3	36.0	27.7	27.1	25.4	22.4	21.9	↓
7	535947	169765	Diffusion tube	100.0	100.0	38.2	36.0	28.6	30.2	28.8	25.7	24.1	↓
8	536941	171320	Diffusion tube	100.0	100.0	-	-	-	20.6	20.0	17.8	14.7	↓
9	537511	167277	Diffusion tube	92.4	92.4	-	-	-	25.4	24.6	21.9	22.2	↑
10	536076	168434	Diffusion tube	100.0	100.0	51.3	48.1	39.5	37.5	35.4	31.6	29.5	↓
11	535006	169590	Diffusion tube	75.0	75.0	35.2	36.4	27.9	29.2	26.3	24.5	23.0	↓
12	533949	170624	Diffusion tube	90.8	90.8	39.0	42.5	35.1	35.9	36.2	30.2	27.8	↓
13	534052	170237	Diffusion tube	100.0	100.0	-	-	-	26.6	26.0	23.4	19.1	↓
14	533702	170354	Diffusion tube	100.0	100.0	-	-	-	18.2	16.5	14.8	13.5	↓

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	Trend from 2023-2024
15	538398	165925	Diffusion tube	90.8	90.8	-	-	-	27.9	27.9	23.4	20.7	↓
16	540228	165941	Diffusion tube	92.2	92.2	-	-	-	16.2	15.3	12.5	11.1	↓
17	543303	165256	Diffusion tube	100.0	100.0	-	-	-	25.0	25.7	23.4	19.7	↓
18	544779	166831	Diffusion tube	90.8	90.8	-	-	-	15.4	14.6	12.8	12.4	↓
19	546190	166135	Diffusion tube	90.5	90.5	-	-	-	41.9	40.6	38.8	40.1	↑
20	545861	164813	Diffusion tube	100.0	100.0	-	-	-	19.4	18.3	16.0	14.8	↓
21	545439	164034	Diffusion tube	100.0	100.0	-	-	-	33.3	30.5	27.4	28.5	↑
22	546821	167564	Diffusion tube	100.0	100.0	-	-	-	22.4	19.8	17.7	15.0	↓
23	547168	167471	Diffusion tube	100.0	100.0	-	-	-	25.1	23.7	21.7	18.4	↓
24	546984	169905	Diffusion tube	100.0	100.0	-	-	-	24.7	24.0	19.6	18.2	↓
25	544437	170464	Diffusion tube	100.0	100.0	-	-	-	19.6	18.9	15.2	13.7	↓
26	543930	170934	Diffusion tube	100.0	100.0	-	-	-	21.0	19.8	16.2	14.9	↓
27	540525	169325	Diffusion tube	100.0	100.0	27.3	28.3	21.4	21.1	20.5	19.4	20.3	↑
28	540519	169403	Diffusion tube	100.0	100.0	39.1	38.4	30.9	32.8	31.1	28.8	30.5	↑
29	542980	167735	Diffusion tube	100.0	100.0	-	-	-	23.0	21.5	17.8	17.0	↓

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	Trend from 2023-2024
30	543452	169793	Diffusion tube	100.0	100.0	-	-	-	26.6	23.3	20.4	18.1	↓
31	542847	172021	Diffusion tube	92.4	92.4	-	-	-	29.7	26.4	24.6	24.7	↑
32	541960	168841	Diffusion tube	100.0	100.0	-	-	-	25.3	23.9	21.3	17.8	↓

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

☒ Diffusion tube data has been bias adjusted.

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

Notes:

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

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

NO₂ annual means exceeding 60 $\mu\text{g}/\text{m}^3$, 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 >200µg m⁻³

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2018	2019	2020	2021	2022	2023	2024
BRY-CM3	540523	169326	Kerbside	85.0	85.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes

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

Exceedance of the 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 were carried out for six months the maximum data capture for the full calendar year would be 50%)

Figure 2 below shows the trend in annual mean NO₂ concentration at BRY-CM3 Harwood Avenue Automatic Monitor for the 2018 – 2024 period. This location exhibits an overall decreasing trend other than a slight increase from 2020-2021 and an increase of 1.0µg m⁻³ in 2024, from 19.0µg m⁻³ in 2023 to 20.0µg m⁻³.

Figure 2. Annual Mean NO₂ concentrations at the Harwood Avenue Automatic Monitoring Site

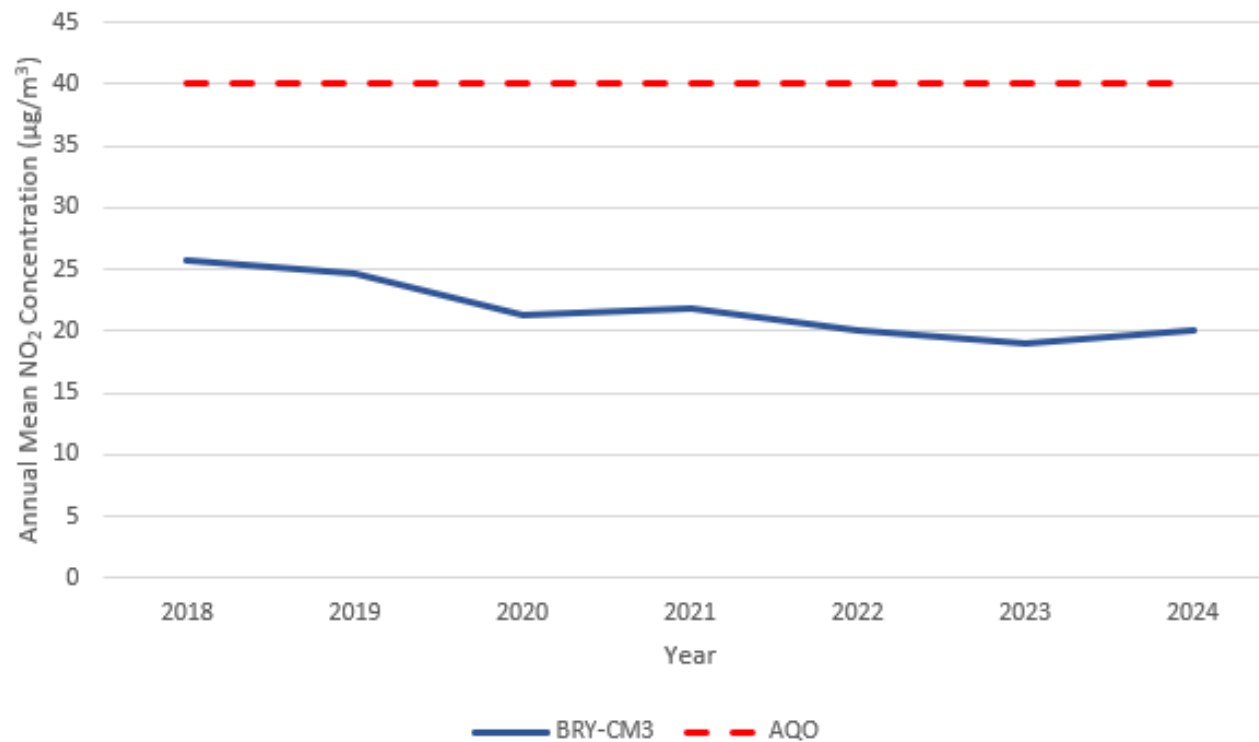


Figure 3 below shows the trend in annual mean NO₂ concentrations for the original 10 non-automatic monitoring diffusion tube sites for the 2018 – 2024 period. Please refer to Table E for full results.

Figures 4 & 5 below show the trends in annual mean NO₂ concentrations for the additional 22 non-automatic monitoring diffusion tube sites installed in 2021 for the 2021 – 2024 period. Please refer to Table E for full results.

Figure 3. Annual Mean NO₂ concentrations for the original 10 Non-Automatic Monitoring Sites

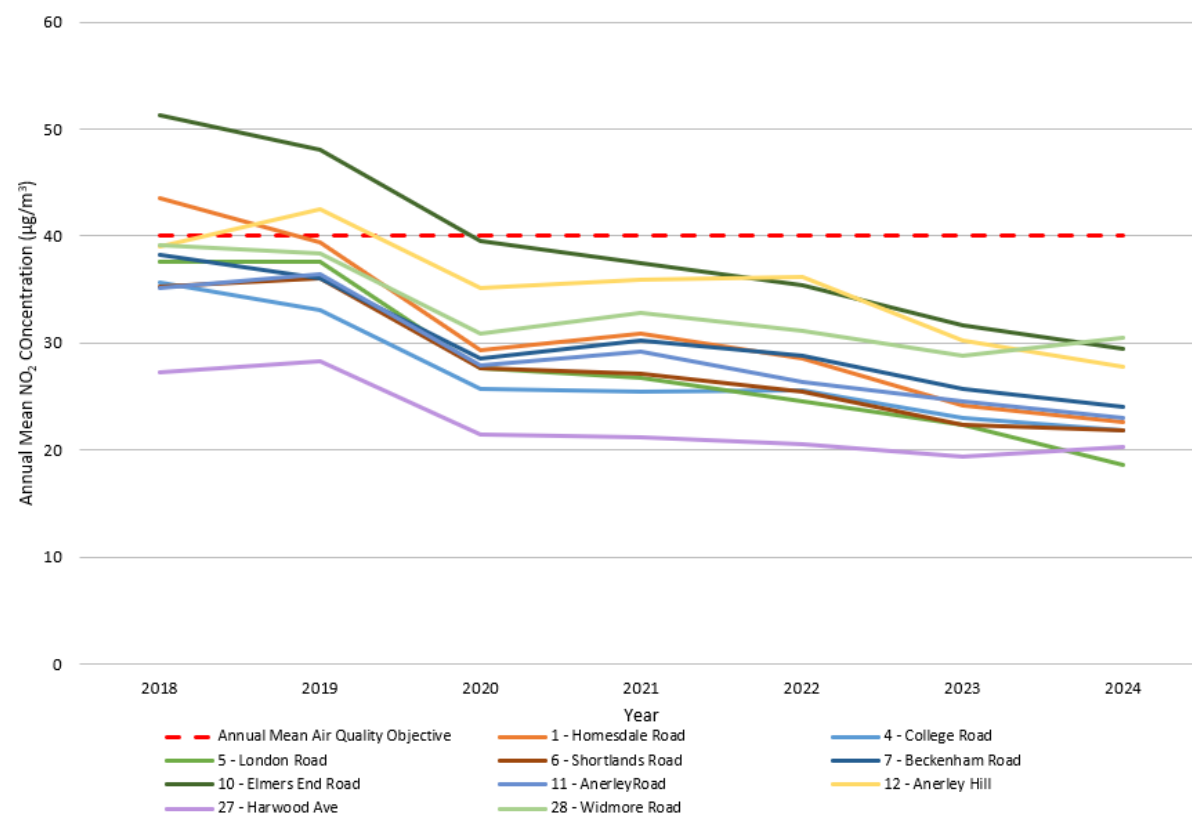


Figure 4. Annual Mean NO₂ concentrations for the additional Non-Automatic Monitoring Sites (Tubes 2-19)

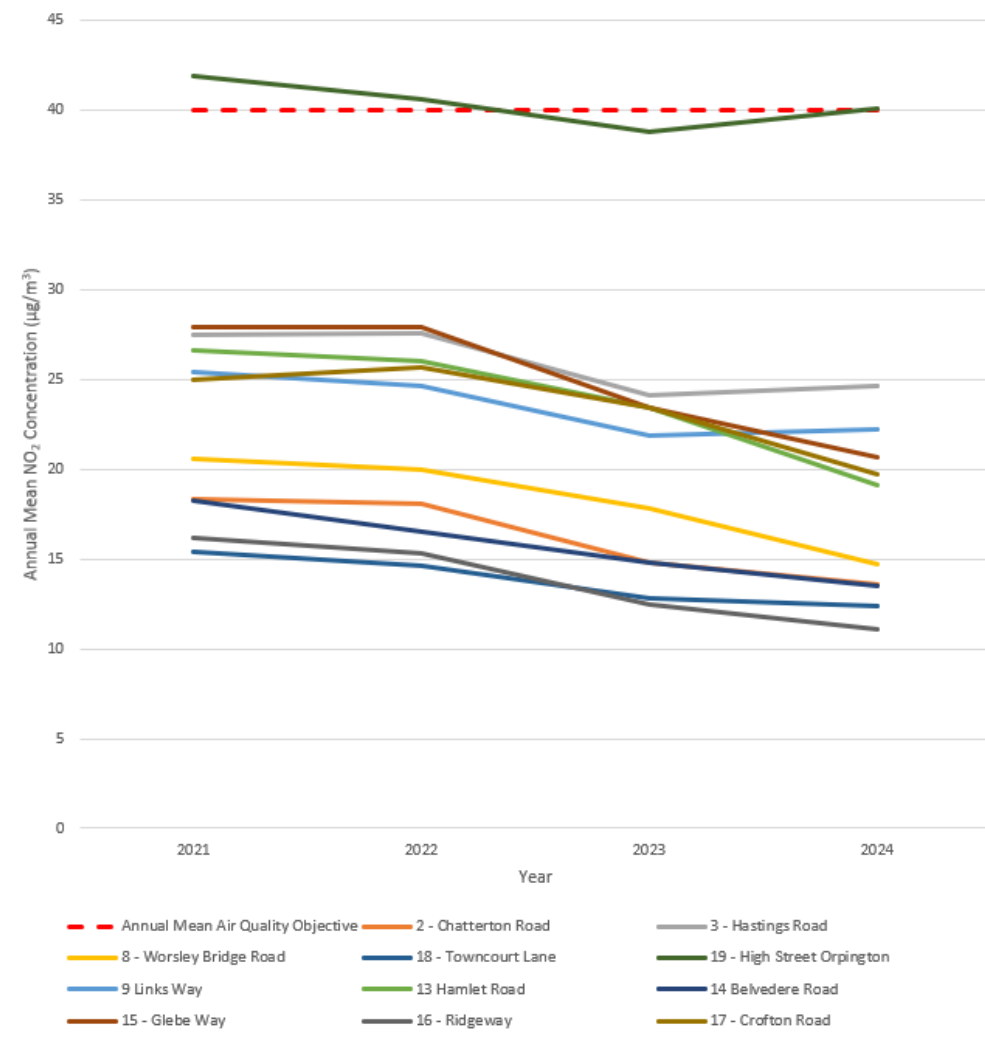
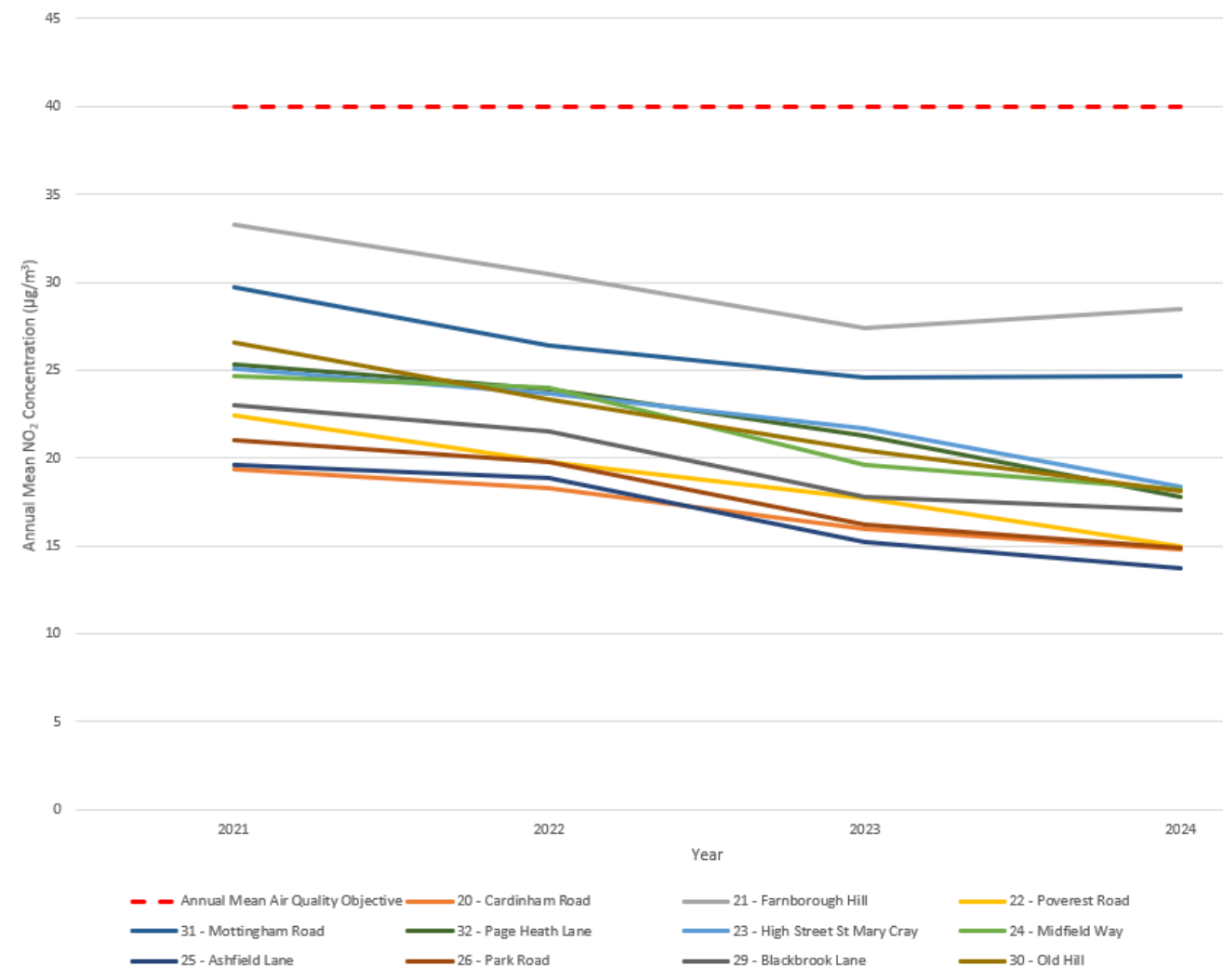


Figure 5. Annual Mean NO₂ concentrations for the additional Non-Automatic Monitoring Sites (Tubes 20-32)



1.3 Annual Mean NO₂ concentrations - Non-Automatic Monitoring Sites

Table E demonstrates that all diffusion tube sites have experienced a decrease in NO₂ concentrations from 2018 to 2024.

In 2024, all bias adjusted diffusion tube concentrations were below the AQO, except for Tube 19 in Orpington High Street which marginally exceeded the AQO with an annual mean NO₂ concentration of 40.1 µg m⁻³, before adjusting for relevant exposure.

Most diffusion tube sites demonstrated a downward trend in NO₂ from 2023 to 2024, except for seven sites that recorded the following increases in annual mean NO₂ concentration:

Site 3: Hastings Road, McDonalds: +0.5 µg m⁻³

Site 9: Links Way: +0.3 µg m⁻³

Site 19: Orpington High Street: +1.3 µg m⁻³

Site 21: Farnborough Hill: +1.1 µg m⁻³

Site 27: Harwood Avenue: +0.9 µg m⁻³

Site 28: Widmore Road: +1.7 µg m⁻³

Site 31: Mottingham Road: +0.1 µg m⁻³

This is a deviation from last year when all diffusion tube sites demonstrated a reduction in NO₂ levels.

The highest decrease in NO₂ concentration from 2023-2024 of 4.3 µg m⁻³ was observed at Site 13 – Hamlet Road. The most significant decreases in NO₂ concentrations when compared to last year were also observed at the following sites, where 50% of these sites are at school locations:

Site 5: London Road: -3.8 µg m⁻³

Site 17: Crofton Road: -3.7 µg m⁻³

Site 32: Page Heath Lane: -3.5 µg m⁻³

Site 23: St Mary Cray: -3.3 µg m⁻³

Site 8: Worsely Bridge Road: -3.1 µg m⁻³

All other diffusion tube sites reported decreases in NO₂ levels ranging from 0.4 to 2.7 µg m⁻³. The decrease at Site 10, Elmers End Road, which historically was declared an Air Quality Focus Area (AQFA) is particularly notable with a reduction of 2.1 µg m⁻³, following an additional decrease of 3.8 µg m⁻³ in 2023. This improvement is likely due to a change in bus movement configurations for the number 289 bus, which has had priority turning right since the end of 2022.

The bias adjusted NO₂ concentration at Site 19 on High Street, Orpington was 40.1 µg m⁻³ in 2024, marginally exceeding the AQO 40 µg m⁻³. In accordance with the technical guidance, this requires distance correction for the location of relevant exposure. After

applying this correction, the predicted concentration at the nearest sensitive receptor is $31.8\mu\text{g m}^{-3}$ (further details of this calculation are presented in Appendix A). In 2023, Site 19 recorded a bias adjusted NO_2 concentration of $38.8\mu\text{g m}^{-3}$, and after distance correction, the concentration was predicted to be $31.5\mu\text{g m}^{-3}$. This demonstrates a bias adjusted increase of $1.3\mu\text{g m}^{-3}$ in NO_2 concentration from 2023 to 2024 and a distance corrected increase of $0.3\mu\text{g m}^{-3}$. This site is affected by high traffic flows, including a significant number of buses which may contribute to higher NO_2 concentrations in the area.

Overall, there was a significant reduction in NO_2 concentrations during the Covid-19 pandemic restrictions in 2020. Since then, NO_2 concentrations have slightly increased from those lows but have not returned to pre-pandemic levels, this is likely due to the cumulative impact of changes in work patterns and a reduction in commuting by car in addition to local and national policies to improve air quality.

The diffusion tube data demonstrates that the average reduction in NO_2 concentration from 2022-2023 was $2.9\mu\text{g m}^{-3}$. The average reduction in NO_2 concentration from 2023-2024 was $1.4\mu\text{g m}^{-3}$. The diffusion tube data demonstrates that although Bromley has reported an average reduction in NO_2 concentration in 2024 from the diffusion tubes sites, the rate of reduction is less than the previous year.

Overall, NO_2 concentrations observed in 2024 demonstrated reductions across the majority of sites, with the exception of seven. The longer-term trend from 2018 to 2024 shows NO_2 concentrations have reduced.

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	Trend from 2023-2024
BRY-CM3	540523	169326	Kerbside	98.0	98.0	16.5	18.8	15.8	15.4	14.7	13.0	16.0	↑

Notes

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

Exceedances of the PM₁₀ annual mean AQO of 40µg m⁻³ are shown in **bold**.

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

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

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

The Council has been monitoring PM₁₀ within the Borough since October 1999. The only operational monitoring station is at Harwood Avenue. A Beta Attenuation Monitor (BAM) is used for monitoring PM₁₀. The annual mean PM₁₀ results are shown in Table G and the 24-hour mean PM₁₀ results are presented in Table H. Data capture at the site in 2024 was 98%.

The annual mean PM₁₀ concentration in 2024 was 16.0µg m⁻³, which is below the annual mean objective of 40µg m⁻³. Annual mean concentrations decreased steadily between 2019-2023, but have increased by 3.0 µg m⁻³ in the last year reflecting levels last observed pre-2020. The overall trend in PM₁₀ annual mean concentrations is demonstrated in Figure 6. There were no days where the average concentration was above the 24-hour mean air quality objective value of 50µg m⁻³.

Table H. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 24-Hour Means > 50µg 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
BRY-CM3	540523	169326	Kerbside	98.0	98.0	0.0(26)	8.0	1.0	0.0	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 were carried out for six months the maximum data capture for the full calendar year would be 50%).

Figure 6. Annual Mean PM₁₀ Concentrations at Harwood Avenue Automatic Monitoring Site

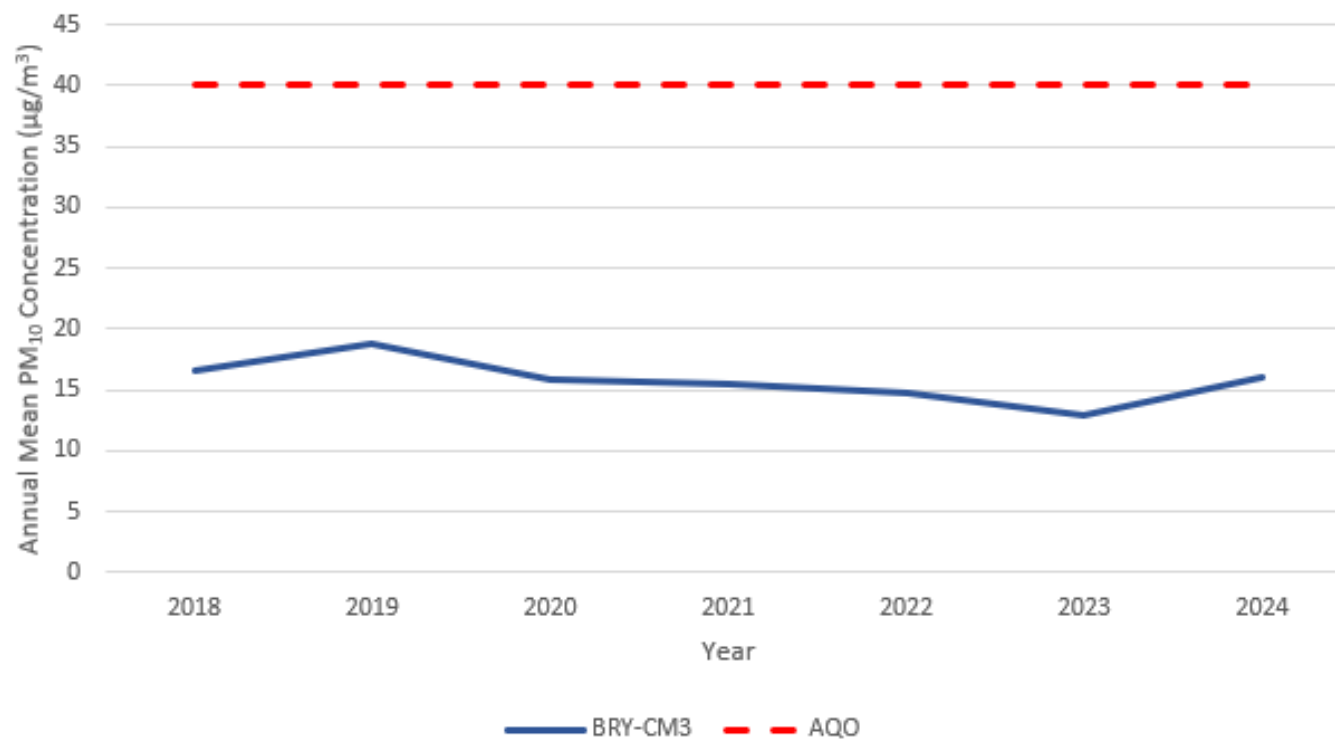


Table I. Annual Mean PM_{2.5} Automatic Monitoring Results (µg m⁻³)

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	Trend from 2023-2024
BRY-CM3	540523	169326	Kerbside	90.0	90.0	-	-	8.5	9.7	10.6	10.0	9.0	↓

Notes

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

Exceedances of the PM_{2.5} annual mean concentration target of 10µg 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.

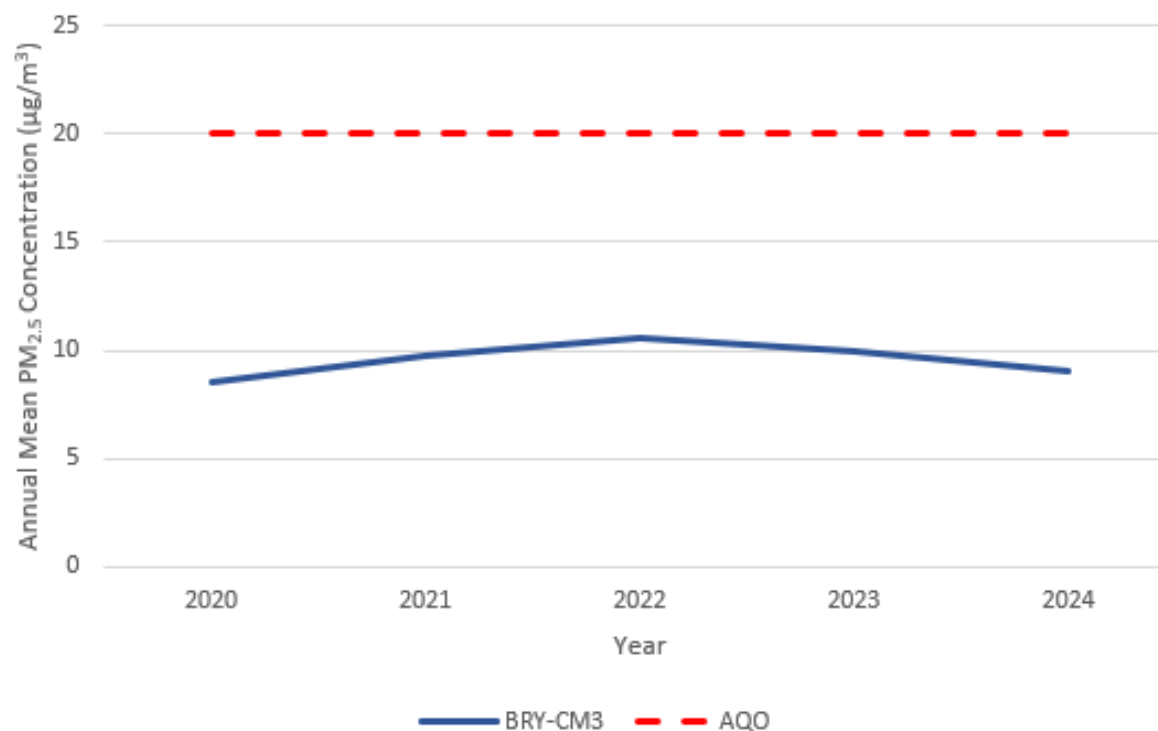
(b) Data capture for the full calendar year (e.g., if monitoring were carried out for six months the maximum data capture for the full calendar year would be 50%).

In 2015, an inlet particle sensor was attached to the PM₁₀ monitor to monitor PM_{2.5}. This monitoring technique was not reference equivalent and as such provided indicative results. In 2020, a PM_{2.5} beta attenuation monitor (BAM) was added to the existing continuous monitoring site at Harwood Avenue, to replace the PM_{2.5} inlet particle sensor.

The annual mean PM_{2.5} results from the BAM in 2024 are shown in Table I. Annual mean concentrations have decreased steadily since 2022 and decreased by 1.0µg m⁻³ in 2024 to a concentration of 9.0µg m⁻³, which is below the annual mean objective of 20µg m⁻³. This also currently meets the air quality target under the Environment Act 2021, of an annual mean of 10µg m⁻³ to be achieved by 2040. Data capture in 2024 was 90%. The overall trend in PM_{2.5} annual mean concentrations is demonstrated in Figure 7.

It should be noted that the PM_{2.5} data capture in 2020 and 2021 was below the valid data capture requirement of 90% to be used as part of the London Air Quality Network. This was largely due to the monitors installation in 2020 and technical issues resulting in periods of down time.

Figure 7. Annual Mean PM_{2.5} Concentrations at Harwood Avenue Automatic Monitoring Site



1.4 Air Quality Sensors

The Breathe London Network provides 6 air quality monitors within the Borough. The Network is run by the Environmental Research Group at Imperial College London and consists of agreements between Local Government, Hospitals and Community Groups. Table J shows a list of the monitors with the annual mean for NO₂ and PM_{2.5} in 2024. This monitoring technique is not reference equivalent and as such provides indicative results.

The locations of the Breathe London Nodes can be found here: [Node Search — Breathe London](#)

Table J. - Annual mean of NO₂ and PM_{2.5} of the Breathe London Nodes within the London Borough of Bromley (µg m⁻³)

Node name	Valid data capture for operational period in 2024 (%)	NOx				Trend	PM _{2.5}				Trend
		2021	2022	2023	2024	2023-2024	2021	2022	2023	2024	2023-2024
Beckenham Beacon Hospital	97.0	-	26.8	23.4	22.1	↓	-	7.8	7.2	6.0	↓
Bethlam Royal Hospital	90.0	-	22.9	21.5	21.1	↓	-	8.1	7.5	6.8	↓
Orpington Hospital	90.0	-	23.3	22.0	20.1	↓	-	7.7	7.1	6.1	↓
Poverest Allotments	100.0	26.2	23.8	22.4	19.3	↓	9.3	8.2	7.9	7.5	↓
Princess Royal Hospital	93.0	22.1	22.2	19.2	18.1	↓	10.7	10.0	8.0	8.4	↑
Elmers End Church	92.0	-	-	-	22.7	-	-	-	-	7.7	-

Notes:

Beckenham Beacon, Bethlam Royal Hospital and Orpington Hospital Nodes became operational in August, July, and June 2022, respectively.

The nodes at Royal Bethlam Hospital and Orpington Hospital were not operational from 1st July 2024-31st December 2024 as a result of a pause in the Breathe London project.

The node at the Princess Royal University Hospital (PRUH) was not operational from 1st January 2024 - 30th April 2024. The site location was changed on 19th April 2024 to move the sensor to nearby the entrance to the hospital from the car park. It should be noted that construction works were ongoing at this site in 2024.

The node at Elmers End Church became operational on 20th January 2024.

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 the AQMA declared by the London Borough of Bromley can be found in Table K. The table presents a description of the AQMA that is currently designated within the London Borough of Bromley. Appendix D provides a map of the AQMA and the air quality monitoring locations in relation to the AQMA. The air quality objective pertinent to the current AQMA designation is as follows:

- NO₂ annual mean.

Table K. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
London Borough of Bromley's AQMA	09/09/2020	NO ₂	E.g., An area encompassing the whole borough except for Biggin Hill, Darwin and parts of Cray Valley East and Chelsfield & Pratts Bottom	No - TFL	LAEI Model, 2020	n/a – monitored data does not show an exceedance of distance adjusted data	5 years ⁽¹⁾	Air Quality Action Plan, 19 th September 2020	Air Quality Action Plan (AQAP)

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

☒ The London Borough of Bromley confirm that all current AQAPs have been submitted to GLA

(1) 5 years compliance is based on distance adjusted data which reflects predicted exposure at the nearest sensitive receptor – see data in Appendix C

2.2 Air Quality Action Plan Progress

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

Table L. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Progress
1. Ensure that appropriate and effective monitoring is undertaken across Bromley to meet statutory obligations			
1.1	Monitoring and other core statutory duties	Ongoing maintenance of the Harwood Ave air quality monitoring station (AQMS) (%) Target: data capture over 90%	Completed for 2024
1.2	Monitoring and other core statutory duties	Publish an annual report of air quality data on Bromley's website The successful submission and publication of Annual Status Reports and other statutory documents to the GLA	Completed annually
1.3	Monitoring and other core statutory duties	Seek funding where appropriate (via s106 agreements) for reference monitoring in Bromley Submissions	Bromley will continue to seek funding where appropriate
1.4	Monitoring and other core statutory duties	Review of diffusion tube network following the extension of the AQMA and add additional diffusion monitoring points (no.)	Completed. In January 2021, the number of monitoring locations increased from 10 to 32 and these have been analysed monthly since
1.5	Monitoring and other core statutory duties	Seek funding for AQMS to measure PM ₁₀ and PM _{2.5} , NO ₂ and O ₃ at Biggin Hill by local agreement	Air quality monitoring is in place at Biggin Hill Airport for PM ₁ , PM _{2.5} , PM ₄ and PM ₁₀ , Nitrogen Dioxide (NO ₂) and Sulphur Dioxide (SO ₂). Verification of data required before results can be shared
1.6	Monitoring and other core statutory duties	Prioritise the provision of a PM _{2.5} monitor if installing new monitors	Completed. A PM _{2.5} BAM was installed at Harwood Monitoring Station. There are no current plans to install further monitoring stations
1.7	Monitoring and other core statutory duties	Seek to test appropriate new smart monitoring technologies as they develop.	Part of the new Breathe London project and the use of Airly sensors, supported by CERC for the validation of data. Also installed an Airly sensor independently. Reviewing the technology as to effectiveness in use and accuracy of data
1.8	Monitoring and other core statutory duties	Continue to support major developers in siting and installing construction site dust monitors Advice given through planning consultation system. Outputs – number of planning conditions /reports	Completed for 2024 - see 2.9 for numbers of Construction Management Plan conditions recommended to planners which includes the management and monitoring of dust on site

Measure	LLAQM Action Matrix Theme	Action	Progress
		provided. Reported annually in the Annual Status Report (ASR)	
1.9	Monitoring and other core statutory duties	Membership of the LAQN renewed.	Membership maintained. Bromley's site makes an essential contribution to the LAQN. This network provides published information for forecasting air quality and predictive triggers for data dissemination
1.10	Monitoring and other core statutory duties	Borough review of Part B (Environmental Permitting) processes to ensure all relevant process are captured (%) Borough wide review to be completed by the end of 2021.	The Borough wide review is completed. All premises that require a permit have one in place or have applied
2. Ensuring emissions from demolition and construction are minimised			
2.1	Emissions from developments and buildings	Require Construction Environmental Management Plans for 100% of major developments where works are likely to produce levels of dust (%)	Conditions imposed on all relevant applications
2.2	Emissions from developments and buildings	Require real-time PM ₁₀ monitoring at high-risk sites in accordance with the Mayor of London Supplementary Planning Guidance (SPG). (%)	Air Quality Assessments accompany relevant planning applications, produced in accordance with best practice guidance
2.3	Emissions from developments and buildings	Enforcement visits when complaints received. (%)	100% of complaints were appropriately responded to
2.4	Emissions from developments and buildings	Update Bromley's existing Code of Construction Practice (CoCP)	Completed. Bromley has adopted the GLA CoCP documents as its own CoCP)
2.5	Emissions from developments and buildings	Produce information for developers to promote low combustion and combustion free development	Completed. This information has been produced and will be available on Bromley's website in the near future
2.6	Emissions from developments and buildings	Adopt revised planning conditions and informatives regarding the use of diesel generators Adoption of any additional information/Informatives.	Completed. Requirements where practicable adopted in CEMPs as part of the approved planning process. Details also included in draft CoCP. Also, a Bromley Communique for developers was produced on 21st December 2021 to promote low combustion and combustion free development (see 2.5)
2.7	Emissions from developments and buildings	Effectively manage and mitigate emissions of development taking place in the designated Air Quality Focus Area (AQFAs) through New Bromley plan	Conditions imposed on relevant applications

Measure	LLAQM Action Matrix Theme	Action	Progress
2.8	Emissions from developments and buildings	Where appropriate, use planning obligations to secure funding from developers for monitoring compliance checks on major and/or sensitive sites.	Requested S106 funds for 5 sites, providing Construction Environmental Impact Monitoring. 1 site awaiting payment, 1 site agreed and subject to approval. 3 sites awaiting confirmation
2.9	Emissions from developments and buildings	Continue to assess all relevant planning applications for their air quality impact and condition as appropriate Number of applications assessed, against no received within 28 days	No. of applications where AQ assessment: 59 No. of planning apps required to monitor for dust: 76 No. of developments required to install ultralow NOx boilers: 75 No. of Air Quality Neutral building and/or transport assessments undertaken: 59 Planning applications conditions for NRMM: 16
3.Ensuring enforcement of Non-Road Mobile Machinery (NRMM) air quality policies			
3.1	Emissions from developments and buildings	Apply conditions for construction sites to ensure compliance with the GLA's NRMM requirements *Planning conditions to include where appropriate: Air Quality Assessment Air Quality Network (AQN) assessment Construction Environment Management Plan (CEMP) to include PM10 monitoring NRMM compliance with London LEZ Seek funding for air quality measures through S.106, Community Infrastructure Levy (CIL) where feasible	Conditions imposed on relevant applications
3.2	Emissions from developments and buildings	Ensure emissions from construction sites are minimized through cooperation with developers and site visits, including effective dust monitoring where appropriate, and compliance with GLA NRMM requirements	Provided an updated list of Major Planning sites where construction is starting or soon to start to NRMM Project Team for inspection. 8 Audits carried out in 2024. 4 self-compliant, 1 compliant and 2 with no NRMM on site and 1 non-compliant with a registration problem
4. Reducing emissions from CHP and ensure smaller developments use ultra-low NOx boilers			
4.1	Emissions from developments and buildings	Require developments with Combined Heat and Power (CHP) to be air quality neutral as a minimum Number of developments where AQ neutral is applied.	Air Quality Neutral Assessment provided at application stage and conditions imposed on the relevant applications
4.2	Emissions from developments and buildings	Require developers to meet the GLA's emissions limits for CHP and Biomass boilers	Use of CHP and biomass boilers assessed at application stage and conditions imposed on the relevant applications
4.3	Emissions from developments and buildings	Set requirement for evidence of maintenance of CHP and associated plant	Conditions imposed on relevant applications

Measure	LLAQM Action Matrix Theme	Action	Progress
5. Enforcing Air Quality Neutral Policies			
5.1	Emissions from developments and buildings	Apply Air Quality Positive for regeneration areas in line with the new London Plan Agree standard planning conditions to require compliance with AQN standards and London Plan policy.	No relevant applications determined
5.2	Emissions from developments and buildings	Set requirement for evidence of maintenance of CHP and associated plant	Conditions imposed on relevant applications
6. Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new and existing developments, where appropriate			
6.1	Emissions from developments and buildings	Planning application / conditions - Set targets to improve levels of green infrastructure provided in new developments. *To be considered on a case-by-case basis through application of relevant London Plan Policies	Assessed at the application stage and tree and landscaping conditions imposed where relevant
6.2	Emissions from developments and buildings	Ensure that exposure to poor air quality in amenity spaces is considered at design stage and as part of the Air Quality Assessment (AQA). *To be considered on a case-by-case basis through application of relevant London Plan Policies	London Plan Policies are applied to development proposals and considered via the consultation process
7. Ensuring that Smoke Control Areas (SCA) are appropriately identified and fully promoted			
7.1	Emissions from developments and buildings	Carry out awareness campaigns in relation to bonfires and wood burning stoves and provide advice on appropriate fuel by issuing guidance Guidance to be produced by the end of 2021 and to be promoted through newsletters including 'Environment Matters'. Estimated engagement can be demonstrated through circulation outputs, website page hits. We will circulate to providers of fuels and relevant businesses, demonstrated through number of correspondences.	Joined the MAQF London Wood Burning Project where we contributed to the research into monitoring. Details on the Clean Air Night shared with medical practitioners via Public Health team
7.2	Emissions from developments and buildings	Effectively fulfil statutory duties as a Smoke Control Area (SCA)	100% response to SCA related complaints. 8 of 8 complaints responded to and appropriate action taken. Includes complaints about smoke emissions from chimneys in SCAs and use of unauthorised fuels only. EXCLUDES more general enquiries about SCAs, authorised fuels, and requests for copies of SCOs

Measure	LLAQM Action Matrix Theme	Action	Progress
7.3	Emissions from developments and buildings	Continue to control emissions from permitted processes through inspections and enforcement (see also action 1)	8 Petrol Vapour Recovery sites, 15 Dry Cleaner sites, crematorium and vehicle refinisher inspected, following risk rating requirements
8.Deliver energy efficiency retrofitting projects in workplaces and homes through EFL retrofit programmes such as RE:NEW, RE:FIT and through borough carbon offset funds to replace old boilers /top-up lost insulation in combination with other energy conservation Measures			
8.1	Emissions from developments and buildings	Promoting and delivering energy efficiency retrofitting projects in workplaces and homes	As an organisation we continue to sign post residents to available grant funding. The councils webpages have been updated with the relevant information and these can be found at https://www.bromley.gov.uk/homepage/201/sustainability---home-energy-efficiency
8.2	Emissions from developments and buildings	Follow up proposals for inclusion in a revised policy for the retrofitting of air pollutant reduction equipment for clients living in areas identified as most likely to trigger detrimental health effects	Measure withdrawn from AQAP
8.3	Emissions from developments and buildings	Continue with the advice service for households at risk of fuel poverty in southeast London. Target- to carry out 800 home visits and 800 one-to-one advice sessions at events	Bromley continues to be part of the South London Energy Partnership and through the council's website, home energy advice tab, provides information to residents on who to contact for energy advice in the home. Further information is available at https://www.bromley.gov.uk/sustainability/sustainability-home-energy-advice-services In 2024/25 up to the end of quarter three: 97 advice sessions have been provided and a further 50 healthy homes phone advice
8.4	Emissions from developments and buildings	As part of a current review of the use of discretionary grant funding linked to Disabled Facilities Grants and the Better Care Fund	The Housing Assistance Policy was drafted in June 2024 – no further updates provided.
8.5	Emissions from developments and buildings	All projects have a demonstrable carbon reduction and will be appraised independently. Overall organisational emissions reductions will be evidenced in the Council's Carbon Management Programme	The Council continues to monitor its greenhouse gas emissions on a yearly basis and report the findings to committee. The council has recently moved to new offices which have a lower carbon footprint. As projects are brought forward carbon reduction is included within the decision making process, including reviewing opportunities to purchase renewable energy as set out in the approved net zero action plan
8A. Update local authority procurement policies to reduce pollution from logistics and servicing, and to maximise air pollution benefits			

Measure	LLAQM Action Matrix Theme	Action	Progress
8A.1	Emissions from developments and buildings	Production of a sustainability toolkit for service leads to consider sustainability issues including carbon and air quality when initiating the procurement process.	A draft scope 3 action plan is being taken to committee for recommendation to approve a scope 3 action plan, which considers procurement and the development of an updated sustainable procurement policy and toolkit
8B.1	Emissions from developments and buildings	LB Bromley Sustainability Policy to be further developed	Completed in full: A policy has been developed and stipulates that the procurement process must consider bids "seeking to minimise any negative environmental impacts of goods and services purchased, across the whole life cycle from raw material extraction to end of life"
8B.2	Emissions from developments and buildings	Seek to influence supplier behaviour through Circular Economy principles: reduced journeys, shared services, product life extension, waste minimisation, energy recovery from waste	To enable supplier engagement and advice to be provided a carbon reduction webinar was hosted for all staff in July 2024 and staff are able to sign up to a 2hr in-house carbon awareness session. Likewise, a business advice page is being developed to provide further information to SME's on how to reduce carbon emissions and save energy and be more efficient. The Greener Bromley Pilot Scheme also allows businesses to understand and improve their environmental impact, and develop a structured framework for fostering sustainable business growth
9.Ensure master planning and redevelopment areas are aligned with Air Quality Positive and Healthy Street approaches			
9.1	Emissions from developments and buildings	Update ASR and planning portal	No relevant applications submitted
10. Public Health department taking shared responsibility for borough air quality issues and supporting implementation of Air Quality Action Plans			
10.1	Public health and awareness raising	The Health and Well-Being Board will include a new section within the Joint Strategic Needs Assessment (JSNA) with up-to-date information on air quality impacts on the population *Public Health Team to support engagement with local stakeholders (businesses, schools, community groups and healthcare providers)	This was not included in the Children's JSNA this year but air quality is under frequent discussion across London with teams looking after children with asthma and Public Health are actively involved in that work to ensure accurate and appropriate messaging. PH team have continued to share messages on air quality campaigns through GP Bulletin and via Education settings
11. Engagement with businesses. This could be linked to the engagement with town centre BIDS proposed in the final LIP to promote active and public transport options to their members, reducing pollution in town centres through mode shift			
11.1	Public health and awareness raising	Promote active travel and public transport to businesses. The Council will host events such as free cycle training and Dr Bike sessions for BIDs who are	13 Dr Bike Sessions Delivered, with 213 bikes seen up to the end of the year 2024

Measure	LLAQM Action Matrix Theme	Action	Progress
		proactively engaged (dependant on TFL funding and Covid restrictions)	
12. Promotion of availability of airTEXT			
12.1	Public health and awareness raising	Public Health team to support promotion through GP practices and pharmacies Membership of airTEXT consortium	At the end of 2024 Bromley had 265 active subscribers, which was a net increase of 36 on the previous year, when there were 229 active subscribers. There were 30 alert days in Bromley in 2024, and 3,554 alert messages were sent by text, email or voicemail
13. Encourage schools to join the TFLs STARS accredited travel planning programme by providing information on the benefits to schools and supporting the implementation of such a programme			
13.1	Public health and awareness raising.	Use of the STARS programme in schools as a tool to promoting active travel to school	The number of schools accredited is from July 2024 and consists of 3 Bronze, 6 Silver and 75 Gold. In July 2024, 65% of open schools had an active school travel plan. Total No points (1 for bronze, 2 for silver & 3 for gold). Total points 240
14. Air quality in and around schools			
14.1	Public health and awareness raising	Ongoing co-ordination of the Healthy Schools London in Bromley project, to improve children and young people's health and well-being. Target is to add 5% more schools each year. *Over ninety schools currently participating. London Healthy Early Years (HEYL) supports and recognises achievements in child health, wellbeing, and education in early years settings. Well over one hundred Bromley Early Years settings have already registered with a target of an additional 5% year on year.	There has been no lead in the borough working on the HEYL scheme this year. Only one setting has applied for an award and they were supported by the NCB
14.2	Public health and awareness raising	The borough is currently undertaking a trial of a green screen around Valley Primary School as part of the Shortlands Friendly Village (Liveable Neighbourhood) project. If successful, consideration will be given to how the green screens can be delivered to more schools in the AQMA. *This delivers on the LIP3 commitment to look to undertake a trial of new green infrastructure, such as trees and green walls around schools in the AQMA and alongside corridors with the highest concentrations as a means of natural emissions capture	Recently research published has suggested that Green Screens are not as effective as they were hoped to be. More evidence of their efficacy will be required before Bromley looks to introduce further Green Screens

Measure	LLAQM Action Matrix Theme	Action	Progress
14.3	Public health and awareness raising	Promote campaign on anti-idling, involving specific signage, communications activity, and increased enforcement in idling hotspots around 8 schools (see also 21). *A more targeted approach to idling, focusing on schools will be taken, which should make a difference in areas over short periods of time, utilising a variety of comms and enforcement action	0 warnings issued
15. Update local authority procurement policies to reduce pollution from logistics and servicing			
15.1	Deliver servicing and freight	Seek to influence supplier behaviour through circular economy principles: reduced journeys, shared services, product life extension, waste minimisation, energy recovery from waste.	The various service areas will continue to consider and assess opportunities to implement sustainable practices, in line with the relevant contracting strategies and service requirements
15.2	Deliver servicing and freight	Require environmental services suppliers with large fleets to have attained Bronze / Silver / Gold (Fleet Operator Recognition Scheme) FORS accreditation. *Bromley's LIP3 sets out a road map to reducing emissions from the London Borough of Bromley (LBB) fleet to 2041 and working with procurement, the Council will be asked to consider how they could ask contractors to innovate towards a greener fleet and to reduce emissions from the Council's fleet.	Veolia maintained FORS Bronze accreditation in September 2024
16. Reducing emissions from deliveries to local businesses and residents			
16.1	Deliver servicing and freight	Sustainability toolkit for service leads to consider sustainability issues including carbon and air quality when initiating the procurement process. Will require measurements that are proportional and appropriate to contract size	Sustainability continues to form part of the gateway report process. A draft scope 3 action plan is due to be taken to committee for approval which includes reviewing existing sustainable procurement policies and updating policies including reviewing opportunities for a sustainability toolkit
16.2	Deliver servicing and freight	LB Bromley Borough-Wide Emissions Strategy to be developed, as part of wider corporate Sustainability Policy	The boroughs carbon emissions continue to be reported via the sustainability pages on the council's website at https://www.bromley.gov.uk/sustainability/sustainability-reports
16.3	Deliver servicing and freight	The Council will continue to seek to work with collection locker providers to provide such facilities in some borough car parks to reduce delivery miles Provision of facilities installed.	No new lockers have been installed, however, the existing lockers have proven popular

Measure	LLAQM Action Matrix Theme	Action	Progress
16.4	Deliver servicing and freight	Any development likely to create a significant number of trips will, where necessary, be required to enter into an agreement to submit and implement acceptable Construction Logistics Plans, and Delivery/Servicing Plans. Consideration will be given to re-organisation of freight to support consolidation (or micro-consolidation) of deliveries, by setting up or participating in new logistics facilities, and/or requiring that council suppliers participate in these.	Conditions imposed on relevant applications
17. Reducing emissions from council fleets			
17.1	Borough fleet	Council fleet and hired fleet to meet Quality Standard. Operating data and feedback will be collected to help inform future replacements and procurement projects.	1 additional electric hatchback car delivered and in service with Transport Operations Section. Revised plan for EV fleet chargers at new Civic offices
17.2	Borough fleet	Increase the number of plug-in hybrid and electric council vehicles through planned replacement programme	Additional EV hatchback car replaced hybrid one for Transport Operations
17.3	Borough fleet	Increase the uptake of new Euro VI vehicles in the heavier fleet, phase out older vehicles operated by our contractors by April 2020	Two replacement Euro VI commissioned in December 2024
17.4	Borough fleet	Promote fuel-efficient driving through the driver induction and competence checks	Ongoing approach to introducing EV's to drivers
17.5	Borough fleet	Work in partnership with our Waste contractor to ensure our infrastructure allows for a fully electric waste collection fleet in 2026 Improvement in infrastructure.	The target of 2026 is not achievable. A decision on electrifying the waste fleet has not been made. Funding to contribute to the purchase of an eRCV was approved in October 2024. Veolia are managing the procurement of this vehicle with an expected lead time of 12 months from when the order was placed. eRCV estimated to arrive end of 2025
17.6	Borough fleet	Monitor progress with vehicle manufacturers, other similar operators, and technical developments to further support the intake of alternatively fuelled vehicles.	Continue to keep abreast of developments within the industry and obtain best practice and examples Approval was sought to trial an eRCV- expected end of 2025
17.7	Borough fleet	Increase the use of pool vehicles Uptake monitored and reported annually.	Two pool cars based at the Civic Centre are hybrid and used across various departments. The contract for the diesel powered van allocated

Measure	LLAQM Action Matrix Theme	Action	Progress
			to Neighbourhood Management has been extended until September 2025, its replacement being part of a wider review of depot-based vehicles used in the Environment Division
17.8	Borough fleet	Maintain the FORS accreditation held by the Council's Waste, Streets and Parks contractors.	Veolia maintained FORS Bronze accreditation in September 2024
17.9	Borough fleet	Equip waste vehicles with the 'Driving Efficiently and Safely' (DES) tracking and monitoring system to monitor and minimise idling, braking, over-revving, and contravention of speed limits	Echo logistics has been updated and the Autonomise system implemented which has superseded DES. All 58 Veolia owned frontline RCVs, and all Veolia owned frontline streets vehicles (15 cages, 4 Hi-Abs and 4 LMBs) are now fitted with either 360-degree cameras or forward and rear facing cameras linked to 'smart boxes' that store telemetric data for driver behaviours to measure Idling, harsh acceleration, harsh breaking, harsh cornering, speed, and g-shock
17.10	Borough fleet	Supervisors of the waste and street cleansing service to use electric vehicles	12 electric vehicles in use
17.11	Borough fleet	Installation of electric charging point for Heavy Goods Vehicles (HGVs)	There is currently no infrastructure in place for this. The decision to procure electric HGV's is still pending. There are 9 charging points in place for EM/Supervisor vehicles
17.12	Borough fleet	Increase the % of mobile equipment used (e.g., electric chainsaws) by the Arboriculture contractor	The Council appointed four new contractors to its supply chain in September 2024 and following mobilisation, is now looking at options for increasing the use of mobile equipment
17A. Staff Lease Car Scheme			
17A.1	Borough fleet	Promote the uptake of alternative fuel cars via the staff lease scheme. The option to further incentivise drivers will be a discussion point when approaching the next procurement exercise	The uptake of hybrids has increased to 125 with EV's now at 20
18. Expanding and improving green infrastructure			
18.1	Localised solutions	Through Planning process, identify opportunities for green infrastructure	Conditions imposed on relevant applications
18.2	Localised solutions	Feasibility of enhancing the public realm potentially through gyratory removal at Elmers End (see also 19).	Funding for LEN bid has not yet been identified
18A. Maintain and increase Council's green infrastructure			
18A.1	Localised solutions	Continue to provide an annual tree planting plan and where possible consider planting trees in areas where they will be of most benefit to local air quality.	In January 2025, the Forestry Commission approved the designs for woodlands on three council owned sites. Opportunities for grant funding are now being explored with the aim to deliver these woodlands in the 2025/26 planting season

Measure	LLAQM Action Matrix Theme	Action	Progress
		Progress a scheme to create/expand woodlands in the Borough.	
18A.2	Localised solutions	Increase the number of street and parks trees via funding	The Council has completed its Treemendous tree planting programme and planted an additional 5000 street trees between 2021 and 2025. In 2024/25, an additional 8000 whips were planted in eight parks and open spaces, including in five micro forests, with funding from the Local Authority Treescapes Fund and the Water Environment Improvement Fund
19. Low Emission Neighbourhoods (LENs)			
19.1	Localised solutions	Review previously unsuccessful bid to the Mayor's Air Quality Fund for a Low Emission Neighbourhood in Birkbeck village in Bromley's AQMA, which is bounded by the A213 and A214 *Options are being considered for how the benefits of the scheme can be derived without LEN funding	No funding secured for LENs in LBB
19.2	Localised solutions	Feasibility study for enhancing the public realm potentially through gyratory removal at Elmers End.	Funding has not yet been secured for this project
19A. Provide waste and recycling collections specifically to reduce need for residents to make trips to Council Household Reuse and Recycling Centres			
19A.1	Localised solutions	Continue to provide existing comprehensive waste and recycling collection service	Maintained comprehensive waste and recycling collection service
19B. Reduce the Council's Environmental Services contractors transport to work emissions			
19B.1	Localised solutions	Provide a kerbside collection service for textiles, batteries and small electrical items*The Council provides a collection service for the Core Materials as required within the London Environment Strategy	Kerbside collection of textiles, batteries and small waste electronic and electrical items provided
19B.2	Localised solutions	Liaise with Council's contractor to expand on materials accepted at the kerbside and promote the Council's chargeable garden waste service	List of materials accepted available at www.bromley.gov.uk/wastenews Comprehensive kerbside collection service provided for the core (dry) materials, plus textiles, batteries, and small waste electricals. Promotion of garden waste is a contractual requirement and was promoted in 2024 through targeted letters, the website, social media, and articles in Environment Matters. Current number of subscriptions (Feb 2025) is 47,000

Measure	LLAQM Action Matrix Theme	Action	Progress
19C. Minimise dust generation at Council's Waste Transfer Stations			
19C.1	Localised solutions	Promote dust management at sites – using the accordance with the Mayor of London SPG as an exemplar	Dust management is in accordance with the environmental permit
19D. Reduce emissions from closed landfill site			
19D.1	Localised solutions	Monitor and manage landfill gas generated by closed landfill site through existing network of pipes and landfill gas flare	Landfill gas and leachate are managed at the closed landfill site in accordance with Environment Agency best practice. Management of the site is reported on a monthly basis and discussed via monthly Service Operations Board. Six monthly site visits to the closed landfill site take place
19E. Reduce arboriculture haulage movements			
19E.1	Localised solutions	Install wood chip bins within the borough's parks instead of transporting woodchip outside the borough*Parks Contractor will be able to use woodchip for bedding, path creation rather than woodchip being used as biomass	There is a permanent woodchip store on the High Elms Estate and woodchip deliveries are carried out to Brook Lane Community Gardens on an ad hoc basis by the Council's Tree contractors. The Council has decided not to proceed with permanent woodchip bins at Brook Lane Community Gardens and Whitehall recreation ground due to concerns around fly tipping and potential damage to infrastructure by vehicles accessing these bins
20. Ensure that Transport and Air Quality policies and projects are integrated			
20.1	Cleaner transport	Through this AQAP and Bromley's LIP3 officers will continue dialogue regarding project and policy implementation. *Transport and Environmental Health staff form part of core AQAP Steering Group	Completed. This is also supported by involvement in the Green Recovery Group and other climate change discussion groups
21. Discouraging unnecessary idling by taxis, coaches, and other vehicles			
21.1	Cleaner transport	The Council is participating in the London-wide anti-idling campaign funded from the Mayor's Air Quality Fund with eight schools in the borough to hold anti-idling campaigns per annum. PCN enforcement will allow for a significantly higher penalty for idling to be applied	We now have signage at 65 school locations in the Borough with enforcement taking place
21.2	Cleaner transport	The borough has adopted powers to enforce against idling vehicles but will look to create a Borough-wide Traffic Management Order (TMO) to allow for PCN enforcement which will be easier to enforce with existing and widely allocated Civil Enforcement Officer (CEO) resources	Individual TMO's still currently being used

Measure	LLAQM Action Matrix Theme	Action	Progress
22. Temporary car free days			
22.1	Cleaner transport	Work with BIDs to support a suitable programme of weekend road closures to allow town centres and high streets to be used in new and innovative ways, supporting vibrant town centres and communities	Completed. A programme of weekend closures has not been taken forward. Instead, the Council has promoted street party road closures, and these have become more popular than ever before, primarily in the summer months
22.2	Cleaner transport	Continue with Street Party events and engage with residents in discussions about possible changes in the locality that would enhance walking and cycling	Over 250 events in 2024
23. Using parking policy to reduce pollution emissions			
23.1	Cleaner transport	The use of electric vehicles will be promoted by providing the appropriate infrastructure	Completed. An Electric Vehicle Charging Strategy has now been produced with the intention to introduce pilot schemes for on street charge points and residential gullies
24. Installation of Ultra-low Emission Vehicle (ULEV) infrastructure such as electric vehicle charging points, rapid electric vehicle charging points and hydrogen refuelling stations			
24.1	Cleaner transport	Work with Bluepoint London to continue to roll out electric vehicle charging infrastructure. *There are national policies in place to influence road users' choice of vehicle, but parking policy is not considered to have an impact on the use of those vehicles	Bluepoint are now Source/Total, roll out of further infrastructure is on hold for the purpose of the LEVI scheme
24.2	Cleaner transport	Install 4 Rapid Charge Points as part of the TFL scheme by March 2020 along with the 4 installed on the A232 TLRN in Coney Hall and West Wickham	Completed in 2020, additional charge points are planned for this location
24.3	Cleaner transport	Policy 30 of the Local Plan requires 1 in 5 car parking spaces to be provided with electric vehicle charge points	Completed in full. Conditions imposed on relevant applications prior to being superseded by Approved document S to expand scope within the Buildings Regulations. Planning conditions no longer required as a result and replaced with informative on development applications
24.4	Cleaner transport	Implementation of a pilot for lamp post charging points, including £30K Local Implementation Plan investment match funded by Go Ultra Low City Scheme	GULCS has been superseded by LEVI/OZEV which the Council are currently working with 4 other Boroughs on a joint bid
25. Provision of infrastructure to support walking and cycling and encourage mode shift away from private vehicle usage			
25.1	Cleaner transport	Development of new cycle routes, both as part of TfL's strategic cycle network and local routes	The outline design for the Kent House to Croydon Cycleway has been completed and has been Safety Audited. The next stage is for the project to be subject to a public consultation exercise

Measure	LLAQM Action Matrix Theme	Action	Progress
25.2	Cleaner transport	Delivery of the 'Shortlands Friendly Village Scheme' to include schemes to reduce traffic volumes on residential streets to facilitate a safer and more inviting environment for walking and cycling.	Although funding for this Liveable Neighbourhood was withdrawn by TfL, many of the projects associated with it have been installed as separate items, such as several zebra crossings and a cycle route
25.3	Cleaner transport	Delivery of area-based schemes that promote walking and reduce road danger, including a new footpath to Valley Primary School, a parallel zebra crossing outside Bishop Challoner School and a segregated cycle route in Albemarle Road and Beckenham Road to connect Shortlands with Beckenham, plus a cycle route in Valley Road to Harris Primary.	The following projects were delivered in 2024: • Albermarle Road/ Westgate Road pedestrian refuge • Station Approach/Warren Road improved footway and crossing over Warren Road - dropped kerbs and buff surfacing • Upper Elmers End Road pedestrian refuge • Farnaby Road junction tightening and pedestrian refuge
25.4	Cleaner transport	Improve pedestrian safety- installation of new pedestrian crossings	The following projects were delivered in 2024: • 4x Parallel crossings were installed at South Eden Park Road/Monks Orchard Road/ Eden Way Roundabout • 1 Zebra crossing at South Eden Park Road/ St Davids Close
25.5	Cleaner transport	Improve pedestrian infrastructure to encourage walking to school	The following projects were delivered in 2024: • South Eden Park Road Roundabout - 4x parallel crossings • South Eden Park Road/ St Davids Close zebra crossing • Upper Elmers End Road pedestrian refuge • Farnaby Road junction tightening and pedestrian refuge
25.6	Cleaner transport	Provide high quality cycle hubs at stations and continue to deliver on-street cycle parking and Bike hangers	4 bike hangars were installed in 2024

3. Planning Update and Other New Sources of Emissions

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

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	59
Number of planning applications required to monitor for construction dust	76
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	75
Number of developments where an AQ Neutral building and/or transport assessments undertaken	59
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	4
Number of planning applications with S106 agreements including other requirements to improve air quality	2
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.	16 conditions included 21 registered 8 audits 12.5% sites unregistered prior to audit 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 Bromley Fleet

Two electric hatchback cars are in service within the Highways Division, two Plug-in hybrid Mayoral Cars are in service and one fully electric van has been in service in Public Protection & Enforcement since in 2021.

4.2 Planning Enforcement

Bromley's Planning Department refer all applications that may have air quality impacts to the Environmental Protection Team to assess, provide recommendations and suggested planning conditions. It is the decision of the planning officer as to whether the recommendations and conditions are applied.

Enforcement of NRMM is delivered via Bromley's membership of the Merton consortium which is match funded by the GLA.

4.3 Pan-London NRMM Auditing Project

Bromley is an active member of the GLA Pan-London NRMM and will be continuing to support the NRMM Enforcement project in 2025 – 2026 through match funding.

Bromley has a standard NRMM condition for construction/demolition sites, which is worded 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/>.

Reason: The London Plan 2021 Policy SI 1 Improving air quality”

The wording is applied on the Decision Notice and the condition is applied to all relevant sites.

4.4 Air Quality Alerts

Bromley is a member of the AirTEXT consortium. At the end of 2024, we had 265 active subscribers.

The Mayor's air quality alert messaging is sent directly to schools and hospitals in the Borough.

4.5 Air Quality Positive

Air Quality Positive (AQP) is a planning strategy aimed at large-scale developments. Development proposals that are subject to an Environmental Impact Assessment (EIA) are required to be air quality positive and therefore should consider and implement measures that enhance air quality during the design and planning stages.

An AQP Statement should be submitted as part of the EIA and updated as appropriate for reserved matters applications, outlining the Air Quality Positive approach taken. This should demonstrate how benefits to local air quality have been maximised, and how measures to minimise pollution exposure will be implemented.

Bromley did not have any relevant developments that submitted an air quality positive statement in 2024.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

During 2024, the Harwood Avenue station was operated by the London Borough of Bromley. QA/QC procedures involve a minimum monthly calibration visit and filter change when required by LB Bromley as the local site operator, and regular service checks by Matts Monitors. All data has been fully ratified according to Defra LAQM Technical Guidance standards. Ratification of data is undertaken by Imperial College in accordance with membership to the LLAQM.

A.2 Diffusion Tubes

Air proficiency testing (AIR-PT) is an independent analytical proficiency-testing scheme, operated by Laboratory of Government Chemists (LGC) Standards and supported by the Health and Safety Laboratory (HSL). AIR-PT is a scheme that has run from April 2014 to combine two long running PT schemes: LGC Standards Stack emission proficiency testing scheme and HSL Workplace Analysis Scheme for Proficiency scheme.

Gradko International participates in the AIR NO₂ PT scheme³. AIR NO₂ PT forms an integral part of the UK NO₂ Network's QA/QC and is a useful tool in assessing the analytical performance of those laboratories supplying diffusion tubes to Local Authorities for use in the context of Local Air Quality Management (LAQM). Defra and the Devolved Administrations advise that diffusion tubes used for LAQM should be obtained from laboratories that have demonstrated satisfactory performance in the AIR-PT scheme.

The results for Gradko International were overall satisfactory as stated here:

AR050 (May – June 2022) – 100%

AR052 (July – August 2022) – 100%

AR053 (September – October 2022) – 100%

AR055 (January – February 2023) – 100%

AR056 (May – June 2023) – 100%

AR058 (July – August 2023) – 100%

AR059 (September – October 2023) – 100%

³ LGC (2024) Summary of Laboratory Performance in AIR NO₂ Proficiency Testing Scheme (May 2022 – June 2024) Available at: [WASP – Annual Performance Criteria for NO2 Diffusion Tubes](#)
Accessed: 31/03/2025

AR062 (January – February 2024) – 100%

AR063 (April – June 2024) – 100%

Bias Adjustment

Bias adjustment is effectively a calculated factor which shows whether diffusion tubes are over-reading or under-reading ambient concentrations, and therefore allows for a correction to be made.

Factor from National Bias Adjustment

The national bias adjustment factor spreadsheet for 2024 is available from the Defra website. The results of multiple co-location studies are collated, and the average bias adjustment factor is taken for studies using the 20% TEA/water preparation method, analysed by Gradko. The national bias adjustment factor for 2024 version 04/25 is 0.84, based on 27 studies, using the LAQM national bias adjustment spreadsheet⁴ which is shown in Figure 8.

Figure 8. National Bias Adjustment Factor Spreadsheet (v03/25)

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				This spreadsheet will be updated at the end of June 2025						
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.				LAQM Helpdesk Website						
The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.				Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.						
Step 1:		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 shown in blue at the foot of the final column.						
If a laboratory is not shown, we have no data for this laboratory.		If the 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.	If you have your own co-location study then see footnote. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953						
Analysed By:	Method	Year	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m)	Automatic Monitor Mean Conc. (Cm) (µg/m)	Bias (B)	Tube Precision	Bias Adjustment Factor (A) (Cm/Dm)
Gradko	20% TEA in water	2024						Use		0.84
				Overall Factor ⁴ (27 studies)						

Discussion of Choice of Factor to Use

During 2024 there was only one diffusion tube co-located with the continuous monitoring at Harwood Avenue. Therefore, no local bias adjustment factor is available for 2024 due to the lack of co-location duplicate or triplicate sites. Therefore, the national bias adjustment factor of 0.84 (version 04/25) for the diffusion tube method 20% triethanolamine in water, analysed by Gradko was used.

⁴ Defra (2025), LAQM, National bias adjustment factor spreadsheet. Available at: [Database Diffusion Tube Bias Factors v04 25.xlsx](#) Accessed: 25/04/2025.

Table N. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.84
2023	National	03/24	0.81
2022	National	03/23	0.83
2021	National	03/22	0.84
2020	Local	-	0.82
2019	National	03/20	0.93
2018	National	03/19	0.93

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

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

All data capture for 2024 was 75% or greater of the full calendar year and, therefore, no annualisation was required.

Distance Adjustment

The monitoring sites that have been bias adjusted and shown to be within 10% of the NO₂ annual objective of 40µg m⁻³ (i.e., above 3µg m⁻³) or above should be accounted for the inherent uncertainty in diffusion tube monitoring concentration data as advised in the LAQM technical guidance produced by Defra (LAQM.TG(22)).

One site falls within the 10% of the NO₂ annual objective of 40µg m⁻³ (DT19, High Street, Orpington) and is considered not representative of relevant exposure. The distance-corrected annual mean NO₂ concentration is shown below.

The local annual mean background concentrations in 2024 from the Defra 2018-based background maps⁵ have been used for the calculation.

Table O presents the output from the NO₂ fall off with distance tool.

⁵ Defra (n.d.), Background Maps. Available at: [Background Maps | LAQM \(defra.gov.uk\)](https://www.defra.gov.uk/laqm/background-maps/) Accessed: 28/03/2025

Table O. 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 ($\mu\text{g m}^{-3}$)
19	2.7	8.9	40.1	12.7	31.8

Appendix B Full Monthly Diffusion Tube Results for 2024

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

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northin g)	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
1	541047	168231	27.6	25.3	26.4	25.4	27.1	26.1	22.9	23.1	29.6	26.2	33.7	29.1	26.9	22.6	-
2	541679	167931	22.0	17.0	17.7	12.8	13.4	11.8	11.8	12.6	15.9	18.5	22.5	18.5	16.2	13.6	-
3	542402	166012	30.3	27.9	29.6	27.2	30.5	25.3	25.9	25.6	31.5	30.6	37.3	29.9	29.3	24.6	-
4	540336	170258	28.7	24.9	27.9	23.6	24.0	22.6		23.6	26.0	29.0	28.9	25.7	25.9	21.8	-
5	539790	170050	25.5	20.2	22.1	17.3	24.4	21.5	19.4	15.3	19.5	27.3	32.2	21.1	22.2	18.6	-
6	539486	169399	29.6	26.4	27.2	18.6	26.0	23.1	22.7	25.5	26.1	28.7	33.1		26.1	21.9	-
7	535947	169765	31.7	28.1	30.6	27.7	28.7	28.7	25.1	24.9	30.6	28.8	32.1	27.2	28.7	24.1	-
8	536941	171320	22.6	17.1	20.7	13.7	15.8	13.3	12.3	12.6	17.5	19.3	26.3	18.6	17.5	14.7	-
9	537511	167277	30.3	23.7	24.3	23.7	24.6	21.5		34.5	24.5	27.2	31.2	25.5	26.5	22.2	-
10	536076	168434	34.3	36.5	35.5	32.3	30.7	33.8	32.1	32.9	37.1	37.8	42.1	36.1	35.1	29.5	-
11	535006	169590	29.8	26.4	31.1	23.1	30.4	27.7	23.0				31.2	23.5	27.4	23.0	-
12	533949	170624	32.0	34.2	39.0	31.7		30.8	31.8	29.7	32.5	36.5	36.1	29.4	33.1	27.8	-
13	534052	170237	29.7	23.9	26.4	20.3	22.0	20.3	18.0	18.1	13.5	25.7	31.8	23.3	22.8	19.1	-

14	533702	170354	20.6	16.9	16.8	12.6	13.5	8.0	9.9	11.8	26.3	16.8	22.2	17.8	16.1	13.5	-
15	538398	165925	25.8	27.0	25.2	22.7		22.9	20.1	23.4	24.5	23.7	30.8	25.2	24.7	20.7	-
16	540228	165941	19.7	15.7	14.4	11.3	11.0	9.9	10.1	10.6	14.0	12.6		15.9	13.2	11.1	-
17	543303	165256	26.7	24.0	26.4	20.2	21.8	20.3	20.2	20.9	24.6	25.2	27.6	23.8	23.5	19.7	-
18	544779	166831	20.5	12.9	15.6	10.8	14.3	12.6	12.1	12.3	13.6	17.5	20.3		14.8	12.4	-
19	546190	166135	45.7	49.1	53.1	52.4	44.3	47.6	51.1		46.1	47.6	46.2	41.6	47.7	40.1	31.8
20	545861	164813	24.5	18.6	17.3	16.5	16.2	15.5	13.3	15.3	17.9	18.6	19.7	17.9	17.6	14.8	-
21	545439	164034	31.3	30.7	36.4	34.1	35.4	34.3	33.3	34.3	36.9	36.2	37.8	27.3	34.0	28.5	-
22	546821	167564	17.4	18.6	19.6	14.6	18.0	14.5	15.0	16.1	20.6	22.3	20.0	17.6	17.9	15.0	-
23	547168	167471	26.5	7.7	24.5	22.5	22.0	21.1	18.8	19.5	23.9	23.8	29.2	23.6	21.9	18.4	-
24	546984	169905	27.2	21.7	23.6	17.3	21.3	18.7	16.8	18.9	22.6	24.8	29.4	17.9	21.7	18.2	-
25	544437	170464	21.2	16.9	17.6	11.9	14.7	12.9	13.4	12.5	15.4	18.0	24.5	16.3	16.3	13.7	-
26	543930	170934	21.3	18.1	20.0	16.1	16.6	12.7	12.5	12.2	16.9	19.8	26.7	20.4	17.8	14.9	-
27	540525	169325	26.5	26.6	26.0	23.8	19.7	17.7	23.6	23.9	23.0	23.3	29.7	26.2	24.2	20.3	-
28	540519	169403	35.2	33.8	37.4	37.7	35.6	37.4	32.0	32.4	41.3	31.4	41.1	40.4	36.3	30.5	-
29	542980	167735	24.2	20.5	20.9	16.8	20.3	18.5	16.9	18.1	19.0	23.0	25.4	19.5	20.3	17.0	-
30	543452	169793	22.6	25.3	23.5	17.1	21.8	21.5	18.3	17.1	23.0	18.7	29.4	20.6	21.6	18.1	-
31	542847	172021	32.6	31.0	29.3		26.9	26.0	26.9	28.1	28.8	30.8	34.1	28.7	29.4	24.7	-
32	541960	168841	28.0	23.2	23.3	18.0	19.9	17.4	15.0	16.1	20.8	23.3	26.4	23.0	21.2	17.8	-

- ☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table P.
- ☒ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.
- ☐ Local bias adjustment factor used.
- ☒ National bias adjustment factor used.
- ☒ Where applicable, data has been distance corrected for relevant exposure in the final column.
- ☒ The London Borough of Bromley 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/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**.

See Appendix A for details on bias adjustment and annualisation.

Appendix C Annual Mean NO₂ Ratified, Bias-adjusted and Distance adjusted Monitoring Results 2018-2024

Site ID	Site type	2018	2019	2020	2021	2022	2023	2024
BRY-CM3	Automatic	25.7	24.7	21.3	21.8	20.1	19.0	20.0
1	Diffusion tube	43.5	39.4	29.3	30.9	28.6	24.2	22.6
2	Diffusion tube	-	-	-	18.3	18.1	14.8	13.6
3	Diffusion tube	-	-	-	27.5	27.6	24.1	24.6
4	Diffusion tube	35.6	33.1	25.7	25.5	25.6	23.0	21.8
5	Diffusion tube	37.6	37.6	27.7	26.8	24.6	22.4	18.6
6	Diffusion tube	35.3	36.0	27.7	27.1	25.4	22.4	21.9
7	Diffusion tube	38.2	36.0	28.6	30.2	28.8	25.7	24.1
8	Diffusion tube	-	-	-	20.6	20.0	17.8	14.7
9	Diffusion tube	-	-	-	25.4	24.6	21.9	22.2
10	Diffusion tube	51.3	48.1	39.5	37.5	35.4	31.6	29.5
11	Diffusion tube	35.2	36.4	27.9	29.2	26.3	24.5	23.0
12	Diffusion tube	39.0	42.5	35.1	35.9	36.2	30.2	27.8
13	Diffusion tube	-	-	-	26.6	26.0	23.4	19.1
14	Diffusion tube	-	-	-	18.2	16.5	14.8	13.5
15	Diffusion tube	-	-	-	27.9	27.9	23.4	20.7
16	Diffusion tube	-	-	-	16.2	15.3	12.5	11.1
17	Diffusion tube	-	-	-	25.0	25.7	23.4	19.7
18	Diffusion tube	-	-	-	15.4	14.6	12.8	12.4
19	Diffusion tube	-	-	-	35.0	33.9	31.5	31.8
20	Diffusion tube	-	-	-	19.4	18.3	16.0	14.8
21	Diffusion tube	-	-	-	33.3	30.5	27.4	28.5
22	Diffusion tube	-	-	-	22.4	19.8	17.7	15.0
23	Diffusion tube	-	-	-	25.1	23.7	21.7	18.4
24	Diffusion tube	-	-	-	24.7	24.0	19.6	18.2
25	Diffusion tube	-	-	-	19.6	18.9	15.2	13.7
26	Diffusion tube	-	-	-	21.0	19.8	16.2	14.9
27	Diffusion tube	27.3	28.3	21.4	21.1	20.5	19.4	20.3
28	Diffusion tube	39.1	38.4	30.9	32.8	31.1	28.8	30.5
29	Diffusion tube	-	-	-	23.0	21.5	17.8	17.0
30	Diffusion tube	-	-	-	26.6	23.3	20.4	18.1
31	Diffusion tube	-	-	-	29.7	26.4	24.6	24.7
32	Diffusion tube	-	-	-	25.3	23.9	21.3	17.8

Notes:

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

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

NO₂ annual means more than $60\mu\text{g m}^{-3}$, 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%.

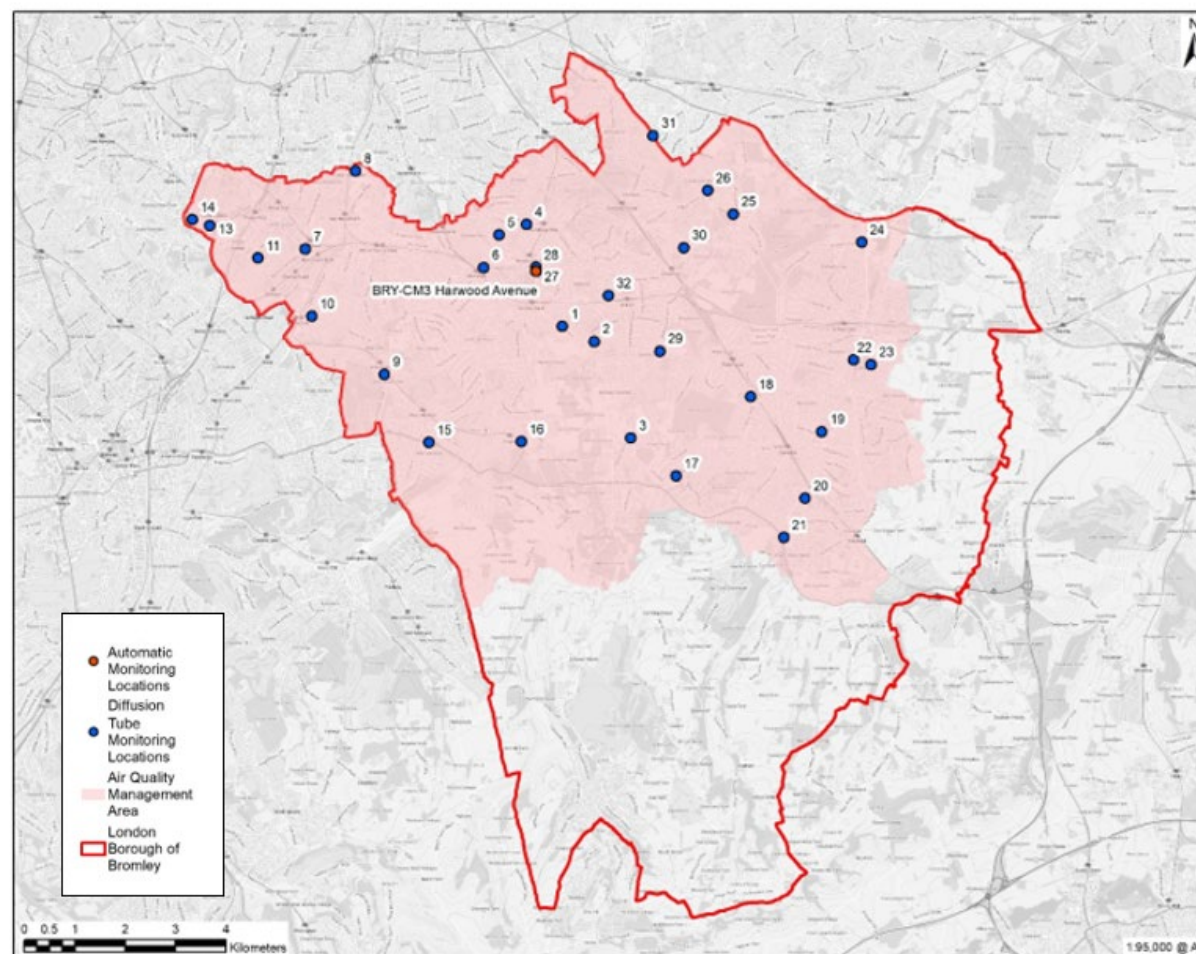
Results have been distance corrected where applicable.

(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 were carried out for six months the maximum data capture for the full calendar year would be 50%).

Appendix D Map of Monitoring Locations and AQMA

The monitoring site numbers indicated on the map below correlate to the Diffusion Tube Identification numbers listed in Table C.



London Borough of Camden Air Quality Annual Status Report for 2024

Date of publication: 30th May 2025



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

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

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Abbreviations

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

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

Pollutant	Standard / Objective / Guideline	Averaging Period	Date ⁽¹⁾
Nitrogen dioxide (NO ₂)	200 µg m ⁻³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	40 µg m ⁻³	Annual mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	WHO AQG ⁽²⁾ : 10 µg m ⁻³	Annual mean	
Particles (PM ₁₀)	50 µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 45 µg m ⁻³ not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM ₁₀)	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 15 µg m ⁻³	Annual mean	
Particles (PM _{2.5})	10 µg m ⁻³⁽³⁾	Annual mean	2040
Particles (PM _{2.5})	London Mayoral Objective ⁽⁴⁾ : 10 µg m ⁻³	Annual mean	2030
Particles (PM _{2.5})	WHO AQG ⁽²⁾ : 5 µg m ⁻³	Annual mean	
Particles (PM _{2.5})	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Particles (PM _{2.5})	WHO AQG ⁽²⁾ : 15 µg m ⁻³	24-hour mean	
Sulphur dioxide (SO ₂)	266 µg m ⁻³ not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO ₂)	350 µg m ⁻³ not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO ₂)	125 µg m ⁻³ 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)
BL0	London Bloomsbury (Russell Square Gardens)	Urban Background	530123	182014	NO ₂ PM ₁₀ PM _{2.5} SO ₂ O ₃	Yes	Camden AQMA	TEOM-FDMS, API NO _x	4	40	4
CD1	Swiss Cottage (Finchley Road)	Kerbside	526629	184391	NO ₂ PM ₁₀ PM _{2.5}	Yes	Camden AQMA	BAM PM ₁₀ , BAM PM _{2.5} , T200 NO _x	3	7	3
CD9	Euston Road	Roadside	529878	182648	NO ₂ PM ₁₀ PM _{2.5}	Yes	Camden AQMA	TEOM-FDMS, API NO _x	2.5	1	2.5
KGX	Coopers Lane	Urban Background/Industrial*	529831	183250	PM ₁₀ PM _{2.5}	Yes	Camden AQMA	TEOM-FDMS	2.5	8	2.5
CD010	Camden High Street	Roadside	528832	183995	NO ₂	Yes	Camden AQMA	Teledyne API M200A NO _x	2.5	1	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

- 'Kerbside' refers to sites with sample inlets within 1m of the kerb of a busy road. Sampling heights are within 2-3m of the ground.
- 'Roadside' refers to sites with sample inlets between 1m and 5m of the kerbside. Sampling heights are within 2-3m of the ground.
- 'Urban background' locations away from major sources and broadly representative of town/city-wide background concentrations, e.g., urban residential areas.²

² https://www.londonair.org.uk/london/asp/classification.asp?region=13&site=SK2&details=general&mapview=all&la_id=&network=All&MapType=Static

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

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM1	Schools AQ 1 - Lady Somerset Road	529030	185687	Roadside	NO ₂	Yes, Camden AQMA	7.5	1	N	2.5
CAM2	Schools AQ 2 - New End/Streatley Place	526518	185938	Roadside	NO ₂	Yes, Camden AQMA	5.5	0.5	N	2.5
CAM3	Schools AQ 3 - New End T-Junction	526518	185989	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM4	Schools AQ 4 - Savernake Road (Gospel Oak Primary School)	528159	185641	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM5	Schools AQ 5 - Rona Road	528098	185597	Roadside	NO ₂	Yes, Camden AQMA	7.5	0.5	N	2.5
CAM6	Schools AQ 6 - South Hampstead High School Junior School	526345	184876	Roadside	NO ₂	Yes, Camden AQMA	10	0.5	N	2.5
CAM7	Schools AQ 7 - Devonshire House Preparatory School	526479	185411	Roadside	NO ₂	Yes, Camden AQMA	14	0.5	N	2.5
CAM8	Schools AQ 8 - University College School Senior School	526226	185337	Roadside	NO ₂	Yes, Camden AQMA	10	0.5	N	2.5
CAM9	Schools AQ 9 - Christchurch Primary School	526499	186122	Roadside	NO ₂	Yes, Camden AQMA	24	9.5	N	2.5
CAM10	Schools AQ 10 - Princess Road (Primrose Hill School)	528302	183932	Roadside	NO ₂	Yes, Camden AQMA	10	0.5	N	2.5
CAM11	Schools AQ 11 - Minster Road (Mulberry House School)	524345	185133	Roadside	NO ₂	Yes, Camden AQMA	8	0.5	N	2.5
CAM12	Schools AQ 12 - Cliff Villas (Brecknock Primary School)	529918	184786	Roadside	NO ₂	Yes, Camden AQMA	7	0.5	N	2.5
CAM13	HSS Phase 4&5 1 - Ecole Jeannine Manuel -	529845	181595	Roadside	NO ₂	Yes, Camden AQMA	5	1	N	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
	Bedford Square south (outside school)									
CAM14	HSS Phase 4&5 2 - Ecole Jeannine Manuel - Bedford Avenue between Adeline Place and Morwell Street (LC5)	529804	181519	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM15	HSS Phase 4&5 3 - Ecole Jeannine Manuel - Bedford Square north (opposite side to school)	529805	181703	Roadside	NO ₂	Yes, Camden AQMA	4	0.5	N	2.5
CAM16	HSS Phase 4&5 4 - Argyle Primary School - Tonbridge Street	530210	182748	Roadside	NO ₂	Yes, Camden AQMA	6.5	1.5	N	2.5
CAM17	HSS Phase 4&5 5 - St Mary & St Pancras - Polygon Road	529583	183051	Roadside	NO ₂	Yes, Camden AQMA	17.5	2.5	N	2.5
CAM18	HSS Phase 4&5 6 - St Mary & St Pancras - Phoenix Road	529617	182935	Roadside	NO ₂	Yes, Camden AQMA	6	<1	N	2.5
CAM19	HSS Phase 4&5 7 - St Mary & St Pancras - Aldenham Road	529522	183089	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM20	HSS Phase 4&5 8 - Lyndhurst House Prep - Lyndhurst Gardens	526856	185301	Roadside	NO ₂	Yes, Camden AQMA	13	<0.5	N	2.5
CAM21	HSS Phase 4&5 9 - Lyndhurst House Prep - Wedderburn Road	526929	185226	Roadside	NO ₂	Yes, Camden AQMA	13.5	0.5	N	2.5
CAM22	HSS Phase 4&5 10 - St Christopher's - Belsize Lane	527006	185160	Roadside	NO ₂	Yes, Camden AQMA	15	<0.5	N	2.5
CAM23	HSS Phase 4&5 11 - St Christopher's - Orman Road	527067	185152	Roadside	NO ₂	Yes, Camden AQMA	8.5	0.5	N	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM24	HSS Phase 4&5 12 - Kingsgate Lower school - Liddell Road	525116	184772	Roadside	NO ₂	Yes, Camden AQMA	20	<1	N	2.5
CAM25	HSS Phase 4&5 13 - Kingsgate Lower school - Iverson Road	525199	184709	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM26	HSS Phase 4&5 14 - Kingsgate Lower school - Ariel Road	525030	184701	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM27	HSS Phase 4&5 15 - Kentish Town CofE - Islip Street	529114	185052	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM28	HSS Phase 4&5 16 - Kentish Town CofE - Caversham Road	529112	184960	Roadside	NO ₂	Yes, Camden AQMA	9	0.5	N	2.5
CAM29	HSS Phase 4&5 17 - Kentish Town CofE - Gaisford Street	529113	184869	Roadside	NO ₂	Yes, Camden AQMA	7.5	0.5	N	2.5
CAM30	HSS Phase 4&5 18 - Christopher Hatton - Mount Pleasant	531028	182092	Roadside	NO ₂	Yes, Camden AQMA	3.5	<0.5	N	2.5
CAM31	HSS Phase 4&5 19 - Brookfield School - Croftdown Road	528745	186598	Roadside	NO ₂	Yes, Camden AQMA	8	0.5	N	2.5
CAM32	HSS Phase 4&5 20 - Brookfield School - Chester Road	528685	186614	Roadside	NO ₂	Yes, Camden AQMA	6	0.5	N	2.5
CAM33	HSS Phase 4&5 21 - Brookfield School - Bramshill Gardens	528876	186421	Roadside	NO ₂	Yes, Camden AQMA	6.5	0.5	N	2.5
CAM34	HSS Phase 4&5 22 - Christ Church School - Redhill Street	528835	182980	Roadside	NO ₂	Yes, Camden AQMA	10.5	1	N	2.5
CAM35	HSS Phase 4&5 23 - Christ Church School - Redhill Street	528814	182873	Roadside	NO ₂	Yes, Camden AQMA	6	0.5	N	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM36	HSS Phase 4&5 24 - Beckford School - Dornfell Street	524928	185092	Roadside	NO ₂	Yes, Camden AQMA	7	0.5	N	2.5
CAM37	HSS Phase 4&5 25 - Beckford School - Sumatra Road	525036	185121	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM38	HSS Phase 4&5 26 - Beckford School - Ravenshaw Road	524860	185039	Roadside	NO ₂	Yes, Camden AQMA	4	0.5	N	2.5
CAM39	HSS Phase 4&5 27 - Broadhurst School - Greencroft Gardens	526216	184457	Roadside	NO ₂	Yes, Camden AQMA	10.5	0.5	N	2.5
CAM40	HSS Phase 4&5 28 - St Patricks - Raglan Street	528903	185009	Roadside	NO ₂	Yes, Camden AQMA	9	0.5	N	2.5
CAM41	HSS Phase 4&5 29 - St Patricks - Inkerman Road	528853	184975	Roadside	NO ₂	Yes, Camden AQMA	6.5	0.5	N	2.5
CAM42	HSS Phase 3 1 - Camden School for Girls - Sandall Road	529409	184720	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM43	HSS Phase 3 2 - Hampstead Parochial and UCS Junior - Holly Bush Vale	526343	185755	Roadside	NO ₂	Yes, Camden AQMA	1.5	<0.5	N	2.5
CAM44	HSS Phase 3 3 - Rhyl Primary School - Marsden Street	528338	184776	Roadside	NO ₂	Yes, Camden AQMA	6.5	0.5	N	2.5
CAM45	HSS Phase 3 4 - Haverstock School - Crogsland Road south	528233	184430	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM46	HSS Phase 3 5 - Netley Primary School - William Road	529113	182561	Roadside	NO ₂	Yes, Camden AQMA	11	<0.5	N	2.5
CAM47	Farringdon 1 - Acton Street	530760	182782	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5

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CAM48	Farringdon 2 - Frederick Street	530705	182701	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM49	Farringdon 3 - Calthorpe Street	530879	182342	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM50	Farringdon 4 - Grays Inn Road/Calthorpe Street	530822	182276	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM51	Farringdon 5 - Ray Street/Herbal Hill	531294	182146	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM52	Farringdon 6 - Summers Street	531239	182105	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM53	Farringdon 7 - Lloyd Baker Street	530990	182574	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM54	Farringdon 8 - Warner Street	531147	182179	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM55	Farringdon 9 - Grays Inn Road North	530620	182633	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM56	Farringdon 10 - Grays Inn Road/Wren Street	530775	182346	Roadside	NO ₂	Yes, Camden AQMA	9	<0.5	N	2.5
CAM57	Farringdon 11 - Grays Inn Road South	531056	181822	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM58	Grays Inn Road South 1 - Northington Street / King's Mews	530915	182046	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM59	Grays Inn Road South 2 - John Street	530823	182079	Roadside	NO ₂	Yes, Camden AQMA	6.5	0.5	N	2.5
CAM60	Grays Inn Road South 3 - Roger Street	530884	182124	Roadside	NO ₂	Yes, Camden AQMA	1.5	0.5	N	2.5
CAM61	Grays Inn Road South 4 - Elm Street	530965	182112	Roadside	NO ₂	Yes, Camden AQMA	6.5	<0.5	N	2.5
CAM62	Prince of Wales 1 - Malden Road north	528305	184657	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM63	Prince of Wales 2 - Prince of Wales Road/Truro Street	528179	184606	Roadside	NO ₂	Yes, Camden AQMA	8	0.5	N	2.5

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CAM64	Prince of Wales 3 - Prince of Wales Road/Haverstock Hill	527990	184602	Roadside	NO ₂	Yes, Camden AQMA	16.5	1	N	2.5
CAM65	Prince of Wales 4 - Crogsland Road	528244	184587	Roadside	NO ₂	Yes, Camden AQMA	10	0.5	N	2.5
CAM66	Prince of Wales 5 - Malden Crescent	528377	184599	Roadside	NO ₂	Yes, Camden AQMA	8	0.5	N	2.5
CAM67	Prince of Wales 6 - Prince of Wales Road/Malden Road	528380	184636	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM68	Prince of Wales 7 - Harmond Street	528537	184626	Roadside	NO ₂	Yes, Camden AQMA	3.5	<0.5	N	2.5
CAM69	Prince of Wales 8 - Prince of Wales Road/Grafton Road	528736	184719	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5
CAM70	Euston Road	530093	182792	Kerbside	NO ₂	Yes, Camden AQMA	1	0.5	N	2.2
CAM71	Euston Road LAQN colocation	529907	182670	Roadside	NO ₂	Yes, Camden AQMA	1	0.5	N	2
CAM72	St. George's Gardens (prev. 'Wakefield Gardens')	530430	182430	Urban Background	NO ₂	Yes, Camden AQMA	18	30	N	1.8
CAM73	St. George's Gardens East	530512	182511	Urban Background	NO ₂	Yes, Camden AQMA	10	29	N	1.5
CAM74	Kentish Town Road	529013	185102	Roadside	NO ₂	Yes, Camden AQMA	1	1	N	2.5
CAM75	Frognaal Way	526213	185519	Urban Background	NO ₂	Yes, Camden AQMA	6	30	N	3
CAM76	47 Fitzjohn's Road	526547	185125	Roadside	NO ₂	Yes, Camden AQMA	5	5	N	2
CAM77	Swiss Cottage	526633	184392	Kerbside	NO ₂	Yes, Camden AQMA	7	<1	N	2.5
CAM78	Brill Place	529904	183138	Roadside	NO ₂	Yes, Camden AQMA	12	0.5	N	2.5
CAM79	Tavistock Gardens	529880	182334	Urban Background	NO ₂	Yes, Camden AQMA	35	25	N	2.5

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CAM80	Endsleigh Gardens	529689	182470	Roadside	NO ₂	Yes, Camden AQMA	6	0.5	N	2
CAM81	Tottenham Court Road*	529568	181728	Kerbside	NO ₂	Yes, Camden AQMA	4	<1	N	3.5
CAM82	Emmanuel Primary School	525362	185255	Roadside	NO ₂	Yes, Camden AQMA	3	2	N	2
CAM83	Witanhurst Lane	528213	187203	Roadside	NO ₂	Yes, Camden AQMA	3	1.5	N	2.2
CAM84	Camden Road	529173	184129	Kerbside	NO ₂	Yes, Camden AQMA	5	<1	N	2.2
CAM85	Chetwynd Road	528722	185950	Roadside	NO ₂	Yes, Camden AQMA	2	1	N	2.5
CAM86	Bloomsbury Street	529962	181620	Kerbside	NO ₂	Yes, Camden AQMA	4	<1	N	2.2
CAM87	Dartmouth Park Hill	529118	185913	Roadside	NO ₂	Yes, Camden AQMA	10	0.5	N	2.5
CAM88	Acland Burghley School (Burghley Road)	529099	185881	Roadside	NO ₂	Yes, Camden AQMA	1	7	N	2.2
CAM89	Oakford Road	529060	185848	Roadside	NO ₂	Yes, Camden AQMA	8	1	N	2.5
CAM90	Pratt-Delancey 1 - Pratt Street (between College Place and Royal College Street)	529334	183868	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM91	Pratt-Delancey 2 - Pratt Street (between Bayham Street and Camden Street)	529142	183738	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM92	Pratt-Delancey 3 - Bayham Street	529054	183772	Roadside	NO ₂	Yes, Camden AQMA	4	0.5	N	2.5
CAM93	Pratt-Delancey 4 - Greenland Street	529010	183795	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	N	2.5

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CAM94	Pratt-Delancey 5 - Delancey Street/Delancey Passage	528971	183636	Roadside	NO ₂	Yes, Camden AQMA	1	1.5	N	2.5
CAM95	Pratt-Delancey 6 - Arlington Road (south of Delancey Street)	528968	183551	Roadside	NO ₂	Yes, Camden AQMA	4	1	N	2.5
CAM96	Pratt-Delancey 7 - Arlington Road (north of Delancey Street))	528881	183697	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM97	Pratt-Delancey 8 - Albert Street (south of Delancey Street)	528867	183547	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM98	Pratt-Delancey 9 - Delancey Street/Albert Street	528866	183590	Roadside	NO ₂	Yes, Camden AQMA	3	2	N	2.5
CAM99	Pratt-Delancey 10 - Albert Street (north of Delancey Street)	528836	183625	Roadside	NO ₂	Yes, Camden AQMA	3	0.5	N	2.5
CAM100	Pratt-Delancey 11 - Delancey Street/Parkway	528695	183596	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM101	Pratt-Delancey 12 - Parkway/A4201	528654	183570	Roadside	NO ₂	Yes, Camden AQMA	6	<0.5	N	2.5
CAM102	Pratt-Delancey 13 - Gloucester Gate	528604	183457	Roadside	NO ₂	Yes, Camden AQMA	6.5	<0.5	N	2.5
CAM103	Pratt-Delancey 14 - North Bridge School	528636	183577	Roadside	NO ₂	Yes, Camden AQMA	16	<0.5	N	2.5
CAM104	Pratt-Delancey 15 - Gloucester Avenue	528560	183695	Roadside	NO ₂	Yes, Camden AQMA	20	<0.5	N	2.5
CAM105	Pratt-Delancey 16 - Parkway	528724	183702	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5

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CAM106	Camden Square 1 - Murray Street	529548	184449	Roadside	NO ₂	Yes, Camden AQMA	20	<0.5	N	2.5
CAM107	Camden Square 2 - Camden Square East	529677	184531	Roadside	NO ₂	Yes, Camden AQMA	10.5	<0.5	N	2.5
CAM108	Camden Square 3 - Camden Terrace	529725	184680	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM109	Camden Square 4 - North Villas	529767	184734	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5
CAM110	Camden Square 5 - St. Augustine's Road	529754	184457	Roadside	NO ₂	Yes, Camden AQMA	8.5	<0.5	N	2.5
CAM111*	Belsize Park/Swiss Cottage 1 - Maresfield Gardens/Nutley Terrace	526456	184931	Roadside	NO ₂	Yes, Camden AQMA	9	<0.5	N	2.5
CAM112*	Belsize Park/Swiss Cottage 2 - Belsize Lane /Fitzjohn's Avenue	526586	184586	Roadside	NO ₂	Yes, Camden AQMA	8	1	N	2.5
CAM113*	Belsize Park/Swiss Cottage 3 - Hilgrove Estate	526559	184324	Roadside	NO ₂	Yes, Camden AQMA	12	<0.5	N	2.5
CAM114*	Belsize Park/Swiss Cottage 4 - Winchester Road	526815	184322	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5
CAM115*	Belsize Park/Swiss Cottage 5 - Eton Avenue	527010	184452	Roadside	NO ₂	Yes, Camden AQMA	6.5	<0.5	N	2.5
CAM116*	Belsize Park/Swiss Cottage 6 - Adelaide Road	526984	184239	Roadside	NO ₂	Yes, Camden AQMA	15	<0.5	N	2.5
CAM117*	Belsize Park/Swiss Cottage 7 - England's Lane	527318	184555	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	N	2.5

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CAM118*	Belsize Park/Swiss Cottage 8 - Belsize Avenue/Belsize Park Gardens	526948	184906	Roadside	NO ₂	Yes, Camden AQMA	7.5	<0.5	N	2.5
CAM119*	Belsize Park/Swiss Cottage 9 - Haverstock Hill	527278	185153	Roadside	NO ₂	Yes, Camden AQMA	11.5	<0.5	N	2.5
CAM120*	Belsize Park/Swiss Cottage 10 - Pond Street/Fleet Road	527314	185509	Roadside	NO ₂	Yes, Camden AQMA	6.5	1	N	2.5
CAM121	Haverstock School (Haverstock Hill)	528081	184490	Roadside	NO ₂	Yes, Camden AQMA	4	0.5	N	2.2
CAM122	Harmood Street	528558	184331	Roadside	NO ₂	Yes, Camden AQMA	7	1	N	2.2
CAM123	Hartland Road	528619	184315	Roadside	NO ₂	Yes, Camden AQMA	3	1	N	2.2
CAM124	Hawley Primary School (Hawley Road)	528881	184287	Roadside	NO ₂	Yes, Camden AQMA	1	6	N	2.2
CAM125	Kentish Town Road	528935	184053	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.2
CAM126	Hawley Crescent	528898	184094	Roadside	NO ₂	Yes, Camden AQMA	4	0.5	N	2.2
CAM127	Jamestown Road	528704	184011	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.2
CAM128	Camden High Street (Bridge)	528722	184127	Roadside	NO ₂	Yes, Camden AQMA	6	2	N	2.5
CAM129	Camden High Street (Camden News)	528845	183970	Roadside	NO ₂	Yes, Camden AQMA	5	2	N	2.2
CAM130	Camden High Street (American Candy)	528884	183901	Roadside	NO ₂	Yes, Camden AQMA	6	1	N	2.2
CAM131	Britannia Junction	528915	183870	Kerbside	NO ₂	Yes, Camden AQMA	15	0.5	N	2.5
CAM132	Cavendish School (Arlington Road)	528770	183887	Roadside	NO ₂	Yes, Camden AQMA	3	2	N	2.5

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CAM133	Holy Trinity & St. Silas School (Hartland Road)	528715	184456	Roadside	NO ₂	Yes, Camden AQMA	3	1.5	N	2.5
CAM133	Holy Trinity & St. Silas School (Hartland Road)	528715	184456	Roadside	NO ₂	Yes, Camden AQMA	3	1.5	N	2.5
CAM134	Chalk Farm Road 1 - Regent's Park Road	528119	184354	Roadside	NO ₂	Yes, Camden AQMA	<0.5	1.5	N	2.5
CAM135	Chalk Farm Road 2 - Chalk Farm Road	528335	184338	Roadside	NO ₂	Yes, Camden AQMA	11	0.5	N	2.5
CAM136	Chalk Farm Road 3 - Ferdinand Street	528456	184345	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM137	Chalk Farm Road 4 - Hartland Road	528582	184265	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM138	Haverstock Hill 1 - Haverstock Hill northbound	527278	185153	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM139	Haverstock Hill 2 - Haverstock Hill southbound	527184	185274	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5
CAM140	Haverstock Hill 3 - Glenloch Road	527299	185071	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5
CAM141	Haverstock Hill 4 - Haverstock Hill (between Upper Park Road and Downside Crescent)	527500	184974	Roadside	NO ₂	Yes, Camden AQMA	12.5	<0.5	N	2.5
CAM142	St. Pancras Way 1 - St. Pancras Way south	529606	183589	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM143	St. Pancras Way 2 - Junction of St. Pancras Way and Pratt Street	529443	183941	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5

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CAM144	St. Pancras Way 3 - St. Pancras Way adjacent to Caulfield Ct.	529405	184139	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM145	St. Pancras Way 4 - St. Pancras Way adjacent to Camden Courtyards	529233	184325	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM146	St. Pancras Way 5 - Camden Street	529289	183697	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM147	York Way 1 - York Way near junction with Camden Park Road	530004	184626	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM148	York Way 2 - York Way Sainsbury's Local	530067	184286	Roadside	NO ₂	Yes, Camden AQMA	6	0.5	N	2.5
CAM149	York Way 3 - York Way Art House	530320	183606	Roadside	NO ₂	Yes, Camden AQMA	6	<0.5	N	2.5
CAM150	Queens Crescent 1 - Junction of Queens Crescent and Allcroft Road	528259	185061	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM151	Queens Crescent 2 - Gilden Crescent	528191	185041	Roadside	NO ₂	Yes, Camden AQMA	1.5	<0.5	N	2.5
CAM152	Queens Crescent 3 - Junction of Grafton Road and Vicar's Road	528248	185360	Roadside	NO ₂	Yes, Camden AQMA	20	<1	N	2.5
CAM153	Queens Crescent 4 - Grafton Road south of Queens Crescent	528404	185130	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM154	Queens Crescent 5 - Spring Place south of Arctic Street	528516	185100	Roadside	NO ₂	Yes, Camden AQMA	3.5	<0.5	N	2.5

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CAM155	Queens Crescent 6 - Holmes Road outside St. Patrick's Catholic Primary School	528874	185037	Roadside	NO ₂	Yes, Camden AQMA	10.5	<0.5	N	2.5
CAM156	Queens Crescent 7 - Malden Road outside St. Dominic Primary School	527865	185224	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM157	Queens Crescent 8 - Malden Road at the junction with Marsden Street	528251	184767	Roadside	NO ₂	Yes, Camden AQMA	16	<0.5	N	2.5
CAM158	Queens Crescent 9 - Rhyl Street outside Rhyl Primary School	528334	184832	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM159	Queens Crescent 10 - Weedington Road south of Queens Crescent	528309	185097	Roadside	NO ₂	Yes, Camden AQMA	8	<0.5	N	2.5
CAM160	Queens Crescent 11 - Junction of Wilkin Street and Talacre Road	528430	184837	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM161	Camden Park Road / Torriano Avenue 1 - Torriano Avenue outside Torriano Primary School	529595	185067	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM162	Camden Park Road / Torriano Avenue 2 - Camden Park Road between South Villas and North Villas	529842	184780	Roadside	NO ₂	Yes, Camden AQMA	8.5	<0.5	N	2.5

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CAM163	Baynes Street (opposite K&I Kitchens, 31-37 Baynes Street)	529317	184124	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM164	Randolph Street	529264	184155	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5
CAM165	Royal College Street near junction with Georgiana Street	529310	183998	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM166	Crowndale Road (opposite junction with Bayham Street)	529279	183390	Roadside	NO ₂	Yes, Camden AQMA	6	<0.5	N	2.5
CAM167	King Henry's Road 1 - Adelaide Road between Elsworthy Rise and Primrose Hill	527440	184319	Roadside	NO ₂	Yes, Camden AQMA	8	<0.5	N	2.5
CAM168	King Henry's Road 2 - Adelaide Road/B509 UCL Academy	526852	184138	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM169	King Henry's Road 3 - Avenue Road	526885	183959	Roadside	NO ₂	Yes, Camden AQMA	18.5	<0.5	N	2.5
CAM170	King Henry's Road 4 - Queens Grove	526924	183780	Roadside	NO ₂	Yes, Camden AQMA	8	<0.5	N	2.5
CAM171	King Henry's Road 5 - Elsworthy Road between Avenue Road and Wadham Gardens	527018	183899	Roadside	NO ₂	Yes, Camden AQMA	15	<0.5	N	2.5
CAM172	King Henry's Road 6 - Elsworthy Road between Lower Merton Rise and Elsworthy Terrace	527372	184086	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM173	King Henry's Road 7 - Elsworthy Road between Elsworth Rise and Primrose Hill Road	527517	184159	Roadside	NO ₂	Yes, Camden AQMA	12	<0.5	N	2.5
CAM174	King Henry's Road 8 - King Henry's Road between Adelaide Road and Harley Road	526930	184135	Roadside	NO ₂	Yes, Camden AQMA	9	<0.5	N	2.5
CAM175	King Henry's Road 9 - King Henry's Road between Lyttleton Close and Lower Merton Rise	527213	184163	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5
CAM176	King Henry's Road 10 - King Henry's Road between Quickswood and Primrose Hill Road	527496	184210	Roadside	NO ₂	Yes, Camden AQMA	10.5	<0.5	N	2.5
CAM177	King Henry's Road 11 - King Henry's Road east of Primrose Hill Road	527595	184210	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM178	King Henry's Road 12 - Primrose Hill Road between Elsworthy Road and Oppidans Road	527582	184132	Roadside	NO ₂	Yes, Camden AQMA	11.5	<0.5	N	2.5
CAM179	Torrington-Tavistock/Midland-Judd 1 - Herbrand Street	530221	182086	Roadside	NO ₂	Yes, Camden AQMA	3.5	<0.5	N	2.5
CAM180	Torrington-Tavistock/Midland-Judd 2 - Guildford Street (west end)	530234	182066	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM181	Torrington-Tavistock/Midland-Judd 3 - Bernard Street	530292	182162	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM182	Torrington-Tavistock/Midland-Judd 4 - Grenville Street	530386	182171	Roadside	NO ₂	Yes, Camden AQMA	6	<0.5	N	2.5
CAM183	Torrington-Tavistock/Midland-Judd 5 - Russell Square south	530210	181917	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM184	Torrington-Tavistock/Midland-Judd 6 - Russell Square north	530057	182060	Roadside	NO ₂	Yes, Camden AQMA	6	<0.5	N	2.5
CAM185	Torrington-Tavistock/Midland-Judd 7 - Woburn Place	530098	182122	Roadside	NO ₂	Yes, Camden AQMA	3.5	<0.5	N	2.5
CAM186	Torrington-Tavistock/Midland-Judd 8 - Bedford Way	530001	182105	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM187	Torrington-Tavistock/Midland-Judd 9 - Montague Place	530015	181854	Roadside	NO ₂	Yes, Camden AQMA	16	<0.5	N	2.5
CAM188	Torrington-Tavistock/Midland-Judd 10 - Keppel Street	529854	181852	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM189	Torrington-Tavistock/Midland-Judd 11 - Tavistock Place	530104	182388	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM190	Torrington-Tavistock/Midland-Judd 12 - Coram Street	530097	182242	Roadside	NO ₂	Yes, Camden AQMA	12	<0.5	N	2.5

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CAM191	Torrington-Tavistock/Midland-Judd 13 - Marchmont Street	530177	182316	Roadside	NO ₂	Yes, Camden AQMA	1.5	<0.5	N	2.5
CAM192	Torrington-Tavistock/Midland-Judd 14 - Hunter Street	530280	182407	Roadside	NO ₂	Yes, Camden AQMA	9	<0.5	N	2.5
CAM193	Torrington-Tavistock/Midland-Judd 15 - Handel Street	530338	182420	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM194	Torrington-Tavistock/Midland-Judd 16 - Tavistock Place/Regent's Square	530343	182500	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM195	Torrington-Tavistock/Midland-Judd 17 - Marchmont Street	530122	182465	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM196	Torrington-Tavistock/Midland-Judd 18 - Leigh Street	530193	182529	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM197	Torrington-Tavistock/Midland-Judd 19 - Sandwich Street	530109	182567	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM198	Torrington-Tavistock/Midland-Judd 20 - Hastings Street	530100	182682	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM199	Torrington-Tavistock/Midland-Judd 21 - Judd Street	530138	182696	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM200	Torrington-Tavistock/Midland-Judd 22 - Midland Road	530044	182947	Roadside	NO ₂	Yes, Camden AQMA	<1	<0.5	N	2.5

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CAM201	Torrington-Tavistock/Midland-Judd 23 - Bidborough Street	530054	182710	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM202	Torrington-Tavistock/Midland-Judd 24 - Mabledon Place	529985	182674	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM203	Torrington-Tavistock/Midland-Judd 25 - Duke's Road	529893	182540	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5
CAM204	Torrington-Tavistock/Midland-Judd 26 - Upper Woburn Place	529860	182451	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5
CAM205	Torrington-Tavistock/Midland-Judd 27 - Endsleigh Street	529753	182452	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM206	Torrington-Tavistock/Midland-Judd 28 - Gower Place	529509	182363	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM207	Torrington-Tavistock/Midland-Judd 29 - Cleveland Street	529236	181811	Roadside	NO ₂	Yes, Camden AQMA	0.5	<0.5	N	2.5
CAM208	Torrington-Tavistock/Midland-Judd 30 - Guildford Street	530352	182100	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM209	Torrington-Tavistock/Midland-Judd 31 - Bloomsbury Square	530402	181627	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM210	Torrington-Tavistock/Midland-Judd 32 - St. Joseph's Roman Catholic Primary School (Macklin Street)	530385	181352	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5

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CAM211	Torrington-Tavistock/Midland-Judd 33 - High Holborn (174-177)	530165	181329	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM212	Torrington-Tavistock/Midland-Judd 34 - Southampton Row	530278	181926	Roadside	NO ₂	Yes, Camden AQMA	3.5	<0.5	N	2.5
CAM213	Torrington-Tavistock/Midland-Judd 35 - High Holborn (199-206)	530386	181485	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM214	Torrington-Tavistock/Midland-Judd 36 - Great Russell Street	530205	181673	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM215	Torrington-Tavistock/Midland-Judd 37 - UCL Department of Chemistry - Christopher Ingold Building (Gordon Street)	529649	182364	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5
CAM216	WEP 1 - Warren Street (5)	529281	182256	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM217	WEP 2 - Grafton Way (40)	529364	182207	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5
CAM218	WEP 3 - Tottenham Court Road (188)	529467	181964	Roadside	NO ₂	Yes, Camden AQMA	6.5	<0.5	N	2.5
CAM219	WEP 4 - Woburn Mansions (30 Torrington Place)	529555	181988	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM220	WEP 5 - Tottenham Court Road (216)	529608	181749	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM221	WEP 6 - Alfred Place (9)	529646	181775	Roadside	NO ₂	Yes, Camden AQMA	6	<0.5	N	2.5

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CAM222	WEP 7 - Charlotte Street (12)	529531	181588	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM223	WEP 8 - Tottenham Court Road (24-27)	529725	181553	Roadside	NO ₂	Yes, Camden AQMA	10.5	<0.5	N	2.5
CAM224	WEP 9 - Tottenham Court Road (279)	529816	181391	Roadside	NO ₂	Yes, Camden AQMA	6.5	<0.5	N	2.5
CAM225	WEP 10 - Denmark Street (5)	529901	181254	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM226	WEP 11 - Shaftesbury Avenue (109)	530095	181327	Roadside	NO ₂	Yes, Camden AQMA	16	<0.5	N	2.5
CAM227	WEP 12 - Bloomsbury Street (1)	530051	181454	Roadside	NO ₂	Yes, Camden AQMA	1.5	<0.5	N	2.5
CAM228	WEP 13 - Bedford Square (7A)	529900	181708	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5
CAM229	WEP 14 - Gower Street (89)	529650	182060	Roadside	NO ₂	Yes, Camden AQMA	3.5	<0.5	N	2.5
CAM230	WEP 15 - Gower Street (136)	529443	182350	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM231	WEP 16 - Gordon Street (20)	529682	182314	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM232	WEP 17 - Euston Road (137)	529905	182667	Roadside	NO ₂	Yes, Camden AQMA	3.5	<0.5	N	2.5
CAM233	WEP 18 - Bedford Square (41)	529844	181551	Roadside	NO ₂	Yes, Camden AQMA	1.5	1	N	2.5
CAM234	WEP 19 - Monmouth Street (25)	530074	181163	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM235	WEP 20 - Monmouth Street (30)	530056	181082	Roadside	NO ₂	Yes, Camden AQMA	1.5	<0.5	N	2.5
CAM236	WEP 21 - Tottenham Court Road (185-186)	529460	181975	Roadside	NO ₂	Yes, Camden AQMA	7.5	<0.5	N	2.5

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CAM237	WEP 22 - Tottenham Court Road (55)	529590	181751	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	N	2.5
CAM238	WEP 23 - Tottenham Court Road (279)	529812	181400	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM239	WEP 24 - Tower Street	530032	181005	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	N	2.5
CAM240	WEP 25 - Neal Street	530178	181127	Roadside	NO ₂	Yes, Camden AQMA	1.5	<0.5	N	2.5
CAM241	Shaftesbury 1 - Shelton Street	530042	181188	Roadside	NO ₂	Yes, Camden AQMA	1.5	0.5	N	2.5
CAM242	Shaftesbury 2 - Mercer Street South	529978	181100	Roadside	NO ₂	Yes, Camden AQMA	1.5	0.5	N	2.5
CAM243	Shaftesbury 3 - Monmouth Street South	530073	181169	Roadside	NO ₂	Yes, Camden AQMA	1.5	0.5	N	2.5
CAM244	Shaftesbury 4 - Tower Street	530059	181041	Roadside	NO ₂	Yes, Camden AQMA	1	0.5	N	2.5
CAM245	Shaftesbury 5 - Earlham Street West	530036	181120	Roadside	NO ₂	Yes, Camden AQMA	3	0.5	N	2.5
CAM246	Shaftesbury 6 - Shaftesbury Avenue South	530086	181070	Roadside	NO ₂	Yes, Camden AQMA	3	0.5	N	2.5
CAM247	Shaftesbury 7 - Mercer Street North	530131	181105	Roadside	NO ₂	Yes, Camden AQMA	1.5	0.5	N	2.5
CAM248	Shaftesbury 8 - Shaftesbury Avenue North	530018	181078	Roadside	NO ₂	Yes, Camden AQMA	3	0.5	N	2.5
CAM249	Shaftesbury 9 - Monmouth Street North	530009	181037	Roadside	NO ₂	Yes, Camden AQMA	2	0.5	N	2.5
CAM250	Shaftesbury 10 - Neal Street	530100	181029	Roadside	NO ₂	Yes, Camden AQMA	2	0.5	N	2.5

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CAM251	Shaftesbury 11 - Shorts Gardens	530114	181134	Roadside	NO ₂	Yes, Camden AQMA	1	0.5	N	2.5
CAM252	Shaftesbury 12 - Earlam Street East	530139	181178	Roadside	NO ₂	Yes, Camden AQMA	2	0.5	N	2.5
CAM253	Canal Location 1 - Rossendale Way	529497	183948	Roadside	NO ₂	Yes, Camden AQMA	6.5	20	N	2.5
CAM254	Canal Location 2 - Belsize primary School	529660	183797	Roadside	NO ₂	Yes, Camden AQMA	<1	42.5	N	2.5
CAM255	Canal Location 3 - Temple	529698	183770	Roadside	NO ₂	Yes, Camden AQMA	6	49	N	2.5
CAM256	Canal Location 4 - Co-op	529748	183733	Roadside	NO ₂	Yes, Camden AQMA	4	22.5	N	2.5
CAM257	Canal Location 5 - Granary Square	529988	183524	Roadside	NO ₂	Yes, Camden AQMA	2	79	N	2.5
CAM258	Estelle Road	528021	185593	Roadside	NO ₂	Yes, Camden AQMA	5.5	0.5	N	2.5
CAM259	Courthorpe Road	527926	185614	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM260	Shirlock Road	527865	185604	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM261	Kilburn High Road at junction with Kilburn Park Road	525668	183335	Roadside	NO ₂	Yes, Camden AQMA	12.5	6.5	N	2.5
CAM262	Kilburn High Road at junction with Oxford Road	525557	183462	Roadside	NO ₂	Yes, Camden AQMA	6	2	N	2.5
CAM263	Kilburn High Road opposite Kilburn High Road LO station	525439	183589	Roadside	NO ₂	Yes, Camden AQMA	7	1	N	2.5
CAM264	West End Lane (15m down West End Lane from junction with Kilburn High Road)	525381	183708	Roadside	NO ₂	Yes, Camden AQMA	1	0.5	N	2.5

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CAM265	Kilburn High Road near junction with Victoria Rd. and Quex Rd.	525258	183828	Roadside	NO ₂	Yes, Camden AQMA	6	0.5	N	2.5
CAM266	Kilburn High Road between Priory Park Road and The Terrace	525156	183991	Roadside	NO ₂	Yes, Camden AQMA	3	0.5	N	2.5
CAM267	Kilburn High Road at junction with Willesden Lane and Gascony Avenue	525077	184067	Roadside	NO ₂	Yes, Camden AQMA	5	0.5	N	2.5
CAM268	Kilburn High Road at corner with Grangeway	524998	184185	Roadside	NO ₂	Yes, Camden AQMA	5.5	1	N	2.5
CAM269	Kilburn High Road between Buckley Road and Dyne Road	524904	184281	Roadside	NO ₂	Yes, Camden AQMA	4.5	0.5	N	2.5
CAM270	Kilburn High Road at junction with Cavendish Rd. & Iverson Rd.	524747	184500	Roadside	NO ₂	Yes, Camden AQMA	3	1	N	2.5
CAM271	Kilburn High Road at junction with Exeter Road	524631	184665	Roadside	NO ₂	Yes, Camden AQMA	5	6	N	2.5
CAM272	Swain's Lane north at corner of Bisham Gardens	528437	187270	Roadside	NO ₂	Yes, Camden AQMA	6	<0.5	N	2.5
CAM273	Swain's Lane south between Hillway and Highgate West Hill	528324	186396	Roadside	NO ₂	Yes, Camden AQMA	8	1	N	2.5
CAM274	Dartmouth Park Hill north	528918	186959	Roadside	NO ₂	Yes, Camden AQMA	15	<0.5	N	2.5
CAM275	Dartmouth Park Hill between Bredgar Road and Hargreave Park	528967	186654	Roadside	NO ₂	Yes, Camden AQMA	6	0.5	N	2.5

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CAM276	Dartmouth Park Hill south	529025	186145	Roadside	NO ₂	Yes, Camden AQMA	8	<0.5	N	2.5
CAM277	Highgate Road north	528364	186173	Roadside	NO ₂	Yes, Camden AQMA	16	1	N	2.5
CAM278	Highgate Road south	528763	185546	Roadside	NO ₂	Yes, Camden AQMA	3	0.5	N	2.5
CAM279	Gordon House Road	528523	185778	Roadside	NO ₂	Yes, Camden AQMA	3.5	0.5	N	2.5
CAM280	Fortess Walk	528939	185366	Roadside	NO ₂	Yes, Camden AQMA	3.5	0.5	N	2.5
CAM281	York Rise	528788	186048	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5
CAM282	Chetwynd Road east	528924	186085	Roadside	NO ₂	Yes, Camden AQMA	6	0.5	N	2.5
CAM283	Cathcart Hill	529119	186219	Roadside	NO ₂	Yes, Camden AQMA	7.5	1	N	2.5
CAM284	Junction Road	529179	186011	Roadside	NO ₂	Yes, Camden AQMA	7	0.5	N	2.5
CAM285	Fortess Road	529016	185533	Roadside	NO ₂	Yes, Camden AQMA	13	<0.5	N	2.5
CAM286	Somers Town 1 - Midland Road/Pancras Road	529885	183280	Roadside	NO ₂	Yes, Camden AQMA	6.5	<0.5	N	2.5
CAM287	Somers Town 2 - Chenies Place East	529813	183349	Roadside	NO ₂	Yes, Camden AQMA	7.5	<0.5	N	2.5
CAM288	Somers Town 3 - Chenies Place West	529750	183288	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM289	Somers Town 4 - Edith Neville Primary School	529797	183187	Roadside	NO ₂	Yes, Camden AQMA	13	<0.5	N	2.5
CAM290	Somers Town 5 - Charrington Street	529641	183282	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM291	Somers Town 6 - Goldington Crescent	529611	183444	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5

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CAM292	Somers Town 7 - Oakley Square North	529424	183445	Roadside	NO ₂	Yes, Camden AQMA	5.5	<0.5	N	2.5
CAM293	Somers Town 8 - Crowndale Centre, Eversholt Street	529224	183362	Roadside	NO ₂	Yes, Camden AQMA	4	<1	N	2.5
CAM294	Somers Town 9 - Harrington Square Gardens	529229	183231	Roadside	NO ₂	Yes, Camden AQMA	3.5	0.5	N	2.5
CAM295	Somers Town 10 - Oakley Square South	529321	183239	Roadside	NO ₂	Yes, Camden AQMA	18.5	<0.5	N	2.5
CAM296	Somers Town 11 - Regent High School, Chalton Street	529527	183264	Roadside	NO ₂	Yes, Camden AQMA	5	<1	N	2.5
CAM297	Somers Town 12 - Somers Town Sports Centre, Chalton Street	529601	183148	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM298	Somers Town 13 - St. Aloysius Church, Phoenix Road	529555	182900	Roadside	NO ₂	Yes, Camden AQMA	2.5	<1	N	2.5
CAM299	Somers Town 14 - Chalton Street North/Phoenix Road	529717	182992	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM300	Somers Town 15 - Chalton Street South	529815	182830	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM301	Somers Town 16 - Churchway	529802	182703	Roadside	NO ₂	Yes, Camden AQMA	6.5	2	N	2.5
CAM302	Somers Town 17 - Ossulston Street South	529949	182798	Roadside	NO ₂	Yes, Camden AQMA	13.5	<0.5	N	2.5
CAM303	Somers Town 18 - Levita House	529887	182813	Roadside	NO ₂	Yes, Camden AQMA	15	40	N	2.5
CAM304	Somers Town 19 - Ossulston Street North	529786	183038	Roadside	NO ₂	Yes, Camden AQMA	13	<0.5	N	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM305	Somers Town 20 - Francis Crick Institute/Midland Road	529987	183060	Roadside	NO ₂	Yes, Camden AQMA	20	0.5	N	2.5
CAM306	Somers Town 21 - Goods Way	530231	183453	Roadside	NO ₂	Yes, Camden AQMA	41	<0.5	N	2.5
CAM307	Agar Grove eastbound	529874	184379	Roadside	NO ₂	Yes, Camden AQMA	4.5	<0.5	N	2.5
CAM308	Agar Grove westbound	529515	184274	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM309	Holmes Road	528687	185016	Roadside	NO ₂	Yes, Camden AQMA	2.5	<0.5	N	2.5
CAM310	Holborn 1 - Great Russell Street	530149	181611	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	N	2.5
CAM311	Holborn 2 - New Oxford Street	530250	181473	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM312	Holborn 3 - Vernon Place	530414	181645	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	N	2.5
CAM313	Holborn 4 - Newton Street	530429	181459	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM314	Holborn 5 - Kingsway	530608	181291	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM315	Holborn 6 - High Holborn	530755	181566	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	N	2.5
CAM316	Holborn 7 - Red Lion Square East	530573	181653	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM317	Holborn 8 - Red Lion Square West	530743	181719	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM318	Holborn 9 - Theobalds Road	530845	181904	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	N	2.5
CAM319	Holborn 10 - Great Ormond Street	530529	182013	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	N	2.5
CAM320	Clerkenwell 1 - Clerkenwell Road	531321	182050	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
	between Herbal Hill and Back Hill									
CAM321	Clerkenwell 2 - Clerkenwell Road at junction with Back Hill	531223	182034	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5
CAM322	Clerkenwell 3 - Laystall Road south	531160	182039	Roadside	NO ₂	Yes, Camden AQMA	14	<0.5	N	2.5
CAM323	Clerkenwell 4 - Clerkenwell Road at junction with Rosebery Avenue	531012	181982	Roadside	NO ₂	Yes, Camden AQMA	12	<0.5	N	2.5
CAM324	Clerkenwell 5 - Rosebery Ave/Laystall St	531092	182097	Roadside	NO ₂	Yes, Camden AQMA	10	<0.5	N	2.5
CAM325	Clerkenwell 6 - Rosebery Ave/Warner St	531123	182188	Roadside	NO ₂	Yes, Camden AQMA	7	<0.5	N	2.5
CAM326	CT Cycle 1 - Pratt Street between Bayham Street and Pratt Mews	529042	183678	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM327	CT Cycle 2 - Farrier Street	529011	184402	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM328	CT Cycle 3 - Prince Albert Road between car park and St. Mark's Church	528379	183669	Roadside	NO ₂	Yes, Camden AQMA	5	<0.5	N	2.5
CAM329	CT Cycle 4 - Pratt Street at junction with Camden Street	529231	183805	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	N	2.5
CAM330	Highgate High Street	528398	187417	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	No	2.5
CAM331	South Grove	528372	187332	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM332	South Highgate High Street	528796	187253	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM333	North Swains Lane (outside cemetery entrance)	528550	187101	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	No	2.5
CAM334	Highgate West Hill (between Makepeace Ave and Oakeshott Ave)	528133	186651	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM335	Raydon Street (before junc. With DPH)	528923	186732	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM336	Chester Road	528895	186575	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM337	Croftdown Road	528556	186213	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM338	Laurier Road	528824	186204	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM339	Spencer Rise	528917	185999	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	No	2.5
CAM340	Churchill Road	528912	185934	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM341	Tufnell Park Junction (Boston)	529150	185881	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM342	Tufnell Park Junction	529175	185860	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM343	Brecknock Road/ Lipton Street	529208	185779	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM344	Raveley Street	529215	185630	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM345	Burghley Road	528936	185575	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM346	The Grove	528196	187356	Roadside	NO ₂	Yes, Camden AQMA	3	1	No	2.5
CAM347	Lissenden Gardens	528471	185937	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM348	Ospringle Road	529332	185537	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM349	Lupton Street (Eleanor Palmer)	529147	185614	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM350	Regent's Park Children's Centre and Nursery	528998	182949	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM351	Junction of Osnaburgh St and Robert St	528945	182714	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM352	192 Drummond Street	529081	182442	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM353	Albany Street South	528836	528836	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM354	Euston Road Pret	529207	182326	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	No	2.5
CAM355	Euston Road Carol	529224	182288	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM356	250 Euston Road	529303	182367	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	No	2.5
CAM357	249 Euston Road	529308	182328	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM358	Grafton Place	529760	182677	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM359	Pancras Road / Euston Road junction	530224	182910	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM360	Eversholt St / Euston Road Junction	529749	182606	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM361	Gordon Street	529617	182413	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM362	Euston Road (outside bus station)	529646	182536	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	No	2.5
CAM363	Stanhope Street (Netley Primary)	529070	182624	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM364	Barnby St/ Eversholt St Junction	529455	183015	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM365	York Way/ Caledonia St junction	530331	183085	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM371	St Chads Street/ Belgrove Street	530308	182828	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM372	Fleet Road (124)	527452	185471	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM373	Fleet Street (27)	527682	185387	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM374	Upper Park Rd/ Garnett Rd	527612	185306	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM375	Lawn Road/ Downside Crescent	527558	185196	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM376	Parkhill Rd (Secret Garden Nursery)	527773	185026	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM377	Parkhill Road/ Haverstock Hill	527739	184788	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM378	Leather Lane / Clerkenwell Rd	531203	182017	Roadside	NO ₂	Yes, Camden AQMA	4	<0.5	No	2.5
CAM379	Greville Street	531326	181744	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM380	Leather Lane / Hatton Wall	531240	181939	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM381	St Cross St	531299	181879	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM382	Leather Lane / Baldwin's Garden	531267	181844	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM383	St Alban's CoE Primary	531142	181801	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM384	New Compton Street North	530022	181251	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM385	New Compton Street South	530001	181199	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM386	Pond Street	527237	185492	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM387	South End Road (7)	527275	185524	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5

Diffusion Tube ID	Site Name	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site type	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)
CAM388	South End Green Square	527310	185521	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	No	2.5
CAM389	South End Green Bus Stands	527304	185555	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM390	South End Road (31)	527247	185599	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM391	Constantine Road (8)	527375	185533	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM392	Fleet Road/ S End Grove	527330	185505	Roadside	NO ₂	Yes, Camden AQMA	2	<0.5	No	2.5
CAM393	Fleet Road (138)	527397	185485	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	No	2.5
CAM394	Willes Road	528658	184937	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM395	Willies Road/ Inkerman Road	528752	184864	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM396	Anglers Lane/ Alma Street	528889	184790	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM397	Grafton Road (43)	528676	184851	Roadside	NO ₂	Yes, Camden AQMA	1	<0.5	No	2.5
CAM398	Cathcart Street (32)	528763	184941	Roadside	NO ₂	Yes, Camden AQMA	3	<0.5	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.

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
BL0	530123	182014	Urban Background	-	94%	36	32	28	27	26	24	23
CD1	526629	184391	Kerbside	-	98%	54	43	33	44	37	33	30
CD9	529878	182648	Roadside	-	82%	<u>82</u> ^c	<u>70</u>	43	48	45	46	42
CD010	528832	183995	Roadside	-	99%	-	-	-	30	29	28	26

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%).

Commentary on annual mean NO₂ data from automatic monitoring

There has been an overall downward trend in annual NO₂ concentrations recorded over the last seven years by Camden's automatic monitoring sites, which continued in 2024 with all four sites recording a reduction in annual NO₂ concentration when compared to the previous year. In 2024, there has been an average reduction in annual mean NO₂ concentrations of 2.5 µg m³ (seven percent) across Camden's automatic monitoring portfolio when compared to 2023, a slight improvement on the previous years' performance.

In the last seven years of monitoring, the London Bloomsbury (BL0) urban background monitoring site has consistently recorded decreasing NO₂ concentrations year on year. The other three monitoring sites have similarly recorded reduced concentrations of NO₂ during this period. However, the impact of the COVID pandemic and associative lockdowns on local traffic flow and air quality can be gleaned from the significant decrease recorded in 2020, emphasising the relationship between vehicle-use and air pollution at these urban roadside locations. It is therefore important to note the improvements in ambient air quality that have since been made in the intervening period, which has resulted in annual NO₂ concentrations for 2024 recording on average ten percent lower than in 2020 across Camden's automatic monitoring network, despite significantly reduced vehicular traffic throughout much of the 2020 monitoring year.

The reductions in NO₂ concentrations recorded across the last seven years illustrate the significant positive effect the Ultra Low Emission Zone (ULEZ) has had on air quality in central London since its introduction in 2018. During this period, annual mean NO₂ concentrations have reduced by an average 43% across the BL0, CD1, and CD9 monitoring stations. Whilst there was an initial step-decrease in NO₂ concentrations since the introduction of the ULEZ (as illustrated by Figure 1), it is important to note that reductions have slowed in subsequent years. This would suggest that, whilst a reduction in vehicle emissions brought about by ULEZ has caused an initially substantial decrease in NO₂, the same level of effective progress is not being made to tackle other sources of the pollutant; we know that building heating systems are now the largest source of NO₂ in Camden. Therefore, to achieve the World Health Organization (WHO) standard for NO₂, efforts must continue to be made to reduce concentrations from all sources within the borough.

Figure 1 shows annual mean NO₂ concentration as measured at four automatic monitoring sites in Camden, illustrating the long-term reduction in this pollutant however, the gap to achieving the WHO 2021 standards is clear to see.

Figure 1. Automatic Monitoring Annual Mean NO₂ Concentration

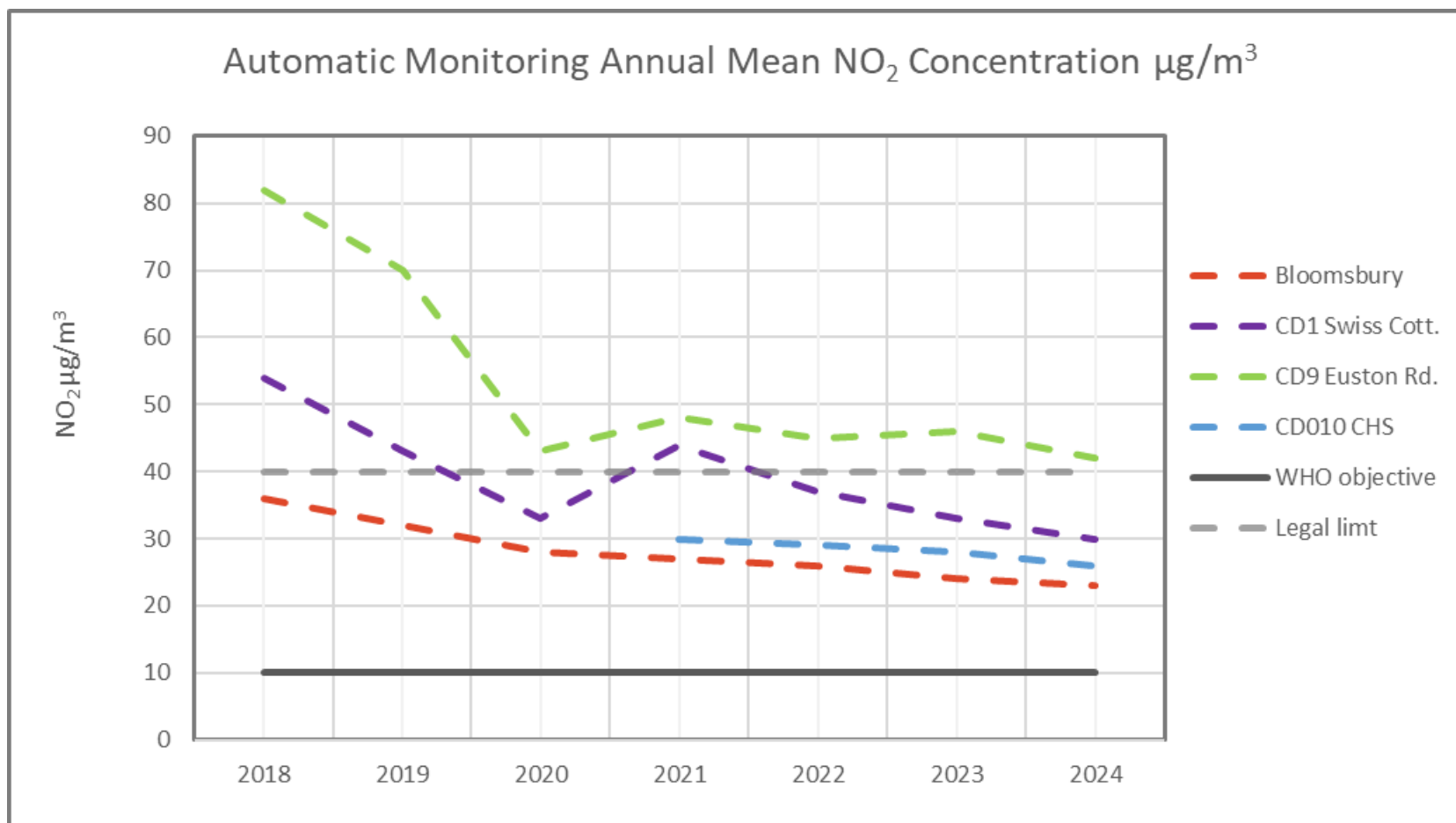


Table E. Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg m⁻³)

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
CAM1	529030	185687	Roadside	-	100%	33.7	31.25	22.74	21.63	19.84	18.90	18.69
CAM2	526518	185938	Roadside	-	92%	29.57	24.46	18.99	17.25	16.17	19.76	14.88
CAM3	526518	185989	Roadside	-	92%	32.16	26.41	20.24	19.07	17.6	21.26	15.27
CAM4	528159	185641	Roadside	-	75%	30.24	24.44	19.18	18.06	17.98	19.39	14.80
CAM5	528098	185597	Roadside	-	83%	30.58	26.47	20.31	19.34	19.87	21.35	16.70
CAM6	526345	184876	Roadside	-	83%	-	31.65	23.55	22.37	20.39	25.02	18.51
CAM7	526479	185411	Roadside	-	83%	-	39.5	30.61	29.19	28.31	23.71	21.23
CAM8	526226	185337	Roadside	-	92%	-	29.75	22.69	22	19.85	22.27	17.04
CAM9	526499	186122	Roadside	-	83%	-	20.9	17.79	16.82	16.13	15.75	13.31
CAM10	528302	183932	Roadside	-	83%	-	-	23.47	20.19	19.93	22.57	18.80
CAM11	524345	185133	Roadside	-	92%	-	-	-	24.4	23.6	24.42	17.99
CAM12	529918	184786	Roadside	-	83%	-	-	24.09	21.32	19.88	23.48	18.06
CAM13	529845	181595	Roadside	-	100%	-	-	-	22.95	22.62	24.51	19.55
CAM14	529804	181519	Roadside	-	100%	-	-	-	26.2	27.04	31.70	24.39
CAM15	529805	181703	Roadside	-	100%	-	-	-	24.09	24.31	26.53	20.93
CAM16	530210	182748	Roadside	-	100%	-	-	-	24.91	24.22	25.71	22.00
CAM17	529583	183051	Roadside	-	92%	-	-	-	22.3	22.76	24.20	17.83
CAM18	529617	182935	Roadside	-	92%	-	-	-	23.75	23.68	27.16	19.29
CAM19	529522	183089	Roadside	-	8%	-	-	-	22.9	21.92	22.78	
CAM20	526856	185301	Roadside	-	92%	-	-	-	19.56	19	20.85	15.76
CAM21	526929	185226	Roadside	-	92%	-	-	-	19.26	19.03	20.82	15.78
CAM22	527006	185160	Roadside	-	83%	-	-	-	19.47	19.48	21.50	16.48
CAM23	527067	185152	Roadside	-	83%	-	-	-	20.31	20.99	22.71	17.20
CAM24	525116	184772	Roadside	-	83%	-	-	-	19.6	19.3	23.20	15.74
CAM25	525199	184709	Roadside	-	92%	-	-	-	24.24	24.56	24.59	18.07
CAM26	525030	184701	Roadside	-	92%	-	-	-	21.92	21.3	24.17	17.93
CAM27	529114	185052	Roadside	-	92%	-	-	-	20.11	19.05	22.07	16.93
CAM28	529112	184960	Roadside	-	92%	-	-	-	18.98	21.69	24.77	16.56
CAM29	529113	184869	Roadside	-	92%	-	-	-	19.7	19.86	21.36	16.29
CAM30	531028	182092	Roadside	-	100%	-	-	-	33.33	33.7	32.48	34.30
CAM31	528745	186598	Roadside	-	92%	-	-	-	18.4	17.78	20.16	13.97
CAM32	528685	186614	Roadside	-	83%	-	-	-	22.79	21.61	23.73	18.95
CAM33	528876	186421	Roadside	-	92%	-	-	-	17.61	16.48	19.42	14.02

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
CAM34	528835	182980	Roadside	-	75%	-	-	-	19.51	19.33	20.68	14.35
CAM35	528814	182873	Roadside	-	75%	-	-	-	22.86	21.93	21.27	17.33
CAM36	524928	185092	Roadside	-	92%	-	-	-	21.21	19.8	22.61	17.12
CAM37	525036	185121	Roadside	-	92%	-	-	-	21.36	19.2	22.46	16.03
CAM38	524860	185039	Roadside	-	92%	-	-	-	20.9	20.01	22.48	17.25
CAM39	526216	184457	Roadside	-	83%	-	-	-	21.08	19.79	23.84	16.02
CAM40	528903	185009	Roadside	-	100%	-	-	-	18.46	18.58	20.86	17.02
CAM41	528853	184975	Roadside	-	92%	-	-	-	18.73	18.78	19.86	16.27
CAM42	529409	184720	Roadside	-	83%	-	-	-	22.11	20.24	26.82	18.11
CAM43	526343	185755	Roadside	-	92%	-	-	-	19.46	19.54	21.61	16.06
CAM44	528338	184776	Roadside	-	92%	-	-	-	19.27	19.31	22.66	17.37
CAM45	528233	184430	Roadside	-	100%	-	-	-	23.4	23.43	23.24	19.72
CAM46	529113	182561	Roadside	-	92%	-	-	-	23.76	22.87	23.09	18.68
CAM47	530760	182782	Roadside	-	75%	55.49	48.27	30.91	34.82	32.26	36.39	27.81
CAM48	530705	182701	Roadside	-	92%	38.97	32.93	23.97	23.88	24.48	25.37	20.47
CAM49	530879	182342	Roadside	-	100%	43.12	37.79	25.98	24.07	27.77	30.33	22.84
CAM50	530822	182276	Roadside	-	100%	51.12	46.62	27.96	29.35	29.69	36.25	26.15
CAM51	531294	182146	Roadside	-	100%	39.14	33.42	22.9	23.04	22.53	25.07	20.83
CAM52	531239	182105	Roadside	-	100%	37.17	32.7	23.77	22.22	23.46	25.35	20.63
CAM53	530990	182574	Roadside	-	100%	42.8	37.01	26.27	25.09	23.85	27.93	21.22
CAM54	531147	182179	Roadside	-	100%	42.98	36.01	24.66	23.9	24.95	25.04	20.74
CAM55	530620	182633	Roadside	-	92%	-	-	28.35	30.11	30.21	33.18	25.16
CAM56	530775	182346	Roadside	-	100%	-	-	25.57	24.26	23.08	28.34	22.71
CAM57	531056	181822	Roadside	-	92%	-	-	27	27.17	29.55	29.82	27.37
CAM58	530915	182046	Roadside	-	92%	-	-	-	23.53	24.59	26.92	21.87
CAM59	530823	182079	Roadside	-	100%	-	-	-	25.29	26.31	29.51	24.04
CAM60	530884	182124	Roadside	-	100%	-	-	-	27.86	30.53	31.95	25.84
CAM61	530965	182112	Roadside	-	100%	-	-	-	27.3	28.69	28.63	25.34
CAM62	528305	184657	Roadside	-	100%	49.8	42.59	-	30.21	29.13	30.24	25.44
CAM63	528179	184606	Roadside	-	100%	35.1	33.72	21.93	22.49	20.67	24.04	19.19
CAM64	527990	184602	Roadside	-	92%	38.26	36.59	22.05	23.53	22.49	22.29	20.82
CAM65	528244	184587	Roadside	-	100%	35.61	33.06	21.59	20.41	21.35	24.23	18.90
CAM66	528377	184599	Roadside	-	92%	38.45	34.47	23.7	24.46	23.62	27.17	20.21
CAM67	528380	184636	Roadside	-	100%	46.54	41.21	26.66	30.32	28.55	31.83	27.03
CAM68	528537	184626	Roadside	-	83%	36.54	32.23	21.65	21.67	22.79	22.94	20.10

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
CAM69	528736	184719	Roadside	-	92%	45.92	39.14	25.47	27.14	26	25.51	26.60
CAM70	530093	182792	Kerbside	-	83%	-	70.65	53.68	56.9	50.64	51.57	41.90
CAM71	529907	182670	Roadside	-	75%	-	65.28	46.57	46.49	43.15	47.52	44.21
CAM72	530430	182430	Urban Background	-	0%	26.67	25.22	-	-	-		
CAM73	530512	182511	Urban Background	-	83%	-	28.31	22.47	17.23	19.21	17.74	17.40
CAM74	529013	185102	Roadside	-	92%	54.66	46.07	34.23	32.57	28.97	28.14	24.89
CAM75	526213	185519	Urban Background	-	75%	22.12	23.34	18.68	15.14	16.35	14.72	13.69
CAM76	526547	185125	Roadside	-	83%	48.13	43.51	34.47	29.75	27.61	26.65	26.50
CAM77	526633	184392	Kerbside	-	100%	62.30^c	50.89	-	-	35.06	34.37	31.21
CAM78	529904	183138	Roadside	-	75%	-	44.12	43.89	34.19	33.13	35.08	33.34
CAM79	529880	182334	Urban Background	-	83%	35.35	33.9	26.78	22.2	23.91	21.30	22.82
CAM80	529689	182470	Roadside	-	83%	-	49.45	35.32	34.32	30.15	27.70	25.31
CAM81	529568	181728	Kerbside	-	67%	65.75	62.62	43.27	44.18	39.95	43.87	34.90
CAM82	525362	185255	Roadside	-	92%	-	38.75	31.8	29.36	29.81	29.03	25.90
CAM83	528213	187203	Roadside	-	100%	37.37	33.26	24.87	22.31	21.95	17.74	17.54
CAM84	529173	184129	Kerbside	-	100%	55.57	53.69	44.26	36.85	38.08	36.49	33.72
CAM85	528722	185950	Roadside	-	100%	38.68	36.06	29.97	24.48	25.46	23.96	20.45
CAM86	529962	181620	Kerbside	-	100%	59.43	49.60	29.52	32.91	30.8	29.49	27.43
CAM87	529118	185913	Roadside	-	100%	42.55	37.89	28.54	25.83	24.86	24.23	22.70
CAM88	529099	185881	Roadside	-	92%	27.11	28.05	20.44	19.58	20.12	18.81	18.24
CAM89	529060	185848	Roadside	-	67%	30.51	29.9	23.14	22.85	20.2	19.73	17.08
CAM90	529334	183868	Roadside	-	100%	-	32.25	24.62	23.81	22.57	22.41	20.40
CAM91	529142	183738	Roadside	-	92%	-	33.38	28.15	24.05	23.06	28.33	23.60
CAM92	529054	183772	Roadside	-	92%	-	57.88	47.58	39.85	36.05	39.42	35.04
CAM93	529010	183795	Roadside	-	92%	-	39.78	32.34	27.88	28.48	31.59	24.80
CAM94	528971	183636	Roadside	-	92%	-	34.5	27.32	31.8	28.33	36.10	30.42
CAM95	528968	183551	Roadside	-	75%	-	31.88	25.98	23.38	22.7	25.60	20.39
CAM96	528881	183697	Roadside	-	92%	-	34.03	27.27	25.03	23.38	27.48	20.40
CAM97	528867	183547	Roadside	-	75%	-	33.06	25.61	23.98	23.41	24.77	20.40
CAM98	528866	183590	Roadside	-	92%	-	42.99	34.65	31.28	31.87	34.22	26.93
CAM99	528836	183625	Roadside	-	83%	-	29.72	23.1	21.68	20.27	23.07	17.78

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
CAM100	528695	183596	Roadside	-	75%	-	35.61	29.24	30.08	26.98	30.15	22.57
CAM101	528654	183570	Roadside	-	92%	-	46.32	38.58	36.17	32.88	34.66	25.53
CAM102	528604	183457	Roadside	-	92%	-	35.01	31.47	28.49	26.71	30.32	22.53
CAM103	528636	183577	Roadside	-	92%	-	41.85	35.74	30.81	29.97	33.45	25.06
CAM104	528560	183695	Roadside	-	75%	-	31.04	27.56	24.66	23.26	28.60	20.47
CAM105	528724	183702	Roadside	-	83%	-	41.99	35.9	33.98	31.04	30.58	28.12
CAM106	529548	184449	Roadside	-	92%	-	30.49	-	20.87	18.93	21.65	16.31
CAM107	529677	184531	Roadside	-	83%	-	29.02	-	20.32	19.52	22.50	17.79
CAM108	529725	184680	Roadside	-	83%	-	29.46	-	20.59	19.29	22.59	17.28
CAM109	529767	184734	Roadside	-	92%	-	31.17	-	20.67	20.16	25.78	18.56
CAM110	529754	184457	Roadside	-	92%	-	31.26	-	21.49	20.51	24.39	18.30
CAM111	526456	184931	Roadside	-	-	-	27.57	-	-	-	-	-
CAM112	526586	184586	Roadside	-	-	-	40.11	-	-	-	-	-
CAM113	526559	184324	Roadside	-	-	-	28.66	-	-	-	-	-
CAM114	526815	184322	Roadside	-	-	-	36.15	-	-	-	-	-
CAM115	527010	184452	Roadside	-	-	-	29.7	-	-	-	-	-
CAM116	526984	184239	Roadside	-	-	-	33.15	-	-	-	-	-
CAM117	527318	184555	Roadside	-	-	-	38	-	-	-	-	-
CAM118	526948	184906	Roadside	-	-	-	31.92	-	-	-	-	-
CAM119	527278	185153	Roadside	-	-	-	40.39	-	-	-	-	-
CAM120	527314	185509	Roadside	-	-	-	44.99	-	-	-	-	-
CAM121	528081	184490	Roadside	-	100%	-	33.06	23.51	20.97	22.04	21.20	18.62
CAM122	528558	184331	Roadside	-	92%	-	31.74	24.89	20.65	18.49	18.40	16.03
CAM123	528619	184315	Roadside	-	92%	-	31.8	26.13	20.65	21.42	19.64	17.38
CAM124	528881	184287	Roadside	-	92%	-	42.93	34.11	26.78	27.86	28.39	22.00
CAM125	528935	184053	Roadside	-	92%	-	45.01	33.81	27.76	27.98	26.10	23.38
CAM126	528898	184094	Roadside	-	100%	-	38.89	32.26	25.71	26.4	22.12	21.63
CAM127	528704	184011	Roadside	-	92%	-	38.7	29.87	25.8	22.56	21.06	18.15
CAM128	528722	184127	Roadside	-	92%	-	41.47	33.09	26.31	27.18	25.52	22.17
CAM129	528845	183970	Roadside	-	83%	-	38.81	30.51	29.66	27.79	26.19	23.35
CAM130	528884	183901	Roadside	-	92%	-	47.65	37.79	31.35	30.19	30.51	25.12
CAM131	528915	183870	Kerbside	-	67%	-	53.9	40.71	37.04	36.87	36.50	32.52
CAM132	528770	183887	Roadside	-	100%	-	33.97	26.9	22.71	23.27	20.60	18.79
CAM133	528715	184456	Roadside	-	100%	-	28.09	22.1	17.93	19.94	18.03	16.30
CAM134	528119	184354	Roadside	-	100%	-	31.43	22.15	20.87	21.46	23.33	18.41

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
CAM135	528335	184338	Roadside	-	100%	-	42.38	33.28	27.11	26.69	31.98	24.26
CAM136	528456	184345	Roadside	-	92%	-	36.73	30.33	29.4	27.76	31.06	24.57
CAM137	528582	184265	Roadside	-	100%	-	33.72	25.18	22.66	22.76	25.45	20.14
CAM138	527278	185153	Roadside	-	83%	-	-	30.83	30.93	32.1	32.75	27.06
CAM139	527184	185274	Roadside	-	83%	-	-	32.23	37.29	34.53	35.65	31.33
CAM140	527299	185071	Roadside	-	75%	-	-	22.51	21.83	20.65	24.25	18.84
CAM141	527500	184974	Roadside	-	83%	-	-	26.53	26.32	26.32	26.24	21.56
CAM142	529606	183589	Roadside	-	75%	-	-	-	28.34	25.39	32.29	23.95
CAM143	529443	183941	Roadside	-	83%	-	-	27.64	25.14	24.76	28.48	20.07
CAM144	529405	184139	Roadside	-	75%	-	-	-	26.99	-	32.03	21.00
CAM145	529233	184325	Roadside	-	83%	-	-	-	27.2	26.39	28.97	21.23
CAM146	529289	183697	Roadside	-	83%	-	-	23.37	23.15	21.53	26.24	17.77
CAM147	530004	184626	Roadside	-	83%	-	-	32.25	32.04	29.04	32.34	24.79
CAM148	530067	184286	Roadside	-	75%	-	-	-	36.39	31.92	34.80	27.04
CAM149	530320	183606	Roadside	-	83%	-	-	29.66	31.45	28.66	29.85	25.81
CAM150	528259	185061	Roadside	-	67%	-	-	-	21.21	20.08	22.49	15.67
CAM151	528191	185041	Roadside	-	83%	-	-	-	20.46	19.98	21.40	17.10
CAM152	528248	185360	Roadside	-	92%	-	-	-	21.39	21.51	23.11	17.87
CAM153	528404	185130	Roadside	-	100%	-	-	-	20.08	20.13	21.72	17.92
CAM154	528516	185100	Roadside	-	100%	-	-	-	21.28	20.93	22.79	18.74
CAM155	528874	185037	Roadside	-	92%	-	-	-	20.97	20.11	19.61	15.79
CAM156	527865	185224	Roadside	-	92%	-	-	-	25.06	26.1	26.60	20.80
CAM157	528251	184767	Roadside	-	100%	-	-	-	21.29	22.44	24.84	18.46
CAM158	528334	184832	Roadside	-	100%	-	-	-	18.27	19.53	21.67	18.18
CAM159	528309	185097	Roadside	-	92%	-	-	-	20.02	20.05	22.03	18.38
CAM160	528430	184837	Roadside	-	92%	-	-	-	17.06	19.61	20.18	16.50
CAM161	529595	185067	Roadside	-	83%	-	-	-	21.47	20.78	23.22	16.53
CAM162	529842	184780	Roadside	-	83%	-	-	-	26.14	24.71	27.73	21.63
CAM163	529317	184124	Roadside	-	58%	-	-	-	21.28	22.77	24.21	21.55
CAM164	529264	184155	Roadside	-	83%	-	-	-	26.22	24.48	28.84	21.81
CAM165	529310	183998	Roadside	-	83%	-	-	-	27.07	26.48	29.90	22.73
CAM166	529279	183390	Roadside	-	83%	-	-	-	42.58	40.69	46.11	35.90
CAM167	527440	184319	Roadside	-	92%	-	-	-	33.59	38.92	41.99	34.26
CAM168	526852	184138	Roadside	-	92%	-	-	-	31.14	33.83	37.22	27.62
CAM169	526885	183959	Roadside	-	92%	-	-	-	26.47	26.06	28.83	21.60

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
CAM170	526924	183780	Roadside	-	92%	-	-	-	22.59	21.38	23.16	16.87
CAM171	527018	183899	Roadside	-	92%	-	-	-	25.47	24.54	25.62	20.35
CAM172	527372	184086	Roadside	-	92%	-	-	-	21.6	19.56	23.58	16.87
CAM173	527517	184159	Roadside	-	92%	-	-	-	21.78	19.07	22.04	16.40
CAM174	526930	184135	Roadside	-	92%	-	-	-	27.78	29.24	28.47	23.44
CAM175	527213	184163	Roadside	-	83%	-	-	-	24.26	22.76	23.50	17.23
CAM176	527496	184210	Roadside	-	92%	-	-	-	23.96	22.28	23.55	17.45
CAM177	527595	184210	Roadside	-	92%	-	-	-	23	22.13	24.50	17.96
CAM178	527582	184132	Roadside	-	83%	-	-	-	25.03	21.98	24.52	18.64
CAM179	530221	182086	Roadside	-	-	53.4	49.02	34.71	-	-	-	-
CAM180	530234	182066	Roadside	-	-	56.93	54.13	36.64	-	-	-	-
CAM181	530292	182162	Roadside	-	-	43.16	41.53	31.02	-	-	-	-
CAM182	530386	182171	Roadside	-	100%	45.73	43.83	31.97	27.61	29.57	30.10	25.52
CAM183	530210	181917	Roadside	-	-	45.65	41.53	29.93	-	-	-	-
CAM184	530057	182060	Roadside	-	-	53.78	46.98	31.62	-	-	-	-
CAM185	530098	182122	Roadside	-	-	70.46	64.49	43.26	-	-	-	-
CAM186	530001	182105	Roadside	-	-	51.49	49.25	34.82	-	-	-	-
CAM187	530015	181854	Roadside	-	-	42.69	40.69	29.53	-	-	-	-
CAM188	529854	181852	Roadside	-	-	45.57	38.82	25.42	-	-	-	-
CAM189	530104	182388	Roadside	-	83%	46.58	39.95	32.22	29.64	29.67	32.50	25.10
CAM190	530097	182242	Roadside	-	-	49.73	45.74	37.09	-	-	-	-
CAM191	530177	182316	Roadside	-	-	45.55	40.05	32.09	-	-	-	-
CAM192	530280	182407	Roadside	-	-	52.22	41.05	30.41	-	-	-	-
CAM193	530338	182420	Roadside	-	-	41.26	36.2	26.79	-	-	-	-
CAM194	530343	182500	Roadside	-	83%	48.34	41.15	28.63	27.95	26.66	29.89	21.50
CAM195	530122	182465	Roadside	-	-	46.2	37.89	32.3	-	-	-	-
CAM196	530193	182529	Roadside	-	83%	46.69	38.61	30.07	27.2	26.21	28.47	22.62
CAM197	530109	182567	Roadside	-	-	43.54	36.89	27.54	-	-	-	-
CAM198	530100	182682	Roadside	-	-	42.6	37.74	26.85	-	-	-	-
CAM199	530138	182696	Roadside	-	-	53.85	42.17	31.74	-	-	-	-
CAM200	530044	182947	Roadside	-	92%	71.2	57.86	39.85	35.17	35.09	38.47	32.83
CAM201	530054	182710	Roadside	-	92%	48.48	41.84	28.07	-	-	-	26.28
CAM202	529985	182674	Roadside	-	92%	57.55	47.56	36.25	-	-	-	25.43
CAM203	529893	182540	Roadside	-	100%	50.38	42.3	31	-	-	-	23.70
CAM204	529860	182451	Roadside	-	100%	68.26	59.37	43.16	37.01	37.27	-	38.06

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
CAM205	529753	182452	Roadside	-	-	50.69	44.64	33.24	-	-	-	-
CAM206	529509	182363	Roadside	-	-		47.88	32.47	-	-	-	-
CAM207	529236	181811	Roadside	-	-		39.03	28.36	-	-	-	-
CAM208	530352	182100	Roadside	-	-	45.54	46.49	31.39	-	-	-	-
CAM209	530402	181627	Roadside	-	-	71.25	60.36	40.34	-	-	-	-
CAM210	530385	181352	Roadside	-	-	37.27	36.26	25.42	-	-	-	-
CAM211	530165	181329	Roadside	-	-	58.48	54.81	35.46	-	-	-	-
CAM212	530278	181926	Roadside	-	-	56.02	51.48	33.98	-	-	-	-
CAM213	530386	181485	Roadside	-	-	58.99	50.14	33.17	-	-	-	-
CAM214	530205	181673	Roadside	-	-	52.36	44.64	29.57	-	-	-	-
CAM215	529649	182364	Roadside	-	-	44.12	40.04	31.17	-	-	-	-
CAM216	529281	182256	Roadside	-	25%	55.99	53.8	50.93	31.36	-	-	19.20
CAM217	529364	182207	Roadside	-	-	57.56	54.1	42.19	35.13	-	-	-
CAM218	529467	181964	Roadside	-	-	50.39	-	-	-	-	-	-
CAM219	529555	181988	Roadside	-	-	42.6	42.6	31.57	31.38	-	-	-
CAM220	529608	181749	Roadside	-	-	57.75	-	-	-	-	-	-
CAM221	529646	181775	Roadside	-	-	38.46	35.5	27.99	26.96	-	-	-
CAM222	529531	181588	Roadside	-	-	39.7	36.4	28.3	26.1	-	-	-
CAM223	529725	181553	Roadside	-	-	69.44	71.8	55.42	42.02	-	-	-
CAM224	529816	181391	Roadside	-	-	70.66	-	-	-	-	-	-
CAM225	529901	181254	Roadside	-	-	71.59	67.2	45.35	30.63	-	-	-
CAM226	530095	181327	Roadside	-	-	64.71	56.5	33.81	39.55	-	-	-
CAM227	530051	181454	Roadside	-	-	92.31	77.5	36.93	43.92	-	-	-
CAM228	529900	181708	Roadside	-	-	64.88	50.5	28.04	30.77	-	-	-
CAM229	529650	182060	Roadside	-	92%	57.51	45.7	26.95	32.03	-	-	25.12
CAM230	529443	182350	Roadside	-	-	64.31	55.1	32.34	32.1	-	-	-
CAM231	529682	182314	Roadside	-	-	43.71	40.3	31.46	30.56	-	-	-
CAM232	529905	182667	Roadside	-	-	74.74	69.6	47.21	46.08	-	-	-
CAM233	529844	181551	Roadside	-	-	46.55	39.8	27.89	26.02	-	-	-
CAM234	530074	181163	Roadside	-	-	-	46.1	28	25.31	-	-	-
CAM235	530056	181082	Roadside	-	-	-	44.6	29.84	30.49	-	-	-
CAM236	529460	181975	Roadside	-	-	-	55.5	40.05	38.09	-	-	-
CAM237	529590	181751	Roadside	-	-	-	62	51.21	48.65	-	-	-
CAM238	529812	181400	Roadside	-	-	-	57.8	47.93	43.47	-	-	-
CAM239	530032	181005	Roadside	-	-	-	-	-	26.35	-	-	-

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
CAM240	530178	181127	Roadside	-	-	-	-	-	27.11	-	-	-
CAM241	530042	181188	Roadside	-	92%	-	-	34.2	33.1	31.31	32.55	28.46
CAM242	529978	181100	Roadside	-	92%	-	-	32.09	27.94	28.48	26.42	24.51
CAM243	530073	181169	Roadside	-	92%	-	-	30.25	27.09	26.75	31.97	22.82
CAM244	530059	181041	Roadside	-	92%	-	-	30.98	25.03	26.86	29.41	23.22
CAM245	530036	181120	Roadside	-	92%	-	-	35.88	30.21	31.03	35.93	28.96
CAM246	530086	181070	Roadside	-	92%	-	-	46.33	38.14	43.9	49.64	38.23
CAM247	530131	181105	Roadside	-	92%	-	-	31.25	25.74	26.6	29.56	23.71
CAM248	530018	181078	Roadside	-	83%	-	-	44.43	37.9	42.63	50.91	42.79
CAM249	530009	181037	Roadside	-	83%	-	-	29.42	26.78	28.39	31.93	25.69
CAM250	530100	181029	Roadside	-	92%	-	-	26.74	23.68	25.51	30.04	23.59
CAM251	530114	181134	Roadside	-	83%	-	-	29.28	23.91	26.55	29.29	24.06
CAM252	530139	181178	Roadside	-	75%	-	-	27.67	25.18	25.59	27.54	24.75
CAM253	529497	183948	Roadside	-	67%	-	-	-	21.78	21	17.09	16.06
CAM254	529660	183797	Roadside	-	92%	-	-	-	19.85	21.5	21.01	17.93
CAM255	529698	183770	Roadside	-	100%	-	-	-	19	19.95	19.05	16.69
CAM256	529748	183733	Roadside	-	92%	-	-	-	22.12	19.86	19.13	17.08
CAM257	529988	183524	Roadside	-	83%	-	-	-	23.42	23.59	24.36	21.17
CAM258	528021	185593	Roadside	-	83%	-	-	-	16.57	17.97	19.77	15.32
CAM259	527926	185614	Roadside	-	83%	-	-	-	17.55	17.62	20.29	15.89
CAM260	527865	185604	Roadside	-	83%	-	-	-	17.24	17.78	20.11	15.39
CAM261	525668	183335	Roadside	-	83%	-	-	-	25.64	24.85	32.44	20.26
CAM262	525557	183462	Roadside	-	75%	-	-	-	28.22	28.67	33.97	22.19
CAM263	525439	183589	Roadside	-	92%	-	-	-	50.98	50.93	41.99	39.65
CAM264	525381	183708	Roadside	-	83%	-	-	-	30.93	30.58	32.74	24.03
CAM265	525258	183828	Roadside	-	83%	-	-	-	42.83	49.99	37.21	30.61
CAM266	525156	183991	Roadside	-	92%	-	-	-	42.26	45.58	44.06	33.20
CAM267	525077	184067	Roadside	-	92%	-	-	-	43.69	45.29	41.93	33.68
CAM268	524998	184185	Roadside	-	83%	-	-	-	29.98	31.41	31.77	23.53
CAM269	524904	184281	Roadside	-	67%	-	-	-	37.84	40.87	38.63	29.80
CAM270	524747	184500	Roadside	-	92%	-	-	-	43.84	35.22	33.21	20.71
CAM271	524631	184665	Roadside	-	92%	-	-	-	35.67	36.19	38.09	28.81
CAM272	528437	187270	Roadside	-	83%	-	-	-	23.31	19.49	21.32	17.25
CAM273	528324	186396	Roadside	-	92%	-	-	-	22.07	21.56	23.21	19.20
CAM274	528918	186959	Roadside	-	83%	-	-	-	24.22	20.7	22.50	20.77

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
CAM275	528967	186654	Roadside	-	83%	-	-	-	24.85	23.18	25.20	19.94
CAM276	529025	186145	Roadside	-	92%	-	-	-	26.56	25.26	27.59	21.23
CAM277	528364	186173	Roadside	-	92%	-	-	-	41.69	31.46	32.78	28.17
CAM278	528763	185546	Roadside	-	83%	-	-	-	27.36	26.77	28.87	21.70
CAM279	528523	185778	Roadside	-	92%	-	-	-	28.73	27.08	31.73	24.70
CAM280	528939	185366	Roadside	-	92%	-	-	-	27.21	26.23	29.35	21.64
CAM281	528788	186048	Roadside	-	83%	-	-	-	21.02	20.05	22.67	17.41
CAM282	528924	186085	Roadside	-	92%	-	-	-	24.91	23.48	26.22	19.13
CAM283	529119	186219	Roadside	-	92%	-	-	-	21.62	20.77	24.12	16.83
CAM284	529179	186011	Roadside	-	83%	-	-	-	26.97	26.03	29.71	22.12
CAM285	529016	185533	Roadside	-	83%	-	-	-	25.29	25.18	27.85	19.72
CAM286	529885	183280	Roadside	-	100%	-	-	-	-	38.49	40.39	36.83
CAM287	529813	183349	Roadside	-	100%	-	-	-	-	25.91	23.47	24.06
CAM288	529750	183288	Roadside	-	92%	-	-	-	-	20.91	21.51	18.73
CAM289	529797	183187	Roadside	-	67%	-	-	-	-	22.36	22.50	20.49
CAM290	529641	183282	Roadside	-	100%	-	-	-	-	20.34	19.21	18.16
CAM291	529611	183444	Roadside	-	100%	-	-	-	-	20.76	20.54	19.02
CAM292	529424	183445	Roadside	-	100%	-	-	-	-	25.29	25.24	21.52
CAM293	529224	183362	Roadside	-	67%	-	-	-	-	28.39	29.56	24.98
CAM294	529229	183231	Roadside	-	100%	-	-	-	-	27.41	26.99	23.94
CAM295	529321	183239	Roadside	-	100%	-	-	-	-	28	29.64	26.26
CAM296	529527	183264	Roadside	-	67%	-	-	-	-	20.84	19.66	17.83
CAM297	529601	183148	Roadside	-	92%	-	-	-	-	21.08	20.17	19.96
CAM298	529555	182900	Roadside	-	100%	-	-	-	-	23.91	23.21	21.11
CAM299	529717	182992	Roadside	-	100%	-	-	-	-	22.91	22.60	20.55
CAM300	529815	182830	Roadside	-	100%	-	-	-	-	23.05	22.47	21.01
CAM301	529802	182703	Roadside	-	100%	-	-	-	-	27.86	27.17	26.06
CAM302	529949	182798	Roadside	-	92%	-	-	-	-	25.15	26.09	22.91
CAM303	529887	182813	Roadside	-	100%	-	-	-	-	23.76	22.64	21.37
CAM304	529786	183038	Roadside	-	92%	-	-	-	-	27.53	26.14	22.89
CAM305	529987	183060	Roadside	-	92%	-	-	-	-	32.09	33.31	30.12
CAM306	530231	183453	Roadside	-	75%	-	-	-	-	30.48	28.60	26.22
CAM307	529874	184379	Roadside	-	92%	-	-	-	-	26.59	30.33	22.42
CAM308	529515	184274	Roadside	-	83%	-	-	-	-	25.07	28.31	20.16
CAM309	528687	185016	Roadside	-	92%	-	-	-	-	24.16	25.33	19.76

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
CAM310	530149	181611	Roadside	-	100%	-	-	-	-	-	34.42	32.52
CAM311	530250	181473	Roadside	-	100%	-	-	-	-	-	28.47	27.37
CAM312	530414	181645	Roadside	-	100%	-	-	-	-	-	40.47	33.66
CAM313	530429	181459	Roadside	-	100%	-	-	-	-	-	29.32	25.83
CAM314	530608	181291	Roadside	-	92%	-	-	-	-	-	39.97	29.94
CAM315	530755	181566	Roadside	-	100%	-	-	-	-	-	44.07	32.23
CAM316	530573	181653	Roadside	-	83%	-	-	-	-	-	34.86	27.16
CAM317	530743	181719	Roadside	-	92%	-	-	-	-	-	26.30	23.68
CAM318	530845	181904	Roadside	-	100%	-	-	-	-	-	40.27	33.67
CAM319	530529	182013	Roadside	-	58%	-	-	-	-	-	31.50	23.27
CAM320	531321	182050	Roadside	-	100%	-	-	-	-	-	33.01	30.53
CAM321	531223	182034	Roadside	-	83%	-	-	-	-	-	34.86	31.05
CAM322	531160	182039	Roadside	-	100%	-	-	-	-	-	31.20	26.41
CAM323	531012	181982	Roadside	-	100%	-	-	-	-	-	41.16	34.85
CAM324	531092	182097	Roadside	-	92%	-	-	-	-	-	39.23	26.64
CAM325	531123	182188	Roadside	-	92%	-	-	-	-	-	31.95	25.85
CAM326	529042	183678	Roadside	-	83%	-	-	-	-	-	42.47	31.61
CAM327	529011	184402	Roadside	-	92%	-	-	-	-	-	25.76	19.71
CAM328	528379	183669	Roadside	-	92%	-	-	-	-	-	35.05	24.35
CAM329	529231	183805	Roadside	-	83%	-	-	-	-	-	27.34	19.80
CAM350	528998	182949	Roadside	-	67%	-	-	-	-	-	-	14.67
CAM351	528945	182714	Roadside	-	83%	-	-	-	-	-	-	17.28
CAM352	529081	182442	Roadside	-	83%	-	-	-	-	-	-	20.99
CAM353	528836	528836	Roadside	-	83%	-	-	-	-	-	-	31.07
CAM354	529207	182326	Roadside	-	75%	-	-	-	-	-	-	22.75
CAM355	529224	182288	Roadside	-	83%	-	-	-	-	-	-	30.01
CAM356	529303	182367	Roadside	-	83%	-	-	-	-	-	-	28.15
CAM357	529308	182328	Roadside	-	50%	-	-	-	-	-	-	28.92
CAM358	529760	182677	Roadside	-	67%	-	-	-	-	-	-	28.68
CAM359	530224	182910	Roadside	-	50%	-	-	-	-	-	-	33.31
CAM360	529749	182606	Roadside	-	83%	-	-	-	-	-	-	27.71
CAM361	529617	182413	Roadside	-	83%	-	-	-	-	-	-	22.08
CAM362	529646	182536	Roadside	-	67%	-	-	-	-	-	-	32.25
CAM363	529070	182624	Roadside	-	83%	-	-	-	-	-	-	17.75
CAM364	529455	183015	Roadside	-	83%	-	-	-	-	-	-	20.87

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
CAM365	530331	183085	Roadside	-	58%	-	-	-	-	-	-	29.96
CAM372	527452	185471	Roadside	-	42%	-	-	-	-	-	-	22.62
CAM373	527682	185387	Roadside	-	42%	-	-	-	-	-	-	22.74
CAM374	527612	185306	Roadside	-	42%	-	-	-	-	-	-	14.85
CAM375	527558	185196	Roadside	-	42%	-	-	-	-	-	-	15.27
CAM376	527773	185026	Roadside	-	42%	-	-	-	-	-	-	17.13
CAM377	527739	184788	Roadside	-	42%	-	-	-	-	-	-	18.25

☒ 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%).

Commentary on annual mean NO₂ data from diffusion tube monitoring

In 2024 Camden commenced diffusion tube monitoring at 55 new locations. By the end of the year, Camden Council actively measure NO₂ at 321 diffusion tube sites and four automatic sites. This monitoring network will continue to be reviewed and expanded where appropriate, with multiple new monitoring locations to be installed for the start of 2025.

The annual mean NO₂ concentrations for 2024 have decreased at all but one of the 32 long-term monitoring locations within the borough when compared to 2023 data, with an average reduction in bias adjusted (and annualised, where necessary) recordings of 2.74 µg/m³ (nine percent) across these sites. Of these long-term monitoring sites, there are nine which have had data collected since 2018. During this period, there has been an average reduction in annual NO₂ concentration of 21.68 µg/m³ (46%); this is illustrated in Figure 2 below. The continued reduction in NO₂ over the past seven years is clear, with several sites which were historically far in exceedance of the 40µg/m³ legal limit for NO₂ (such as Kentish Town Road, Tottenham Court Road, and Camden Road) now recording below this level. This does not mean that there will be any reduction in effort to improve air quality throughout Camden: The Council maintain the commitment to realise the community's vision for a borough in which no person experiences ill health because of the air they breathe.

In total, there have been 261 diffusion tube monitoring locations in Camden with data collected in both 2023 and 2024, with only four of these recording increased/ worsened NO₂ concentrations in 2024. The average increase for these four sites was just 1.25 µg/m³. For the fifth year in a row, no monitoring site has recorded an annual mean above 60 µg/m³, which indicates that the short-term (one-hour) NO₂ objective is likely to have not been exceeded at any of the sites during 2024.

Figure 2. Non-automatic Monitoring Annual Mean NO₂ Concentration

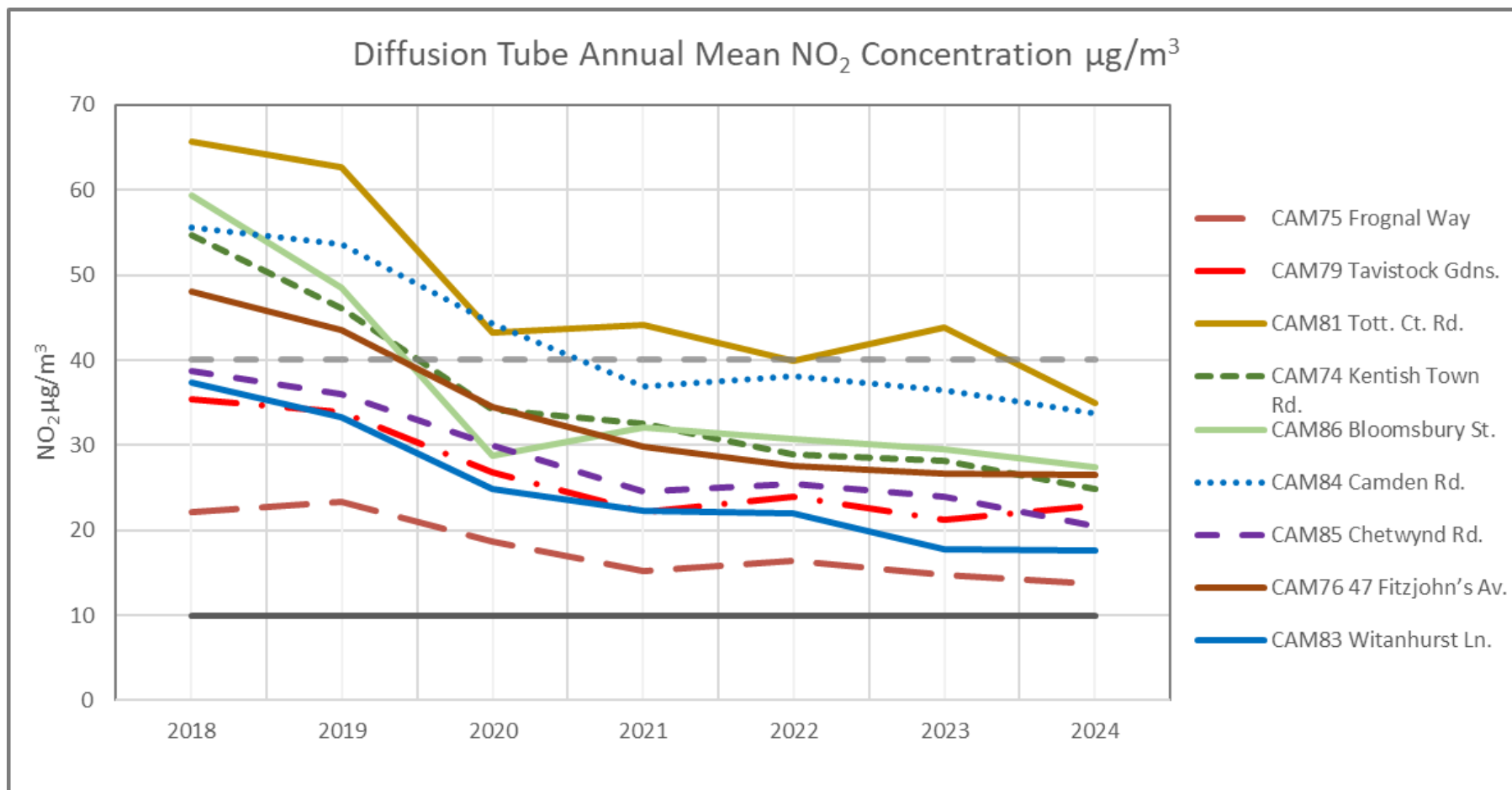


Table F. NO₂ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg m⁻³

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
BL0	530123	182014	Urban Background	-	94%	0	0	0	0	0	0	0
CD1	526629	184391	Kerbside	-	98%	2	1	0	2	0	0	0
CD9	529878	182648	Roadside	-	82%	18	7	0	1	2	0	0
CD010	528832	183995	Roadside	-	99%	-	-	-	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%)

Commentary on 1-hour mean NO₂ data from automatic monitoring

In 2024, there were no exceedances of the one-hour mean level recorded across Camden's automatic monitoring network, for the second year in a row.

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
BL0	530123	182014	Urban Background	-	94%	17	18	16	16	17	13	12
CD1	526629	184391	Kerbside	-	94%	21	19	16	16	21	18	18
CD9	529878	182648	Roadside	-	72%	21	22	18	19	21	18	18
KGX	529831	183250	Urban Background/ Industrial*	-	79%	15	15	13	13	15	14	14

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%).

Commentary on annual mean PM₁₀ data from automatic monitoring

Camden's automatic PM₁₀ monitoring data exhibits an overall downward trend since 2018, with an average reduction of 3.67 µg/m³ (19% during) this time across the BL0 London Bloomsbury, CD1 Swiss Cottage, CD9 Euston Road, and KGX Coopers Lane sites. PM₁₀ data coverage at the CD9 was 72%, meaning that the dataset had to be annualised however, this did not change the annual mean concentration significantly (0.23 µg/m³).

PM₁₀ annual mean concentrations have reduced at only the BL0 monitoring station in 2024 from the previous year, reducing by just 1 µg/m³ (8%) reduction. All other sites have recorded similar annual mean PM₁₀ concentrations to those recorded for 2023, implying a plateau in particulates reductions in Camden. Each site has continued to record below the legal limit of 40 µg/m³ however, only the BL0 London Bloomsbury and KGX Coopers Lane urban background monitoring sites are within the 2021 updated WHO objective of 15 µg/m³ annual mean for PM₁₀.

Figure 3 illustrates annual mean PM₁₀ concentration as measured at four automatic monitoring sites in Camden, showing the reduction in PM₁₀ concentrations in 2024 compared to the previous seven years.

Figure 3. Automatic Monitoring Annual Mean PM₁₀ Concentrations

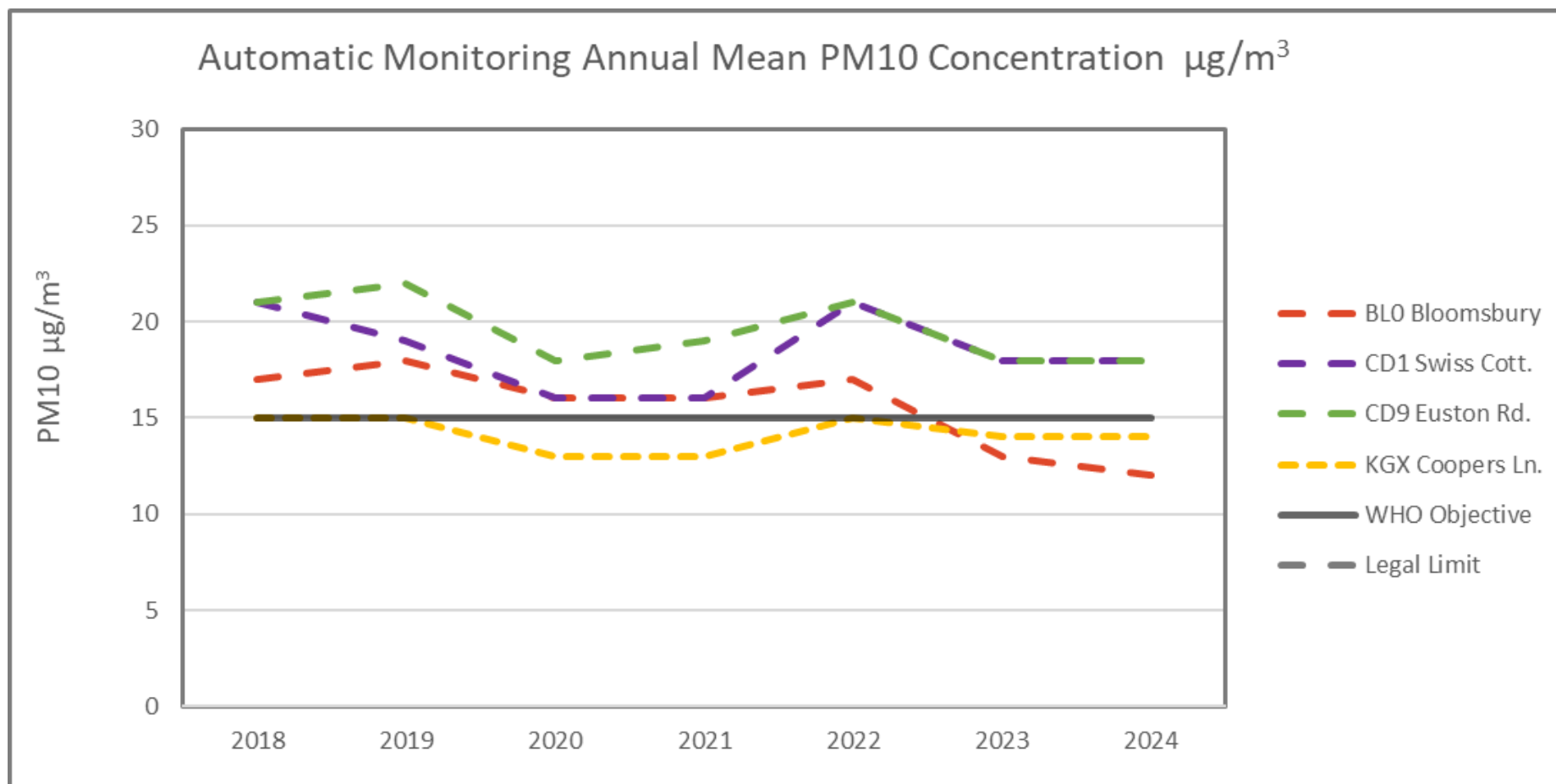


Table H. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM₁₀ 24-Hour Means > 50 µg m⁻³

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
BL0	530123	182014	Urban Background	-	94%	1	9	4	0	5	0	0
CD1	526629	184391	Kerbside	-	94%	4	8	3	0	0	2	0
CD9	529878	182648	Roadside	-	72%	2	8	2	2	6	4	0
KGX	529831	183250	Urban Background/ Industrial*	-	79%	1	5	1	0	5	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%).

Commentary on 24-hour mean PM₁₀ data from automatic monitoring

In 2024, there were no exceedances of the short-term (24-hour) objective for PM₁₀ across Camden's automatic monitoring network, an improvement from the seven exceedances in 2023, and the 16 recorded during 2022. This is the first year that there has not been a recorded exceedance of the short-term PM₁₀ air quality objective in Camden.

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
BL0	530123	182014	Urban Background	-	94%	10	11	9	9	9	8	7
CD1	526629	184391	Kerbside	-	96%	11	11	10	9	12	10	10
CD9	529878	182648	Roadside	-	72%	15	14	11	11	12	9	9
KGX	529831	183250	Urban Background/ Industrial*	-	87%	-	-	-	-	10	8	8

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%).

Commentary on annual mean PM_{2.5} data from automatic monitoring

Camden's automatic PM_{2.5} monitoring network for 2024 has recorded concentrations in a similar pattern to the PM₁₀ discussed above. PM_{2.5} has reduced at only the BL0 London Bloomsbury automatic monitoring station in 2024 from the previous year, reducing by just 1 µg/m³ (12.5%). All other sites have recorded similar annual mean PM_{2.5} concentrations to those recorded for 2023, implying a plateau in particulates reductions in Camden.

On a longer timeline, annual mean PM_{2.5} concentrations have reduced on average by 3.3 µg/m³ (26%) across Camden's automatic monitoring network since 2018. 2022 was the first year Camden Council monitored for PM_{2.5} at the Coopers Lane site, meaning that historical data analysis is not yet possible for this site. However, this site has recorded a 2 µg/m³ (20%) reduction in concentrations during this time.

All automatic PM_{2.5} monitoring sites have been compliant with the legal limit of 25 µg/m³ for several years and as of 2023 have continued to achieve the 2030 London Mayoral Objective of 10 µg/m³. Despite this, all four monitoring sites are in exceedance of the WHO's updated 2021 PM_{2.5} guideline of 5 µg/m³. The World Health Organization considers there to be no safe threshold of exposure to PM_{2.5}; therefore, Camden Council will strive to improve air quality throughout the borough to better protect the health of all who live, work and study in Camden.

Figure 4 illustrates the annual mean PM_{2.5} concentrations measured at the four automatic monitoring sites in Camden over the last seven years.

Figure 3. Automatic Monitoring Annual Mean PM_{2.5} Concentration

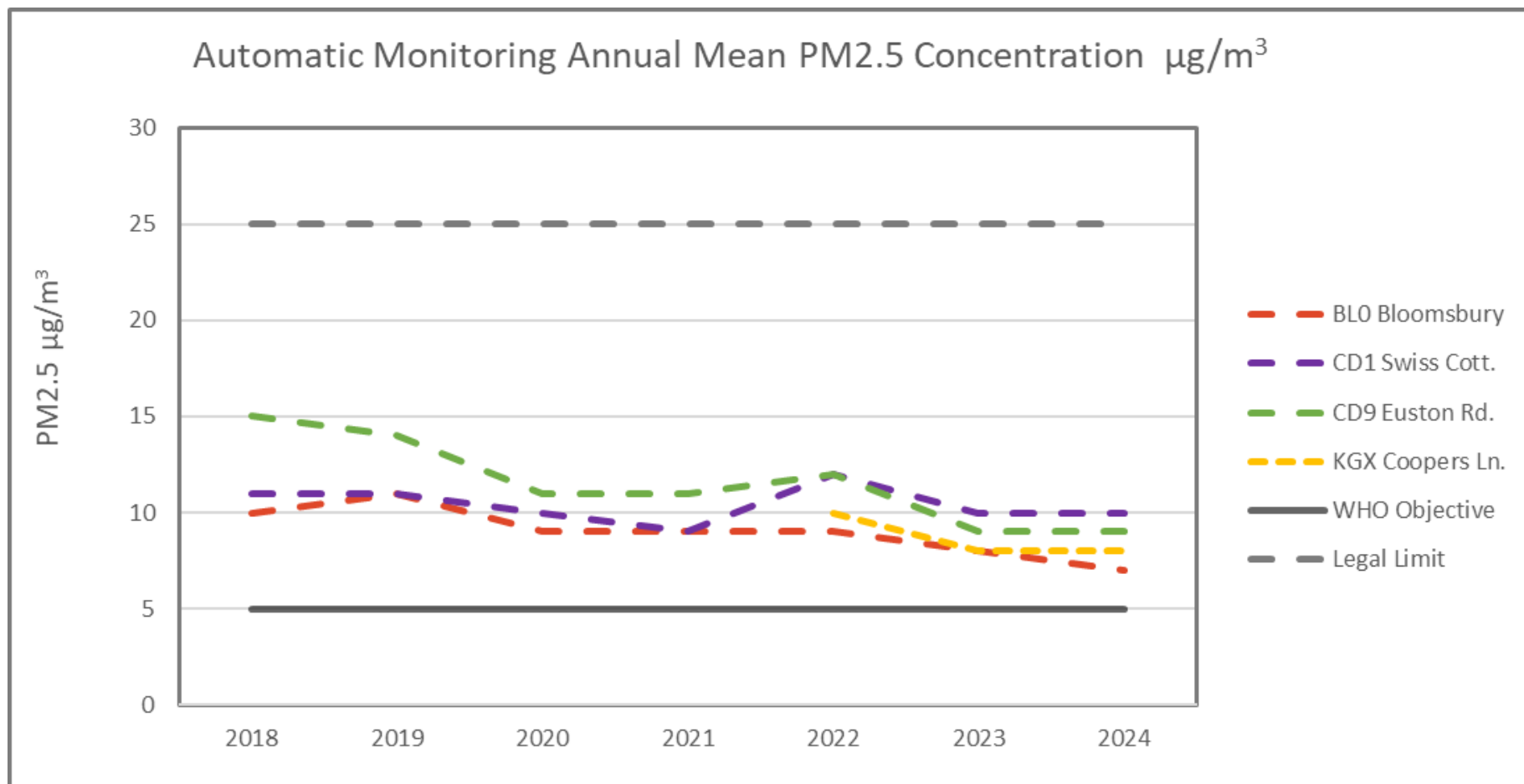


Table J. 2024 SO₂ Automatic Monitoring Results: Comparison with Objectives

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	Number of 15-minute means > 266 $\mu\text{g m}^{-3}$	Number of 1-hour mean > 350 $\mu\text{g m}^{-3}$	Number 24-hour mean > 125 $\mu\text{g m}^{-3}$
BL0	-	84%	0 (no)	0 (no)	0 (no)

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).

Despite the period of valid data being less than 85%, the relevant percentiles have not been provided in brackets as there were no exceedances of the above mean concentrations.

(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 O₃ 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
BL0	-	93%	35	36	45	41	46	54	51

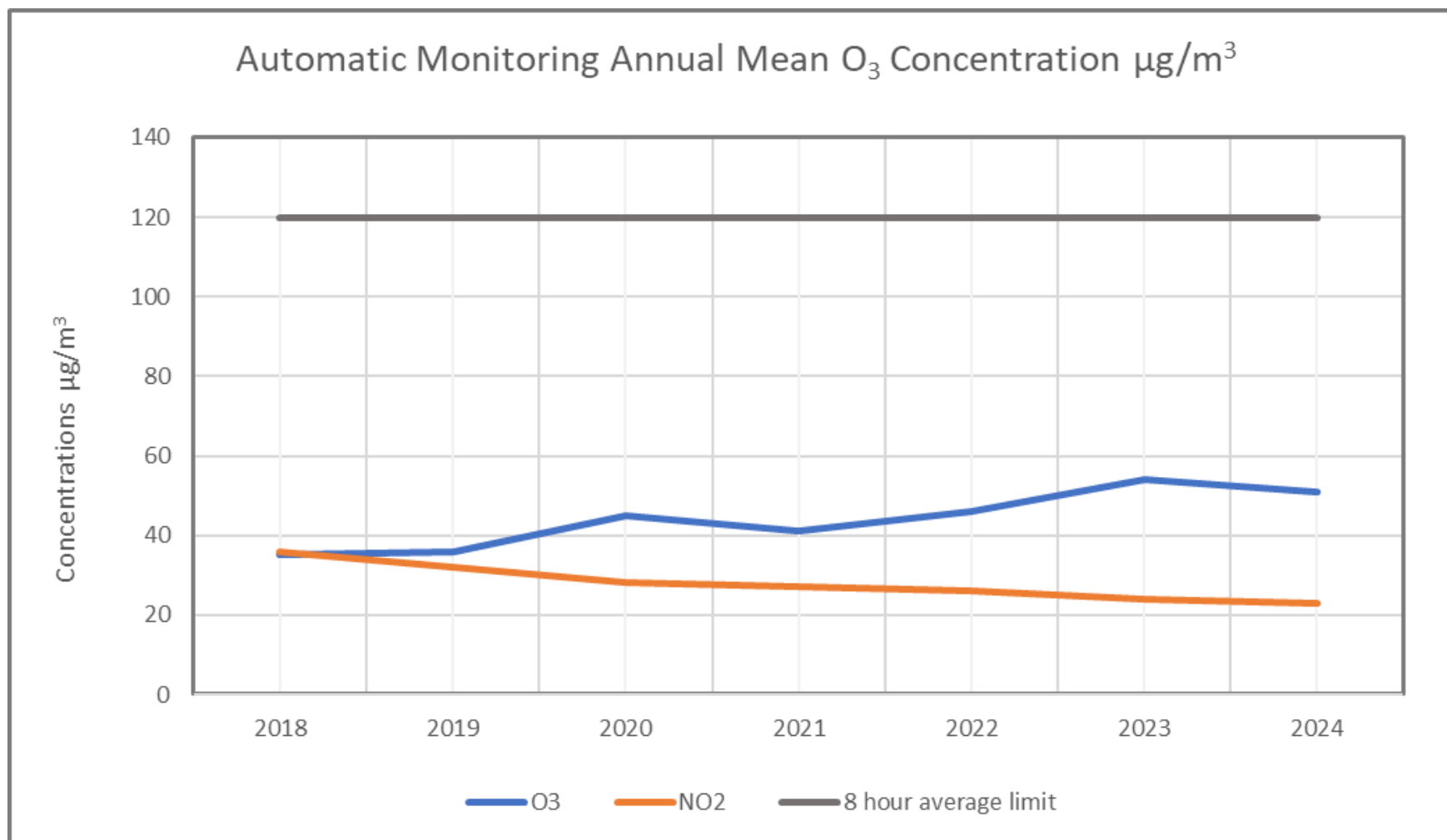
Ozone (O₃) is a gaseous air pollutant which naturally occurs at high altitude where it helps to shield the Earth's surface from UV radiation but also forms at ground level as a result of chemical reactions and physical processes within the atmosphere. O₃ is harmful for human health because it is a respiratory irritant, causing issues for the respiratory tract, eyes, nose and throat, and increases the risk of asthma attacks. O₃ is also damaging for the natural environment.

The [2010 Air Quality Standards Regulations](#) has set the target for Local Authorities that a three-year average of eight-hour mean concentrations of O₃ should not exceed 120 µg/m³ more than 25 times. When published, these regulations were achievable in central London (12 exceedances in 2009-11 in Camden, for example) however, in 2024, the three-year average (2022 - 2024) has exceeded this target average 361 times over the course of 47 days in Camden.

The increase in eight-hour mean O₃ concentrations is not unique to Camden, with urban background concentrations showing significant increase over a thirty-year period across London³. Since the introduction of the ULEZ in 2018, O₃ concentrations have increased at a faster rate than in the preceding years. This is not surprising given that nitric oxides (NO₂) emissions from vehicle tailpipes can inhibit and suppress the formation of O₃ at ground level. Therefore, whilst the ULEZ scheme has reduced roadside NO₂ emissions greatly, this has simultaneously had the negative effect of increasing O₃ concentrations within Camden, as illustrated by Figure 5 below.

³ <https://www.gov.uk/government/statistics/air-quality-statistics/concentrations-of-ozone>

Figure 5. Automatic Monitoring Annual Mean O₃ Concentration



2. Action to Improve Air Quality

2.1 Air Quality Management Areas

A summary of AQMAs declared by London Borough of Camden can be found in **Error! Not a valid bookmark self-reference..** The table presents a description of the AQMA that is currently designated within Camden. Appendix C provides maps of AQMA and 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 24-hour mean.

Table L. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Camden AQMA	20/09/2002	•NO₂ annual mean •PM₁₀ 24-hour mean	This AQMA encompasses the entire borough of Camden	NO	•NO₂ annual mean: recorded at CD9 (2001): 66 µg/m³ •PM₁₀ 24-hour mean recorded at BL0 (2001): 15 µg/m³	•NO₂ annual mean: 0 exceedances •PM₁₀ 24-hour mean: 7 exceedances	NO ₂ annual mean compliance has not yet been achieved across Camden's monitoring network. PM ₁₀ 24-hour mean compliance has been	Camden Clean Air Action Plan 2023-26, published 1 st January 2023	Camden Air Quality Action Plan 2023-26

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
					and CD1 (2001): 25 µg/m ³		achieved for several years.		

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

2.2 Air Quality Action Plan Progress

The Camden Clean Air Action Plan (CAAP) 2023-26 launched January 2023, with the next update to be issued in January 2027.

Table M provides a summary of London Borough of Camden progress against the current edition of the CAAP, showing progress made in 2024.

Table M. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
6	Buildings : Reducing the impact of air pollution from building operation and use (heating, power, and commercial and industrial processes) on public health.	Reduced emissions from building heating systems	Ongoing	Camden Council Air Quality, Sustainability, Planning, Environmental Health departments.	- The Camden Climate Alliance (CCA) had 71 new business join the network during 2024, taking the total number of members up to 526 within the borough. - In 2024, the CCA delivered the Camden and Brent Business Climate Challenge which supported a further 86 businesses through the BCC programme. - The CCA also run the Camden Climate Fund (CCF) which provides up to 50% of costs to reduce carbon and air pollution produced by homes, businesses, and community spaces. In particular, the CCF is aimed at reducing heating demand from gas powered boilers, therefore reducing their associative pollutant emissions. In 2024, £94,000 was approved to support energy efficiency projects. £31,000 was also approved through the CCF Household grants scheme to support energy efficiency projects across Camden's private sector homes.
17	Communities and schools : Supporting and empowering communities and schools to reduce and	Reduced exposure outside schools and support schools in protecting child health whilst at school	Ongoing	Camden Council Air Quality, Transport Strategy,	Camden continues to roll out the programme of Healthy School Streets, with 35 schools in the borough now covered by timed motor vehicle restrictions. In 2024,

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
	avoid exposure to air pollution			Education departments. - Local Schools	two schemes were made permanent, with a further three under assessment. - Following a successful application for Defra Air Quality Grant Funding, Camden Council has launched the 'Clean Air for Schools' project, an air quality engagement campaign for schools, that will protect the health of children through increasing knowledge and raising awareness. The project will focus on holding events, assemblies and workshops during the September 2024 - July 2025 academic year. - The Idling Action London project, a consortium project in which Camden is a lead borough, launched a radio information campaign in late 2024. These provided information on the need to protect children and young people from the damaging health impacts of vehicle engine idling whilst challenging all drivers to stop unnecessary engine idling. - The Air Quality team ran an activity about the link between air pollution and asthma at two group asthma sessions, run by the school asthma nursing service, engaging 22 young people and 10 adults.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
34	Indoor air pollution and occupational exposure : Raising awareness about the causes and impact of poor indoor air quality and workplace air pollution exposure	Reduced indoor pollution exposure in homes in Camden	Ongoing	- Camden Council Air Quality, Sustainability, Housing departments.	- In 2024, 15 residents participated in Camden's Indoor Air Quality Monitor Loan Scheme, where they had the opportunity to learn about the sources of pollutants in their home and the different ways they can reduce their exposure. - The Camden Household Air Monitoring Project (CHAMP) concluded in 2024. The project was due to be expanded upon successful awarding of Defra Air Quality grant funding however, this was subsequently withdrawn.
1	Construction and development : Reducing the impact of air pollution from construction and development on public health.	Reduced emissions from non-road mobile machinery (NRMM)	Ongoing	- Camden Council Air Quality, Sustainability, Planning, Environmental Health departments.	- Camden Council continues to participate in the LB Merton-led Cleaner Construction for London NRMM enforcement project. - Camden's Construction Management Plan (CMP) pro-forma has been amended to reflect the forthcoming NRMM requirement updates. - Camden's NRMM planning guidance was also updated ahead of the new 2025 standards (minimum Stage IV for all Greater London, Stage V for generators).
2		Reduced emissions from construction generators	Ongoing	- Camden Council Air Quality, Environmental	- In 2024, there were there were audits of 18 construction sites in Camden to assess NRMM (including generator) standard

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
				Health departments. - LB Merton Cleaner Construction for London (NRMM)	compliance. 100% of these sites were found to be compliant.
3		Reduced emissions from construction and demolition processes	Ongoing	- Camden Council Air Quality, Planning, Environmental Health departments.	- During 2024, Camden's Air Quality Planning Officer reviewed 100 CMPs from 61 separate applications with the majority of these requiring Air Quality Assessments to be reviewed and commented on.
4		Reduced emissions from road vehicles servicing construction sites	Ongoing	- Camden Council Air Quality, Planning, Environmental Health departments.	- Every CMP received is reviewed to ensure the minimum number of construction site delivery vehicles are used to service the development.
5		Reduced impacts of HS2 and other major development or infrastructure projects	Ongoing	- Camden Council Air Quality, HS2, Environmental Health departments. - HS2	- Camden's Air Quality officers attend monthly and quarterly environmental meetings with HS2 where upcoming works, site updates, and complaints received are discussed and resolved. - The pause of HS2 works at Euston for much of 2024 has limited the impact of construction on the area during this period.
7	Buildings : Reducing the impact of air pollution from building operation and use	Reduced emissions from backup diesel generators	Ongoing	- Camden Council Air Quality, Planning,	- During 2024, Camden officers from the Air Quality, Sustainability, and Planning teams held internal discussions as to how new or

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
	(heating, power, and commercial and industrial processes) on public health.			Housing departments.	amended policy could be utilised to reduce and monitor emissions from backup diesel generators. This will be fed into the new Camden Local Plan (public consultation to be launched in 2025).
8		Reduced emissions from commercial cooking	Ongoing	- Camden Council Air Quality, Environmental Health departments.	- As part of a consortium bid, Camden applied for Defra Air Quality Grant Funding to undertake a research project to assess the impact of commercial cooking on ambient air quality and occupational exposure. - Camden's Air Quality team commenced work to update and expand the Camden Smoke Control Order.
9		Reduced emissions from wood burning	Ongoing	- Camden Council Air Quality, Planning, departments. - LWBP member boroughs	- The London Wood Burning Project (LWBP) gained two new member boroughs. - The LWBP was awarded £91,000 of funding from the Mayor's Air Quality Fund to provide Clean Air Act enforcement training and run an awareness campaign from 2024-2027 - o Clean Air Act enforcement training was attended by nine Council officers. - Letters to inform residents about the Clean Air Act 1993 and health harms of solid fuel

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					burning were sent to 180 households in the borough. - The awareness raising aspect of the LWBP in 2024 delivered: 4.5m impacts from radio, 2.6m of which (59%) was from the ABC1 target group 78 bus rears advertisements 106k impressions on Meta platforms 1.8m impressions via Google Ads
10	Transport : Reducing the impact of air pollution from transport on public health	Reduced emissions from Camden's vehicle fleet	Ongoing	- Camden Council Air Quality, CATS, Transport Strategy, Procurement departments.	- As of the end of 2024, 99% of Camden Council's vehicle fleet was ULEZ compliant, with the three remaining non-compliant vehicles to be removed from the fleet in early 2025. 14% of the fleet is electrically powered. This is broken down in section 4.1 of this report.
11		Reduced emissions from road vehicles	Ongoing	- Camden Council Air Quality, CATS, Sustainability, Transport Strategy, departments.	- Camden's Sustainability, Air Quality & Energy Management Team and Transport Strategy Service work collaboratively across a range of policy and project areas covered by Camden's Clean Air Action Plan 2023-26 , Climate Action Plan 2020-2025 , and Transport Strategy 2019-2041 . All plans have overlapping and mutually supportive policies.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					- In 2024, Camden launched the 'Cleaner Fairer Parking' policy with the aim to discourage inessential use and ownership of motor vehicles. This will ensure there is parking for those that need it most whilst encouraging sustainable travel within the borough. The policy also includes an 'air quality surcharge' for older petrol and diesel vehicles. - Camden continues to roll out the programme of Healthy School Streets, with around 35 schools in the borough now covered by timed motor vehicle restrictions. In 2024, two schemes were made permanent, with a further three under a feasibility assessment. - Camden's Transport Strategy team carried out urban/street greening and pedestrianisation road closure trials in several locations during 2024. - In 2024, Camden launched the 'Pedal Your Parcel' scheme, which has seen two businesses within the borough switch from van use to cargo bikes. - Camden also launched the 'Try Before You Bike' scheme in August 2024, which allows people who live, work, and study in

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Camden can borrow a bike for up to three months for a small monthly fee. Six pedal bikes and three cargo bikes were subsequently loaned out to residents. Camden's cargo bike share scheme has been set up in four locations across the borough. Since August 2024, 42 rides had taken place, totalling 95 hours of use.
12		Reduced emissions from vehicle engine idling	Ongoing	Camden Council Air Quality, Planning, departments.	- Camden co-led a consortium of 21 local authorities to submit a bid for another iteration of the MAQF Idling Action London Project. The bid was successful and secured a grant of £234,000 to implement a further round of the Idling Action London Project. This will run from April 2024 to March 2027 and will be match-funded by an additional £234,000 from the participating local authorities in the Idling Action London Project. - Ahead of its wider rollout in 2025, the Idling Action London Project was launched with a radio advertisement campaign, with anti-idling messages targeted at drivers of petrol and diesel-powered vehicles. The radio messages urged drivers to consider the health of everyone, especially vulnerable children with asthma, by

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					switching off their engines when their vehicles are stationary. The Idling Action radio ads targeted individuals in the London area who are 15 years old and above. Planned impacts for radio ads in 2024 were estimated at 2,395,172 impacts. The ad campaign achieved 2,625,270 impacts representing a performance of 110%.
13		Reduced emissions from deliveries, servicing, and freight	Ongoing	Camden Council Air Quality, CATS, Sustainability, Transport Strategy, Procurement departments.	- In March 2024 Camden consulted on a new Freight & Servicing Action Plan (FSAP) for the Borough, which was adopted following that consultation in the summer. - In 2024, Camden launched the 'Pedal Your Parcel' scheme, which has seen two businesses within the borough switch from van use to cargo bikes.
14		Reduced emissions from rail	Ongoing	- Camden Council Air Quality department. - Rail Safety and Standards Board RSSB	In 2024, members of Camden's Air Quality Team held a meeting with the Rail Safety and Standards Board (RSSB) to raise the profile of rail's impact on air quality, particularly at the Euston, King's Cross, and St. Pancras stations in the borough.
15		Interventions are targeted to tackle the inequitable	Ongoing	Camden Council Air Quality,	In 2024, Camden's Air Quality Team ran or supported multiple community-based

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
	empowering communities and schools to reduce and avoid exposure to air pollution	impact of air pollution on vulnerable communities and those disproportionately impacted by air pollution		Sustainability, Transport Strategy, Education departments. - Local Schools	events and workshops, and hosted events for members of the public on Clean Air Day. - In 2024, Camden launched the Clean Air for Schools programme Have Your Say Today - The Year Of Clean Air For Camden Schools - Commonplace., which delivered 22 events, engaging 1877 young people and 210 adults. - In 2024, 15 residents participated in Camden's Indoor Air Quality Monitor Loan Scheme, where they had the opportunity to learn about the sources of pollutants in their home and the different ways they can reduce their exposure. - MAQF Clean Air for Camden funding directly looks to tackle health inequalities. Working with NHS and public health partners, the project seeks to build public awareness and knowledge whilst enhancing access to air quality monitoring

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					information and guidance for reducing exposure and health risk.
16		Communities are empowered to take action locally	Ongoing	- Camden Council Air Quality, Transport Strategy, Education departments. - Community groups - Think & Do - Somers Town Future Neighbourhoods 2030	- Camden's Air Quality team maintained its efforts in the 'Somers Town Future Neighbourhoods 2030' project by attending multiple partner meetings and learning-workshops. The focus in 2024 has been establishing a lasting air quality legacy in the area after the conclusion of the wider Project. - Supported Hampstead Group Practice with a pilot for a group asthma clinic session, where young people with severe asthma and their families were invited to collectively learn about asthma management including protecting health by reducing exposure to air pollution at home and outdoors. - Following the successful application for MAQF funding for the 'Clean Air for Camden – Citizen Science and Community AQ' began engaging with community groups to promote the Project.
18		Reduced exposure outside hospitals and health centres	Ongoing	Camden Council Air Quality, Public Health departments.	Camden co-led a consortium of 21 local authorities to submit a bid for another iteration of the MAQF Idling Action London Project in January 2024. The bid was

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
				- Local healthcare professionals - Hospitals (e.g. GOSH)	successful and secured a grant of £234,000 to implement another round of the Idling Action London Project. This project kicked off in April 2024 and will run until March 2027. The project will be match-funded by an additional £234,000 from the 21 participating local authorities.
19		Reduced emissions from events and filming	Ongoing	- Camden Council Air Quality department. - FilmFixer. - GLA (Mayor of London).	- In 2024, the Mayor of London's Air Quality Fund sponsored 'Cleaner Filming for Camden' project launched; a project targeting reducing film production emissions within the borough. This project launched in the summer 2024, and will continue until 2027. - In 2024, Camden's film production permitting process was updated to include environmentally focused questions for applicants to provide information for which can then be used to assess the impact of filming on ambient air quality.
20		Reduced emissions from ice cream vans	Ongoing	- Camden Council Air Quality, Licensing, Markets departments. - Defra. - Local ice cream vendors.	In 2024, Camden Council operated seven licensed emissions-free ice cream trading bays in several of the borough's most popular locations. Traders at these locations were either operating via the use of mains electrical connections or battery power, eliminating the need for diesel engine idling.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					The licensing of these trading locations, and the project will continue into 2025.
21		Reduced emissions from street food vending	Ongoing	- Camden Council Air Quality, Licensing, Markets departments. - Local street food vendors.	In 2024, Camden's Air Quality and Markets teams worked together to update licensing conditions to mitigate street food-based emissions, and to positively engage with vendors.
22		Reduced emissions from canal boats, and support the boating community to protect boater health and the health of canal-side neighbours	Ongoing	- Camden Council Air Quality department. - Other London local authorities - Canal River Trust - Port of London Authority - GLA (Mayor of London)	- In 2024 Camden, as part of a consortium bid, were awarded Mayor's Air Quality Funding to create the 'Healthy Waterways London' project, jointly led by Camden, Hackney and Newham and with eight other local authorities, the Canal & River Trust and the Port of London Authority also participating. The project commenced in 2024 with establishing the programme of work, appointing consultants for boater surveys and engagement, and a site visit to the Camden Electric Moorings. - Camden officers have started work to update the boroughs' smoke control order to include moored vessels within its scope. This will be launched in 2025, following a public consultation.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					- In 2024, Camden's 'eco-moorings' (electrical connection points for canal boats) were utilised for a total of 3,834 kilowatt hours (kWh).
23		Reduced emissions from leaf blowers and grounds maintenance	Ongoing	- Camden Council Air Quality, Housing, Procurement departments.	- It is standard practice for Camden Council to review all procurement exercises for opportunities to reduce its impact on the local environment.
24		Reduced emissions from other sources of outdoor air pollution	Ongoing	- Camden Council Air Quality department.	- Camden's Air Quality Team routinely reviews new research and information regarding air quality. When appropriate, this knowledge and/or evidence is shared with members of the public and other relevant stakeholders. - Information letters about the health harms and rules around outdoor burning have been sent to 226 households in the borough following complaints about residential outdoor burning.
25	Indirect emissions and lobbying : Leading by example, working with others, and advocating for greater action on air quality and health	Camden councillors, staff and senior management understand the importance of air quality for public health	Ongoing	- Camden Council Air Quality, Sustainability departments. - Camden Councillors - Local healthcare professionals.	- Camden Council launched 'lunchtime learning' environmental awareness training for its officers in 2024. - The Clean Air for Camden Schools launch-event was held in June 2024 and was attended by internal and external parties. Attendees from Camden Council

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					represented the Sustainability and Air Quality Team, the Camden Climate Alliance, the Health Improvement Team, the Transport Team, and Camden Learning, plus seven external community partners, including the NHS. - In 2024, multiple Camden officers and councillors utilised the air quality sensor loan scheme. - 54 Camden councillors and officers subscribe to the Clean Air for Camden newsletter - Over the course of 2024, Camden's Air Quality team have given both internal and external presentations and taken cabinet briefings.
26		Reduced indirect emissions through procurement	Ongoing	- Camden Council Air Quality, CATS, Procurement departments.	- Camden officers continue to assess the environmental implications of proposed procurement contracts to ensure minimal impact.
27		We use our platform to encourage other local authorities, public and private sector stakeholders to take action on air pollution	Ongoing	- Camden Council Air Quality, Sustainability, Transport Strategy departments.	- Six issues of the Clean Air for Camden newsletter were published in 2024, delivering information on air quality projects and actions to 755 subscribers.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
				- Other London local authorities	- Officers from Camden, Brent, and Westminster have been working together to deliver the 'One Kilburn' project, to deliver environmental and societal improvements to the Kilburn ward and its residents. - In 2024 Camden, as part of two consortium bids, were awarded Mayor's Air Quality Funding for projects to extend the London Wood Burning Project, and to develop the 'Healthy Waterways London' project. - Camden's Air Quality Team regularly meets with other local authorities to share knowledge and discuss opportunities for improving London's air quality. - Camden continued to build partnerships with other local authorities, academic institutions, campaigning organisations, the NHS, and other stakeholders engaged in air quality related policy creation and advocacy.
28		We work with other local authorities, external stakeholders, and other levels of government in the UK and internationally on	Ongoing	- Camden Council Air Quality, Sustainability departments.	- See above.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		air quality policy and projects		- London local authorities. - GLA (Mayor of London). - Defra.	
29		We actively lobby for action on air quality and health	Ongoing	- Camden Council Air Quality, Sustainability departments. - Camden Councillors.	- In partnership with Great Ormond Street Hospital and Global Action Plan, Camden held the 'Cleaner Air, Healthier Lives Summit' on Clean Air Day 2024 to highlight the urgent need for more action to tackle air pollution from the healthcare sector in partnership with local authorities, and showcased some of the successes and case studies for action taken in different parts of the NHS to improve air quality and protect health. - The Air Quality team actively engages and supports efforts from the central government, the GLA, and other local authorities to explore ways of improving air quality policy, engagement, and data analysis.
30		Increased public awareness about health impacts associated with air pollution	Ongoing	Camden Council Air Quality, Sustainability departments.	Camden's Air Quality Team continues to routinely issue public communications and updates. This includes the Clean Air Newsletter, airTEXT alerts, air pollution alerts, and general communications.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					- Camden's Air Quality team participated at multiple engagement events in 2024, including a workshop on indoor air quality at the British Library, and an air quality walk with Kilburn Elderly Voices Exchange. The team also attended the National Air Quality Conference in November. - Supported Hampstead Group Practice with a pilot for a group asthma clinic session, where young people with severe asthma and their families were invited to collectively learn about asthma management including protecting health by reducing exposure to air pollution at home and outdoors. - Camden worked with Great Ormond Street Hospital and the Royal College of Paediatrics and General Practitioners to create a learning module to support healthcare professionals speak with patients about air quality and health. This included four short videos demonstrating how air quality could sensitively be introduced into a patient consultation. The resources will be published in 2025 on the RCPCH Air Pollution Companion webpages.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					- Following the successful application for MAQF funding (Clean Air for Camden – Citizen Science and Community AQ), Camden's Air Quality team were able to look at expanding the Indoor Air Quality Monitor Loan Service by purchasing more equipment. - In 2024, Camden ran the Clean Air for Schools assembly programme. This included seven assemblies at individual schools, with 1680 young people and 34 adults engaged.
31		Increased air quality monitoring coverage and public access and ownership of data	Ongoing	- Camden Council Air Quality, Data Management departments.	- In 2024, 55 additional diffusion tubes monitoring sites were installed across Camden, bringing the total number to of active monitoring sites to 321 by the end of the year. This will be expanded further in 2025 - Camden's Air Quality team also completed a procurement exercise to select a supplier for a new comprehensive automatic air quality monitoring station, to be installed in the Kilburn town centre. This will be delivered in 2025.
32		Camden's air quality programme is directly related to the core objective	Ongoing	- Camden Council Air Quality department.	- Camden's Air Quality Team assesses both public health and air quality data when decision making. This includes when

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		of protecting and improving public health and the We Make Camden vision			providing policy recommendations for colleagues and councillors, designing future projects, assessing development proposals, and responding to public enquiries. Through the London Wood Burning Project, Camden has been able evaluate the public health impact and the economic and healthcare costs wood burning has on society.
33		Camden and external partners in healthcare and social care work collaboratively to tackle the impact of AQ on health		- Camden Council Air Quality department. - Local healthcare professionals.	- Camden's Air Quality officers regularly meet with hospitals and healthcare practitioners to establish links with primary care providers and raise awareness within the medical community of air pollution as a public health risk. - Camden worked with Great Ormond Street Hospital and the Royal College of Paediatrics and General Practitioners to create a learning module to support healthcare professionals speak with patients about air quality and health. This included four short videos demonstrating how air quality could sensitively be introduced into a patient consultation. The resources will be published in 2025 on the RCPCH Air Pollution Companion webpages.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
35	Indoor air pollution and occupational exposure: Raising awareness about the causes and impact of poor indoor air quality and workplace air pollution exposure	Reduced indoor pollution exposure in schools in Camden	Ongoing	- Camden Council Air Quality department. - Local schools.	Camden's Clean Air for Schools project focused predominantly on awareness raising activities surrounding indoor air pollution, educating students and teachers about the sources of pollution within the home and how these can be mitigated against. This included 22 events, which engaged 1877 young people and 210 adults.
36		Reduced occupational exposure to air pollution in Camden	Ongoing	Camden Council Air Quality department.	In 2024, Camden's Air Quality Team hosted and attended multiple public events to raise awareness of indoor air quality and to provide information and advice about how Camden residents can help to reduce indoor air pollution exposure at home.

3. Planning Update and Other New Sources of Emissions

Table N. Planning requirements met by planning applications in London Borough of Camden in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	46
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)	
Number of CHPs/Biomass boilers refused on air quality grounds	N/A – no applications were directly refused on this basis. Does not include proposals requested to remove CHP prior to decision following consultation, as per Camden practice
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.	N/A – no applications were directly refused on this basis. Does not include proposals requested to remove CHP prior to decision following consultation, as per Camden practice
Number of developments required to install Ultra-Low NO _x boilers	This is required through policy compliance 4.15 from Camden's Planning Guidance: Air Quality
Number of developments where an AQ Neutral building and/or transport assessments undertaken	
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	N/A
Number of planning applications with S106 agreements including other requirements to improve air quality	Not current practice at Camden
Number of planning applications with CIL payments that include a contribution to improve air quality	Not current practice at Camden
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.	Five sites inside the CAZ newly registered on Non-Road Mobile Machinery (NRMM) London City Hall in 2024. Seven sites inside the CAZ area were audited during 2024 through the NRMM compliance project (Cleaner Construction for London). All sites were compliant after being audited. Camden's CMP pro forma contains a requirement for sites to ensure NRMM is compliant and registered. Conditions

Condition	Number
	relating to NRMM compliance are included in decision notices for many applications, however the total number of conditions for planning permissions granted in 2024 is not currently retrievable. Camden's Sustainability team is working with the Council's Planning service to ensure NRMM conditions are applied routinely, with up-to-date wording as provided by LB Merton's Cleaner Construction for London project coordinator.
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.	Nine sites outside of the CAZ in Camden were newly registered on Non-Road Mobile Machinery (NRMM) London City Hall in 2024. 11 sites outside of the CAZ area were audited during 2024 through the NRMM compliance project (Cleaner Construction for London). Nine of these sites were found to be self-compliant, and two sites were compliant following auditing. Camden's CMP pro forma contains a requirement for sites to ensure NRMM is compliant and registered. Conditions relating to NRMM compliance are included in decision notices for many applications, however the total number of conditions for planning permissions granted in 2024 is not currently retrievable. Camden's Sustainability team is working with the Council's Planning service to ensure NRMM conditions are applied routinely, with up-to-date wording as provided by LB Merton's Cleaner Construction for London project coordinator.

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 London Borough of Camden Fleet

Table O outlines the breakdown of Camden Council's fleet into five fuel type categories. The number of electric vehicles within Camden's fleet has risen by 488% (from eight) since the end of 2018, reflecting the impact of Camden's recent Clean Air Action Plans. As of the end of 2024, electric cars and vans comprise 14% of Camden's fleet with 47 vehicles, whilst hybrids account for 3% with ten vehicles. More than 99% of Camden's diesel, petrol and CNG vehicles are ULEZ-compliant.

Table O. London Borough of Camden vehicle fleet composition

Fleet figures on 31/12/24	Fuel type					
Vehicle type	Electric	Hybrid	Diesel	Petrol	CNG (Biomethane)	Total
Car	8	10	0	0	0	18
Van	38	0	183	23	15	259
Large van	0	0	12	0	2	14
PSV	0	0	17	0	12	29
Specialist	0	0	0	0	0	0
Cherry picker	0	0	1	0	1	2
Gully	0	0	0	0	0	0
Jetter	0	0	2	0	0	2
Tipper	1	0	6	0	0	7
Total	47	10	221	23	30	331
% Of fleet	14.20%	3.02%	66.77%	6.95%	9.06%	100%

4.2 Camden Council's process for reviewing air quality through the planning system

Pre-planning and planning application stage

Camden's Sustainability Planning Team is a statutory consultee, with officers required to review planning applications from an air quality, energy/carbon, and flood risk/LLFA perspective, and work closely with the Air Quality Programme Manager, the Air Quality Planning Officer, and the Council's Planning service to ensure that all relevant planning applications are reviewed, and conditions are applied and enforced. It is nevertheless viewed that there is continual opportunity for process improvement, both in terms of tightening controls and data collection, so that Camden can ensure future development is more sustainable and is undertaken in a way that offers greater protections to air quality, public health, and amenity.

During 2024, the 'Air Quality (Planning) Officer' position in the Sustainability department of Camden Council was extended by a further three years and will run until October 2027 at a minimum. This role was created to aid and improve the process of reviewing planning applications and Section 106 legal agreement performance from developments in the borough.

Post-approval and ongoing compliance

Camden's air quality officers work closely with the Planning service (Planning Obligations and Planning Enforcement officers, in particular) as well as Environmental Health, Transport, Highways and Parking to ensure all applicable approved developments provide a Demolition Management Plan (DMP) and/or a Construction Management Plan (CMP). This is mandated through Section 106 (S106) Legal Agreements. CMPs and DMPs are aligned with a pro forma template which covers several issues including air quality and dust management during on-site activities for any new development or refurbishment.

Officers review and provide feedback on DMPs/CMPs and any unsatisfactory consideration of air quality and dust impacts on the part of the contractor or developer will lead to rejection and the need to submit a revised plan. The CMP/DMP covers the following air quality considerations:

- Preventative and reactive dust mitigation including prevention of resuspension of particulates from dust and debris tracked onto the public highway.
- Real-time dust monitoring and reporting, based upon the dust risk classification from an Air Quality Dust Risk Assessment (AQDRA). In line with the Mayor of London's [‘Control of dust and emissions during construction and demolition’ SPG](#), any medium or high-risk sites are required to use real-time MCERTS-indicative dust monitors and to produce monthly reports for Camden Council to review. Camden has made it policy for all dust reports and data to be publicly accessible for all applicable sites.
- Adherence to the GLA dust mitigation checklist.
- Adherence to NRMM conditions and registration of the site on the London NRMM Register.
- Avoidance of vehicle engine idling.

Through Camden's participation in the MAQF-funded NRMM compliance project, all major construction sites in the borough are eligible for NRMM compliance audits. Camden's Air Quality Team coordinates with LB Merton's Project Coordinator to ensure an up-to-date list of major sites is provided.

Where sites in Camden are found to be non-compliant in terms of NRMM standards, real-time dust (PM10) monitoring or reporting, or management of air quality impacts in general, the first step is to engage directly with the site to convey the importance of compliance and improved performance. Failing this, the case will be passed to Camden's Planning Enforcement team (through liaison with the Construction Management Forum comprising officers from various Council departments) for further action. This usually involves an enforcement case being opened and a formal warning being issued. Continued failure to meet conditions or comply with CMP or S106 requirements would lead to an injunction being sought, though this stage was not required for any site during 2024.

4.3 Pan-London NRMM Auditing Project

London Borough of Camden participated in the LB Merton-led Cleaner Construction for London NRMM enforcement project during 2024 and will continue to do so in 2025.

Camden Council enforces NRMM compliance through the Construction Management Plan (CMP) process. All applicants who have submitted a CMP are required to answer the following questions regarding NRMM for their proposed development:

Figure 6. Camden's CMP NRMM questions:

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" (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 Camden Council. 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://www.london.gov.uk/what-we-do/environment/pollution-and-air-quality/nrmm>

Direct link to NRMM Practical Guide (V6):

<https://www.london.gov.uk/sites/default/files/2024-05/NRMM-Practical-Guide-Accessible-May2024.pdf>

Current requirements

(i) Any development within Greater London – NRMM used on the site of any major development will be required to meet Emission Stage IIIB as a minimum.

(ii) Any development site within the Central Activity Zone - NRMM used on any site within the Central Activity Zone will be required to meet Emission Stage IV as a minimum.

(iii) NRMM register - The site and all in-scope machinery (37-560kW) must be registered on the [GLA's NRMM Website](#).

(iv) Generators - Generators are required to meet Emission Stage V across the whole of London. When bringing a generator to site, you must ask your supplier for a Stage V generator. If a suitable Stage V solution is not available for the site, you will need to apply for an exemption.

From 1st January 2025

(v) All development sites in Greater London required to meet Stage IV - The CAZ, Opportunity Areas and Greater London zones will no longer have different emission standards. All NRMM on all sites within Greater London will be required to meet Stage IV as a minimum. Generators will continue to be required to meet Stage V.

Please provide evidence demonstrating the above requirements will be met by answering the following questions:

- a) Construction time period (mm/yy - mm/yy):
- b) Is the development within the CAZ? (Y/N):
- c) Will the NRMM with net power between 37kW and 560kW meet the standards outlined above? (Y/N):
- d) Please confirm that all relevant machinery will be registered on the NRMM Register, including the site name under which it has been registered:
- e) Please confirm that an inventory of all NRMM will be kept on site and that all machinery will be regularly serviced and service logs kept on site for inspection:
- f) Please confirm that records will be kept on site which details proof of emission limits, including legible photographs of individual engine plates for all equipment, and that this documentation will be made available to local authority officers as required:

4.4 Air Quality Alerts

Camden Council supports airTEXT and by the end of 2024 there were 713 active subscribers receiving alerts for Camden, which is an increase of 38 from the previous year. Most subscribers receive alerts via SMS text, with email, voicemail, and social media notifications also utilised. During 2023, there were 33 alert days in Camden, with 11,862 alert messages issued.

Camden Council is actively working to secure the routine and consistent cascading of pollution alerts to members of the public.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

Routine calibrations are carried out on a fortnightly basis by Ricardo Energy & Environment. Operatives are trained to AURN standards.

In Camden, the London Bloomsbury and Camden Kerbside/Swiss Cottage monitoring sites are part of the AURN and as such, are audited to the AURN standard by providers selected by the Environment Agency.

Non-AURN monitoring sites are audited by Ricardo Energy & Environment, who are UKAS accredited. Ricardo are also UKAS accredited for the recertification of onsite cylinders.

All sites are audited every six months and comply with the validation procedures which conform to the requirements of the AURN and exceed the requirements of the LLAQM TG (22). The data ratification procedures also exceed the requirements of TG (22). In 2024, only the Euston Road particulate matter analyser recorded below the 75% data capture requirement and so was annualised to compensate for this shortfall. All other automatic air quality monitoring in Camden recorded above 75% data capture, meaning that any further data annualisation was not required.

PM₁₀ Monitoring Adjustment

PM₁₀ and PM_{2.5} is measured with TEOM-FDMS analysers at three automatic monitoring sites in Camden. These are the London Bloomsbury, Coopers Lane, and Euston Road sites. These instruments are certified to MCERTS reference equivalent standard therefore, the VCM is not required. The Camden Kerbside/ Swiss Cottage automatic monitoring site utilises a BAM analyser to monitor PM₁₀ and PM_{2.5}.

A.2 Diffusion Tubes

Camden's diffusion tubes are supplied by Socotec UK, with 50% TEA in acetone the chosen preparation method. This is the second year that Camden Council has used Socotec UK for diffusion tube monitoring, having previously worked with Gradko International (see [Table P below](#)).

Socotec follows the procedures set out in the Practical Guidance. Socotec's 50% TEA/acetone preparation method were rated as having 'good' precision from 30 colocation studies in 2024, according to the Summary of Precision Results for Nitrogen Dioxide Diffusion Tube Collocation Studies, by Laboratory', published in April 2025 by Defra, which can be viewed here:

<https://laqm.defra.gov.uk/air-quality/air-quality-assessment/precision-and-accuracy/>

Socotec has scored highly in laboratory performance assessments for the Summary of Laboratory Performance in AIR NO₂ Proficiency Testing Scheme (January 2023 – February 2025), published in February 2025 by the LAQM Helpdesk (covering AIR PT rounds 55-68, from January 2023 to February 2025). Socotec were found to have 100% of results determined to be 'satisfactory' in all rounds except round 68 (January - February 2025), which scored 87.5% satisfactory. No results have been reported for following AIR PT rounds. The 'Summary of Laboratory Performance in AIR NO₂ Proficiency Testing Scheme (January 2023 – February 2025)' report published by Defra can be viewed here:

<https://laqm.defra.gov.uk/wp-content/uploads/2025/04/AIR-PT-Rounds-55-to-68-January-2023-to-February-2025.pdf>

Camden has used the 2024 national bias adjustment factor for Socotec UK diffusion tubes with 50% TEA/acetone method (0.78) to adjust the Council's raw diffusion tube annual mean concentrations for bias. This factor was published in the 'National Bias Adjustment Factors' spreadsheet produced by Defra and published in April 2024 and was based on 33 colocation studies. This can be viewed here:

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

The only diffusion tube bias adjustment factor applied to the data presented in this report is the national bias adjustment factor for Socotec UK diffusion tubes prepared with the 50% TEA/acetone method, which was 0.78.

Previous years' diffusion tube-measured annual mean NO₂ concentrations have been re-calculated where necessary with updated national bias adjustment factors as published by Defra. Consequently, the diffusion tube annual mean values for 2023 and preceding years which have been presented in this Annual Status Report supersede the annual means presented in previous reports.

Factor from Local Co-location Studies

Camden did not participate in the colocation study in 2024.

Discussion of Choice of Factor to Use

In the absence of local adjustment factors or other conditions suggesting that an alternative factor should be used, the national bias adjustment factor for 2023 has been used.

Table P. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.78 (Socotec UK)
2023	National	09/24	0.78 (Socotec UK)
2022	National	09/23	0.82 (Gradko Int)
2021	National	09/21	0.82 (Gradko Int)
2020	National	09/21	0.82 (Gradko Int)
2019	National	09/20	0.89 (Gradko Int)
2018	National	09/19	0.89 (Gradko Int)
2017	National	09/18	0.96 (Gradko Int)

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Diffusion tube data has been annualised where there were at least three but fewer than nine months of data. Camden Council's internal air quality monitoring database was utilised for the 2024 adjustments, in accordance with the LLAQM TG methodology.

Table Q displays the annualisation factors which were applied to adjust the raw diffusion tube data based upon NO₂ concentrations measured at the BL0 and IS6 urban background automatic monitoring sites, which achieved sufficient data capture for use in the diffusion tube annualisation adjustments.

Distance Adjustment

No distance adjustment calculations were used on Camden's air quality monitoring data, in line with previous years' annual status reporting methodology. Distance adjustment calculations are not deemed necessary for the three monitoring locations which have recorded an NO₂ annual mean of higher than the legal limit of 40 µg/m³ in 2024. These sites are heavily trafficked by pedestrians and so are viewed as representative of nearby receptors, including bus stops or pavement seating, and so members of the public are likely to have been exposed to similar pollutant concentrations to those measured at each site.

Table Q. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor: BL0	Annualisation Factor: IS6	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g m}^{-3}$)	Annualised Annual Mean ($\mu\text{g m}^{-3}$)	Comments
CAM81	0.941983	0.932935	0.937459	47.73	34.90	Diffusion Tube
CAM89	0.970212	0.934283	0.952248	23.00	17.08	Diffusion Tube
CAM131	0.988528	0.962461	0.975494	42.74	32.52	Diffusion Tube
CAM150	0.975764	1.010629	0.993197	20.23	15.67	Diffusion Tube
CAM163	1.074677	1.161389	1.118033	24.71	21.55	Diffusion Tube
CAM253	0.888862	0.878526	0.883694	23.30	16.06	Diffusion Tube
CAM269	1.000251	1.033276	1.016764	37.58	29.80	Diffusion Tube
CAM289	0.923248	0.903998	0.913623	28.75	20.49	Diffusion Tube
CAM293	1.015428	1.034991	1.025209	31.24	24.98	Diffusion Tube
CAM296	0.928092	0.951546	0.939819	24.33	17.83	Diffusion Tube
CAM319	0.87763	0.881528	0.879579	33.92	23.27	Diffusion Tube
CAM216	1.010283	1.252218	1.131251	21.76	19.20	Diffusion Tube
CAM350	1.014129	1.068692	1.041411	18.06	14.67	Diffusion Tube

CAM357	0.938311	1.058143	0.998227	37.14	28.92	Diffusion Tube
CAM358	0.921399	1.017822	0.969611	37.93	28.68	Diffusion Tube
CAM359	0.868214	0.996072	0.932143	45.82	33.31	Diffusion Tube
CAM362	0.963154	1.034615	0.998885	41.39	32.25	Diffusion Tube
CAM365	0.882201	1.024384	0.953292	40.29	29.96	Diffusion Tube
CAM372	0.881397	0.915814	0.898606	32.27	22.62	Diffusion Tube
CAM373	0.881262	0.91578	0.898521	32.45	22.74	Diffusion Tube
CAM374	0.881262	0.91578	0.898521	21.19	14.85	Diffusion Tube
CAM375	0.88147	0.91573	0.8986	21.78	15.27	Diffusion Tube
CAM376	0.881136	0.915709	0.898423	24.45	17.13	Diffusion Tube
CAM377	0.881154	0.915778	0.898466	26.05	18.25	Diffusion Tube

Table P. Automatic PM₁₀ Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	CD9 Euston Road			
			Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)
IS2 (Holloway Road)	98%	17.07	16.18	1.054625088		
HG005 (Wood Green)	100%	13.36	13.46	0.992589269		
KC2 (Cromwell Road)	97%	13.33	13.02	1.023485441		
HF5 (Hammersmith Town Centre)	89%	15.00	8.96	0.98171577		
Average (R _a)			1.013103892			
Raw Data Annual Mean (M)			17.59			
Annualised Annual Mean (M x R _a)			17.82			

Table Q. Automatic PM_{2.5} Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	CD9 Euston Road			
			Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)
HG005 (Wood Green)	100%	8.86	9.08	0.976551621		
KC2 (Cromwell Road)	96%	7.17	7.08	1.013941899		
HF5 (Hammersmith Town Centre)	98%	8.78	8.96	0.980093494		
Average (R _a)			0.990195671			
Raw Data Annual Mean (M)			9.48			
Annualised Annual Mean (M x R _a)			9.38			

Appendix B Full Monthly Diffusion Tube Results for 2024

Table T. 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
CAM1	529030	185687	36.60	28.60	19.50	14.70	31.40	16.20	17.60	17.10	18.50	29.20	30.50	27.60	23.96	18.69	N/A	
CAM2	526518	185938		28.33	14.07	19.00	14.07	14.40	13.70	13.37	17.10	24.07	28.20	23.60	19.08	14.88	N/A	
CAM3	526518	185989		28.83	14.07	19.73	16.47	14.47	15.17	14.40	16.97	25.27	27.60	22.35	19.57	15.27	N/A	
CAM4	528159	185641			16.37	24.13		13.97	16.17	14.57	16.93	23.97	23.73	20.93	18.97	14.80	N/A	
CAM5	528098	185597		30.07	17.73	22.90		15.30	15.93	14.90	18.80	27.00	26.53	24.90	21.41	16.70	N/A	
CAM6	526345	184876		34.90	19.50	22.13		19.87	19.95	20.47	19.00	25.53	29.63	26.27	23.73	18.51	N/A	
CAM7	526479	185411		36.50		18.65	25.50	25.60	22.07	22.13	29.80	30.77	34.23	26.90	27.22	21.23	N/A	
CAM8	526226	185337		33.10	20.30	23.53	17.47	17.33	17.47	16.07	20.35	24.00	27.30	23.43	21.85	17.04	N/A	
CAM9	526499	186122		23.67		26.05	13.10	11.73	11.90	11.73	16.67	20.77	17.57	17.40	17.06	13.31	N/A	
CAM10	528302	183932		40.63	23.90	30.93	18.47	16.27		15.70	19.87	26.10	24.97	24.13	24.10	18.80	N/A	
CAM11	524345	185133		33.43	20.00	27.00	18.87	18.03	18.73	17.57	22.43	26.87	29.93	20.90	23.07	17.99	N/A	
CAM12	529918	184786		34.57	22.05	23.30		17.93	18.85	16.80	19.60	24.87	29.43	24.17	23.16	18.06	N/A	
CAM13	529845	181595	36.00	30.77	19.57	18.55	23.83	18.67	18.87	20.20	24.57	28.73	34.33	26.70	25.07	19.55	N/A	
CAM14	529804	181519	43.53	39.10	28.10	27.17	26.95	23.57	23.40	25.67	26.00	36.30	39.37	36.03	31.27	24.39	N/A	
CAM15	529805	181703	41.87	32.73	20.43	15.90	23.03	22.10	22.87	20.63	25.37	32.70	36.87	27.47	26.83	20.93	N/A	
CAM16	530210	182748	44.20	33.10	29.23	22.10	26.33	22.00	20.60	20.80	26.50	26.40	36.10	31.17	28.21	22.00	N/A	
CAM17	529583	183051		32.00	23.50	16.70	20.33	17.37	17.87	19.60	22.43	26.47	28.57	26.67	22.86	17.83	N/A	
CAM18	529617	182935		35.53	24.37	20.80	21.33	18.33	20.70	20.23	22.67	29.57	33.17	25.37	24.73	19.29	N/A	
CAM19	529522	183089				28.20									28.20		N/A	
CAM20	526856	185301		31.63	16.67	18.00	15.70	15.23	15.97	14.53	19.73	24.63	26.20	24.00	20.21	15.76	N/A	
CAM21	526929	185226		28.60	15.20	23.00	15.87	14.17	15.10	14.73	20.73	25.27	27.67	22.27	20.24	15.78	N/A	
CAM22	527006	185160		30.53	17.63	18.43		14.85	17.80	17.50	18.80	25.87	27.30	22.55	21.13	16.48	N/A	
CAM23	527067	185152		31.27	17.83	19.20		16.03	16.97	16.07	19.60	24.50	30.53	28.47	22.05	17.20	N/A	
CAM24	525116	184772		31.70	17.70	17.95	17.60	17.17	16.23	15.37	20.87		28.50	18.75	20.18	15.74	N/A	
CAM25	525199	184709		32.23	18.60	15.60	20.27	21.00	21.90	19.27	22.70	28.97	31.73	22.63	23.17	18.07	N/A	
CAM26	525030	184701		33.30	17.80	21.43	17.63	18.10	19.37	18.20	22.50	27.03	31.73	25.73	22.98	17.93	N/A	
CAM27	529114	185052		32.13	21.03	19.80	19.27	17.03	16.60	17.50	21.50	26.57	23.13	24.25	21.71	16.93	N/A	
CAM28	529112	184960		33.27	18.90	19.65	17.37	15.77	16.77	14.63	20.10	23.07	31.50	22.53	21.23	16.56	N/A	
CAM29	529113	184869		31.05	20.30	18.07	18.20	16.30	15.40	15.20	18.43	24.77	26.57	25.43	20.88	16.29	N/A	
CAM30	531028	182092	50.00	50.60	45.50	19.87	40.70	40.17	37.90	42.33	49.03	59.30	47.97	44.40	43.98	34.30	N/A	
CAM31	528745	186598		25.97	17.07	18.60	14.50	13.35	14.27	13.57	18.23	22.17	24.55	14.73	17.91	13.97	N/A	
CAM32	528685	186614		34.17	23.10	23.00		21.90	22.20	18.77	22.20	31.73	29.40	16.53	24.30	18.95	N/A	

CAM33	528876	186421		26.20	17.10	16.50	13.37	13.07	13.47	13.57	17.37	21.33	27.60	18.20	17.98	14.02	N/A	
CAM34	528835	182980			18.00	14.10		15.17	14.53	15.10	19.30	19.97	26.63	22.77	18.40	14.35	N/A	
CAM35	528814	182873			20.27	20.85		18.40	20.17	18.93	21.93	26.90	30.10	22.43	22.22	17.33	N/A	
CAM36	524928	185092		30.23	16.27	21.90	15.97	16.93	18.43	18.30	20.20	29.03	31.30	22.90	21.95	17.12	N/A	
CAM37	525036	185121		29.67	17.70	18.97	15.70	16.50	16.77	15.60	18.30	25.87	30.10	20.93	20.55	16.03	N/A	
CAM38	524860	185039		31.70	17.73	20.63	17.93	17.03	18.20	17.47	22.07	28.47	29.77	22.20	22.11	17.25	N/A	
CAM39	526216	184457		29.37		17.70	18.07	15.00	16.23	15.70	20.40	23.10	30.67	19.15	20.54	16.02	N/A	
CAM40	528903	185009	27.40	29.83	20.07	24.63	19.43	15.83	13.85	15.20	19.80	24.53	30.25	21.05	21.82	17.02	N/A	
CAM41	528853	184975	25.37	29.50	17.37		15.83	13.83	15.17	13.85	19.23	26.80	28.55	23.97	20.86	16.27	N/A	
CAM42	529409	184720		31.73	22.07	20.80	17.90	15.87	17.53		22.43	26.23	31.83	25.80	23.22	18.11	N/A	
CAM43	526343	185755		27.73	17.23	20.83	16.97	15.17	16.07	15.47	19.57	27.67	28.27	21.57	20.59	16.06	N/A	
CAM44	528338	184776	28.30	32.10	19.87	14.80	22.10		22.30	13.80	19.90	24.13	27.20	20.50	22.27	17.37	N/A	
CAM45	528233	184430	33.60	36.03	26.80	19.97	18.97	18.37	18.33	18.77	24.57	31.63	32.37	24.00	25.28	19.72	N/A	
CAM46	529113	182561		42.95	21.70	20.50	14.90	14.80	16.40	19.93	25.67	26.63	32.00	27.97	23.95	18.68	N/A	
CAM47	530760	182782				35.65	33.77	33.43	31.13	27.63	38.57	39.43	45.85	35.47	35.66	27.81	N/A	
CAM48	530705	182701		33.73	27.07	28.10	22.43	19.13	19.90	20.43	24.35	28.97	34.43	30.10	26.24	20.47	N/A	
CAM49	530879	182342	42.73	43.37	28.30	20.20	24.57	21.73	21.40	22.83	25.50	31.40	36.60	32.77	29.28	22.84	N/A	
CAM50	530822	182276	45.03	43.57	31.57	24.33	30.07	29.70	28.15	29.20	32.53	30.70	41.37	36.07	33.52	26.15	N/A	
CAM51	531294	182146	32.13	37.83	29.07	25.00	25.00	19.43	20.17	20.07	22.10	27.90	32.10	29.60	26.70	20.83	N/A	
CAM52	531239	182105	34.63	36.73	25.80	25.80	18.93	19.73	20.20	19.60	24.17	31.33	31.35	29.10	26.45	20.63	N/A	
CAM53	530990	182574	42.73	33.20	27.50	22.93	21.80	20.50	21.53	20.70	22.40	28.17	31.17	33.83	27.21	21.22	N/A	
CAM54	531147	182179	32.40	36.20	26.27	24.63	20.37	21.10	22.03	21.63	23.93	29.30	31.50	29.73	26.59	20.74	N/A	
CAM55	530620	182633		33.90	34.27	24.37	33.60	30.93	27.90	27.83	33.63	37.10	34.17	37.10	32.25	25.16	N/A	
CAM56	530775	182346	37.97	45.13	31.10	23.63	23.47	22.77	23.40	22.47	24.77	30.60	33.35	30.70	29.11	22.71	N/A	
CAM57	531056	181822	40.97	41.37	40.70	30.70		28.90	27.90	27.83	33.97	37.10	39.13	37.47	35.09	27.37	N/A	
CAM58	530915	182046	33.57	35.27	29.13	33.37	26.07	24.17	23.20	23.67	26.40	28.20		25.43	28.04	21.87	N/A	
CAM59	530823	182079	40.57	37.13	29.80	24.30	25.40	25.50	26.87	25.90	29.70	34.03	36.77	33.85	30.82	24.04	N/A	
CAM60	530884	182124	45.10	41.63	33.80	28.10	27.20	30.70	26.33	27.67	32.23	37.37	29.00	38.47	33.13	25.84	N/A	
CAM61	530965	182112	42.43	39.37	32.53	21.55	26.57	25.67	26.60	25.73	31.37	35.07	43.43	39.60	32.49	25.34	N/A	
CAM62	528305	184657	33.93	45.60	27.23	35.37	29.60	34.00	31.07	30.70	30.67	33.65	26.77	32.75	32.61	25.44	N/A	
CAM63	528179	184606	32.03	32.03	23.97	16.93	20.50	18.03	19.87	18.87	23.17	28.43	31.37	30.03	24.60	19.19	N/A	
CAM64	527990	184602	35.00	38.73	25.97	23.45	19.43	19.53		20.20	24.57	30.70	31.83	24.27	26.70	20.82	N/A	
CAM65	528244	184587	30.80	37.23	24.37	19.35	19.60	19.57	18.27	17.00	23.27	26.57	29.47	25.27	24.23	18.90	N/A	
CAM66	528377	184599	35.05	35.50		19.05	22.17	21.27	20.70	19.13	24.00	31.20	32.13	24.77	25.91	20.21	N/A	
CAM67	528380	184636	37.45	43.27	52.60	36.50	28.80	29.90	26.17	24.77	33.70	32.40	41.57	28.77	34.66	27.03	N/A	
CAM68	528537	184626	35.27	35.00	22.13	29.73		17.97		17.10	23.00	27.27	27.65	22.57	25.77	20.10	N/A	
CAM69	528736	184719	35.73	54.75	63.30	30.10	25.03	24.00		20.37	31.20	32.00	33.93	24.70	34.10	26.60	N/A	
CAM70	530093	182792			59.60	57.30	20.90	55.90	55.50	54.50	61.70	61.30	58.00	52.50	53.72	41.90	N/A	
CAM71	529907	182670	58.33	63.17		52.23	42.10	56.30			61.10	61.80	59.90	55.17	56.68	44.21	N/A	
CAM73	530512	182511	28.30	28.40	22.10	17.70		15.10	15.60	13.70		34.60	27.50	20.10	22.31	17.40	N/A	
CAM74	529013	185102	39.00	33.70	24.40		30.30	26.10	31.40	22.00	29.80	41.30	39.80	33.20	31.91	24.89	N/A	

CAM75	526213	185519	24.30	19.20	17.20	13.10		12.40	13.00		16.90	21.30		20.60	17.56	13.69	N/A	
CAM76	526547	185125	33.50	38.00			46.30	29.00	28.50	27.60	26.30	39.40	36.20	34.90	33.97	26.50	N/A	
CAM77	526633	184392	46.77	41.33	39.27	38.27	32.50	38.65	38.33	36.23	41.83	46.70	46.33	34.00	40.02	31.21	N/A	
CAM78	529904	183138	48.10	54.30	36.80	31.60			39.40	34.20	41.50	45.20		53.60	42.74	33.34	N/A	
CAM79	529880	182334	37.50	31.00	29.40	22.60	33.70		20.40		23.30	30.40	33.90	30.40	29.26	22.82	N/A	
CAM80	529689	182470	38.90	40.70	34.90	30.00	12.80	30.80		24.60	34.60		38.80	38.40	32.45	25.31	N/A	
CAM81	529568	181728	51.00	44.30	49.50	42.90			49.80	48.20			45.00	51.10	47.73	34.90	N/A	
CAM82	525362	185255	37.30	35.90	31.90	28.50		30.20	28.20	28.70	39.90	33.40	38.70	32.50	33.20	25.90	N/A	
CAM83	528213	187203	20.70	28.30	21.40	18.60	20.30	16.90	21.00	17.10	22.60	31.60	31.80	19.60	22.49	17.54	N/A	
CAM84	529173	184129	45.90	46.50	38.90	37.20	44.90	43.30	46.50	38.00	45.20	53.90	40.50	37.90	43.23	33.72	N/A	
CAM85	528722	185950	38.00	34.70	22.40	22.30	23.90	23.10	18.10	21.70	23.90	33.50	29.30	23.70	26.22	20.45	N/A	
CAM86	529962	181620	41.80	37.10	32.30	33.70	29.30	32.30	30.70	31.60	39.60	33.70	42.80	37.10	35.17	27.43	N/A	
CAM87	529118	185913	42.80	35.60	24.60	22.90	22.50	24.20	24.70	22.00	29.40	34.50	35.10	30.90	29.10	22.70	N/A	
CAM88	529099	185881	31.00		23.20	17.30	21.70	17.90	18.30	17.00	26.20	30.40	31.90	22.40	23.39	18.24	N/A	
CAM89	529060	185848	34.50	29.70				15.50	16.00	14.80	18.70	25.90	28.90		23.00	17.08	N/A	
CAM90	529334	183868	32.15	37.37	21.53	34.25	19.87	18.77	18.80	18.33	22.03	29.03	33.67	28.07	26.16	20.40	N/A	
CAM91	529142	183738		42.47	26.43	28.73	42.80	27.97	23.53	20.87	25.87	31.17	34.30	28.67	30.25	23.60	N/A	
CAM92	529054	183772		61.57	39.23	29.30	42.27	46.87	46.07	42.97	41.37	49.27	51.20	44.10	44.93	35.04	N/A	
CAM93	529010	183795		44.53	27.80	34.10	29.20	27.65	25.77	26.50	30.10	34.43	38.37	31.27	31.79	24.80	N/A	
CAM94	528971	183636		52.87	33.67	21.40	39.07	40.13	36.63	36.67	42.80	44.63	43.00	38.20	39.01	30.42	N/A	
CAM95	528968	183551		37.10		32.60		19.43	17.53	16.17	24.03	28.37	33.73	26.30	26.14	20.39	N/A	
CAM96	528881	183697		39.53	23.63	28.17	21.10	20.83	19.70	19.00	22.73	30.73	36.37	25.93	26.16	20.40	N/A	
CAM97	528867	183547		37.47		35.40		21.23	20.03	18.63	22.57	24.63	29.47	26.00	26.16	20.40	N/A	
CAM98	528866	183590		46.57	29.87	29.60	32.80	33.27	26.93	30.30	38.27	38.10	45.53	28.57	34.53	26.93	N/A	
CAM99	528836	183625		34.97	21.03		20.10	17.13	16.57	16.67	21.40	26.07	29.40	24.57	22.79	17.78	N/A	
CAM100	528695	183596		36.70		25.95	29.20	24.70	23.45		30.90	30.67	36.17	22.70	28.94	22.57	N/A	
CAM101	528654	183570		45.70	31.53	25.40	33.40	33.33	32.70	23.70	35.33	32.83	40.23	25.87	32.73	25.53	N/A	
CAM102	528604	183457		38.20	28.77	19.23	28.27	23.90	25.03	23.70	33.47	30.10	38.63	28.37	28.88	22.53	N/A	
CAM103	528636	183577		43.70	30.77	22.70	30.80	32.03	29.25	26.33	34.40	35.30	36.03	32.03	32.12	25.06	N/A	
CAM104	528560	183695		36.75	24.87	23.90		21.50	20.23	24.53	25.60	29.73	29.10		26.25	20.47	N/A	
CAM105	528724	183702		43.80	31.07	30.70		41.30	38.57	35.50	38.87	36.83	36.63	27.23	36.05	28.12	N/A	
CAM106	529548	184449		31.43	20.10	20.63	17.00	14.07	15.40	14.03	18.60	23.10	29.07	26.53	20.91	16.31	N/A	
CAM107	529677	184531		31.93	22.47	27.35	17.43	14.77		15.23	19.20	25.83	27.10	26.70	22.80	17.79	N/A	
CAM108	529725	184680		34.43	21.43	15.20	17.47	15.77		15.67	19.70	25.80	30.57	25.47	22.15	17.28	N/A	
CAM109	529767	184734		33.40	21.27	27.20	18.77	16.97	17.23	15.60	21.85	27.00	31.83	30.60	23.79	18.56	N/A	
CAM110	529754	184457		35.90	22.43	18.43	18.80	17.40	19.00	16.73	21.83	26.73	30.43	30.33	23.46	18.30	N/A	
CAM121	528081	184490	30.40	29.40	22.70	17.20	12.40	18.00	20.70	17.80	24.20	33.80	30.80	29.00	23.87	18.62	N/A	
CAM122	528558	184331	28.80	28.30	21.80	15.10	8.50	15.90	17.70	15.10	17.40	28.90	28.50		20.55	16.03	N/A	
CAM123	528619	184315	34.40	28.40	22.90	16.40	10.30	17.10	18.60	16.20	21.70	31.80		27.30	22.28	17.38	N/A	
CAM124	528881	184287	32.10	36.00	29.50	22.20	12.50	24.10	28.00	30.00	29.70		31.50	34.60	28.20	22.00	N/A	
CAM125	528935	184053	35.90	35.00	26.70	23.50	23.00	27.70	27.00	33.00		36.40	34.20	27.30	29.97	23.38	N/A	

CAM126	528898	184094	34.30	34.10	27.20	18.20	13.30	24.60	29.10	15.60	25.60	42.50	37.90	30.40	27.73	21.63	N/A	
CAM127	528704	184011	31.70	29.40	22.80	18.40	12.20	18.50	20.90	19.60	24.10	32.10		26.30	23.27	18.15	N/A	
CAM128	528722	184127	38.00	35.10	30.40	25.10	17.00	28.90		25.10	31.30	40.40	12.20	29.10	28.42	22.17	N/A	
CAM129	528845	183970		32.30	29.10	27.10	32.30	26.70	28.20		26.60	39.60	29.60	27.90	29.94	23.35	N/A	
CAM130	528884	183901	36.50	40.70	25.00	29.10	17.60	32.40	36.40	31.70	25.30	45.70		33.90	32.21	25.12	N/A	
CAM131	528915	183870	48.20	48.90				36.90	39.60	36.50	41.40	53.10		37.30	42.74	32.52	N/A	
CAM132	528770	183887	32.70	26.60	24.90	18.30	11.40	18.40	21.30	18.80	24.60	34.10	32.30	25.60	24.08	18.79	N/A	
CAM133	528715	184456	30.10	28.20	19.10	15.10	15.60	14.50	17.40	14.50	15.80	27.40	26.30	26.70	20.89	16.30	N/A	
CAM134	528119	184354	31.50	31.95	22.33	29.80	18.87	18.20	18.07	15.03	22.27	26.80	28.40	20.03	23.60	18.41	N/A	
CAM135	528335	184338	35.60	38.73	27.75	23.70	30.03	28.83	25.93	24.87	33.70	35.10	38.40	30.57	31.10	24.26	N/A	
CAM136	528456	184345	35.50	37.03	27.30		30.83	29.30	25.40	26.27	31.33	36.70	37.33	29.50	31.50	24.57	N/A	
CAM137	528582	184265	32.70	37.90	24.03	26.15	20.35	22.85	21.30	20.03	23.83	26.77	31.17	22.77	25.82	20.14	N/A	
CAM138	527278	185153		44.73	28.13	21.43		33.45	35.90	34.63	33.47	46.43	37.53	31.23	34.70	27.06	N/A	
CAM139	527184	185274		45.83	26.83	20.77		39.60	39.40	37.60	52.40	50.03	49.75	39.40	40.16	31.33	N/A	
CAM140	527299	185071		32.80		18.03		17.10	19.93	16.97	21.67	31.53	32.03	27.37	24.16	18.84	N/A	
CAM141	527500	184974		35.30	20.93	22.47		24.03	24.57	22.93	27.57	34.50	35.23	28.87	27.64	21.56	N/A	
CAM142	529606	183589		33.90	29.33	31.57	29.60	30.57		26.83	33.23	34.23		27.03	30.70	23.95	N/A	
CAM143	529443	183941		31.90	24.43	26.90	23.95	20.35	22.50	21.47		30.63	26.50	28.67	25.73	20.07	N/A	
CAM144	529405	184139		30.30	23.25	17.03	30.70	22.67			26.73	29.83	35.60	26.17	26.92	21.00	N/A	
CAM145	529233	184325		30.07		25.65	26.45	24.57	23.43	22.60	27.13	29.73	31.83	30.65	27.21	21.23	N/A	
CAM146	529289	183697			21.83	23.50	21.20	18.37	21.80	21.50	26.40	27.87	22.40	23.00	22.79	17.77	N/A	
CAM147	530004	184626		46.40		34.00	28.73	30.07	28.17	24.17	27.20	35.43	36.67	26.97	31.78	24.79	N/A	
CAM148	530067	184286		46.10	36.27	27.85		33.73	34.13	28.10	28.67	36.73	40.45		34.67	27.04	N/A	
CAM149	530320	183606			32.80	31.00	29.70	30.03	35.20	32.70	30.63	35.30	38.80	34.70	33.09	25.81	N/A	
CAM150	528259	185061				15.85		16.20	16.10	15.87	19.07	25.27	30.20	23.27	20.23	15.67	N/A	
CAM151	528191	185041	25.77	30.87		19.70	15.90	19.10	16.27	15.97		21.87	30.20	23.60	21.92	17.10	N/A	
CAM152	528248	185360		33.07	20.57	24.13	19.90	19.67	15.80	16.77	23.30	27.50	29.07	22.20	22.91	17.87	N/A	
CAM153	528404	185130	31.27	35.80	21.30	26.00	17.57	17.30	17.63	14.27	20.50	26.97	24.27	22.80	22.97	17.92	N/A	
CAM154	528516	185100	30.73	38.13	21.47	22.40	18.17	17.17	18.03	18.13	21.30	24.30	31.30	27.20	24.03	18.74	N/A	
CAM155	528874	185037	25.30	28.93	18.30	16.70	22.15	15.93	15.67	14.20	21.83	24.37		19.27	20.24	15.79	N/A	
CAM156	527865	185224		32.50	34.97	21.55	25.37	21.83	17.13	23.57	28.17	28.93	34.63	24.70	26.67	20.80	N/A	
CAM157	528251	184767	32.77	35.63	24.60	20.03	20.95	16.60	16.90	18.20	22.33	25.85	29.00	21.07	23.66	18.46	N/A	
CAM158	528334	184832	32.57	34.80	19.83	26.60	17.53	16.17	23.17	14.17	18.83	22.10	28.93	25.05	23.31	18.18	N/A	
CAM159	528309	185097	27.60	31.77	24.73	23.55	17.73		19.53	14.40	21.37	25.47	30.70	22.37	23.57	18.38	N/A	
CAM160	528430	184837	28.57	31.23	21.10	15.25	16.07	15.00	16.60	14.43		23.13	28.67	22.63	21.15	16.50	N/A	
CAM161	529595	185067		27.50		13.60	19.20	17.60	19.97	16.60	23.03	26.73	29.30	18.43	21.20	16.53	N/A	
CAM162	529842	184780		34.60		25.85	26.03	22.27	19.07	20.40	27.40	32.43	36.97	32.30	27.73	21.63	N/A	
CAM163	529317	184124		53.70	21.95	19.15	19.00	17.45		19.00	22.70				24.71	21.55	N/A	
CAM164	529264	184155		47.47	24.13	22.73		24.00	23.77	24.30	29.30	32.75	28.10	23.07	27.96	21.81	N/A	
CAM165	529310	183998		43.53	26.03	19.37		25.33	22.93	24.33	27.87	34.43	38.40	29.13	29.14	22.73	N/A	
CAM166	529279	183390		40.77	47.40	27.77	47.90	46.93	49.90	46.67	46.65	54.15	52.13		46.03	35.90	N/A	

CAM167	527440	184319		53.20	36.77	29.00	47.63	45.90	44.77	42.87	47.23	48.90	48.33	38.60	43.93	34.26	N/A	
CAM168	526852	184138		45.13	31.70	14.25	36.33	33.70	38.00	36.57	34.10	40.33	43.60	35.80	35.41	27.62	N/A	
CAM169	526885	183959		35.27	22.90	20.65	31.97	27.57	25.70	24.87	28.77	32.17	29.00	25.83	27.70	21.60	N/A	
CAM170	526924	183780		32.00	17.90	15.77	20.20	16.60	18.60	16.63	24.07	24.97	30.37	20.83	21.63	16.87	N/A	
CAM171	527018	183899		31.90	20.57	17.27	26.23	24.27	25.55	24.33	27.90	32.23	34.83	21.87	26.09	20.35	N/A	
CAM172	527372	184086		28.60	16.70	19.77	19.40	17.40	16.07	18.73	22.13	26.65	29.00	23.47	21.63	16.87	N/A	
CAM173	527517	184159		27.80	17.07	21.47	18.37	16.17	17.03	18.80	22.23	23.23	28.45	20.67	21.03	16.40	N/A	
CAM174	526930	184135		41.73	24.47	21.60	26.53	28.50	30.17	24.60	30.47	34.87	36.07	31.60	30.05	23.44	N/A	
CAM175	527213	184163		27.27	16.05	18.93	21.40	20.80	21.27	19.33	22.70	28.40		24.77	22.09	17.23	N/A	
CAM176	527496	184210		29.50	18.00	31.50	20.80	19.10	18.47	17.30	22.97	19.20	25.37	23.83	22.37	17.45	N/A	
CAM177	527595	184210		28.90	23.93	21.50	19.87	19.43	18.93	19.17	23.27	25.37	29.13	23.80	23.03	17.96	N/A	
CAM178	527582	184132		29.90	19.27	26.40	22.63	19.77	20.90	18.43	22.57	29.00	30.17		23.90	18.64	N/A	
CAM182	530386	182171	45.77	38.50	38.33	21.20	29.40	25.33	26.67	27.43	32.23	43.73	37.33	26.70	32.72	25.52	N/A	
CAM189	530104	182388	41.93	43.77	35.60	25.90		26.40	26.43	26.25	28.05		39.35	28.10	32.18	25.10	N/A	
CAM194	530343	182500		33.80	30.23		24.30	20.70	23.17	22.33	24.80	29.37	34.10	32.87	27.57	21.50	N/A	
CAM196	530193	182529		34.93	33.03		25.50	22.97	25.10	21.97	25.83	32.17	36.70	31.83	29.00	22.62	N/A	
CAM200	530044	182947		47.67	42.53	22.97	42.97	40.70	39.27	36.80	52.07	48.67	54.10	35.20	42.08	32.83	N/A	
CAM201	530054	182710	47.67	36.17	48.10	28.00		25.00	24.50	24.03	31.80	33.20	40.27	31.93		26.28	N/A	
CAM202	529985	182674		35.87	31.35	29.35	29.87	27.70	26.53	27.53	31.47	34.37	41.80	42.75		25.43	N/A	
CAM203	529893	182540	45.23	38.45	32.05	24.20	25.57	22.87	26.03	16.70	30.73	31.60	35.33	35.80		23.70	N/A	
CAM204	529860	182451	62.93	46.73	44.53	44.60	46.87	49.47	49.40	46.23	44.40	49.87	57.63	51.13	49.48	38.60	N/A	
CAM216	529281	182256			20.33	16.70	28.23								21.76	19.20	N/A	
CAM229	529650	182060		43.10	21.27	29.53	30.90	28.17	25.83	25.40	34.93	34.80	43.55	36.80	32.21	25.12	N/A	
CAM241	530042	181188	49.30	39.83	46.90		33.77	31.30	27.80	31.30	33.10	33.30	37.43	37.30	36.48	28.46	N/A	
CAM242	529978	181100	40.90	37.33		31.50	30.07	28.27	26.03	28.00	30.70	33.93	38.57	20.33	31.42	24.51	N/A	
CAM243	530073	181169	36.67	34.90		26.85	27.40	25.73	24.20	27.27	28.57	31.13	32.40	26.67	29.25	22.82	N/A	
CAM244	530059	181041	38.20	31.37		26.35	27.33	25.87	24.13	26.90	27.07	32.10	37.45	30.73	29.77	23.22	N/A	
CAM245	530036	181120	48.93	41.15		40.70	35.63	34.17	33.17	36.03	33.90	30.97	37.50	36.20	37.12	28.96	N/A	
CAM246	530086	181070	59.70	53.80		41.20	46.20	55.37	54.35	59.33	45.50	51.30	33.40	39.00	49.01	38.23	N/A	
CAM247	530131	181105	41.90	31.77		29.20	29.27	25.23	25.10	26.33	29.60	31.90	31.30	32.83	30.40	23.71	N/A	
CAM248	530018	181078	60.07	55.03			53.70	56.30	51.23	62.20	57.50	51.53	54.25	46.73	54.86	42.79	N/A	
CAM249	530009	181037	40.63	35.07		39.30	29.60	26.20	26.43	27.63		34.37	37.85	32.33	32.94	25.69	N/A	
CAM250	530100	181029	42.27	33.27		26.20	28.63	27.97	24.10	25.87	27.20	29.27	38.40	29.53	30.25	23.59	N/A	
CAM251	530114	181134	41.73			40.45	28.00	27.30	23.50	24.70	24.60	30.17	37.00	31.03	30.85	24.06	N/A	
CAM252	530139	181178	65.40	33.90		33.63	25.90	24.53	22.30	24.80	25.80		29.30		31.73	24.75	N/A	
CAM253	529497	183948	30.50	25.20	20.10			16.10			18.80	27.50	26.50	21.70	23.30	16.06	N/A	
CAM254	529660	183797	28.00	27.00	21.70	16.70		17.00	19.10	16.70	20.80	30.70	29.20	26.00	22.99	17.93	N/A	
CAM255	529698	183770	27.20	26.10	21.60	16.30	10.40	15.10	18.80	16.70	21.40	29.40	29.30	24.40	21.39	16.69	N/A	
CAM256	529748	183733	29.30	26.10	21.10	17.40		15.40	16.30	14.80	20.50	27.00	27.10	25.90	21.90	17.08	N/A	
CAM257	529988	183524	34.40	25.20	31.30			20.80	24.40	21.70	23.90	29.30	35.80	24.60	27.14	21.17	N/A	
CAM258	528021	185593		28.23	17.70	20.80		14.13	15.67	15.10	17.50	22.10	24.63	20.50	19.64	15.32	N/A	

CAM259	527926	185614		29.80	17.07	20.77		15.47	15.37	13.83	17.93	24.93	26.35	22.17	20.37	15.89	N/A	
CAM260	527865	185604		28.20	16.70	20.60		14.07	15.03	14.07	17.17	23.17	26.53	21.73	19.73	15.39	N/A	
CAM261	525668	183335		34.87	21.87	25.03	23.57		24.43	20.87	24.73	30.27	27.00	27.13	25.98	20.26	N/A	
CAM262	525557	183462		38.07	26.73	24.83	25.70	24.50	27.50	27.10	27.10	34.50			28.45	22.19	N/A	
CAM263	525439	183589		61.43	52.33	46.00	52.63	50.27	52.00	47.33	50.40	56.80	52.03	37.93	50.83	39.65	N/A	
CAM264	525381	183708		36.35	26.77	16.03		32.17	31.70	30.35	30.83	36.97	30.97	35.90	30.80	24.03	N/A	
CAM265	525258	183828			34.17	37.75	34.85	41.90	43.77	39.47	34.37	45.10	39.65	41.43	39.25	30.61	N/A	
CAM266	525156	183991		48.13	33.37	30.00	49.37	42.00	44.13	39.40	42.70	46.57	50.35	42.20	42.57	33.20	N/A	
CAM267	525077	184067		55.77	42.23	27.47	41.47	40.70	42.97	42.17	39.80	52.83	46.73	42.80	43.18	33.68	N/A	
CAM268	524998	184185		26.30	26.80	29.70	28.30	26.97		27.33	30.80	33.77	38.30	33.37	30.16	23.53	N/A	
CAM269	524904	184281		47.37		16.93		38.63	39.97	33.33	35.43	43.67	45.30		37.58	29.80	N/A	
CAM270	524747	184500		37.20	18.43	18.00	24.70	24.70	23.45	22.77	28.50	29.87	35.40	29.10	26.56	20.71	N/A	
CAM271	524631	184665		45.60	29.95	25.40	38.80	35.47	37.40	36.60	39.97	42.07	43.75	31.30	36.94	28.81	N/A	
CAM272	528437	187270		42.53		23.87	17.73	15.33	16.37	14.77	19.93	26.47	24.80	19.33	22.11	17.25	N/A	
CAM273	528324	186396		31.03	18.80	23.95	22.37	20.63	22.70	21.53	22.67	30.53	28.67	27.93	24.62	19.20	N/A	
CAM274	528918	186959		50.00		22.97	21.33	20.13	22.47	18.00	22.53	28.47	30.90	29.47	26.63	20.77	N/A	
CAM275	528967	186654		33.45	23.30	17.93		21.53	21.37	21.30	24.40	32.03	32.57	27.80	25.57	19.94	N/A	
CAM276	529025	186145		33.90	29.13	22.70	26.85	22.50	23.13	18.60	28.40	31.70	33.37	29.10	27.22	21.23	N/A	
CAM277	528364	186173		45.43	26.97	25.67	41.67	34.37	36.27	35.67	37.83	37.90	42.07	33.43	36.12	28.17	N/A	
CAM278	528763	185546		36.00	23.30	20.70	27.07		24.40	19.77	27.57	35.60	34.47	29.30	27.82	21.70	N/A	
CAM279	528523	185778		38.00	23.87	28.80	32.20	30.57	27.67	29.13	35.57	36.43	38.77	27.40	31.67	24.70	N/A	
CAM280	528939	185366		36.67	25.83	23.50	25.57	23.03	23.80	23.40	25.93	33.63	34.83	28.97	27.74	21.64	N/A	
CAM281	528788	186048		30.40		27.43	17.77	15.20	17.33	16.17	18.90	25.90	31.65	22.50	22.33	17.41	N/A	
CAM282	528924	186085		32.53	23.20	17.75	21.45	21.07	23.40	22.20	22.03	29.80	28.35	27.93	24.52	19.13	N/A	
CAM283	529119	186219		30.43	18.60	21.15	20.65	18.07	17.57	16.47	22.77	23.77	28.97	18.85	21.57	16.83	N/A	
CAM284	529179	186011		32.05	24.20	21.10		28.90	25.93	25.03	28.20	34.03	37.30	26.90	28.37	22.12	N/A	
CAM285	529016	185533			23.57	22.73	24.45	18.50	21.70	20.37	26.23	29.70	36.35	29.27	25.29	19.72	N/A	
CAM286	529885	183280	46.80	56.60	45.17	45.03	26.45	45.93	51.67	49.15	45.20	55.93	53.50	45.13	47.21	36.83	N/A	
CAM287	529813	183349	35.10	32.80	26.60	21.93	54.40	21.70	23.20	20.47	34.55	34.13	37.83	27.50	30.85	24.06	N/A	
CAM288	529750	183288	31.83	30.63	23.03	18.13	28.60	16.87	20.70	17.50	23.10	32.57		21.20	24.02	18.73	N/A	
CAM289	529797	183187	33.20	34.20					21.03	16.93	33.05	34.97	33.23	23.40	28.75	20.49	N/A	
CAM290	529641	183282	29.37	24.13	22.50	15.23	24.90	15.77	19.40	16.93	28.80	28.63	26.33	27.40	23.28	18.16	N/A	
CAM291	529611	183444	31.15	26.67	23.33	17.53	26.90	18.47	20.07	16.77	28.40	29.83	31.53	22.03	24.39	19.02	N/A	
CAM292	529424	183445	27.10	29.93	28.20	21.93	27.60	24.00	26.13	22.07	26.95	34.93	32.87	29.30	27.58	21.52	N/A	
CAM293	529224	183362					25.45	29.17	33.57	27.00	25.50	38.60	42.70	27.97	31.24	24.98	N/A	
CAM294	529229	183231	39.03	35.90	30.13	19.77	28.80	26.73	29.40	22.45	25.30	39.20	40.90	30.77	30.70	23.94	N/A	
CAM295	529321	183239	36.27	38.10	31.97	29.20	32.03	32.23	32.63	29.73	25.80	38.03	41.97	36.10	33.67	26.26	N/A	
CAM296	529527	183264	31.23		21.87	15.90				15.37	24.90	28.90	30.83	25.63	24.33	17.83	N/A	
CAM297	529601	183148	31.37	31.83	25.13	18.20	26.47	17.63		15.60	27.55	30.20	32.00	25.57	25.60	19.96	N/A	
CAM298	529555	182900	34.00	29.63	25.57	20.50	26.63	21.73	23.80	20.73	25.80	32.93	36.73	26.77	27.07	21.11	N/A	
CAM299	529717	182992	38.70	31.77	27.80	18.90	28.03	17.45	21.83	18.10	23.10	31.20	33.03	26.30	26.35	20.55	N/A	

CAM300	529815	182830	36.43	32.03	27.37	22.10	26.65	18.93	22.87	18.80	22.60	31.87	33.33	30.27	26.94	21.01	N/A	
CAM301	529802	182703	39.77	41.90	40.37	25.60	23.57	25.37	31.40	27.90	28.30	39.87	40.67	36.23	33.41	26.06	N/A	
CAM302	529949	182798	40.53	36.33	31.10	24.40		22.77	23.57	19.17	27.17	30.47	36.53	31.10	29.38	22.91	N/A	
CAM303	529887	182813	33.93	32.60	28.67	21.47	28.70	18.07	23.50	19.10	25.50	32.00	35.43	29.77	27.39	21.37	N/A	
CAM304	529786	183038	38.37	35.50	27.10	20.40	22.17	21.87		21.83	26.50	35.77	40.65	32.70	29.35	22.89	N/A	
CAM305	529987	183060	47.45	46.43	33.03	36.77	37.30	39.70	37.87	31.60	28.87	46.43		39.30	38.61	30.12	N/A	
CAM306	530231	183453	39.33	41.37			28.25	29.07	32.10		21.57	38.27	37.37	35.17	33.61	26.22	N/A	
CAM307	529874	184379		39.03	28.03	20.07	28.20	24.63	24.20	22.20	27.77	33.60	36.00	32.40	28.74	22.42	N/A	
CAM308	529515	184274		34.40	25.43	23.75	23.30	20.43		20.07	26.33	30.87	27.00	26.93	25.85	20.16	N/A	
CAM309	528687	185016	35.53	33.17	22.73	26.50		19.00	19.33	18.50	23.90	29.50	28.33	22.10	25.33	19.76	N/A	
CAM310	530149	181611	44.50	48.03	44.67	23.80	44.87	39.13	42.40	42.87	40.27	51.13	46.33	32.33	41.69	32.52	N/A	
CAM311	530250	181473	44.47	40.30	34.10	33.67	29.80	32.13	29.30	30.40	34.03	41.37	39.13	32.40	35.09	27.37	N/A	
CAM312	530414	181645	41.07	42.53	41.10	40.05	48.27	43.90	44.37	34.33	47.35	46.80	51.77	36.30	43.15	33.66	N/A	
CAM313	530429	181459	47.80	35.50	32.30	27.80	28.43	40.40	35.70	21.73	26.60	31.17	37.70	32.20	33.11	25.83	N/A	
CAM314	530608	181291	41.47	52.67	43.73	23.03		25.93	22.70	40.87	43.85	45.27	45.80	36.93	38.39	29.94	N/A	
CAM315	530755	181566	51.10	52.10	50.90	21.27	45.23	25.97	22.53	46.83	44.47	48.50	45.10	41.83	41.32	32.23	N/A	
CAM316	530573	181653	52.17		32.53	25.00	30.97		41.70	28.87	33.13	34.20	37.77	31.90	34.82	27.16	N/A	
CAM317	530743	181719	44.40	35.10	26.13	34.73	25.07	30.17	27.93	21.73	26.23	28.97		33.43	30.35	23.68	N/A	
CAM318	530845	181904	37.03	54.73	45.03	25.80	43.10	44.03	38.93	42.43	48.10	44.80	50.03	43.90	43.16	33.67	N/A	
CAM319	530529	182013	56.85	32.60	28.43		27.77		23.80			33.10	34.90		33.92	23.27	N/A	
CAM320	531321	182050	42.50	46.53	35.50	38.30	34.63	33.97	29.87	33.10	40.73	43.30	48.20	43.10	39.14	30.53	N/A	
CAM321	531223	182034	46.80	46.20		26.15	32.67	35.40		34.80	42.83	43.40	45.50	44.30	39.81	31.05	N/A	
CAM322	531160	182039	39.60	41.07	34.80	21.63	30.73	32.50	28.07	28.90	31.00	39.17	39.63	39.13	33.85	26.41	N/A	
CAM323	531012	181982	52.97	55.70	39.47	18.63	46.70	50.47	42.67	42.60	49.73	47.13	49.43	40.67	44.68	34.85	N/A	
CAM324	531092	182097	46.23	54.40		25.03	23.67	24.87	23.77	42.10	40.87	32.00	32.17	30.60	34.15	26.64	N/A	
CAM325	531123	182188	40.10	39.03	29.20		28.43	29.07	26.33	26.80	34.63	38.03	39.13	33.83	33.15	25.85	N/A	
CAM326	529042	183678		59.97		28.05	39.95	39.45	40.00	35.97	43.17	44.47	35.13	39.10	40.53	31.61	N/A	
CAM327	529011	184402		32.10	23.73	23.17	21.33	20.20	22.20	19.50	21.83	31.77	31.75	30.37	25.27	19.71	N/A	
CAM328	528379	183669		41.43	23.47	23.60	29.23	28.30	29.15	21.50	31.93	37.67	43.30	33.85	31.22	24.35	N/A	
CAM329	529231	183805		37.40	24.55	22.70		22.33	20.63	21.50	22.60	27.33	29.70	25.05	25.38	19.80	N/A	
CAM350	528998	182949			18.83		16.70	14.60	14.90	15.30	19.07	21.70		23.37	18.06	14.67	N/A	
CAM351	528945	182714			21.00	26.07	18.67	17.20	17.87	17.85	22.30	28.23	28.43	23.97	22.16	17.28	N/A	
CAM352	529081	182442			26.30	18.23	25.55	21.20	21.43	24.17	30.47	34.27	35.47	32.00	26.91	20.99	N/A	
CAM353	528836	528836			39.00	31.35	34.93	42.20	42.73	38.87	45.33	42.27	44.23	37.43	39.84	31.07	N/A	
CAM354	529207	182326			27.80	33.35	22.85	20.87	19.70		40.57	31.93	31.55	33.93	29.17	22.75	N/A	
CAM355	529224	182288			35.65	28.13	37.07	42.10	40.57	43.30	36.70	41.37	44.93	34.90	38.47	30.01	N/A	
CAM356	529303	182367			26.40	29.40	40.20	38.73	33.63	35.97	41.57	36.53	43.73	34.73	36.09	28.15	N/A	
CAM357	529308	182328			30.70	35.77	35.70	36.60	32.43				51.67		37.14	28.92	N/A	
CAM358	529760	182677			29.47	28.20	43.20	38.37			35.10	34.50	47.57	47.00	37.93	28.68	N/A	
CAM359	530224	182910				23.40	27.30				55.60	53.60	58.77	56.23	45.82	33.31	N/A	
CAM360	529749	182606			28.97	18.90	40.87	39.57	35.35	42.50	41.23	42.07	29.07	36.77	35.53	27.71	N/A	

CAM361	529617	182413			22.30	25.17	30.10	27.27	23.95	24.73	30.97	34.53	39.30	24.70	28.30	22.08	N/A	
CAM362	529646	182536			31.23	19.30		47.20	43.87	44.87	48.33	45.85	50.50		41.39	32.25	N/A	
CAM363	529070	182624			21.77	21.20	21.17	18.10	18.23	18.07	23.70	29.00	30.90	25.43	22.76	17.75	N/A	
CAM364	529455	183015			22.77	21.55	25.75	23.77	24.45	22.87	28.70	31.80	37.85	28.00	26.75	20.87	N/A	
CAM365	530331	183085			32.17	42.70	43.53		37.25		43.00		37.75	45.60	40.29	29.96	N/A	
CAM372	527452	185471								24.00	31.27	35.67	39.87	30.53	32.27	22.62	N/A	
CAM373	527682	185387								27.80	34.97	38.03	36.93	24.53	32.45	22.74	N/A	
CAM374	527612	185306								15.67	20.00	20.80	25.03	24.47	21.19	14.85	N/A	
CAM375	527558	185196								16.07	20.20	22.30	25.83	24.50	21.78	15.27	N/A	
CAM376	527773	185026								18.00	23.00	27.13	27.15	26.95	24.45	17.13	N/A	
CAM377	527739	184788								18.63	21.40	29.77	29.60	30.83	26.05	18.25	N/A	

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

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

☐ Local bias adjustment factor used.

☒ National bias adjustment factor used.

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

☐ London Borough of Camden 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 A for details on bias adjustment and annualisation.

Appendix C Map(s) of Monitoring Locations and AQMAs

Figure D. Map of Non-Automatic Monitoring Sites

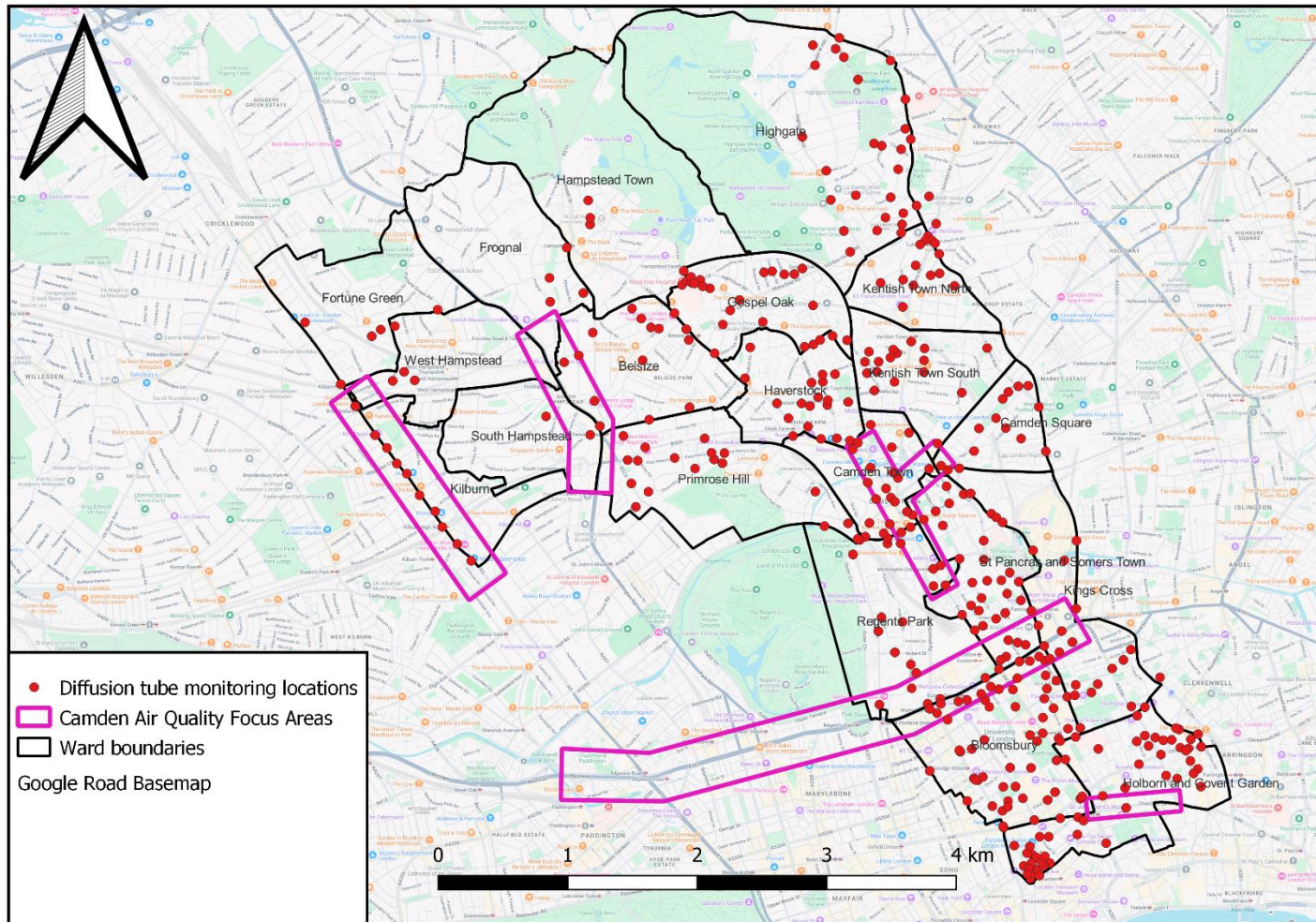


Figure E. Map of Automatic Monitoring Sites in Camden

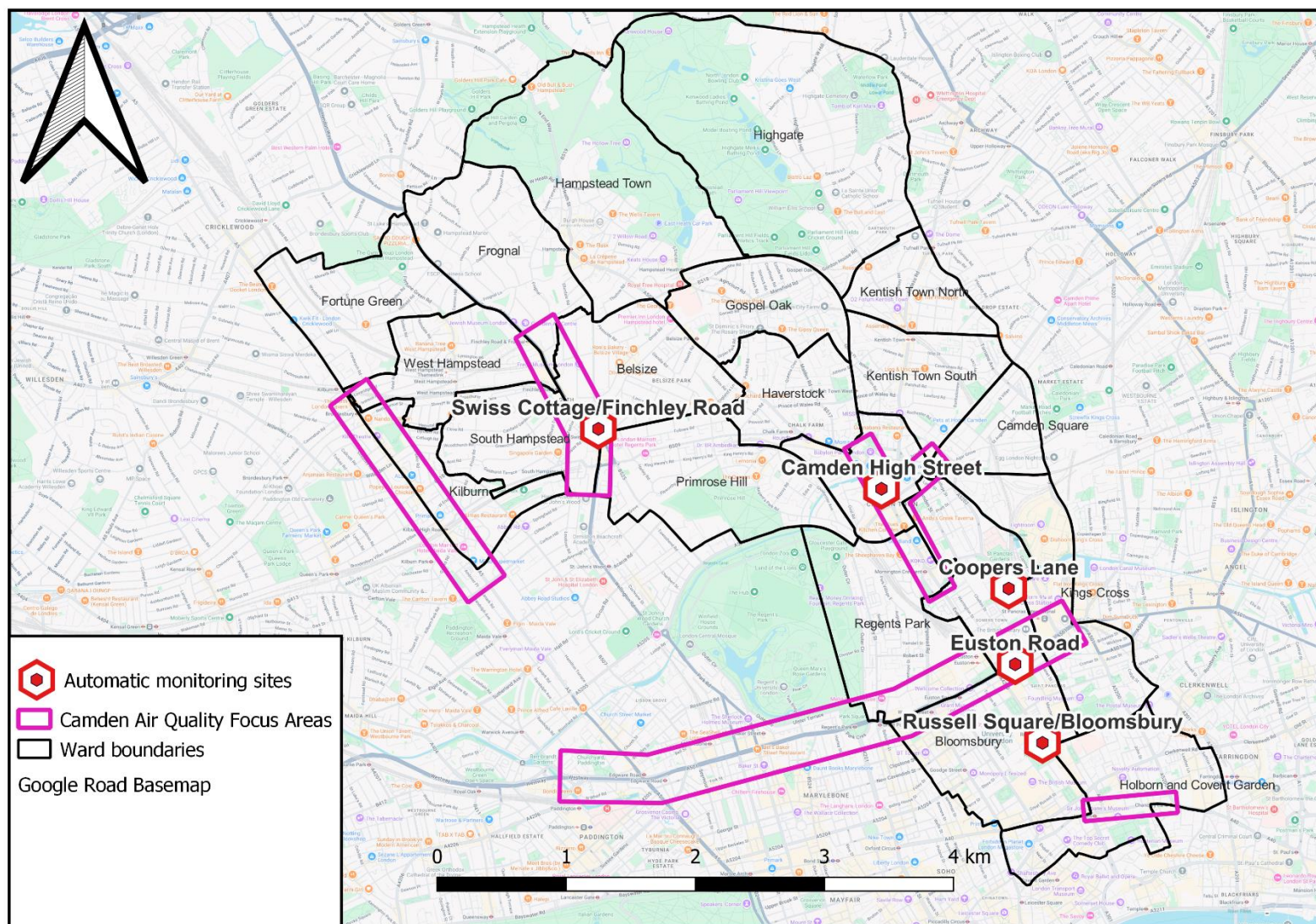
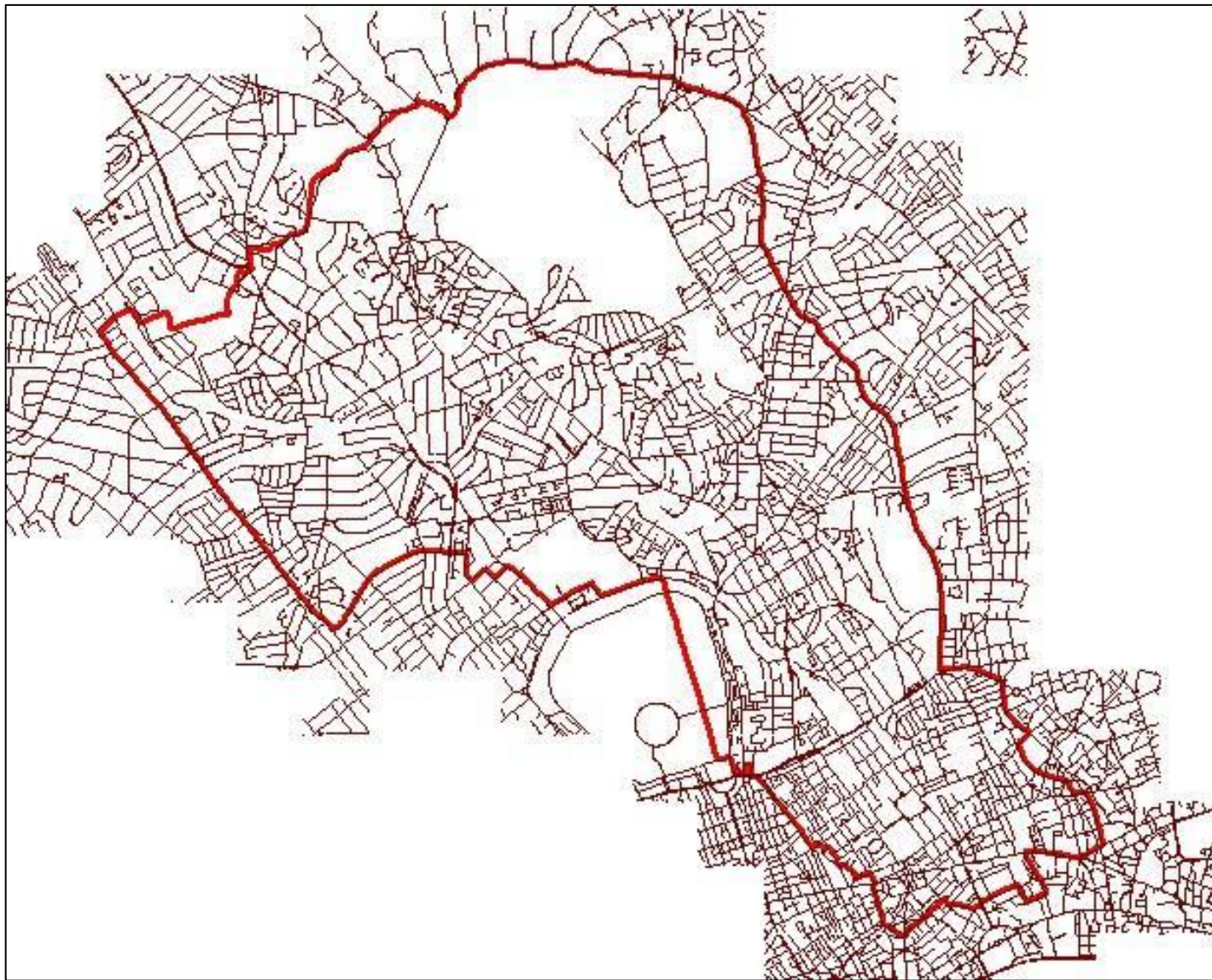


Figure C. Map of the Camden AQMA



City of London Corporation Air Quality Annual Status Report for 2024

Date of publication: May 2025



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

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

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Abbreviations

Abbreviation	Description
AMCT	Annual Mean Concentration Target
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQG	Air Quality Guideline
AQP	Air Quality Positive
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
DTDPT	Diffusion Tube Data Processing Tool
EA	Environment Agency
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
PLA	Port of London Authority
PM ₁₀	Particulate matter less than 10 micron in diameter
PM _{2.5}	Particulate matter less than 2.5 micron in diameter
SPD	Supplementary Planning Document
SPG	Supplementary Planning Guidance
TEB	Transport Emissions Benchmark
TfL	Transport for London
WHO	World Health Organisation

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?	Monitoring Technique	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Inlet Height (m)
CT2	Farringdon Street	Roadside	531623	181238	PM _{2.5}	Yes	BAM	N/A	2.5m	2m
CT3	The Aldgate School	Urban Background	533484	181190	NO ₂ , PM ₁₀ PM _{2.5}	Yes	Chemiluminescent and BAM	0m	N/A	1.5m
CT4	Beech Street	Roadside	532167	181857	PM ₁₀	Yes	BAM	10m	3m	3m
CT4 ⁽³⁾	Beech Street	Roadside	532176	181862	NO ₂	Yes	Chemiluminescent	0m	1.5m	2m
CT9	Guildhall	Urban Background	532471	181424	O ₃	Yes	UV Absorption	N/A	N/A	25m
CTA	Bell Wharf Lane	Roadside	532495	180791	NO ₂ , PM ₁₀	Yes	Chemiluminescent and BAM	0m (NO ₂) N/A (PM ₁₀)	10.5m	1.5m

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

(3) Listed as CT4a within the Automatic Data Entry System to allow differentiation between pollutants monitored at CT4.

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

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
CL5	St. Bartholomew's Hospital Courtyard	Urban Background	531901	181571	NO ₂	Yes	0m	N/A	No	1.5m
CL38	St. Andrew's Church, Queen Victoria Street	Roadside	531851	180962	NO ₂	Yes	N/A	2m	No	2.75m
CL39	St. Dunstan's Church, Fleet Street	Roadside	531235	181155	NO ₂	Yes	N/A	2m	No	1.5m
CL40	Guinness Trust Estate, Mansell Street	Roadside	533794	181026	NO ₂	Yes	0m	5.5m	No	2m
CL55	Speed House, Barbican Centre	Urban Background	532482	181799	NO ₂	Yes	4.5m	N/A	No	10m

Notes (applicable to Tables C-G):

(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 Non-Automatic Monitoring Sites for 2024: Bank Area

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
Bank 1	Cannon Street	Kerbside	532641	180914	NO ₂	Yes	N/A	0.3m	No	2m
Bank 2a ⁽³⁾	Queen Victoria Street	Kerbside	532591	181073	NO ₂	Yes	N/A	1m	No	2m
Bank 3	King Street	Kerbside	532465	181171	NO ₂	Yes	N/A	0.5m	No	2m
Bank 5	Magistrates Court	Roadside	532647	181092	NO ₂	Yes	15m	3.7m	No	2m
Bank 6	King William Street	Kerbside	532791	180986	NO ₂	Yes	N/A	0.5m	No	2m
Bank 8	Lombard Street	Kerbside	532853	181019	NO ₂	Yes	N/A	1m	No	2m
Bank 11	Cornhill-Royal Exchange	Kerbside	532785	181119	NO ₂	Yes	N/A	0.5m	No	2.2m
Bank 12	Threadneedle Street	Kerbside	532804	181164	NO ₂	Yes	N/A	0.7m	No	2.2m
Bank 13	31 Old Broad Street	Kerbside	533036	181376	NO ₂	Yes	N/A	1m	No	2m
Bank 14	Wormwood Street	Kerbside	533077	181448	NO ₂	Yes	N/A	0.5m	No	2m
Bank 15	3 London Wall	Kerbside	532915	181513	NO ₂	Yes	N/A	0.5m	No	2m
Bank 16	81 London Wall	Kerbside	532670	181555	NO ₂	Yes	2m	0.75m	No	2m
Bank 17	55 Moorgate	Roadside	532684	181442	NO ₂	Yes	N/A	2m	No	2m
Bank 18	85 Gresham Street	Kerbside	532503	181304	NO ₂	Yes	N/A	0.5m	No	2m
Bank 19	Lothbury	Roadside	532705	181268	NO ₂	Yes	N/A	2.2m	No	2m
Bank 20a ⁽⁴⁾	Princes Street	Kerbside	532682	181196	NO ₂	Yes	N/A	1m	No	2.2m
Bank 22	Gracechurch Street	Kerbside	533010	181058	NO ₂	Yes	N/A	1m	No	2m

Notes:

(3) Monitoring location Bank 2 moved to the opposite side of Queen Victoria Street at beginning of 2023 due to a lamppost being removed, renamed 2a.

(4) Monitoring location Bank 20 moved to the opposite side of Princes Street at beginning of 2024 due to a lamppost being removed, renamed 20a.

Table E. Details of Non-Automatic Monitoring Sites for 2024: Transport Strategy Diffusion Tube Sites

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
T2	Byward Street	Roadside	533294	180688	NO ₂	Y	6.5m	3.5m	No	2m
T3	Seething Lane	Roadside	533385	180722	NO ₂	Y	N/A	3.2m	No	2m
T4	Crosswall	Kerbside	533513	180941	NO ₂	Y	N/A	1m	No	2m
T5	Minories	Kerbside	533600	181165	NO ₂	Y	N/A	0.5m	No	2m
T6	Stoney Lane	Roadside	533549	181345	NO ₂	Y	12m	2.5m	No	2m
T7	Heneage Lane	Urban Centre	533418	181257	NO ₂	Y	N/A	12m	No	2m
T10	St Mary Axe	Kerbside	533239	181152	NO ₂	Y	N/A	1m	No	2m
T13	Blackfriars Bridge	Kerbside	531644	180857	NO ₂	Y	N/A	0.5m	No	2m
T14	Victoria Embankment	Kerbside	531197	180826	NO ₂	Y	N/A	0.5m	No	2m
T15a ⁽⁵⁾	Fleet Street	Kerbside	531422	181160	NO ₂	Y	N/A	8m	No	1.9m
T16	Ludgate Hill	Kerbside	531769	181167	NO ₂	Y	N/A	0.5m	No	2m
T17	Museum of London	Kerbside	532251	181571	NO ₂	Y	N/A	0.5m	No	2m
T18	London Wall	Kerbside	532240	181559	NO ₂	Y	N/A	0.5m	No	2m
T20	The Fable	Kerbside	531592	181563	NO ₂	Y	N/A	0.5m	No	2m
T21	North Old Bailey	Kerbside	531804	181395	NO ₂	Y	N/A	0.5m	No	2m
T23	The Gherkin	Roadside	533263	181248	NO ₂	Y	N/A	2m	No	2m

Notes:

(5) Monitoring location T15 moved further back from Fleet Street in 2024 due to a lamppost being removed, renamed T15a.

Table F. Details of Non-Automatic Monitoring Sites for 2024: City Area

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
TAS 1/2/3	The Aldgate School NO _x Analyser	Urban Background	533484	181190	NO ₂	Yes	0m	N/A	Yes	1.5m
BWL 1/2/3	Bell Wharf Lane NO _x Analyser	Roadside	532495	180791	NO ₂	Yes	N/A	10.5m	Yes	1.5m
WW	Walbrook Wharf	Roadside	532540	180786	NO ₂	Yes	N/A	2.5m	No	3m
PLA5	Southwark Bridge	Urban Centre	532412	180709	NO ₂	Yes	N/A	N/A	No	2m
LS	Liverpool Street	Urban Centre	533147	181574	NO ₂	Yes	N/A	0.5m	No	2m
FA	Fenchurch Avenue	Urban Centre	533236	181040	NO ₂	Yes	N/A	1.1m	No	2m
FL	Fetter Lane	Roadside	531276	181261	NO ₂	Yes	N/A	1.5m	No	2m
OS3	St Pauls	Urban Centre	532132	181108	NO ₂	Yes	15m	35m	No	2m
OS6	Finsbury Circus	Roadside	532939	181609	NO ₂	Yes	N/A	0.5m	No	2m
OS7	Christchurch Greyfriars Church Garden	Urban Background	531974	181382	NO ₂	Yes	N/A	38m	No	2m
GY	Goodmans Yard	Roadside	533703	180913	NO ₂	Yes	N/A	6m	No	2m
CT	Citigen	Roadside	531634	181692	NO ₂	Yes	N/A	2m	No	2m
N1	Hatching Dragons	Urban Background	532164	181641	NO ₂	Yes	0m	N/A	No	2m
N2	Bright Horizons	Urban Background	532210	181975	NO ₂	Yes	0m	1.5m	No	2.1m
SPS2	St Pauls School Front Railings	Roadside	532175	181150	NO ₂	Yes	9m	3.5m	No	2m
CLS2	Boys School Sports Access Ramp	Urban Background	532051	180900	NO ₂	Yes	0m	40m	No	2m
CHS1	Charterhouse Square School	Roadside	531988	181881	NO ₂	Yes	0m	3m	No	2m

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
CSG	Cheapside Sunken Garden	Roadside	532174	181214	NO ₂	Yes	N/A	10m	No	2m
TC	Temple Church Courtyard	Urban Background	531254	181044	NO ₂	Yes	N/A	N/A	No	2m
BG	Bishopsgate	Kerbside	533295	181622	NO ₂	Yes	N/A	0.9m	No	1.9m
MS	Middlesex Street	Kerbside	533539	181488	NO ₂	Yes	7m	0.5m	No	2m
HC	Holborn Circus	Kerbside	531413	181556	NO ₂	Yes	N/A	0.9m	No	1.9m
PLA7	Tower Millennium Pier	Urban Centre	533384	180517	NO ₂	Yes	N/A	N/A	No	2.2m
BS1	Aldersgate Street	Kerbside	532105	181967	NO ₂	Yes	25m	0.5m	No	2m
BS18	London Wall/ Moorgate	Kerbside	532706	181571	NO ₂	Yes	16m	1m	No	2m
BS20	Wood Street	Roadside	532412	181685	NO ₂	Yes	15m	2.2m	No	2m
BS21	Goswell Road	Kerbside	532101	182074	NO ₂	Yes	2m	0.5m	No	2.1m
LEN 1	Giltspur Street	Roadside	531872	181621	NO ₂	Yes	10m	5.5m	No	2m
LEN 3	Beech Street, Near Barbican Station	Roadside	532117	181840	NO ₂	Yes	17m	2.5m	No	2m
LEN 4	Aldersgate	Kerbside	532117	181714	NO ₂	Yes	N/A	0.5m	No	2m
LEN 6	Whitecross Street/Beech Street	Roadside	532443	181966	NO ₂	Yes	N/A	1.5m	No	2m
LEN 9	London Wall/ Brewers Hall Gardens	Kerbside	532435	181558	NO ₂	Yes	11m	0.5m	No	2m
LEN 15	Fann Street	Kerbside	532144	182013	NO ₂	Yes	20m	2m	No	2m

Table G. Details of Non-Automatic Monitoring Sites for 2024: St Martin's Le Grand Regeneration Project

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SM1	Wood Street	Kerbside	532312	181270	NO ₂	Yes	N/A	0.5m	No	1.95m
SM2	Cheapside East	Kerbside	532210	181217	NO ₂	Yes	N/A	0.9m	No	2.1m
SM3	Cheapside West	Kerbside	532154	181260	NO ₂	Yes	N/A	0.5m	No	2m
SM4	Cheapside/ Newgate Street	Kerbside	532095	181285	NO ₂	Yes	N/A	0.8m	No	2m
SM5	Newgate Street East	Kerbside	531980	181331	NO ₂	Yes	N/A	0.6m	No	2m
SM6	Newgate Street West	Kerbside	531898	181353	NO ₂	Yes	N/A	1m	No	2m
SM7	King Edward Street	Kerbside	532025	181371	NO ₂	Yes	N/A	0.9m	No	2m
SM8	Postman's Park West	Roadside	532041	181468	NO ₂	Yes	10m	4.7m	No	2m
SM9	Little Britain	Kerbside	532038	181534	NO ₂	Yes	N/A	0.7m	No	1.9m
SM10	Montague Street	Kerbside	532082	181578	NO ₂	Yes	N/A	0.8m	No	2.1m
SM11	Postman's Park East	Kerbside	532143	181492	NO ₂	Yes	N/A	0.5m	No	2m
SM12	St Martin's Le Grand North	Kerbside	532138	181425	NO ₂	Yes	N/A	0.5m	No	2m
SM13	St Martin's Le Grand South	Kerbside	532143	181371	NO ₂	Yes	N/A	0.7m	No	2m
SM14	St Martin's Le Grand/ Cheapside	Kerbside	532137	181316	NO ₂	Yes	N/A	0.7m	No	2m

1.2 Comparison of Monitoring Results with AQOs

Table H. 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
CT3	533484	181190	Urban Background	86.7	86.7	32	33	22	23	22.8	21.5	20.1
CT4	532176	181862	Roadside	99.6	99.6	<u>69</u>	<u>62</u>	29	31	40.6	36.1	36.5
CTA	532495	180791	Roadside	99.7	99.7	-	-	-	-	-	31.6	30.0

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**.

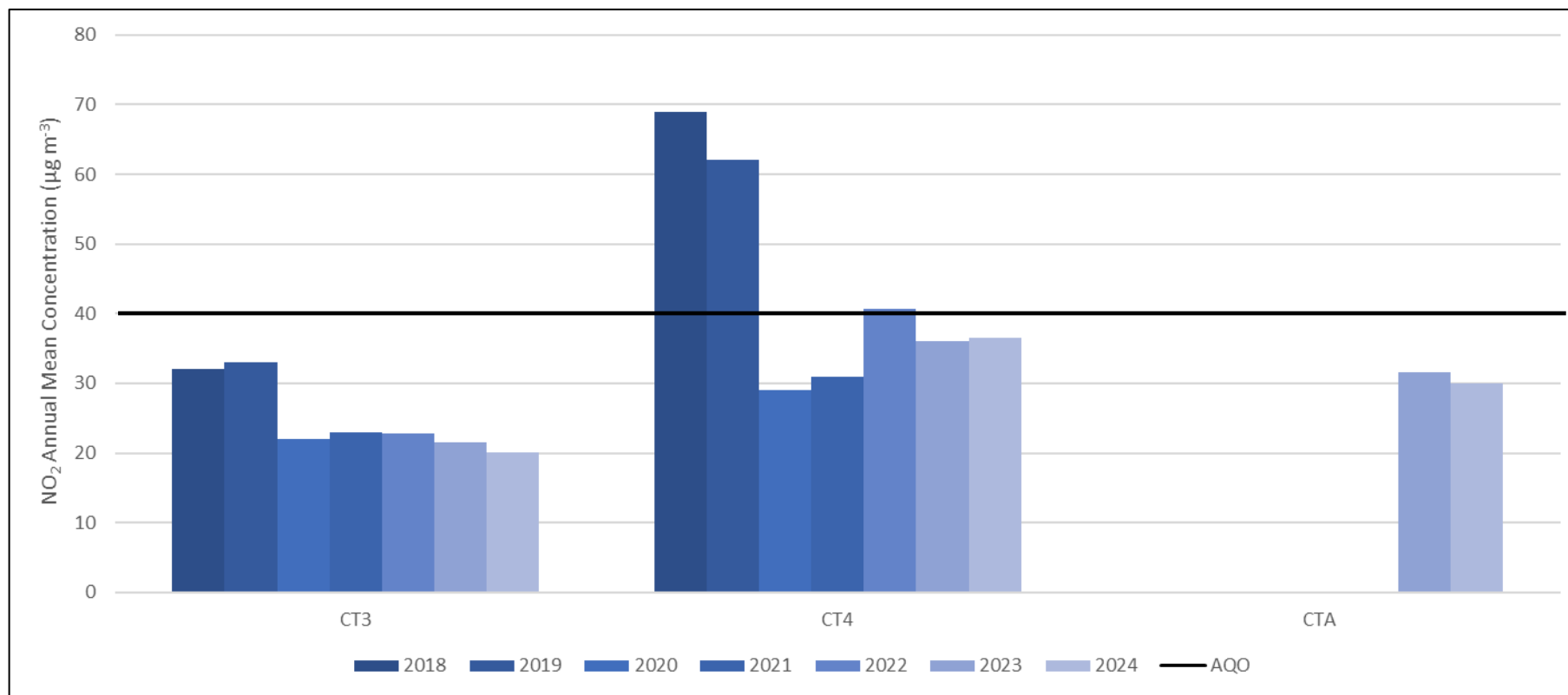
All means have been “annualised” in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

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%).

Figure A. Annual Mean NO₂ Monitoring Results: Automatic Monitoring Sites



All three automatic monitoring stations were compliant with the annual mean AQO in 2023. Concentrations have remained consistent at CT3 for a five-year period, and the second year of monitoring at CTA shows consistency from 2023 to 2024. CT4 has recorded the highest annual mean concentration across the three sites in each of the past seven years. The 2023 and 2024 concentrations at CT4 were below the annual mean AQO, showing a slight reduction from the non-compliant year of 2022.

Table I. Annual Mean NO₂ Monitoring Results: Long Term Diffusion Tube Sites

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
CL5	531901	181571	Urban Background	100.0	100.0	50	42	33	31	32.2	33.9	28.1
CL38	531851	180962	Roadside	100.0	100.0	50	41	28	28	30.0	27.5	27.7
CL39	531235	181155	Roadside	100.0	100.0	70	57	31	36	37.4	38.4	38.7
CL40	533794	181026	Roadside	100.0	100.0	46	39	33	27	27.0	26.0	27.2
CL55	532482	181799	Urban Background	90.6	90.6	31	28	19	19	19.5	18.9	19.3

Table J. Annual Mean NO₂ Monitoring Results: Bank Diffusion Tube Sites

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
Bank 1	532641	180914	Kerbside	83.0	83.0	50	40	38	37	38.0	38.1	42.1
Bank 2a	532591	181073	Kerbside	75.0	75.0	-	-	-	-	-	27.5	26.4
Bank 3	532465	181171	Kerbside	100.0	100.0	52	47	30	30	28.1	29.1	25.9

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2024 (%) ⁽²⁾	2018	2019	2020	2021	2022	2023	2024
Bank 5	532647	181092	Roadside	100.0	100.0	53	56	36	32	33.4	28.6	26.0
Bank 6	532791	180986	Kerbside	75.0	75.0	<u>61</u>	<u>61</u>	42	35	36.2	32.8	30.0
Bank 8	532853	181019	Kerbside	92.5	92.5	56	45	30	28	28.1	26.8	25.3
Bank 11	532785	181119	Kerbside	100.0	100.0	<u>62</u>	41	26	27	28.7	26.1	26.4
Bank 12	532804	181164	Kerbside	32.1	32.1	<u>62</u>	42	31	28	28.7	25.9	22.6
Bank 13	533036	181376	Kerbside	75.0	75.0	53	45	28	26	26.8	25.4	25.8
Bank 14	533077	181448	Kerbside	92.5	92.5	57	49	32	32	35.5	31.6	29.4
Bank 15	532915	181513	Kerbside	58.5	58.5	<u>65</u>	53	33	38	37.1	37.7	30.6
Bank 16	532670	181555	Kerbside	81.1	81.1	<u>62</u>	53	36	41	39.9	37.0	31.8
Bank 17	532684	181442	Roadside	90.6	90.6	<u>66</u>	52	36	36	34.4	33.5	32.1
Bank 18	532503	181304	Kerbside	92.5	92.5	52	46	30	30	27.1	29.3	28.6
Bank 19	532705	181268	Roadside	83.0	83.0	45	39	24	24	23.5	25.8	22.4
Bank 20a	532682	181196	Kerbside	90.6	90.6	-	-	-	-	-	-	30.6
Bank 22	533010	181058	Kerbside	34.0	34.0	<u>62</u>	51	33	36	41.8	34.4	41.1

Table K. Annual Mean NO₂ Monitoring Results: Transport Strategy Diffusion Tube Sites

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
T2	533294	180688	Roadside	100.0	100.0	<u>67</u>	51	33	40	38.3	36.8	34.9
T3	533385	180722	Roadside	49.1	49.1	<u>71</u>	57	41	46	45.1	46.1	39.5
T4	533513	180941	Kerbside	75.0	75.0	50	44	26	27	30.0	27.3	28.8
T5	533600	181165	Kerbside	100.0	100.0	<u>62</u>	49	36	37	39.5	37.6	38.1
T6	533549	181345	Roadside	84.9	84.9	40	39	25	25	27.4	23.8	26.4
T7	533418	181257	Urban Centre	83.0	83.0	42	33	25	25	26.0	24.1	23.6
T10	533239	181152	Kerbside	90.6	90.6	50	42	24	25	23.7	24.7	23.9
T13	531644	180857	Kerbside	100.0	100.0	<u>62</u>	56	41	38	37.3	38.1	36.2
T14	531197	180826	Kerbside	100.0	100.0	<u>68</u>	57	36	38	39.9	38.2	35.6
T15a	531422	181160	Kerbside	58.5	58.5	-	-	-	-	-	-	33.3
T16	531769	181167	Kerbside	83.0	83.0	<u>61</u>	50	31	31	34.2	31.1	31.6
T17	532251	181571	Kerbside	92.5	92.5	<u>66</u>	55	36	35	36.7	38.1	35.7
T18	532240	181559	Kerbside	41.5	41.5	<u>65</u>	52	36	36	36.8	32.0	30.6

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
T20	531592	181563	Kerbside	100.0	100.0	58	51	35	30	35.7	32.8	30.8
T21	531804	181395	Kerbside	92.5	92.5	<u>73</u>	56	36	43	44.4	42.3	41.6
T23	533263	181248	Roadside	64.2	64.2	-	-	-	27	26.0	22.1	24.6

Table L. Annual Mean NO₂ Monitoring Results: City Area Diffusion Tube Sites

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
TAS 1/2/3 ₍₃₎	533484	181190	Urban Background	100.0	100.0	39	33	22	24	22.9	22.5	24.0
BWL 1/2/3 ₍₃₎	532495	180791	Roadside	100.0	100.0						29.8	29.7
WW ⁽⁴⁾	532540	180786	Roadside	92.5	92.5	<u>77</u>	<u>64</u>	41	44	49.8	48.9	46.2
PLA5	532412	180709	Urban Centre	83.0	83.0	41	35	29	31	33.9	31.4	29.4
LS	533147	181574	Urban Centre	92.5	92.5	<u>71</u>	52	35	35	30.9	34.8	32.1

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
FA	533236	181040	Urban Centre	83.0	83.0	36	35	26	25	24.4	20.6	22.7
FL	531276	181261	Roadside	90.6	90.6	56	44	29	30	31.3	28.2	30.9
OS3	532132	181108	Urban Centre	66.0	66.0	41	39	24	24	26.3	25.9	27.7
OS6	532939	181609	Roadside	100.0	100.0	-	-	-	25	24.9	23.3	22.8
OS7	531974	181382	Urban Background	100.0	100.0	-	-	-	27	27.2	26.9	26.2
GY	533703	180913	Roadside	75.0	75.0	-	44	25	28	28.3	27.7	28.2
CT	531634	181692	Roadside	100.0	100.0	-	-	30	30	30.0	31.6	32.3
N1	532164	181641	Urban Background	100.0	100.0	-	-	22	22	22.8	23.1	21.6
N2	532210	181975	Urban Background	92.5	92.5	-	-	24	21	20.6	19.8	19.9
SPS2	532175	181150	Roadside	100.0	100.0	-	42	31	28	30.3	31.6	32.7
CLS2	532051	180900	Urban Background	100.0	100.0	-	-	21	23	24.0	21.4	21.0
CHS1	531988	181881	Roadside	100.0	100.0	-	-	-	25	24.7	23.4	22.4

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
CSG	532174	181214	Roadside	0	0	-	-	-	-	27.4	28.7	-
TC	531254	181044	Urban Background	81.1	81.1	-	-	-	-	21.4	22.8	20.6
BG	533295	181622	Kerbside	92.5	92.5	-	-	-	-	-	-	24.7
MS	533539	181488	Kerbside	75.0	75.0	-	-	-	-	-	-	24.0
HC	531413	181556	Kerbside	100.0	100.0	-	-	-	-	-	-	33.9
PLA7	533384	180517	Urban Centre	50.9	50.9	-	-	-	-	-	-	26.2
BS1	532105	181967	Kerbside	66.0	66.0	-	47	37	39	43.5	37.0	37.4
BS18	532706	181571	Kerbside	67.9	67.9	-	52	34	37	36.1	34.3	31.9
BS20	532412	181685	Roadside	92.5	92.5	-	29	23	24	20.7	22.0	20.2
BS21	532101	182074	Kerbside	100.0	100.0	-	-	31	36	34.7	34.2	33.8
LEN 1	531872	181621	Roadside	100.0	100.0	43	38	28	27	28.5	28.2	27.5
LEN 3	532117	181840	Roadside	83.0	83.0	62	50	33	30	36.7	36.8	34.7
LEN 4	532117	181714	Kerbside	92.5	92.5	57	47	41	35	43.0	35.3	33.8
LEN 6	532443	181966	Roadside	100.0	100.0	42	40	23	25	26.2	26.0	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
LEN 9	532435	181558	Kerbside	41.5	41.5	49	42	29	36	31.7	33.0	28.8
LEN 15	532144	182013	Kerbside	90.6	90.6	41	36	23	23	24.6	22.9	21.5

Table M. Annual Mean NO₂ Monitoring Results: St Martin's Le Grand Regeneration Project Diffusion Tubes

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
SM1	532312	181270	Kerbside	100.0	100.0	-	-	-	-	-	24.0	24.9
SM2	532210	181217	Kerbside	90.6	90.6	-	-	-	-	-	32.7	32.5
SM3	532154	181260	Kerbside	90.6	90.6	-	-	-	-	-	34.4	31.3
SM4	532095	181285	Kerbside	84.9	84.9	-	-	-	-	-	38.3	36.9
SM5	531980	181331	Kerbside	75.0	75.0	-	-	-	-	-	40.2	35.9
SM6	531898	181353	Kerbside	92.5	92.5	-	-	-	-	-	34.1	32.2
SM7	532025	181371	Kerbside	100.0	100.0	-	-	-	-	-	37.0	32.7
SM8	532041	181468	Roadside	81.1	81.1	-	-	-	-	-	32.5	28.6

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
SM9	532038	181534	Kerbside	64.2	64.2	-	-	-	-	-	34.2	30.7
SM10	532082	181578	Kerbside	90.6	90.6	-	-	-	-	-	39.8	34.8
SM11	532143	181492	Kerbside	90.6	90.6	-	-	-	-	-	39.7	38.5
SM12	532138	181425	Kerbside	100.0	100.0	-	-	-	-	-	42.4	39.0
SM13	532143	181371	Kerbside	90.6	90.6	-	-	-	-	-	38.8	39.2
SM14	532137	181316	Kerbside	75.0	75.0	-	-	-	-	-	38.1	37.3

☒ 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**.

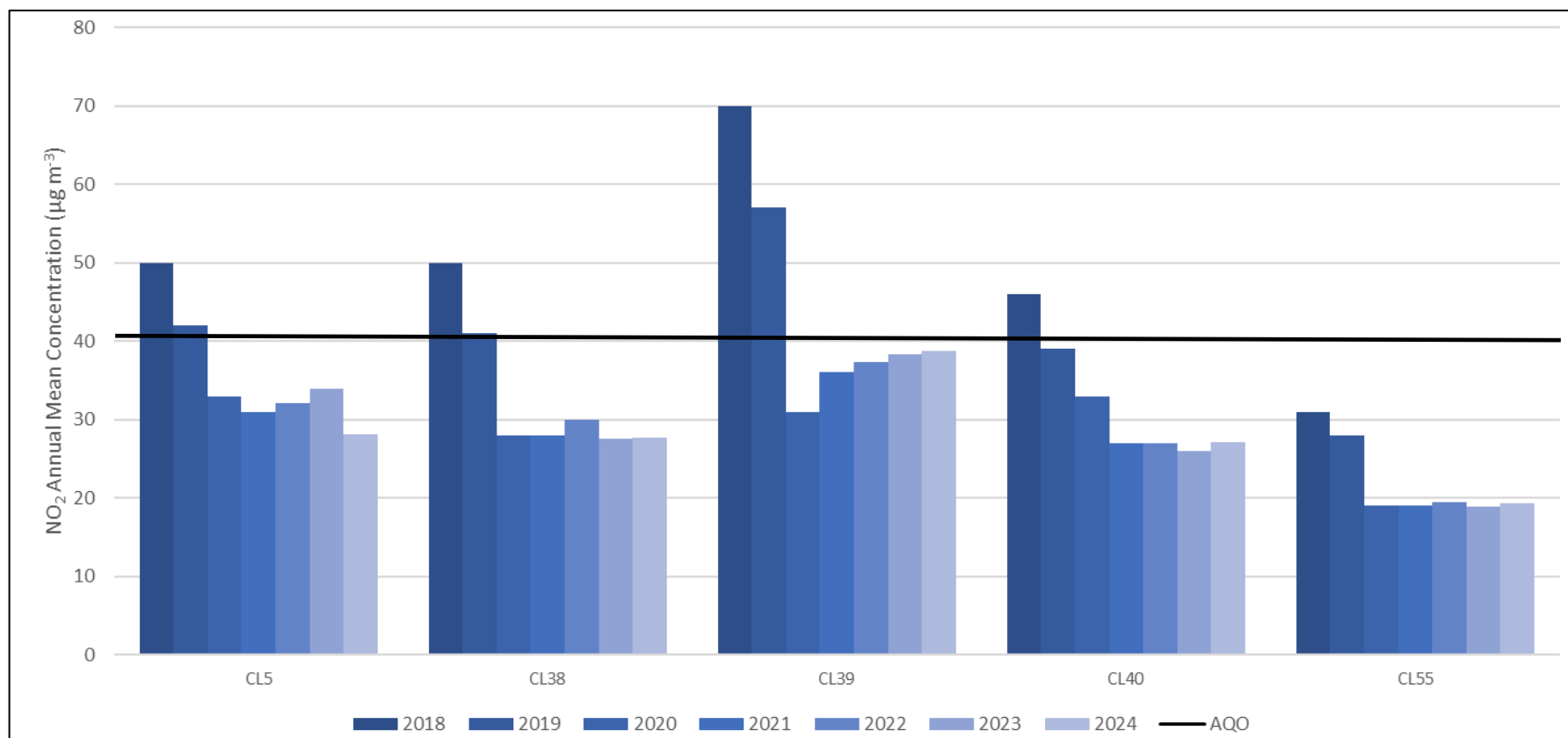
Means for diffusion tubes have been corrected for bias. All means have been “annualised” in accordance with LLAQM Technical Guidance if valid data capture for the calendar year is less than 75% and greater than 25%.

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.

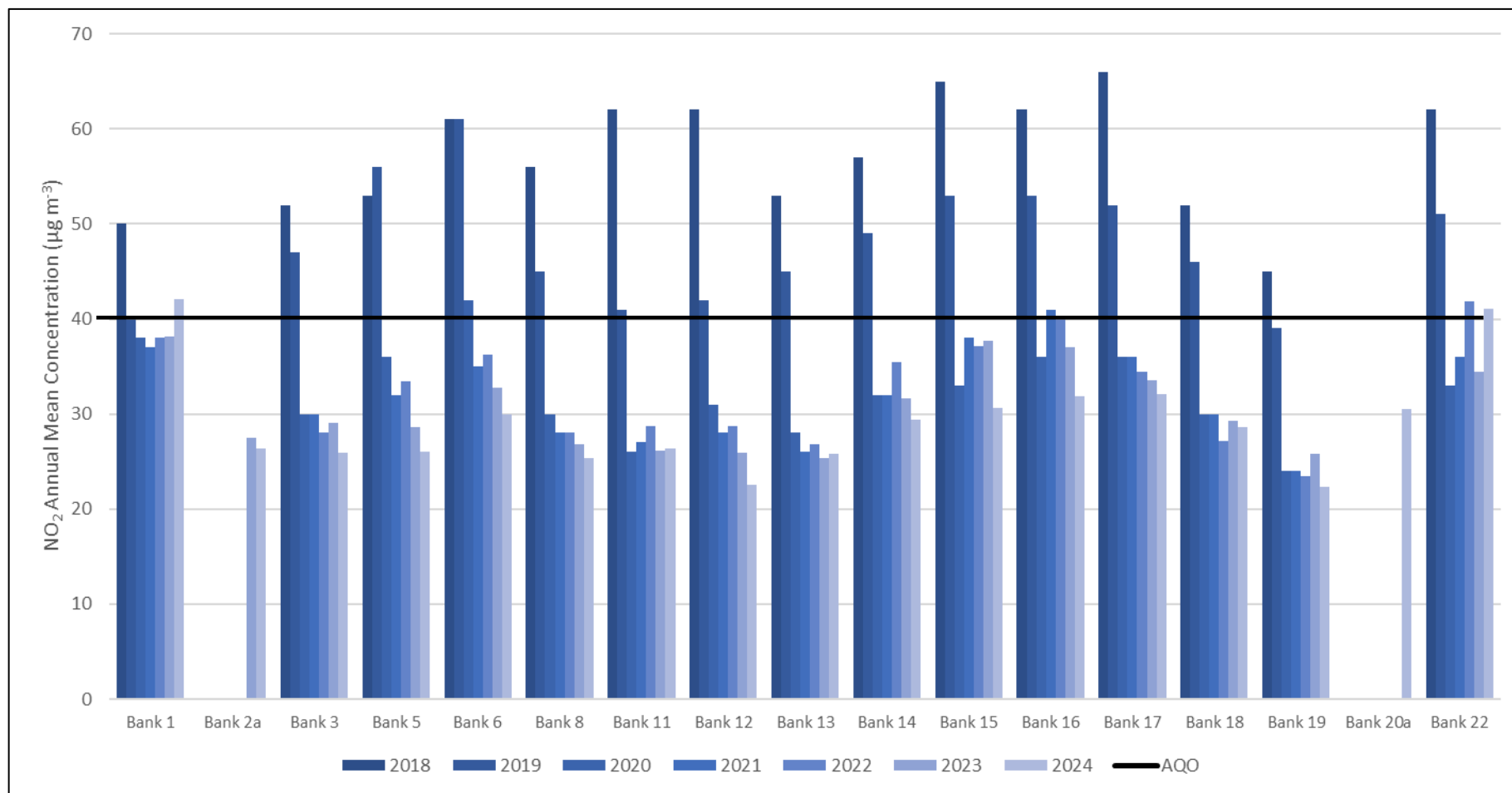
- (2) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).
- (3) TAS and BWL are sites of triplicate diffusion tubes co-located at CT3 and CTA. The results presented are an average of the triplicate tubes at each site.
- (4) Prior to 2023 WW was a triplicate co-location site. Since February 2023 only a single tube has been exposed per monitoring period.

Figure B. Annual Mean NO₂ Monitoring Results: Long Term Diffusion Tubes



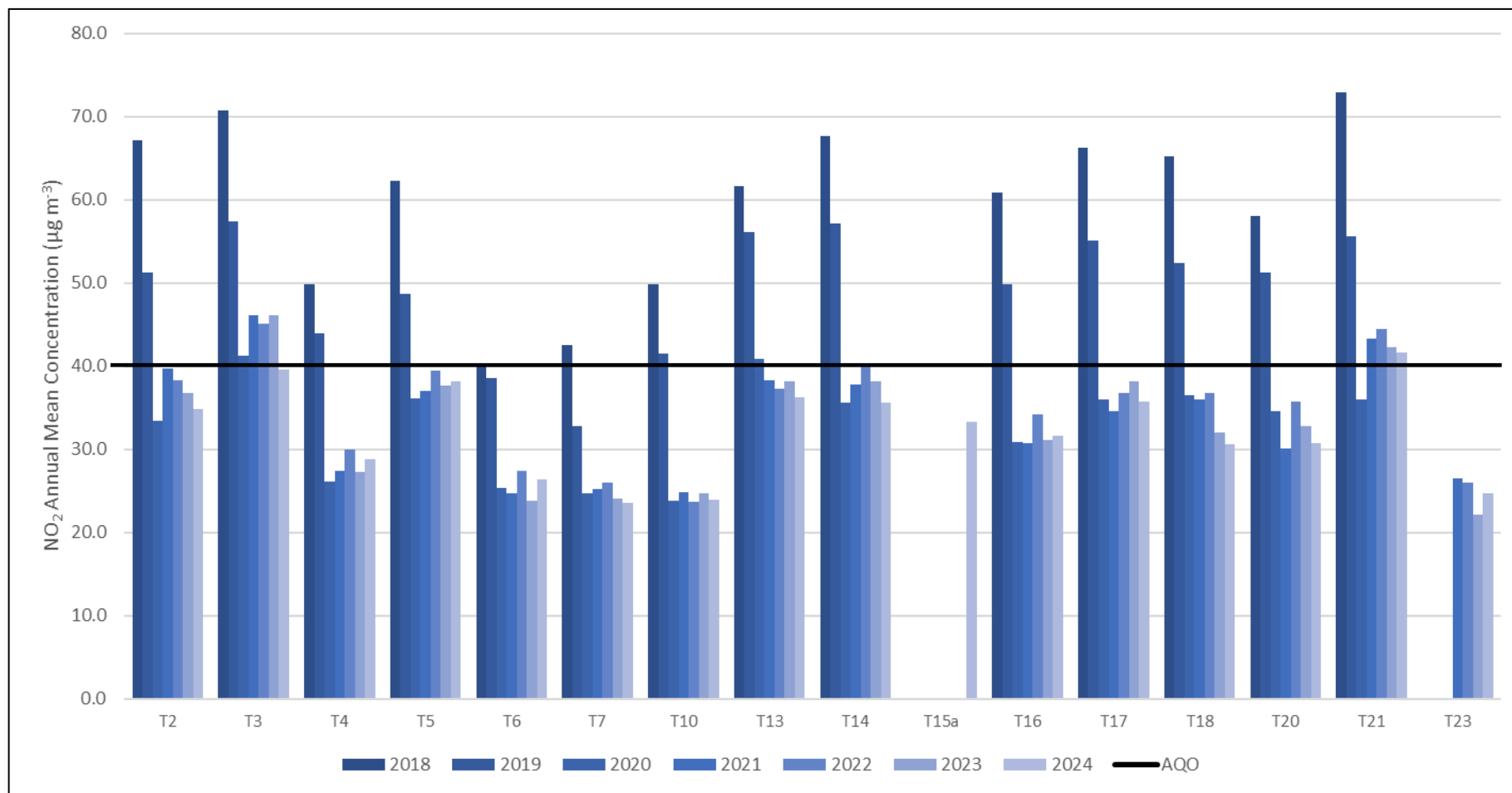
All long-term monitoring sites remain compliant with the annual mean AQO, with the last exceedances experienced in 2019. Whilst CL38, CL40 and CL55 have remained consistent for the past five years, CL5 experienced a reduction in 2024 and CL39 has experienced a gradual increase in annual mean concentrations since 2020.

Figure C. Annual Mean NO₂ Monitoring Results: Bank Area Diffusion Tubes



After all monitoring sites associated with the Bank Regeneration project achieved compliance with the annual mean AQO in 2023, two sites exceeded the AQO in 2024; Bank 1 and Bank 22. Both non-compliant sites have previously exceeded the annual mean AQO and are located on arterial routes that surround the Bank junction.

Figure D. Annual Mean NO₂ Monitoring Results: Transport Strategy Diffusion Tubes



NO₂ diffusion tubes were deployed in 2018 to measure the impacts of the City of London Corporation 2019 Transport Strategy, now revised to 2024. All sites are roadside locations, and in 2024 all but one site complied with the annual mean AQO. T3 complied for the first time since its inception in 2024, albeit by 0.5 µg m⁻³.

Figure E. Annual Mean NO₂ Monitoring Results: City Area Diffusion Tubes 1

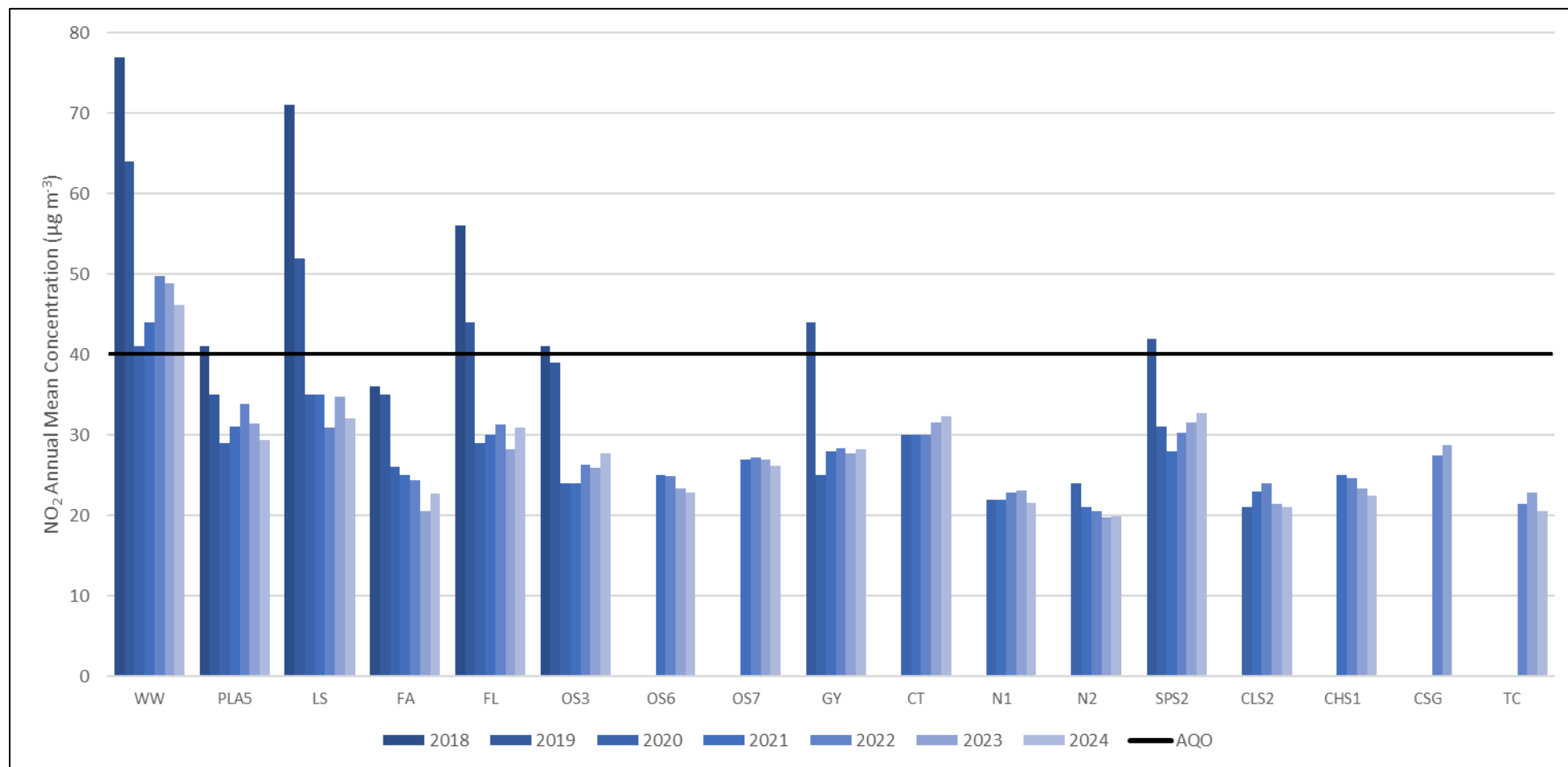
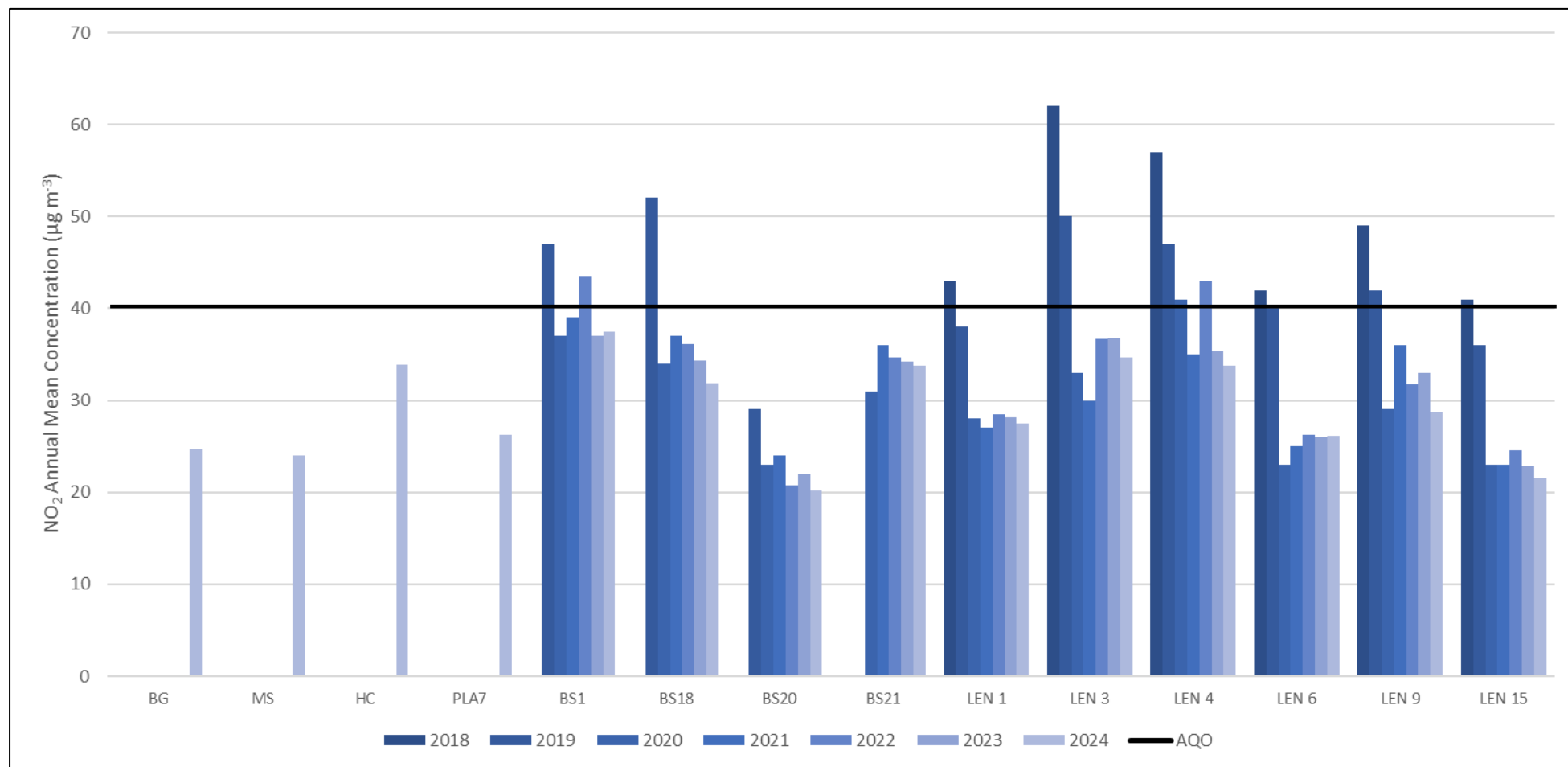
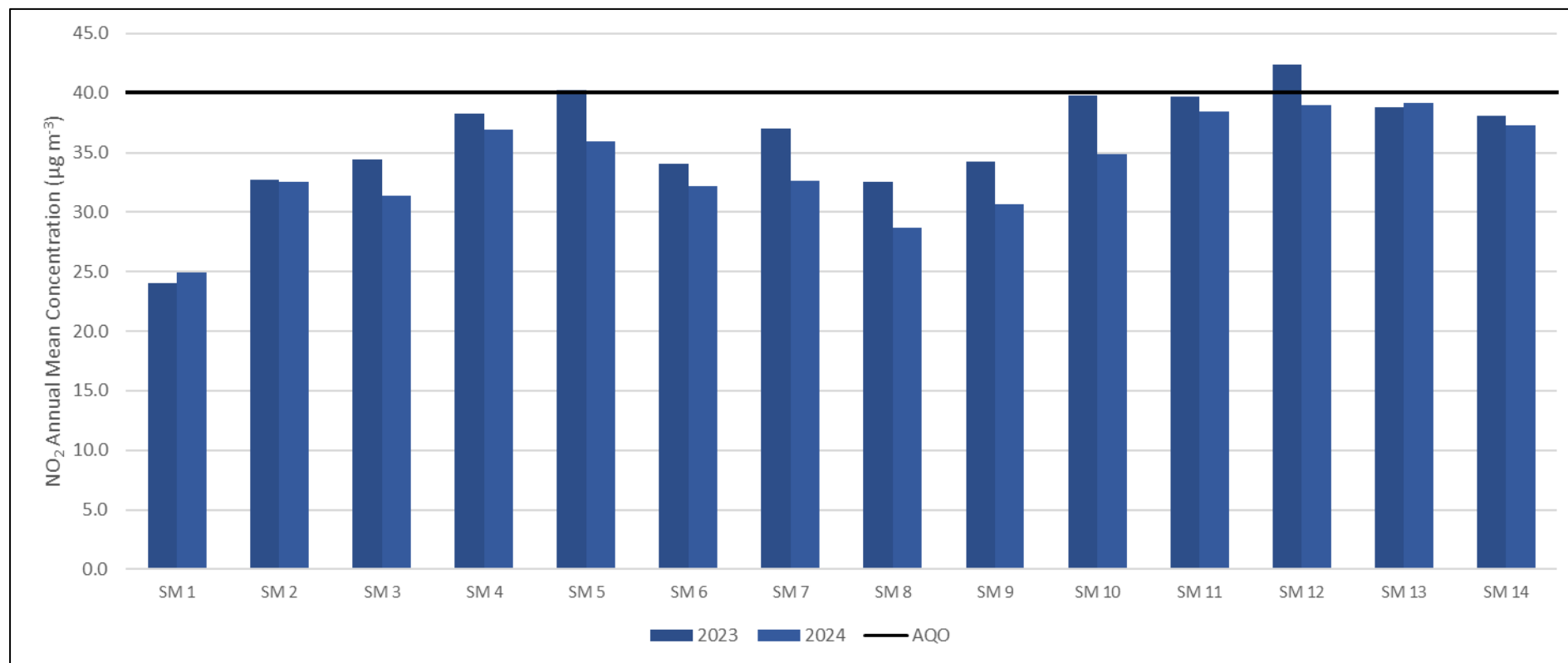


Figure F. Annual Mean NO₂ Monitoring Results: City Area Diffusion Tubes 2



WW continues to record the highest NO₂ annual mean concentration within the Square Mile. 2024 was the lowest annual mean concentration recorded at the site, outside of Covid-19 impacted years of 2020 and 2021. However, at 46.2 µg m⁻³ it is still above the AQO. Four new monitoring locations were introduced in 2024, all of these complied with the annual mean AQO.

Figure G. Annual Mean NO₂ Monitoring Results: St Martin's Le Grand Diffusion Tubes



NO₂ diffusion tubes were deployed in 2023 at a number of locations close to St Martin's Le Grand to provide baseline concentration data for a large redevelopment project. All sites are either kerbside or roadside locations. Two sites exceeded the annual mean AQO in 2023, and all sites were compliant in 2024. The scale of monitoring was reduced at the start of 2025, with redevelopment works commencing in April 2025.

Table N. NO₂ Automatic Monitoring Results: Comparison with 1-hour Mean AQO, 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
CT3	533484	181190	Urban Background	86.7	86.7	0	0	0	0	0	0	0
CT4	532176	181862	Roadside	99.6	99.6	27	7	0	0	0	0	0
CTA	532495	180791	Roadside	99.7	99.7	-	-	-	-	-	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%)

2024 was the fifth consecutive year where no hourly NO₂ concentrations greater than 200 µg m⁻³ were recorded within the Square Mile. In addition, the 1-hour AQO has been complied with for six consecutive years. Due to the increasing length of time that the 1-hour NO₂ AQO has been achieved, and in accordance with LLAQM guidance of AQMA revocation based upon at least three years of robust monitoring data, GLA guidance was sought with regards to the 1-hour NO₂ designation of the City of London AQMA. At the current time the GLA have advised for all AQMA designations to remain in place.

Table O. 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
CT3	533484	181190	Urban Background	89.7	89.7	21	19	16	16	16.8	14.9	16.0
CT4	532167	181857	Roadside	99.1	99.1	24	22	18	15	17.3	15.2	15.4
CTA	532495	180791	Roadside	99.4	99.4	-	-	-	-	19.5	16.6	16.2

Notes

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

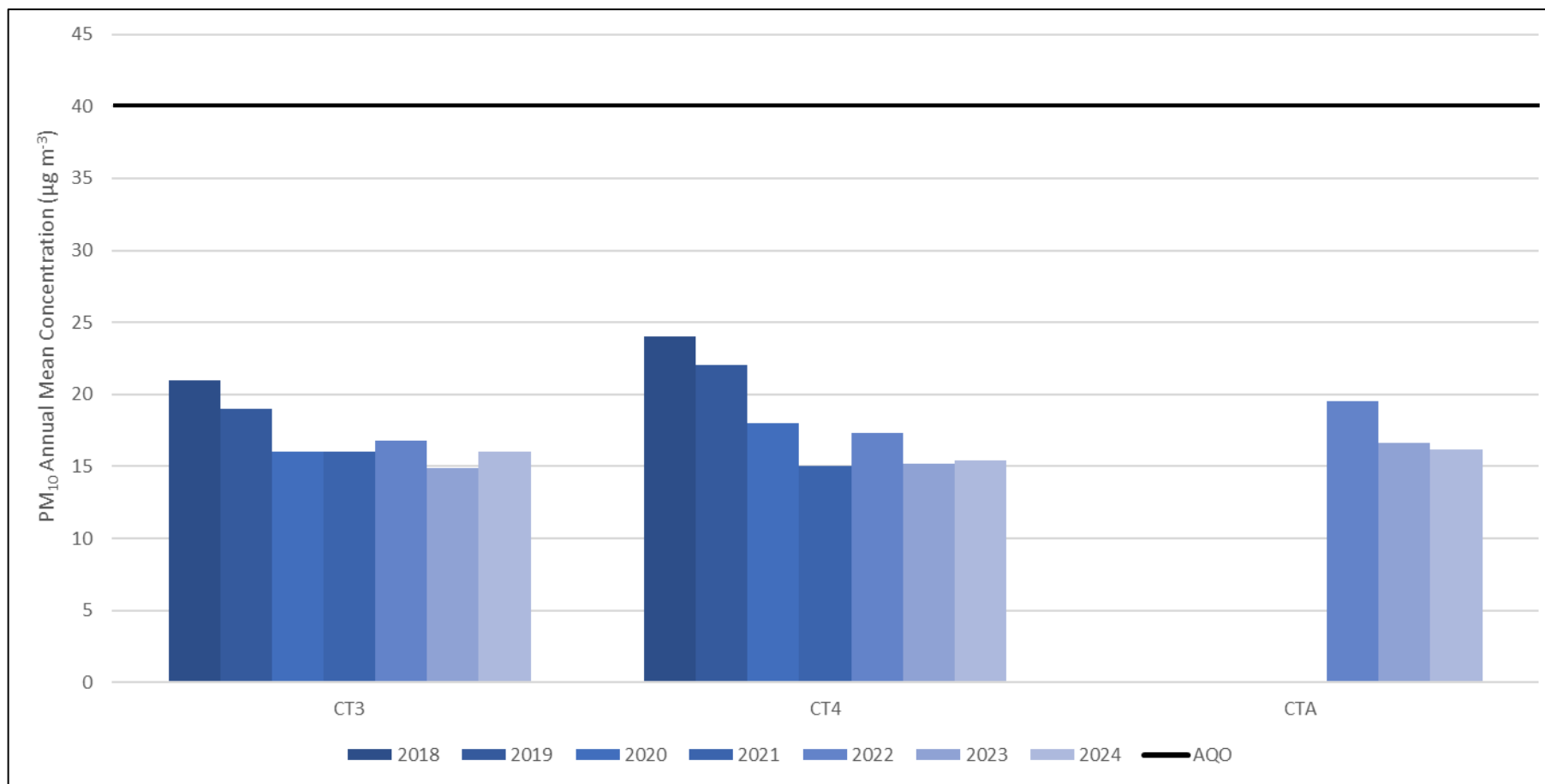
Exceedances of the PM₁₀ annual mean AQO of 40 µg m⁻³ are shown in **bold**.

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%).

Figure H. Annual Mean PM₁₀ Monitoring Results



All PM₁₀ monitoring sites continue to comply with the annual mean AQO. Concentrations at all sites between 2023 and 2024 are very similar, with each site close to achieving the 2021 WHO annual mean AQG.

Table P. PM₁₀ Automatic Monitoring Results: Comparison with 24-Hour Mean AQO, 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
CT3	533484	181190	Urban Background	89.7	89.7	3	7	1	1	3 (25.7)	0	0
CT4	532167	181857	Roadside	99.1	99.1	9	6	2	0	3	0	0
CTA	532495	180791	Roadside	99.4	99.4	-	-	-	-	0 (27.8)	5	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%).

All PM₁₀ monitoring sites continue to comply with the 24-hour mean AQO. The AQO was last exceeded in 2016, and 2024 was the first year where no 24-hour periods with a concentration of >50 µg m⁻³ were recorded.

Table Q. 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
CT2	531623	181238	Roadside	96.8	96.8	16	14	12	12	11.9	9.5	9.0
CT3	533484	181190	Urban Background	87.7	87.7	12	12	12	11	13.2	8.5	9.4

Notes

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

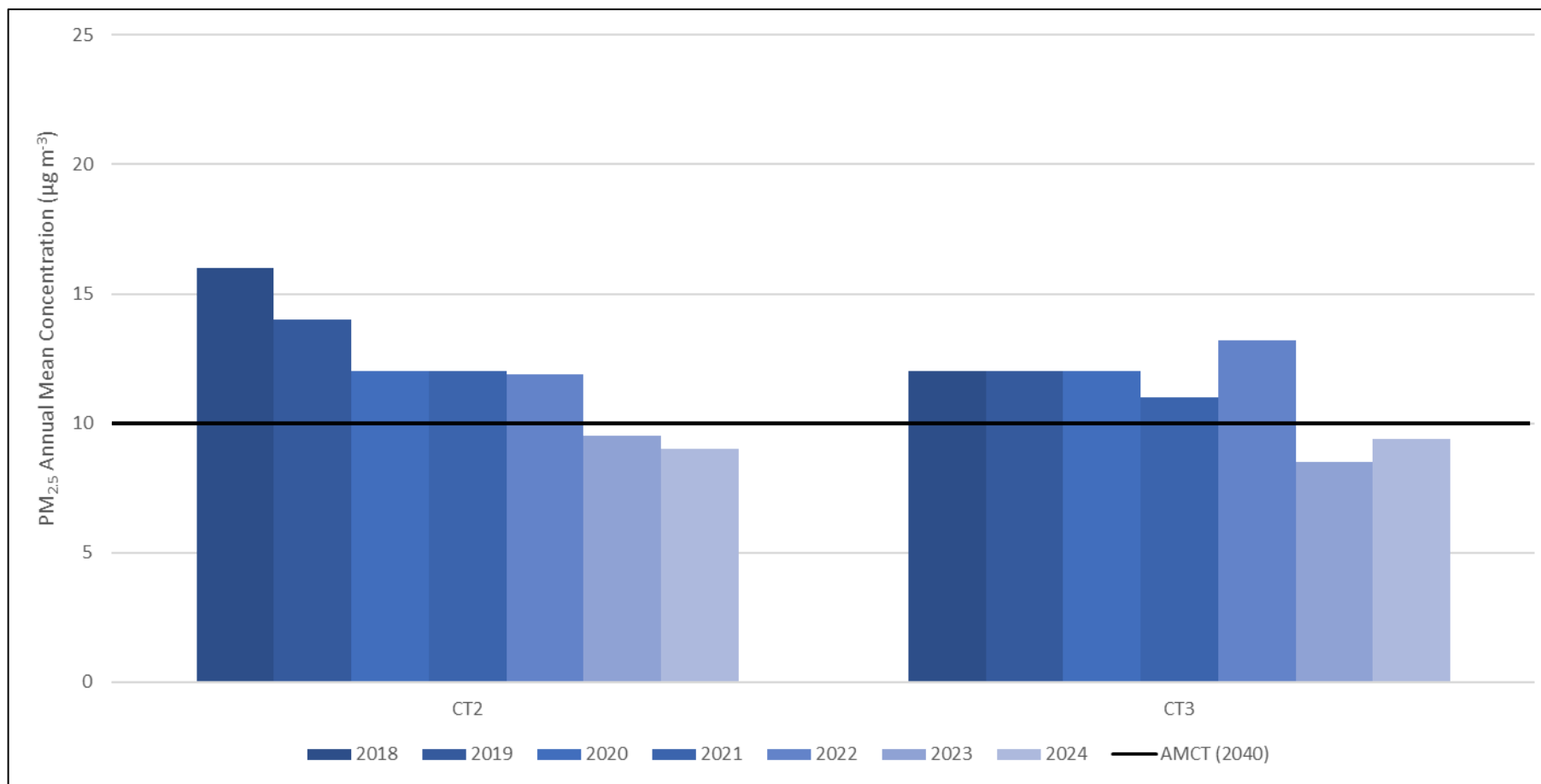
Exceedances of the PM_{2.5} annual mean concentration target (AMCT) of 10 µg m⁻³ (to be achieved by 2040, London Mayoral Objective to be achieved by 2030) are shown in **bold**.

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%).

Figure I. Annual Mean PM_{2.5} Monitoring Results



Both sites present an overall decline between 2018 and 2024. It should be noted that the 2022 annual mean for CT3 was annualised due to data capture being less than 75%. In reference to the AMCT and Mayoral Objective of 10 µg m⁻³, to be achieved by 2024 and 2030 respectively, both CT2 and CT3 were compliant in 2023 and 2024.

Table R. O₃ Automatic Monitoring Results

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
CT9	532471	181424	Urban Background	99.1	99.1	-	-	-	-	54.1	54.4	53.4

Notes

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

(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 six months the maximum data capture for the full calendar year would be 50%).

Although the monitoring and reporting of O₃ is not a requirement under LLAQM, the City Corporation procured and installed an O₃ analyser during 2022. The analyser is located within the Guildhall on the 6th floor and has been operational since the 26th of March 2022 with the aim to compare long term trends of O₃ within the Square Mile.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

An AQMA is declared when there is an exceedance or likely exceedance of an AQO. After declaration, the authority should prepare an AQAP within 12 months. The AQAP should specify how AQOs will be achieved and maintained and provide dates by which measures will be carried out.

A summary of AQMAs declared by the City Corporation is presented in Table S. Appendix C provides maps of the AQMA and the air quality monitoring locations. It should be noted that LLAQM guidance (Box 1.1 of LLAQM.TG (19)) details locations where AQOs apply, based on an AQO averaging time. The City Corporation is striving for AQO compliance at all monitoring locations regardless of short-term or long-term exposure.

At the time of writing, the AQMA is to remain with all three current designations for the following reasons:

- NO₂ annual mean: There continues to be a small number of monitoring locations within the Square Mile that report a concentration greater than the annual mean objective of 40 µg m⁻³.
- NO₂ 1-hour mean: Compliance with the 1-hour mean objective has been achieved since 2019. This designation was reviewed with the GLA in 2024. The Mayor of London has committed to meet the WHO's latest guidelines for NO₂ and PM_{2.5} as soon as possible, therefore the GLA has advised against reducing or revoking any designated AQMAs.
- PM₁₀ 24-hour mean: As per LLAQM guidance, any AQMA for particulate matter should only be revoked following three years of continual compliance with the WHO AQG for PM_{2.5} (2005 guidance). As presented in Table Q, this has not yet been achieved.

Table S. 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
City of London AQMA	26/01/2001	NO ₂ annual mean	The entire Square Mile is designated as an AQMA	N/A*	118.0 µg m ⁻³	46.2 µg m ⁻³	-	City of London Air Quality Strategy 2025-2030, January 2025	City of London Corporation AQAP
City of London AQMA	26/01/2001	NO ₂ 1-hour mean	The entire Square Mile is designated as an AQMA	N/A*	597 1-hour periods > 200 µg m ⁻³	No exceedance	Six	City of London Air Quality Strategy 2025-2030, January 2025	City of London Corporation AQAP
City of London AQMA	26/01/2001	PM ₁₀ 24-hour mean	The entire Square Mile is designated as an AQMA	N/A*	60 24-hour periods > 50 µg m ⁻³	No exceedance	Eight	City of London Air Quality Strategy 2025-2030, January 2025	City of London Corporation AQAP

☒ **The City of London Corporation confirm the information on UK-Air regarding their AQMA is up to date.**

☒ **The City of London Corporation confirm that all current AQAPs have been submitted to GLA.**

* National Highways Strategic Road Network does not operate in central London. There are several Transport for London Road Network (TLRN) roads that pass through the Square Mile; A10, A201, A3211, A1210/11.

2.2 Air Quality Action Plan Progress

Table T provides a brief summary of the City Corporation's progress against the AQAP, showing progress made against the measures in 2024. 2024 was the last year for which the 2019-2024 City of London Air Quality Strategy was relevant. During 2024, a new AQAP was developed, and the 2025-2030 City of London Air Quality Strategy was adopted in January 2025. Due to this the completion date of 2024 has been logged for the 2019-2024 City of London Air Quality Strategy measures, and the first update on the 2025-2030 City of London Air Quality Strategy will be completed in the Annual Status Report for 2025.

The three key measures detailed at the top of Table T are relevant to the new AQAP, showing key areas of focus for the City Corporation in 2025.

Table T. 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
-	Monitoring and other core statutory duties	Adopt the updated City of London Corporation Air Quality Strategy 2025 - 2030	2025-2030	City of London Corporation Statutory Consultees	A revised Air Quality Action Plan was adopted in January 2025 outlining a five-year strategy to improve air quality within the Square Mile.
16	Emissions from developments and buildings	Revise the City Corporation Supplementary Planning Guidance for Air Quality.	2026	City of London Corporation	A new Supplementary Planning Guidance document is to be developed in 2025 with the aim for adoption in-line with the City Plan 2040.
27	Public health and awareness raising	Work with schools and nurseries in the Square Mile	2025	City of London Corporation Schools within the Square Mile	Within 2025 the Travel for Life programme is to be encouraged at all schools within the Square Mile. Also, the Mayor of London's School Filters programme will be implemented at relevant schools.
1	Public health and awareness raising	Ensure that adequate and appropriate monitoring is undertaken across the City of London to fulfil statutory obligations	2024	City of London Corporation	Automatic monitoring is completed by two PM _{2.5} , three PM ₁₀ , one O ₃ and three NO ₂ continuous analysers. All sites are serviced and audited in line with national guidance. The data is ratified

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		and make good quality data available to the public.			by Ricardo and made available to the public via the Air Quality England website. During 2024 there were 85 LLAQM monitoring locations where NO₂ diffusion tubes were deployed. CT2 is to be upgraded in 2025 with a new PM_{2.5} analyser replacing the existing BAM, and NO₂ and benzene analysers to be installed.
2	Public health and awareness raising	Use air quality data to generate pollution alerts and messages using a range of media such as the free CityAir Smart Phone App.	2024	City of London Corporation Mayor of London	The air quality monitoring data is used to provide current information on air quality through the City Corporation CityAir App. It is also used to support the AirTEXT service.
3	Public health and awareness raising	Publish an annual report of air quality data on the City Corporation web site.	2024	City of London Corporation	The 2023 Annual Status Report is available on the City Corporation website. The 2024 report will be made available on the web site following GLA approval.
4	Public health and awareness raising	Continue to make live data from continuous air quality monitors available to the public on the London Air Quality Network web site.	2024	City of London Corporation	All automatic monitoring data is available to the public via the Air Quality England website. This has moved from the London Air Quality Network website due to a contractual change.
5	Public health and awareness raising	Support the testing of new air quality sensors to establish their degree of accuracy.	2024	City of London Corporation	During 2024 we supported the City of London Girls school to trial an air pollution sensor, running it alongside CT3 to assess its accuracy.
6	Public health and awareness raising	Undertake an annual assessment of air quality to ensure levels of nitrogen dioxide in 90% of the	2024	City of London Corporation	An area compliance assessment was undertaken for the year 2023, which

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Square Mile meet health-based Limit Values and WHO Guidelines by 2025.			was the latest year with a completed set of ratified data. The area of the Square Mile to comply with the NO₂ AQO limit value and 2001 WHO AQG in 2023 was 94%, this is a significant increase from 2019 when it was 67%.
7	Public health and awareness raising	Continue to place air quality as an important political priority and support the outcomes of the City Corporate Plan and local and London-wide action.	2024	City of London Corporation Institute of Environmental Sciences	The City Corporation provides the chair for the Environmental Policy Implementation Community (EPIC) steering group. The City Corporation chaired the annual EPIC conference which was attended by over 100 people.
8	Emissions from developments and buildings	Provide information on reducing emissions from buildings for City Corporation facilities managers and investment property managers.	2024	City of London Corporation	A guidance document 'Combustion plant: Recommendations for best practice' is available on the City Corporation's website. The webinar that accompanied the combustion plant guidance for facility managers has been converted to an educational video, available to view on YouTube via a requested link. Two case studies on standby generators in the Square Mile were undertaken in 2024 to understand their usage and emissions.
9	Emissions from developments and buildings	Reduce emissions of air pollutants from buildings owned by the City Corporation.	2024	City of London Corporation	When compared to the 2023, electricity consumption in our buildings reduced by 3.8% and gas consumption increased by 2%. However, the long-term trend is very good as since the 2018/19 baseline, emissions of carbon from our own operations have reduced by 65%.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
10	Cleaner transport	Review the provision of electric vehicle charging across City Corporation sites including residential estates.	2024	City of London Corporation City of Westminster Royal Borough of Kensington and Chelsea	EV charging infrastructure plan recommendations still being delivered. Progressing a partnership bid with City of Westminster and Royal Borough of Kensington and Chelsea to the Office for Zero Emission Vehicles to secure funding which will help to fund additional charge points.
11	Borough fleet actions	Ensure that, subject to operational requirements, 100% of vehicles owned or leased by the City Corporation are electric or hybrid by 2025.	2024	City of London Corporation	The following vehicle purchasing hierarchy is implemented: - fully electric - plug in hybrid - petrol hybrid - Euro VI petrol - Euro VI diesel. We continue to reduce the size of our fleet whilst increasing the number of electric vehicles. We currently have 46 fully electric and hybrid vehicles. The Fleet Operator Recognition Scheme (FORS) is a voluntary accreditation scheme designed to help fleet operators improve standards in their organisation. Bronze, Silver, or Gold accreditation is awarded to organisations based on a range of criteria including emissions and fuel efficiency. The City Corporation has been awarded the Gold FORS accreditation standard for over a decade.
12	Borough fleet actions	Continue to trial low and zero emission technology.	2024	City of London Corporation	We continue to trial electric vehicles as they come onto the market. Following successful trials, refuse collection is

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					undertaken using five all electric refuse collection vehicles.
13	Delivery servicing and freight	Continue to encourage zero emission vehicles through the supply chain.	2024	City of London Corporation	A menu of options relating to air quality is included within the City Corporation Responsible Procurement Strategy: - Set ambitious targets for the reduction of nitrogen oxides, PM₁₀ and PM_{2.5} emissions from vehicles over the life of the contract. - Set an ambitious target for increasing the use of zero tailpipe emission vehicles over the life of the contract. - Set a target for a reduction in the number of motorised vehicle trips that form part of the services. - Develop a logistics approach that avoids vehicle movements during peak congestion and pedestrian footfall times, 07:00–10:00, 12:00–14:00, 16:00–19:00. - Use technology that supports air quality improvement e.g., gear shift indicators, stop-start ignition, software to monitor green driving. - Green driver training for Contractor Staff used on the Contract, offer safer urban driving courses to drivers.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					7. Other innovative action to support the Air Quality Strategy that the City Corporation would reasonably deem of an equivalent level of ambition.
14	Borough fleet actions	Require electric or hybrid vehicles as a default for the Corporate taxi contract, together with annual emission reduction targets.	2024	City of London Corporation Addison Lee	The City Corporation has a contract with Addison Lee which has a fleet of 1,000 fully electric taxis and has recently added 600 new, zero-emission capable (ZEC) multi-vans to replace the remaining diesel people carriers.
15	Borough fleet actions	Require zero emission and electric or hybrid vehicles as a default for courier contracts, together with annual emission reduction targets.	2024	City of London Corporation	For deliveries within five miles of Guildhall and Barbican areas, the current Courier Contract requires the use of zero emission transport. The contract for national and international parcels requires the use of safe, low-emission and zero emission modes of transport wherever possible.
16	Public health and awareness raising	Continue to ensure that all relevant Corporate strategies and policies reflect the importance of improving local air quality and reducing exposure.	2024	City of London Corporation	The air quality team works very closely other teams, so air quality is considered in decision making. This includes Planning, Transportation, Public Realm, Highways, Recycling and Waste, Open Spaces, Procurement, Remembrancers, Public Health, Climate Action, and Fleet Management. The team is part of a Corporate Strategy Forum which has been set up to share best practice. The Corporate Plan 2024 to 2029 includes a performance measure to assess progress towards WHO AQGs. This supports the outcome Leading Sustainable Environment.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
17	Public health and awareness raising	Work with London Councils and other stakeholders to develop proposals for legislation to help improve air quality across London.	2024	City of London Corporation London Councils	The Emission Reduction (Local Authorities in London) Private Members Bill was introduced to the House of Lords by Lord Tope in October 2019, and again in January 2020. The Bill fell when parliament was dissolved in May 2024. However, its contents are still used to press for new powers to assist London Boroughs with obligations under the Environment Act 2021.
18	Public health and awareness raising	Continue to work closely with the Greater London Authority and Transport for London on policies to improve air quality and ensure that all actions support the aims and objectives of the Mayor's Environment Strategy.	2024	City of London Corporation GLA TfL	We continue to be part of the Mayor of London NRMM enforcement project and provide information pertinent to the Beyond Construction Project. We work with a range of London Boroughs on a Mayor of London funded pan London idling engine programme. We also provide support for a pan London project to gather data on mobile generators used in street works, filming, markets and events.
19	Public health and awareness raising	Continue to collaborate with London Boroughs and London Councils on action to improve air quality.	2024	City of London Corporation GLA TfL EA PLA UK Health Security Agency London Boroughs	We hosted and chaired four virtual meetings of the London Air Quality Steering Group. These were attended by representatives from the GLA, EA, PLA, London Councils, UK Health Security Agency and Lead London Air Quality Cluster co-ordinators. We also represent London local authorities on behalf of the Steering Group at the London Air Quality and Health Delivery Group.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					We have attended, and chaired in turn, quarterly Central London Cluster group meetings throughout 2024.
20	Public health and awareness raising	Support Universities with research into the health impacts of air pollution, to increase understanding of the sources of pollution and the effectiveness of interventions to reduce pollution.	2024	City of London Corporation Air Pollution Research in London	We sit on the Air Pollution Research in London committee which identifies priority areas for research to improve air quality in London and other major cities, supports the development of new scientific research and communicates the latest research findings. Research into the impact of urban form on air pollution is ongoing.
21	Public health and awareness raising	Continue to support the Third Sector to deliver air quality improvement projects and raise awareness amongst London's communities.	2024	City of London Corporation Institute of Environmental Sciences	We supported the development of the Institution of Environmental Sciences UK Guidance for local authorities on Air Quality and Climate Change.
22	Public health and awareness raising	Support the Port of London Air Quality Strategy through air quality monitoring and in taking wider action to reduce emissions from vessels on the river Thames.	2024	City of London Corporation PLA	NO ₂ monitoring took place adjacent to the river in 2024 to supplement monitoring undertaken by the PLA. Meetings are held with the PLA to discuss options for joint working.
23	Public health and awareness raising	Continue to support the Cross-River Partnership in its delivery of air quality projects in central London.	2024	City of London Corporation Cross River Partnership	The City Corporation provides the co-chair for Cross River Partnership.
24	Public health and awareness raising	Continue to support the Environment Agency with action to improve air quality, including the implementation of the Medium Combustion Plant Directive.	2024	City of London Corporation GLA EA London Boroughs	We continue to collate data from a range of sources including planning applications to compile a list of combustion plant in the Square Mile which is used to inform research into the sources of NO _x and PM _{2.5} in the Square Mile. We commissioned a case study to understand the operating regime and

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					the applicability of MCP regulations to back-up generators used within the Square Mile. We liaise with the EA on the potential risk of increased emissions due to the use of generators to provide electricity to the grid during power outages. We have supported the establishment of a roundtable of local authorities to engage with the EA on issues around Medium Combustion Plant and data centres. Three meetings were held in 2024.
25	Public health and awareness raising	Continue to engage with and support the Business Community to become Air Quality Champions and reduce their impact on local air pollution.	2024	City of London Corporation	We assisted with the delivery and judging of the 'Air Quality and Climate Change' award for the Clean City Awards Scheme. Through this partnership we continued to share our air quality resources for businesses with a wider network. We continue to support the City Business Alliances, working in partnership to improve information about the health impacts of air pollution and how businesses can help to improve local air quality.
26	Cleaner transport	Support the Mayor of London with the effective implementation of the Ultra-Low Emission Zone.	2024	City of London Corporation GLA TfL	We are continuing to strive towards 100% ULEZ compliance, operating a 'Transition to Zero Emission Fleet policy', a decision-making hierarchy which applies to all purchased, leased, and hired vehicles operated by the City Corporation.
27	Cleaner transport	Work with the taxi industry to reduce empty running of taxis within the Square Mile.	2024	City of London Corporation	No progress on measure.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
28	Cleaner transport	Urge Transport for London to prioritise Zero Emission Capable buses on routes through the City of London.	2024	City of London Corporation GLA TfL	There are 35 bus routes that pass through the Square Mile. Of these routes, over 97% operate a mix of hybrid and fully electric vehicles.
29	Public health and awareness raising	Ensure that Healthy Street Plans have air quality improvement targets and that the air quality impact of major transport and public realm schemes are measured.	2024	City of London Corporation	All major road schemes are assessed for air quality impacts and air quality is factored in as a key objective to all Healthy Street Plans. Wide scale air quality monitoring continues to be used to assess the impacts of street schemes including Bank on Safety/ All Change at Bank, the Pedestrian Priority Streets programme and the wider Transport Strategy.
30	Localised solutions	Introduce Local Zero Emission Zones by 2022.	2024	City of London Corporation	Beech Street zero emission street was piloted from March 2020 to September 2021. Following consultation, the decision was made to discontinue with the scheme and instead incorporate traffic related air quality improvements into wider traffic management schemes in the area.
31	Localised solutions	Implement a wide range of action through the City Corporation Transport Strategy to reduce the exposure of pedestrians to transport generated air pollution in the Square Mile.	2024	City of London Corporation	Continuing to increase km of pedestrian priority streets – currently have 28km with targets for 35km by 2030 and 55km by 2044. Construction underway on pedestrian priority improvements to King William Street. Widened pavements (650m² more space) and improved crossings at Threadneedle Street now complete.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Construction has started on St Paul's Gyratory transformation. Healthy Streets Plans have been produced for three areas, one in progress, and four more will be produced by 2027/28. Continue to make improvements for walking and wheeling and new routes through Section 278 planning obligations, including on the riverside walkway and Barbican highwalk. Conducting a review of the timings of existing pedestrian priority zones to ensure they are still working to prioritise people walking and wheeling. Further information can be found in the Transport Strategy 2024/25 Annual Report and the 2025/26 – 2030/31 Transport Strategy Delivery Plan.
32	Localised solutions	Pilot an ultra-low emission vehicle street.	2024	City of London Corporation	Beech Street zero emission street was piloted from March 2020 to September 2021. Following consultation, the decision was made to discontinue with the scheme and instead incorporate traffic related air quality improvements into wider traffic management schemes in the area.
33	Localised solutions	Assess the suitability of rolling out LEN pilot projects at other locations across the Square Mile.	2024	City of London Corporation	The Low Emission Neighbourhood Legacy report was completed and effective measures that were identified have been incorporated into a range of operations.
34	Delivery servicing and freight	Implement a wide range of action, through the City Local Plan and the	2024	City of London Corporation	We are continuing to stipulate Delivery and Servicing Management Plans as

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		City Corporation Transport Strategy, and Freight and Servicing SPD to reduce emissions from freight vehicles in the Square Mile.		Business Improvement Districts Zero Emissions Network GLA TfL	part of S106 agreements for new developments and are working to increase the data collection and monitoring of this. We are working with Business Improvement Districts to promote consolidation for freight deliveries to existing buildings. Ideas for use of Minories car park and Walbrook Wharf have not progressed, but we continue to have discussions about potential locations for last mile delivery hubs. We have joined the Zero Emissions Network, which aims to decarbonise local via a network of cargo bike share, cargo bike grants, and events that promote air quality improvements or active travel.
35	Cleaner transport	Implement a range of actions through the City Corporation Transport Strategy and City Local Plan to support and encourage cycling.	2024	City of London Corporation	The Threadneedle Street cycle lane is now complete. Installation of a northbound cycle lane between the junction with Lothbury/Gresham Street and Moorgate will be completed in 2025/26. Junction improvements at Moorgate/Ropemaker Street and Moorgate/London wall are due to be completed by 2028/29. Construction has begun on St Paul's Gyratory transformation.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Micromobility parking programme will provide an estimated 1,400 new spaces for e-scooters and dockless cycles by 2026. We continue to work with the City of London Police on road danger reduction campaigns and will work with TfL on their Highway Code campaigns. We are helping to organise the 2025 London Cycling Festival and co-host the annual London Walking, Wheeling and Cycling Conference.
36	Cleaner transport	Install additional publicly accessible electric vehicle (EV) rapid charge points by 2025.	2024	City of London Corporation	Up to five locations for new charging points will be put to market in 2025/26. Delivery of the locations will be dependent on the market take up.
37	Cleaner transport	Through the City Local Plan require the installation of rapid charge points in new developments.	2024	City of London Corporation	We ensure that electric vehicle charging facilities are installed in accordance with our parking and servicing standards.
38	Localised solutions	Ensure that improving air quality and reducing exposure is an integral part of all major transport and public realm schemes and that all schemes incorporate greening where possible.	2024	City of London Corporation	All major transport and public realm schemes are reviewed for air quality impacts and air quality monitoring and modelling is carried out where necessary. Detailed monitoring has been undertaken to assess the impact of proposed changes to the road layout around St Martins Le Grand. Particulate monitoring was undertaken adjacent to a London underground vent shaft in the locality to assess the potential impact on users of the space from any particles coming from the tube network.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
39	Localised solutions	Continue to take a wide range of action to discourage unnecessary vehicle engine idling in the Square Mile.	2024	City of London Corporation	The City Corporation has the provision to issue Fixed Penalty Notices or Penalty Charge Notices for unnecessary vehicle engine idling. Civil Enforcement Officers (CEOs) take enforcement action. The CEOs will ask a driver to turn their engine in the first instance. If the driver refuses, the CEO can issue a warning notice for a first offence to the driver. This approach is in line with guidance issued by the government. If the vehicle has been issued with a previous warning notice for the same contravention, then a Penalty Charge Notice (PCN) is issued. In 2024 three warning notices and one PCNs were issued.
40	Cleaner transport	Ensure City Corporation parking charges favour low and zero emission vehicles in the City of London.	2024	City of London Corporation	Both on street and off-street vehicle parking charges now reflect vehicle emissions. Older, more polluting vehicles pay a higher charge to park with electric or hydrogen or hybrid paying the lowest tariff.
41	Emissions from developments and buildings	Continue to assess all planning applications for air quality impact.	2024	City of London Corporation	All planning applications are reviewed for air quality impacts, with conditions recommended where necessary. All major developments require an Air Quality Impact Assessment. This has been incorporated into the draft City Plan 2040 and will be included in a revised Air Quality SPD. The pre app guidance for air quality is constantly reviewed and updated where required.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
42	Emissions from developments and buildings	Encourage the use of non-combustion technology during construction and in the operation of new developments.	2024	City of London Corporation	The emerging City Plan 2040 aligns with the commitment in the City Corporation's Climate Action Strategy to support the achievement of net zero for the Square Mile by 2040. It reflects the London Plan in prioritising non combustion and zero emissions heating and energy systems. Following the adoption of the City Plan 2040, an updated Air Quality SPD will be finalised. All planning applications are reviewed by air quality officers and alternatives to diesel backup generators are required to be assessed.
43	Emissions from developments and buildings	Apply stringent emission standards for combustion plant where non-combustion plant is not feasible in new developments.	2024	City of London Corporation	Due to sustainable planning requirements, the majority of planning applications for commercial developments received propose zero emissions heating solutions, most commonly heat pumps, instead of combustion plant. If combustion plant is installed, conditions are applied requiring plant to meet specified NOx emissions standards.
44	Emissions from developments and buildings	Ensure that where possible chimney stacks terminate above the height of the nearest building.	2024	City of London Corporation	The City Corporation Air Quality SPD requires a consideration of combustion flue location and emission discharge velocity at the planning stage to ensure appropriate provision has been made. We set conditions to require that chimneys are a minimum of 1m above building height.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					We respond to applications for chimney height approval as they arise.
45	Emissions from developments and buildings	Require all new developments to be air quality neutral as a minimum and developments subject to an Environmental Impact Assessment to be Air Quality Positive in line with the requirements of the emerging London Plan.	2024	City of London Corporation	All major developments must submit an AQN Assessment. All AQN Assessments are reviewed by an air quality officer to ensure the benchmarks are met, or relevant mitigation is provided. We have updated our pre-application advice to include the requirement for AQP Assessments for Environmental Impact Assessment development. This has been included in the emerging City Plan 2040 and will be reflected in the Air Quality SPD update.
46	Emissions from developments and buildings	Update the City Corporation Supplementary Planning Document for Air Quality to reflect new policies and requirements of the City Local Plan and London Plan.	2024	City of London Corporation	The City of London submitted the proposed submission draft City Plan 2040 to the Secretary of State in August 2024. Examination in Public Hearings are currently ongoing. Once adopted, the new Plan will replace the Local Plan 2015. A draft updated SPD is being produced in preparation for the adoption of the City Plan 2040.
47	Emissions from developments and buildings	Ensure emissions from construction sites are minimised through close management and control.	2024	City of London Corporation GLA	Construction sites are required to follow the City of London Code of Practice for Deconstruction and Construction Sites. We work with construction companies during the development of the proposals for construction practice proposals to minimise emissions and respond promptly to complaints.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Site audits of NRMM are undertaken through the pan London project, funded by the Mayor of London, and supplemented by the City Corporation. In 2024, 42 site audits were completed. Our Code of Practice for Deconstruction and Construction Sites encourages sites to secure an electrical supply for sites well in advance of works. Membership of the NRMM Project ensures that where alternative fuels and power sources are not available, sites use the least-polluting diesel equipment possible. Our guide to low emission and alternative technology and fuels is available on our webpages to support the uptake of lower emission NRMM for use during construction and street works, filming, and other events.
48	Emissions from developments and buildings	Regularly update the City Corporation best practice guidance on minimising emissions from construction and demolition in order to reflect best practice.	2024	City of London Corporation	We continue to provide updated comments for the Air Quality Chapter of the Code of Practice for Deconstruction and Construction Sites.
49	Emissions from developments and buildings	Enforce the Mayor of London NRMM requirements on construction sites as a minimum.	2024	City of London Corporation GLA	We continue to be a member of the pan London NRMM project. Our sites are audited regularly for compliance with NRMM requirements by the project team and City Corporation officers. A range of sources are used to identify active demolition and construction sites, including planning and information from construction levy officers.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					During 2024, 42 audits were undertaken. 73% were self-compliant with 27% compliant.
50	Emissions from developments and buildings	Introduce a Stage V emission limit for NRMM on construction sites by 2025 where available.	2024	City of London Corporation	The proportion of NRMM over 37kW that is Stage V compliant continues to increase across the Square Mile. Generators have to be Stage V as Stage IV generators are not produced. A Stage V restriction will be implemented London wide from 2030, prior to this, officers will continue to promote the use of Stage V NRMM across all construction sites within the Square Mile.
51	Emissions from developments and buildings	Investigate options for reducing emissions from NRMM used in street works, filming, and other events.	2024	City of London Corporation	A City Corporation guide to low emission alternative technology and fuels is available on our webpages to support the uptake of lower emission NRMM for use during street works, filming, and other events. We are supporting the London-wide project to document what NRMM is currently being used for licensed works such as film events, street works and waste transfer sites. We obtain information on the number and size of generators including the number of Stage V generators used whilst filming in the Square Mile. The information is collated by the Sustainability /Generator app which is used by filming teams to log their current generator locations and usage.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					We have previously included presentations at the Considerate Contractors Street Works Scheme workshops for utilities and contractors working in the Square Mile. The scheme rewards good practice through various awards. In 2024 Vorboss Limited was awarded the Environment Award and nominated for the innovation award, winning with an energy efficient, low-emission, electrified splicing bike. The adapted electric cargo bike can move quickly around the Square. The vehicle reduces emissions and congestion in the streets.
52	Emissions from developments and buildings	Examine options for reducing emissions from existing combustion plant in the Square Mile.	2024	City of London Corporation	An increase in Stage V generators in the Square Mile has been noted. Information is provided to construction sites during NRMM audits regarding additional options such as battery storage and hybrid systems to supplement the use of, and the reduce the dependency on diesel generators. In addition to the pan-London NRMM guidance for construction sites, the city's Low Emission NRMM Guide is available through the City Corporation website.
53	Emissions from developments and buildings	Improve the understanding of the use of emergency generators in City of London buildings being used for Demand Side Response and Short-Term Operating Reserve.	2024	City of London Corporation	An independent assessment of generator use, and potential impact on emissions of pollutants was conducted in 2024, and the work will be further developed in 2025
54	Emissions from developments and buildings	Continue to ensure that emissions from chimneys are dispersed as far	2024	City of London Corporation	No applications were received in 2024.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		as possible using the provisions of the Clean Air Act 1993.			
55	Emissions from developments and buildings	Ensure compliance with emission control requirements for the City Corporation's prescribed processes.	2024	City of London Corporation	All permitted processes premises are inspected in line with their risk rating and the recommended inspection schedule. There is one dry cleaning operation and Barts energy centre is also permitted. In 2024, an inspection was completed for one dry cleaner, which was scored as a low risk.
56	Emissions from developments and buildings	Promote and enforce smoke control provisions detailed in the City of London Various Powers Act 1954 and 1973 and the Clean Air Act 1993.	2024	City of London Corporation	The City Corporation's air quality webpages include information on the Domestic Solid Fuels Standards regulations in addition to the responsibilities required within a smoke control area. We inspected all shops likely to sell manufactured solid fuels and wood to check that the correct labelling was displayed. All premises were compliant in 2024. Our factsheet 'Smoke Control from Food Premises', which provides information on smoke provisions and advice to food premises on exempt appliances and authorised fuels, is also available on the City Corporation's website and has been shared with restaurants cooking with solid fuels. Restaurants have been inspected to check that authorised fuels or exempt appliances are being used.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
57	Public health and awareness raising	Make greater use of Public Health Networks to disseminate information about air quality.	2024	City of London Corporation	We support the Mayor of London's air pollution alerts to schools and GP practice, amplifying this message through alerts issued on X and Bluesky. We have created a factsheet for health professionals summarising the health impacts of air pollution and providing tools and guidance for how to minimise exposure to air pollution. It is available to download from the City Corporation website. A Defra Air Quality Grant funded project was completed in 2024. This was tailored to bolster the confidence of healthcare professionals in advising patients on how to minimise exposure to air pollution and where to find further information and guidance. Following the completion of this project we continue to attend meetings with the wider Public Health Network and promote legacy work.
58	Public health and awareness raising	Assess options to improve and further develop the free CityAir Smart Phone App and continue to support and promote the AirText service.	2024	City of London Corporation	We continue to support and promote AirTEXT.
59	Public health and awareness raising	Disseminate information about air quality through various channels such as social media, the City Corporation web site, and an e-newsletter.	2024	City of London Corporation	We continue to promote air quality messaging through our X, Bluesky and LinkedIn accounts, monthly e-newsletters, and our website pages.
60	Public health and awareness raising	Develop an action plan, in support of the Mayor of London's air pollution forecasting service, to	2024	City of London Corporation	We support the dissemination of the Mayor of London air pollution forecasting system and take

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		reduce exposure on days of high and very high levels of air pollution.			opportunities as they arise to raise the profile of air quality.
61	Public health and awareness raising	Increase awareness of air pollution amongst the City of London residential community.	2024	City of London Corporation London Boroughs of Hackney, Newham, Tower Hamlets Defra	The City Corporation, in collaboration with the London Boroughs of Hackney, Newham, Tower Hamlets secured funding from the Defra Air Quality Grant scheme in 2021/2022. The funding was awarded to deliver an awareness-raising project that aimed to disseminate information on air quality and methods of reducing exposure to pollution to help people better manage their health. One of the outcomes of the project was a brand-new web-based tool that helps users to better manage their health by providing information about air pollution and easy access to the latest monitoring data. Touch screens were installed at Artizan Library and Barbican Library in March 2024 to allow residents to interact and explore the webtool and help increase awareness of air pollution in the residential community. To mark the end of the project, a celebration event, showcasing the projects outcome was hosted in April 2024. 85 guests attended. Over the course of 2024, the air quality team had a presence at 23 events presenting opportunities to engage directly with residents and supply information relating to air quality. The events ranged from air quality pop-ups

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					with AQ sensors to cycle safety events and library sessions.
62	Public health and awareness raising	Run events in support of National Clean Air Day.	2024	City of London Corporation	Pop-up events: 57 people attended. Engaged with 90 school children during an assembly. Over 60 pieces of air-aware merchandise promoting air-aware were given out. Air quality stall hosted at school Summer Fayre. Over 50 air quality resources were given out. The air quality team networked with health care practitioners and promoted the online resources available for clinicians to enhance their knowledge on air quality.
63	Public health and awareness raising	Develop plans for improving air quality and reducing the exposure to pollution of children who attend schools and nurseries in the City of London.	2024	City of London Corporation	Monitoring reports are produced annually for each school and nursery based on monitoring data from the sites or at nearby comparable locations. These reports are provided to the respective schools and nurseries.
64	Public health and awareness raising	Continue to support Barts Health NHS and other health care facilities to reduce their own impact on local air pollution and assist vulnerable patients in reducing their exposure to pollution.	2024	City of London Corporation London Boroughs of Hackney, Newham, Tower Hamlets Defra	We obtained joint funding with the London Boroughs of Hackney, Tower Hamlets, and Newham to improve messaging around air quality for communities. The project focused on training healthcare professionals and creating patient resources, creating a community-based app, Air Quality Champions, and providing training to

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Health Practitioners on air pollution. This project completed in 2024. As part of the wider project, the City of London Corporation led on a pilot project for pharmacists to have a face-to-face quality conversation with children and their families, around asthma care and the impacts of air pollution on their health, and what simple steps they can take to help reduce their exposure. By May 2025, 625 conversations had taken place.
65	Public health and awareness raising	Continue to work with businesses to raise awareness of air pollution amongst workers.	2024	City of London Corporation	The City Corporation runs an annual Clean City Award Scheme for City businesses. The winner of the Air Quality and Climate Action Award for 2024 was the Leadenhall Building. This achievement reflects ongoing efforts to reduce emissions, improve air quality, and promote responsible practices throughout the building's operations. Heart of the City continues to promote air quality resources for businesses and work continues with the City Business Improvement Districts.

3. Planning Update and Other New Sources of Emissions

Table U. Planning requirements met by planning applications in the City of London in 2024*

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	12
Number of planning applications required to undertake construction dust monitoring and reporting.	Nine new sites commenced that were required to monitor dust. Data accessed via a number of sources; online tool, scheduled reports, excel raw data.
Number of CHPs/Biomass boilers refused on air quality grounds	0
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions as detailed in Air Quality Neutral LPG (london.gov.uk) point 3.1.5.	0
Number of developments required to install Ultra-Low NO _x boilers	1
Number of developments where an AQ Neutral building and/or transport assessments undertaken	15
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 decided upon in 2024 with conditions related to NRMM included. Number of developments registered at www.nrmm.london . Number of audits (based on the pan-London project report) % of sites unregistered prior to audit % of sites compliant with Stage IV of the Directive and/or exemptions to the policy.	27 conditions included 42 registered, as of 07/04/25 42 audits 0% sites 100% sites

* Statistics for planning applications decided upon in 2024

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 The City of London Corporation Fleet

The City Corporation has been reducing emissions from its own fleet for several years. This has been achieved by improved management, a reduction in size of the fleet and the purchase of newer, cleaner vehicles. The City Corporation owns or leases 111 vehicles / plant. The majority of these are not used in the Square Mile. At the time of writing, 46 of the vehicles are fully electric or hybrid.

Since January 2016, a policy has been in place that diesel vehicles cannot be purchased or leased if there are low or zero tailpipe emission options available. A fuel hierarchy is in place for new vehicles:

1. Full electric.
2. Plug-in hybrid.
3. Petrol hybrid (regenerative braking).
4. Petrol.
5. Diesel Fleet (Euro VI) Operator Recognition Scheme Accreditation.

4.2 Planning Enforcement

All relevant planning applications are reviewed in terms of air quality. A weekly General Development Order is sent to the Air Quality Team. This is reviewed to identify those applications that require review. Officers ensure that all relevant developments are assessed, and conditions recommended, should the development be approved.

4.3 Pan-London NRMM Auditing Project

The City Corporation will continue to support the pan-London NRMM enforcement project in 2025. A standard condition is applied to a Decision Notice where NRMM is to be used for the demolition/deconstruction/construction of a proposed development to ensure that the requirements of the NRMM Low Emissions Zone are met. Officers review planning applications to identify when the NRMM condition should be applied. A precautionary approach is taken where it may not be known at the planning stage if NRMM is to be used, with the condition being set.

The condition is as follows:

Prior to the commencement of the development, the developer/ construction contractor shall sign up to the Non-Road Mobile Machinery Register. The development shall be carried out in accordance with the Mayor of London Control of Dust and Emissions during Construction and Demolition SPG July 2014 (Or any subsequent iterations) to ensure appropriate plant is used and that the emissions standards detailed in the SPG are met. An inventory of all NRMM used on site shall be maintained and provided to the Local Planning Authority upon request to demonstrate compliance with the regulations.

4.4 Air Quality Alerts

We continue to support *airTEXT* (<https://www.airtext.info/>). We also cascade the Mayor's air quality alert messages and issue air quality alerts through our own smartphone App CityAir.

4.5 Air Quality Positive

There were four planning applications decided upon in 2024 that required an Environmental Impact Assessment. Three of these submitted an AQP assessment, the fourth was a Section 73 application that wasn't related to an air quality condition.

Of the three AQP assessments, the Air Quality Positive Matrix was only completed fully for one application, the Innovation and Futureproofing section was not included for two applications. This is consistent with the majority of AQP assessments received by the City Corporation.

We are happy for the GLA to include any of the AQP assessments received as case studies for workshops and guidance documents. Please contact Paul Bentley to discuss this.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

In 2024, the City Corporation employed the services of a Data Management Unit, Ricardo, and an Equipment Support Unit, Matts Monitors, to ensure that data is accurate, and the analysers are maintained. Additionally, Officers at the City Corporation act as the Local Site Operator for all sites to carry out the routine tasks required for each type of analyser.

The tasks assigned to each team are as follows:

Data Management Unit	Equipment Support Unit
• Analysis of day-to-day data. • Identification of analyser faults. • Data ratification. • Biannual site audits.	• Reactive site maintenance. • Biannual site servicing. • LSO training.
Local Site Operator	
NO_x Analysers (API and Ecotech)	PM Analysers (BAM)
• Calibrations and filter changes; biweekly for CT4 and CTA, four-weekly for CT3. • Provision of calibration gas.	• Cleaning the inlet head; collector assembly monthly, acceleration assembly and sharp cut cyclone quarterly. • Tape changes every 60 days. • Leak check on every LSO visit. • Cleaning the nozzle and vane on every tape change and dictated by leak check results.

PM₁₀ Monitoring Adjustment

All BAM monitoring data has been corrected in line with guidance provided in LLAQM.TG (19). All PM data is corrected, where required, by Ricardo, and is currently accessible through the Air Quality England and Air Aware websites.

A.2 Diffusion Tubes

- The diffusion tubes utilised by the City Corporation in 2024 were supplied and analysed by Gradko International Laboratory.
- The preparation method used was 50% Triethanolamine in Acetone preparation method and analysis of diffusion tubes was completed using U.V. Spectrophotometry.

- Gradko International Ltd is a UKAS accredited laboratory and participates in the AIR-PT Scheme (a continuation of the Workplace Analysis Scheme for Proficiency) for NO₂ tube analysis and the Annual Field Inter-Comparison Exercise. 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.
- Results of laboratory precision for 2024:
 - Gradko 50% TEA in acetone tube precision for 2024 returned 100% good precision, 11 studies.
 - Latest AIR NO₂ PT Scheme results: 75-100% for all 2014 results available at the time of writing (AR062/63).
- Bias adjustment factor from the National Bias Adjustment Spreadsheet available on the LAQM Support Website (Spreadsheet Version Number: 04/25); 0.88 based on 12 studies.
- Two local co-location studies were undertaken during 2024: one roadside at CTA and one urban background at CT3.

Factor from Local Co-location Studies

During 2024 two co-location studies were undertaken with triplicate diffusion tubes at the CT3 and CTA automatic monitoring sites. Local bias adjustment factors have been calculated for each site using the DTDPT provided by the LAQM Helpdesk.

The results of both studies have been submitted to the LAQM Helpdesk for inclusion within the National Diffusion Tube Bias Adjustment Factor Spreadsheet. The results presented below are based on ratified automatic monitoring data up to the 31st of December 2024, and provisional data thereafter.

Table V. Local Bias Factor Results

Site ID	Triplicate Diffusion Tube Mean ($\mu\text{g m}^{-3}$)	Automatic Monitoring Mean ($\mu\text{g m}^{-3}$)	Bias A	Bias B
CT3	26.2	20.3	0.77	29%
CTA	33.7	30.3	0.9	12%

Following the procedure as detailed in LLAQM.TG (19) the average of the two local bias adjustment factors is 0.83.

Discussion of Choice of Factor to Use

The national bias adjustment factor has been used to adjust all 2024 diffusion tube annual mean concentrations. This is consistent with bias adjustment factors used within previous years. Due to the changing monitoring environment across the Square Mile, using a larger dataset (national) rather than the two local studies completed in 2024 provides a more robust structure for bias adjustment.

Table W. 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	0.83
2022	National	03/23	0.82
2021	National	03/22	0.83
2020	National	03/21	0.82
2019	National	03/20	0.87
2018	National	03/19	0.92
2017	National	03/18	0.97

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

In accordance with LLAGM.TG (19) any relevant monitoring sites have been annualised. The DTDPT has been utilised to complete the required annualisation calculations. As per guidance provided by the LAQM Helpdesk, any diffusion tubes that had nine months of results, but <75% of data capture, have not been annualised.

For 2024 monitoring data there were 13 diffusion tube sites that required annualisation. This compares to 11 diffusion tube monitoring sites that required annualisation for 2023 monitoring data.

Distance Adjustment

Due to the simplistic nature of the NO₂ fall off with distance tool distance, distance adjustment has not been completed for any of the NO₂ monitoring locations. The Square Mile is a complex urban environment with a network of roads, multiple pollutant sources, and an ever-changing landscape of buildings. Limitation 7 within the tool states that the calculator can only be used where the influence of one road is present. Due to this, and the influence of buildings not considered within the calculations, the methodology is not relevant to the NO₂ monitoring completed within the Square Mile.

Table X. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor: London Bloomsbury	Annualisation Factor: London Westminster	Annualisation Factor: London North Kensington	Annualisation Factor: CT3	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g m}^{-3}$)	Annualised Annual Mean ($\mu\text{g m}^{-3}$)	Comments
Bank 12	0.9138	0.9549	0.9293	0.9071	0.9263	27.7	25.7	
Bank 15	0.9738	1.0194	0.9996	0.9666	0.9898	35.1	34.8	
Bank 22	1.0901	1.0980	1.1459	1.1633	1.1243	41.5	46.7	
OS3	1.0117	1.0105	1.0122	1.0012	1.0089	31.2	31.5	
PLA7	0.8966	0.9279	0.9063	0.8974	0.9071	32.8	29.8	
BS1	1.0657	1.1161	1.1065	1.0919	1.0951	38.9	42.5	
BS18	1.0234	1.0218	1.0239	0.9949	1.0160	35.6	36.2	
LEN 9	0.9414	0.9792	0.9636	0.9520	0.9591	34.1	32.7	
T3	0.9314	0.9129	0.9212	0.9422	0.9269	48.4	44.9	
T15a	1.0510	1.0156	1.0285	1.0255	1.0302	36.7	37.9	
T18	0.9414	0.9792	0.9636	0.9520	0.9591	36.3	34.8	
T23	1.0418	1.0307	1.0653	1.0173	1.0388	27.0	28.0	
SM9	0.9889	0.9720	0.9692	0.9561	0.9716	35.9	34.9	

Appendix B Full Monthly Diffusion Tube Results for 2024

Table Y. 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 (0.88)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
CL5	531901	181571	38.9	44.4	38.5	29.8	24.5	26.3	28.4	27.9	24.6	31.8	35.4	32.3	31.9	28.1	-	
CL38	531851	180962	36.9	31.2	29.4	29.2	34.5	27.5	28.5	28.0	34.9	34.4	36.1	26.6	31.4	27.7	-	
CL39	531235	181155	41.2	41.6	42.2	43.1	45.6	51.9	44.9	44.1	49.1	43.1	41.3	39.2	43.9	38.7	-	
CL40	533794	181026	37.9	33.8	29.8	23.8	30.6	29.8	29.1	28.4	29.1	29.6	34.5	34.0	30.9	27.2	-	
CL55	532482	181799	25.8	21.8	22.4	19.9	22.1	17.4	17.1		19.4	24.9	27.4	23.1	21.9	19.3	-	
Bank 1	532641	180914	47.0	43.4	47.7	36.7	53.4	44.2	58.8	46.5	55.4			45.4	47.9	42.1	-	
Bank 2a	532591	181073			32.3	20.5	27.8	25.1	28.4		27.9	34.3	38.8	35.0	30.0	26.4	-	
Bank 3	532465	181171	37.1	28.5	25.3	21.4	28.9	26.1	28.1	26.1	30.9	32.3	40.6	28.0	29.4	25.9	-	
Bank 5	532647	181092	32.7	33.3	26.0	23.2	28.9	28.5	25.5	27.5	30.4	32.5	37.7	28.2	29.5	26.0	-	
Bank 6	532791	180986	40.3	35.1	36.1	32.2	36.7	29.0	29.3		29.9	37.9			34.1	30.0	-	
Bank 8	532853	181019	34.2	32.6	30.7	21.4	29.5		26.0	24.3	19.6	32.3	37.7	28.3	28.8	25.3	-	
Bank 11	532785	181119	34.7	32.2	28.8	25.1	28.6	19.3	29.3	29.9	31.5	33.0	34.6	32.5	30.0	26.4	-	
Bank 12	532804	181164	33.0	29.1	25.4	23.2									27.7	22.6	-	
Bank 13	533036	181376	30.4		28.1	26.1	30.5		28.6	22.6		34.1	37.9	25.5	29.3	25.8	-	
Bank 14	533077	181448	35.5	37.2	34.4	31.3	36.1	30.2		28.8	31.6	39.2	36.0	27.3	33.4	29.4	-	
Bank 15	532915	181513	32.1	40.3	36.9	36.2	40.5	25.1						34.8	35.1	30.6	-	
Bank 16	532670	181555	43.7		36.1	41.3		39.4	25.9	22.0	34.0	33.3	47.8	38.4	36.2	31.8	-	
Bank 17	532684	181442	45.6	39.3	34.2	31.5	29.1	31.7	40.8	33.9	38.6	36.2	40.2		36.5	32.1	-	
Bank 18	532503	181304	35.9	35.2	30.2	28.9	31.5	28.4		29.9	35.4	36.1	35.8	29.9	32.5	28.6	-	
Bank 19	532705	181268	30.9	24.9	25.5	21.6	26.1	21.3	25.9		27.1	26.6		24.4	25.4	22.4	-	
Bank 20a	532682	181196	42.1		39.2	35.6	35.7	36.7	33.7	28.9	31.9	33.1	36.8	28.3	34.7	30.6	-	
Bank 22	533010	181058							40.6	40.4	43.4	41.6			41.5	41.1	-	
TAS1	533484	181190	30.9	30.0	26.2	22.1	25.3	19.0	20.4	19.0	22.9	31.5	37.2	29.1	-	-	-	Triplicate Site with TAS1, TAS2 and TAS3 - Annual data provided for TAS3 only
TAS2	533484	181190	33.4	33.5	27.8	22.9	26.8	21.8	20.7	17.6	23.4	27.3	30.7	26.4	-	-	-	Triplicate Site with TAS1, TAS2 and TAS3 - Annual data provided for TAS3 only
TAS3	533484	181190	31.5	32.6	30.1	24.4	26.5	21.7	21.4	19.0	22.2	30.2	35.4	31.8	26.5	23.3	-	Triplicate Site with TAS1, TAS2 and TAS3 - Annual data provided for TAS3 only
WW	532540	180786	47.0	53.5	60.4	48.9	51.7	52.1	62.6	55.0		54.0	48.7	44.2	52.6	46.2	-	
PLA5	532412	180709	37.1	36.3		31.1	36.6	22.0	31.2	26.1	37.0		43.8	32.8	33.4	29.4	-	
LS	533147	181574	44.5	33.6	35.5	35.5	40.8		31.0	30.2	40.4	34.6	40.5	34.7	36.5	32.1	-	
FA	533236	181040	31.1	28.6		21.5		21.7	21.7	19.6	23.8	28.8	34.8	26.7	25.8	22.7	-	
FL	531276	181261	38.9	34.3	34.9	26.0	32.0	36.6	37.6	34.9	35.3	37.3	38.7		35.1	30.9	-	

OS3	532132	181108	33.8		31.8	28.7	30.9	28.0		30.4			32.2	33.6	31.2	27.7	-	
OS6	532939	181609	44.8	27.5	25.2	15.4	25.4	23.1	20.8	19.1	24.3	27.7	31.6	25.4	25.9	22.8	-	
OS7	531974	181382	37.0	30.8	27.0	29.2	30.4	27.6	23.5	21.0	31.2	31.5	38.7	29.7	29.8	26.2	-	
GY	533703	180913	38.7	34.3	30.9	26.0		30.0	23.8	27.8			41.3	35.9	32.1	28.2	-	
CT	531634	181692	44.5	41.1	44.0	40.4	35.7	36.3	33.4	31.0	36.6	33.6	33.6	30.7	36.7	32.3	-	
N1	532164	181641	29.5	28.1	24.4	15.7	24.8	21.2	22.9	20.6	24.8	28.8	27.8	25.5	24.5	21.6	-	
N2	532210	181975	26.9	27.7	24.5	17.1	19.6	17.8		14.2	19.2	24.6	27.8	29.0	22.6	19.9	-	
SPS2	532175	181150	41.5	38.7	35.5	32.9	36.2	34.2	36.1	35.7	36.9	35.3	42.7	39.8	37.1	32.7	-	
CLS2	532051	180900	27.8	22.2	21.3	20.9	23.7	19.3	22.2	20.5	26.1	29.2	30.1	22.4	23.8	21.0	-	
CHS1	531988	181881	33.6	27.8	27.0	21.2	23.2	22.4	20.1	23.4	21.2	29.9	28.5	27.8	25.5	22.4	-	
CSG ⁽¹⁾	532174	181214														-	-	
TC	531254	181044	31.9		21.0	19.4		16.6	21.0	19.1	22.1	27.1	31.5	23.8	23.4	20.6	-	
BG	533295	181622	37.2	27.4	29.9	26.9	30.9	17.9	24.1	20.9	26.8	34.9		32.0	28.1	24.7	-	
MS	533539	181488	32.9	31.9	29.0		22.9	22.4		21.1	23.7		34.2	27.9	27.3	24.0	-	
HC	531413	181556	44.8	42.9	43.6	36.5	38.1	34.9	37.1	33.3	36.3	41.4	42.7	30.3	38.5	33.9	-	
PLA7	533384	180517	36.2	33.6	32.3	28.2						34.6		32.0	32.8	26.2	-	
BWL1	532495	180791	35.4	34.7	30.6	31.3	33.1	34.9	34.6	31.3	35.4	35.4	40.7	31.4	-	-	-	Triplicate Site with BWL1, BWL2 and BWL3 - Annual data provided for BWL3 only
BWL2	532495	180791	35.0	34.4	31.7	29.6	33.8	32.2	32.5	34.1	35.7	36.3	39.1	32.0	-	-	-	Triplicate Site with BWL1, BWL2 and BWL3 - Annual data provided for BWL3 only
BWL3	532495	180791	38.2		32.2	29.3	34.2	35.5	33.7	29.3	36.1	34.6	37.6	31.0	33.9	29.9	-	Triplicate Site with BWL1, BWL2 and BWL3 - Annual data provided for BWL3 only
BS1	532105	181967	48.2	44.8	40.3	35.1	38.0	33.9	35.4	35.0					38.9	37.4	-	
BS18	532706	181571			32.3	36.4	39.8	35.1		29.9		38.1	41.0	32.6	35.6	31.9	-	
BS20	532412	181685	26.9	24.1		19.2	22.4	17.6	19.3	18.3	21.0	25.5	29.6	28.5	22.9	20.2	-	
BS21	532101	182074	43.1	43.2	36.5	35.7	40.6	38.4	36.1	30.8	41.4	35.6	43.3	35.9	38.4	33.8	-	
LEN 1	531872	181621	35.7	38.0	35.5	27.7	27.2	25.0	26.3	24.7	28.4	34.0	39.3	32.7	31.2	27.5	-	
LEN 3	532117	181840	44.0	43.0	44.1		36.9	35.7	38.0	35.4	40.0		38.7	38.4	39.4	34.7	-	
LEN 4	532117	181714	42.7	36.9	37.3	34.9	38.4	37.8	36.2	35.7		38.1	45.6	38.6	38.4	33.8	-	
LEN 6	532443	181966	33.9	31.4	35.1	30.4	25.7	23.0	27.3	26.9	28.3	31.3	33.9	29.8	29.7	26.2	-	
LEN 9	532435	181558	41.4	32.7	32.9	29.5	33.8								34.1	28.8	-	
LEN 15	532144	182013	31.1	25.3	27.4	19.9		19.4	19.8	17.5	22.8	25.7	31.0	28.7	24.4	21.5	-	
T2	533294	180688	43.8	41.4	37.7	42.2	43.1	36.6	40.4	34.8	42.3	38.6	40.5	34.1	39.6	34.9	-	
T3	533385	180722	55.7		40.9		49.2		47.8				51.8	45.2	48.4	39.5	-	
T4	533513	180941	37.5	43.0	36.9	28.4	33.4		25.8	24.9			35.8	28.6	32.7	28.8	-	
T5	533600	181165	45.6	47.3	42.1	36.0	41.7	42.0	48.9	43.5	41.8	45.0	47.0	39.2	43.3	38.1	-	
T6	533549	181345	37.6	33.4	31.6	21.9	28.8		25.6	21.8		32.9	37.9	27.8	29.9	26.4	-	
T7	533418	181257	33.4	32.1		24.4	25.8	21.6	22.4	21.0	24.0		34.0	29.0	26.8	23.6	-	
T10	533239	181152	31.2	31.2	24.6	21.6	26.5	19.6	24.7		26.1	32.2	30.5	30.6	27.2	23.9	-	
T13	531644	180857	42.6	41.6	42.5	33.3	42.9	41.3	41.6	42.0	42.9	44.3	43.2	35.4	41.1	36.2	-	
T14	531197	180826	42.3	44.8	42.8	35.7	39.6	42.2	40.8	39.2	39.4	36.5	43.0	38.9	40.4	35.6	-	
T15a	531422	181160						39.7	39.0	37.9	35.2	33.7	39.5	32.1	36.7	33.3	-	
T16	531769	181167	36.4	35.1	36.1	31.1	37.7	32.3		32.7	38.1	38.4	41.0		35.9	31.6	-	

T17	532156	181528	44.1	39.7		34.7	41.9	40.2	41.5	41.1	37.5	43.1	43.1	39.0	40.5	35.7	-	
T18	532251	181571	39.2	39.2	37.8	30.9	34.4								36.3	30.6	-	
T20	531592	181563	43.6	42.0	38.0	33.8	35.8	30.3	31.4	27.4	28.0	37.9	35.7	35.4	34.9	30.8	-	
T21	531804	181395	51.5	50.1	52.0	45.1	50.5	46.9		42.4	46.3	48.7	47.7	38.8	47.3	41.6	-	
T23	533263	181248			28.7	22.2	26.8	21.1	22.4		25.8		38.4	30.3	27.0	24.6	-	
SM1	532312	181270	32.3	32.2	29.5	22.4	28.0	21.5	25.2	25.3	27.5	30.4	37.2	28.0	28.3	24.9	-	
SM2	532210	181217	41.2	40.2	39.1	29.7	35.2	31.6	37.0	36.8	37.1	35.9	42.7		36.9	32.5	-	
SM3	532154	181260	41.4	31.3	32.1	36.0	40.2	32.9	31.9	27.1	41.5		46.2	31.3	35.6	31.3	-	
SM4	532095	181285		45.4	39.1	39.2	39.8	41.5		35.5	45.2	42.5	44.0	47.2	41.9	36.9	-	
SM5	531980	181331	36.8	47.1	42.6	38.9	41.4	39.6	39.0	38.7		43.2			40.8	35.9	-	
SM6	531898	181353	39.7	35.6	34.9	36.2	43.4	34.5		28.9	39.6	37.0	42.4	29.7	36.5	32.2	-	
SM7	532025	181371	36.4	38.4	36.1	33.6	32.7	38.8	37.5	31.9	40.4	40.1	43.3	36.3	37.1	32.7	-	
SM8	532041	181468	34.0	39.7	33.0	26.4	33.3	29.6	30.3		30.5	33.6	35.3		32.6	28.6	-	
SM9	532038	181534	38.9	41.0		28.2		30.2	34.2		36.3		40.5	37.9	35.9	30.7	-	
SM10	532082	181578	42.5	45.8	37.4	33.4	41.6	40.1	39.1	34.2	36.0	41.0	44.6		39.6	34.8	-	
SM11	532143	181492	41.9	51.2	45.7	42.4	43.6	46.0	41.9		39.1	41.2	45.7	41.9	43.7	38.5	-	
SM12	532138	181425	49.3	47.9	45.6	42.9	50.1	43.1	43.3	38.1	42.6	40.6	43.6	44.6	44.3	39.0	-	
SM13	532143	181371	47.6	44.8	45.5	44.1	45.9	43.6	47.5	40.3	43.0		48.8	38.4	44.5	39.2	-	
SM14	532137	181316	46.3	42.4		40.6	49.5	36.6	42.6	34.5	46.5	42.6			42.4	37.3	-	

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

☒ 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.

☒ The City of London Corporation 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 A for details on bias adjustment and annualisation.

(1) Due to construction works at Cheapside Sunken Garden monitoring was not completed in 2024.

Appendix C Maps of Monitoring Locations and AQMAs

Figure J. Map of Non-Automatic Monitoring Sites

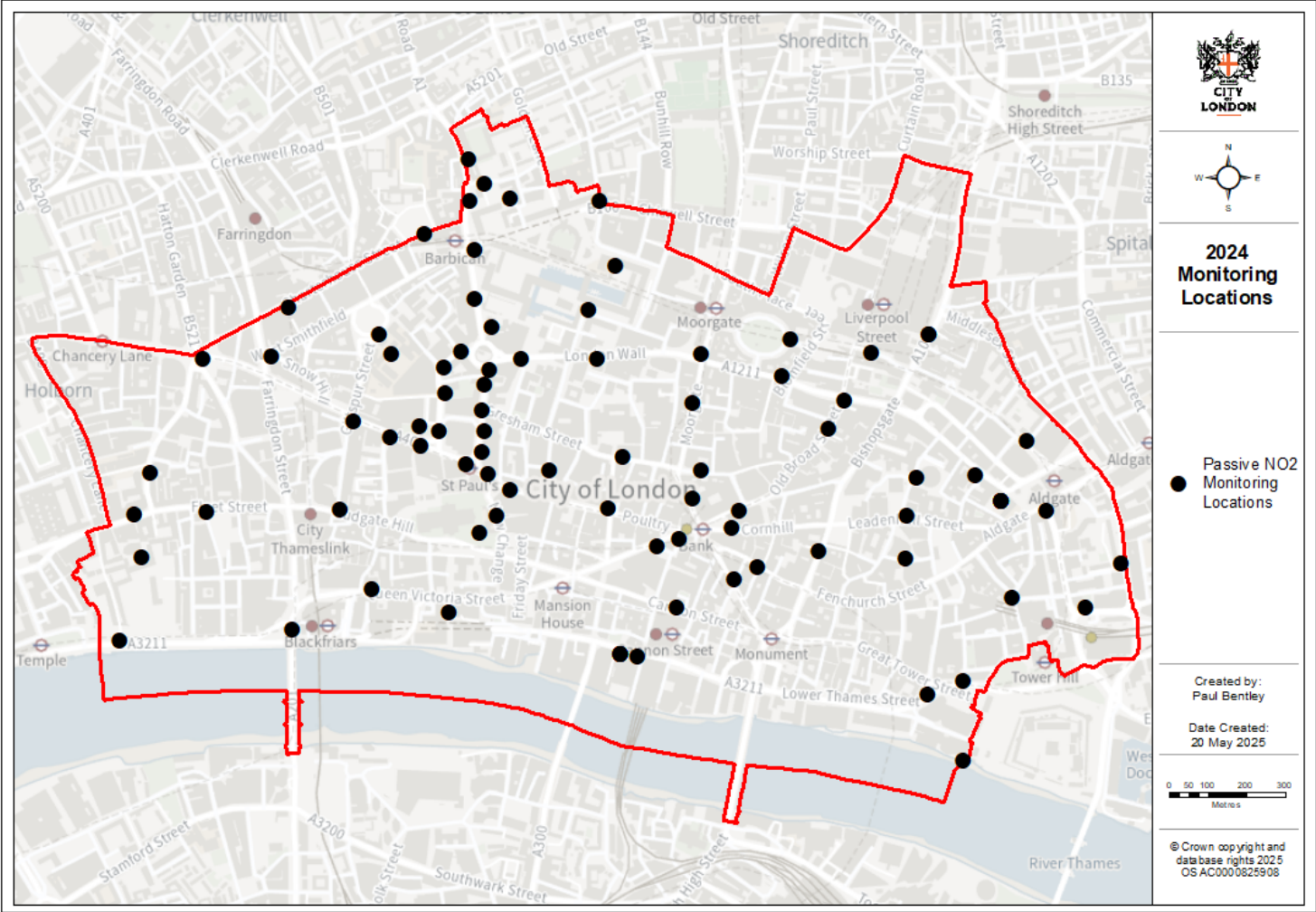
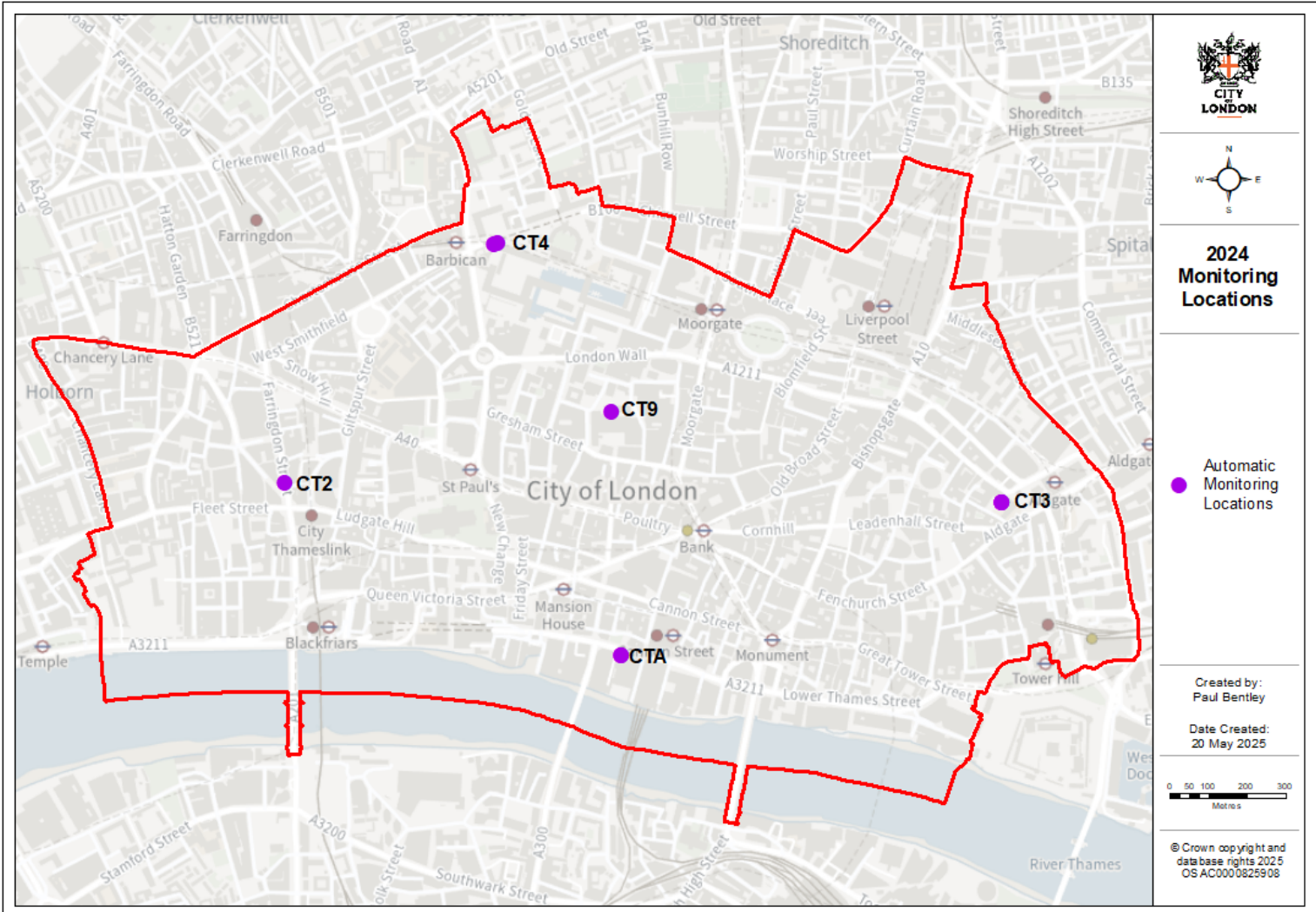


Figure K. Map of Automatic Monitoring Sites



London Borough of Ealing Air Quality Annual Status Report for 2024

Date of publication: June 2025



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

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

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Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQO	Air Quality Objective
AQG	Air Quality Guidelines
AQS	Air Quality Strategy
AURN	Automatic Urban and Rural Network
BAM	Beta Attenuation Monitor
CHP	Combined Heat and Power
COP26	Conference of the Parties (2021 United Nations Climate Change Conference)
CV	Coefficient of Variation
CYP	Children and Young People
DPD	Development Plan Document
DPH	Department of Public Health
EA	Environment Agency
EV	Electric Vehicle
FDMS	Filter Dynamics Measurement System
GLA	Greater London Authority
HPF	Health Protection Forum
HSL	Health and Safety Laboratory
JSNA	Joint Strategic Needs Assessment
LAQM	Local Air Quality Management
LAQN	London Air Quality Network
LBE	London Borough of Ealing
LES	Low Emission Strategy
LLAQM	London Local Air Quality Management
MAQF	Mayor's Air Quality Fund
NHS	National Health Service

Abbreviation	Description
NO ₂	Nitrogen dioxide
NO _x	Nitrogen oxides
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
QA/QC	Quality assurance and quality control.
STARS	Sustainable Travel: Active, Responsible, Safe
TEOM	Tapered Element Oscillating Microbalance
TfL	Transport for London
VCM	Volatile Correction Model
WHO	World Health Organisation

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

In 2024, four automatic monitoring stations were operational in the London Borough of Ealing as part of the London Air Quality Network (LAQN). These include Ealing Acton Vale, an urban background site, two roadside sites (Ealing Hanger Lane Gyratory and Ealing Western Avenue) and one industrial site (Ealing Horn Lane). Two different PM₁₀ analysers are active at the Horn Lane monitoring station, a TEOM and a BAM. Consistent with the LAQN classification, data from the two instruments are reported as two separate stations (EA8 Horn Lane and EI8 Horn Lane TEOM). Site EA010 Ealing Green Quarter was decommissioned in December 2023 and has not been reported in this ASR.

Details of the relevant Quality Assurance/Quality Control (QA/QC) procedures that were followed during the monitoring are provided in Appendix A. Figure N in Appendix C and Table B provide details of the automatic monitoring sites located in the Borough. All the currently operational automatic monitoring sites measure nitrogen dioxide (NO₂) and Particulate Matter (PM₁₀).

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)
EA6 Hanger Lane Gyratory	Hanger Lane Gyratory	Roadside	518537	182708	NO ₂ , PM ₁₀	Y	Ealing	Chemiluminescence, TEOM	4	3	2.0
EA8 Horn Lane	Horn Lane	Industrial	520432	181428	NO ₂ , PM ₁₀	Y	Ealing	Chemiluminescence, PM ₁₀ by BAM	8	2.5	1.8
EI8 Horn Lane	Horn Lane	Industrial	520432	181428	PM ₁₀	Y	Ealing	TEOM	8	2.5	1.8
EI1 Western Avenue	Western Avenue	Roadside	520430	181950	NO ₂ , PM ₁₀	Y	Ealing	Chemiluminescence, TEOM	4	4	2.0
EI3 Acton Vale	Acton Vale	Urban Background	521134	179771	NO ₂ , PM ₁₀	Y	Ealing	Chemiluminescence, PM ₁₀ by FDMS	N/A	N/A	2.55

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

During 2024, the London Borough of Ealing also monitored annual mean NO₂ concentrations using a network of 66 passive diffusion tubes across 60 locations at a time². There are three triplicate diffusion tube sites, co-located with three of the automatic air quality monitoring stations. Figure M in Appendix C and Table C provide details of the diffusion tube sites operated within the borough during 2024.

In 2024, there were minor changes to the diffusion tube network. A total of seven sites were relocated, two of which were relocated twice during the latter part of the year. These sites had previously been moved from drainpipes on house facades to nearby lampposts due to access requirements, they have now been moved back to their original positions on the drainpipes. These changes generally do not significantly change exposure and therefore do not affect monitoring concentrations, with the exception of EA53. EA53 was relocated in 2023, which saw the concentrations change drastically after being relocated. As such the location before and after relocation are considered to be separate sites and have been addressed as EA53 and EA53b accordingly, this is discussed further in Section 1.2. EA53b was decommissioned at the end of 2024 and returned to the original EA53 site. All of these changes are outlined in Table C with new coordinates reported where relevant.

² There were 61 different monitoring locations during 2024 due to EA53 relocation to EA53b.

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)
EA1	2 Horsenden Lane South, Greenford, UB6 8AB	Roadside	516368	182978	NO ₂	Y- Ealing	0.0	5.0	No	2-2.5
EA2	1 Kirn Road, West Ealing, W13 0UB	Roadside	516704	180487	NO ₂	Y- Ealing	0.0	7.0	No	2-2.5
EA3	Brent Lodge Park, Church Road, Hanwell, W7 3BP	Background	514740	180643	NO ₂	Y- Ealing	0.0	30.0	No	2-2.5
EA4	74a Greenford Avenue, Hanwell, W7 3QS	Roadside	515451	180894	NO ₂	Y- Ealing	0.0	5.0	No	2-2.5
EA5	Boston Parade, 19 Boston Road, Hanwell, W7 2AN	Roadside	516281	178879	NO ₂	Y- Ealing	0.0	15.0	No	2-2.5
EA6	200 Uxbridge Road, Hanwell, W7 3TB	Roadside	515180	180111	NO ₂	Y- Ealing	0.0	3.3	No	2-2.5
EA7	2 St Marys Avenue South, Southall, UB2 4LS	Roadside	513476	178561	NO ₂	Y- Ealing	0.0	12.0	No	2-2.5
EA8	55 King Street, Southall, UB2 4DQ	Roadside	512341	179186	NO ₂	Y- Ealing	0.0	3.3	No	2-2.5
EA9	18 Western Road, Southall, UB2 5DU	Roadside	512181	179219	NO ₂	Y- Ealing	0.0	7.5	No	2-2.5
EA10	150 Brent Road, Southall, UB2 5LD	Roadside	511172	179241	NO ₂	Y- Ealing	0.0	8.0	No	2-2.5
EA11	2 Merrick Road, Southall, UB2 4AU	Roadside	512657	179706	NO ₂	Y- Ealing	0.0	12.0	No	2-2.5
EA12	Hambrough Primary School	Roadside	512673	180069	NO ₂	Y- Ealing	0.0	10.0	No	2-2.5

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)
EA13	11 The Broadway, Southall, UB1 3PX	Roadside	512768	180400	NO ₂	Y- Ealing	0.0	4.0	No	2-2.5
EA14	25 Lady Margaret Road, Southall, UB1 2RA	Roadside	512812	180516	NO ₂	Y- Ealing	0.0	6.3	No	2-2.5
EA15	213 Church Road, Northolt, UB5 5BE	Roadside	512442	183769	NO ₂	Y- Ealing	0.0	12.4	No	2-2.5
EA16	31 Mandeville Road, Northolt, UB5 5HF	Roadside	513056	184241	NO ₂	Y- Ealing	0.0	9.0	No	2-2.5
EA17	126 Petts Hill, Northolt, UB5 4NW	Roadside	513794	185348	NO ₂	Y- Ealing	0.0	9.0	No	2-2.5
EA18	1504 Greenford Road, Greenford, UB6 0HR	Roadside	515402	185313	NO ₂	Y- Ealing	0.0	5.3	No	2-2.5
EA19	914 Greenford Road, Greenford, UB6 8QN	Roadside	514985	183770	NO ₂	Y- Ealing	0.0	3.3	No	2-2.5
EA20	6 Karoline Gardens, Greenford, UB6 9JP	Roadside	514691	183269	NO ₂	Y- Ealing	0.0	9.1	No	2-2.5
EA21	12 Blenheim Close, Greenford, UB6 8ET	Roadside	514882	183102	NO ₂	Y- Ealing	0.0	20.0	No	2-2.5
EA22	18 Runnymede Gardens, Greenford, UB6 8SX	Roadside	515250	183093	NO ₂	Y- Ealing	0.0	4.5	No	2-2.5

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)
EA23	158 South Ealing Road, Ealing, W5 4QL	Roadside	517694	179045	NO ₂	Y- Ealing	0.0	3.5	No	2-2.5
EA24	213 Northfields Ave, West Ealing, W13 9QU	Roadside	517045	179292	NO ₂	Y- Ealing	0.0	5.2	No	2-2.5
EA25	12 Bond Street, Ealing, W5 5AP	Roadside	517644	180613	NO ₂	Y- Ealing	0.0	2.7	No	2-2.5
EA26	8 Spring Bridge Road, Ealing, W5 2AA	Roadside	517745	180826	NO ₂	Y- Ealing	0.0	3.0	No	2-2.5
EA27	21 Haven Lane, Ealing, W5 2HZ	Roadside	518022	181114	NO ₂	Y- Ealing	0.0	2.4	No	2-2.5
EA28	41-42 Haven Green, Ealing, W5 2NX	Roadside	517909	180971	NO ₂	Y- Ealing	0.0	3.0	No	2-2.5
EA29	64 Hanger Lane, Ealing, W5 2JH	Roadside	518635	181288	NO ₂	Y- Ealing	0.0	0.7	No	2-2.5
EA30, EA31, EA32	Fernlea House	Roadside	518541	182707	NO ₂	Y- Ealing	0.0	4.0	Yes	2-2.5
EA33	25 Waverley Gardens, Park Royal, NW10 7EX	Roadside	518673	182982	NO ₂	Y- Ealing	6.0	1.8	No	2-2.5
EA34	3 Iveagh Terrace, Park Royal, NW10 7SY	Roadside	519126	183383	NO ₂	Y- Ealing	4.0	33.0	No	2-2.5
EA35	5 Wendover Court, Western Avenue, Acton, W3 0TG	Roadside	520020	182180	NO ₂	Y- Ealing	0.0	11.0	No	2-2.5

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)
EA36, EA37, EA38	322 & 324 Western Avenue	Roadside	520430	181950	NO ₂	Y- Ealing	3.5	5.0	Yes	2-2.5
EA39	326 Western Avenue, Acton, W3 0PL	Roadside	520426	181958	NO ₂	Y- Ealing	0.0	11.4	No	2-2.5
EA40	94 North Acton Road, Park Royal, NW10 7AY	Roadside	520782	182771	NO ₂	Y- Ealing	0.0	8.0	No	2-2.5
EA41	1 Shaftesbury Gardens, Park Royal, NW10 6LJ	Roadside	521312	182366	NO ₂	Y- Ealing	0.0	10.0	No	2-2.5
EA42	39 Old Oak Lane, Park Royal, NW10 6EJ	Roadside	521587	182685	NO ₂	Y- Ealing	0.0	5.0	No	2-2.5
EA43	161 Wells House Road, Park Royal, NW10 6EA	Roadside	521303	182056	NO ₂	Y- Ealing	6.5	3.0	No	2-2.5
EA44	4 St Andrews Road, Acton, W3 7NE	Roadside	521389	180953	NO ₂	Y- Ealing	0.0	8.6	No	2-2.5
EA45	98 Western Avenue, Acton, W3 7TZ	Roadside	521173	180981	NO ₂	Y- Ealing	0.0	10.0	No	2-2.5
EA46	6 Western Avenue, Acton, W3 7UD	Roadside	521549	180923	NO ₂	Y- Ealing	0.0	4.6	No	2-2.5
EA47	71 Old Oak Common Lane, Acton, W3 7DD	Roadside	521557	180996	NO ₂	Y- Ealing	0.0	11.0	No	2-2.5

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)
EA48	205 Old Oak Road, Acton, W3 7HH	Roadside	521614	180852	NO ₂	Y- Ealing	0.0	4.7	No	2-2.5
EA49	17 The Vale, Acton, W3 7SH	Roadside	521720	180084	NO ₂	Y- Ealing	0.0	5.0	No	2-2.5
EA50	3 Warple Way, Acton, W3 0RH	Roadside	521088	180046	NO ₂	Y- Ealing	0.0	2.2	No	2-2.5
EA51	88 High Street, Acton, W3 6QX	Roadside	520285	180075	NO ₂	Y- Ealing	0.0	5.0	No	2-2.5
EA52	15a Church Road, Acton, W3 8QE	Roadside	520092	180063	NO ₂	Y- Ealing	0.0	10.0	No	2-2.5
EA53	182 High Street, Acton, W3 9NN	Roadside	520030	180141	NO ₂	Y- Ealing	1.5	0.5	No	2-2.5
EA53b	182 High Street, Acton, W3 9NN	Roadside	520044	180125	NO ₂	Y- Ealing	1.5	0.5	No	2-2.5
EA54	44 Acton Lane, Chiswick, W4 5ED	Roadside	520484	178847	NO ₂	Y- Ealing	6.5	1.0	No	2-2.5
EA55	156 Horn Lane, Acton, W3 6PH	Roadside	520226	180947	NO ₂	Y- Ealing	0.0	6.0	No	2-2.5
EA56, EA57, EA58	317 Horn Lane, Acton, W3 0BU (AQMS) (Tri)	Roadside	520432	181428	NO ₂	Y- Ealing	8.0	2.5	Yes	2-2.5
EA59	5 Leamington Park, Acton, W3 6TJ	Roadside	520532	181517	NO ₂	Y- Ealing	0.0	3.0	No	2-2.5
EA60	Lyra Court, Portal Way, Acton, W3 6DB	Roadside	520739	181824	NO ₂	Y- Ealing	0.0	5.0	No	2-2.5
EA61	36 Wales Farm Road, Acton, W3 6UE	Roadside	520713	181592	NO ₂	Y- Ealing	0.0	5.0	No	2-2.5

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)
EA62	30 Bengarth Road, Northolt, UB5 5LH	Roadside	512026	183762	NO ₂	Y- Ealing	10.0	4.0	No	2-2.5
EA63	Greenway Gardens, Greenford, UB6 9TT	Roadside	513483	182686	NO ₂	Y- Ealing	16.0	0.0	No	2-2.5
EA64	Greenford Business Centre, Greenford, UB6 9AP	Roadside	514378	182112	NO ₂	Y- Ealing	12.0	0.0	No	2-2.5
EA65	31 Kennedy Road, Hanwell, W7 1JL	Roadside	515276	181990	NO ₂	Y- Ealing	8.0	0.0	No	2-2.5
EA66	69 Oldfield Lane South, Greenford, UB6 9JT	Roadside	514521	182949	NO ₂	Y- Ealing	7.0	0.0	No	2-2.5

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.

1.2 Comparison of Monitoring Results with AQOs

The annual mean NO₂ concentration results from automatic monitoring stations since 2018 are presented in Table D. The results presented are after adjustments for “annualisation” and for distance to a location of relevant public exposure (if required), the details of which are described in Appendix A.

Data capture was excellent at Hanger Lane Gyratory, Horn Lane and Western Avenue (EA6, EA8, EI1) automatic monitors in 2024, with these three stations achieving data capture rates above 95% for NO₂. Due to ongoing technical issues with the monitor during there was no data available at Acton Vale (EI3) for the majority of 2024. The monitor was fixed in November and has been recording data since, however data capture is less than 25% and thus insufficient to undergo annualisation. As a result, the monitoring data at Acton Vale have not been reported for 2024.

There were no exceedances of the NO₂ annual mean objective of 40 µg m⁻³ observed in 2024. The latest exceedance was at the Hanger Lane Gyratory monitoring station in 2023 where it recorded an NO₂ concentration marginally above the objective (40.5 µg m⁻³). Concentrations have since reduced to 36.5 µg m⁻³ in 2024, which continues the long-term downward trend observed at this location. Both Horn Lane and Western Avenue recorded NO₂ concentrations below the objective for the fifth year in a row and continue to show a downward trend. However, it should be noted that all the automatic monitoring locations were in exceedance of the annual mean WHO AQG of 10 µg m⁻³.

Concentration values are those at the location of the monitoring site (bias adjusted and annualised, as required), not those following any fall-off with distance correction.

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
EA6 Hanger Lane Gyratory	518537	182708	Roadside	96.2	96.2	<u>67.9</u>	<u>64.5</u>	51.0	49.4	51.5	40.5	36.4
EA8 Horn Lane	520432	181428	Industrial	93.0	93.0	43.9	41.8	33.2	32.0	29.3	28.5	25.7
EI1 Western Avenue	520430	181950	Roadside	96.9	96.9	47.7	48.6	35.2	35.9	35.2	30.1	28.3
EI3 Acton Vale	521134	179771	Urban Background	13.2	13.2	29.0	26.5	19.7	21.0	20.6	-	-

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%.

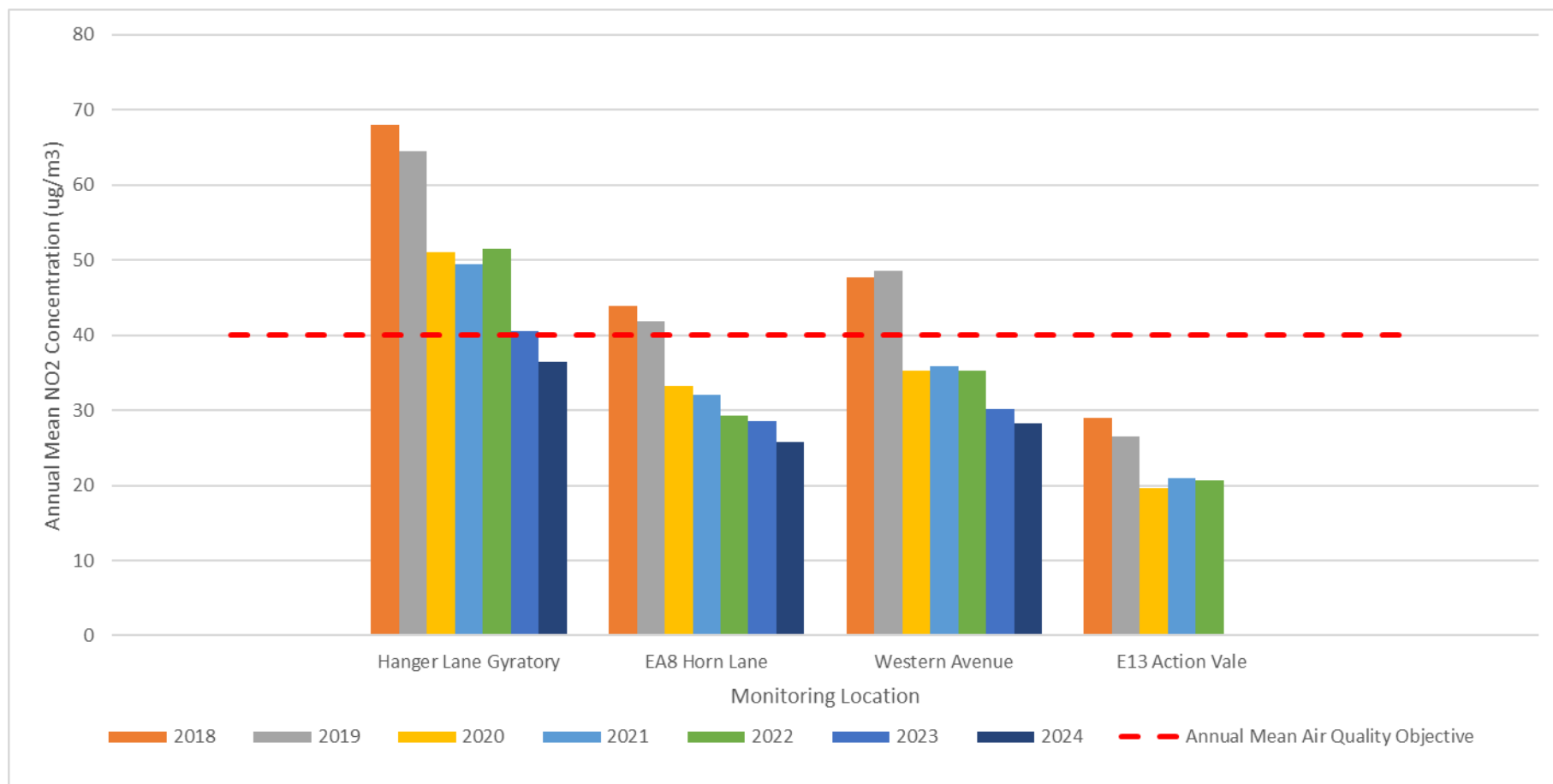
Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(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%).

Figure 1 shows the trends in NO₂ concentrations at automatic monitoring sites in the borough for the period of 2018 – 2024. At automatic monitoring sites, a decreasing trend in NO₂ concentrations can be seen since 2015, albeit with some natural variations. There was a large reduction in 2020 due to the impacts of COVID-19 travel restrictions. Between 2020 and 2022, the trend has generally stabilised. All sites displayed decreases in 2024 from 2023 concentrations where data are available.

Figure 1. Annual Mean NO₂ Concentrations at Automatic Monitoring Sites



Data capture at most NO₂ diffusion tubes sites was good in 2024, with at least 9 months of valid data (i.e. 75% data capture or greater). EA53, EA53b, EA62, EA64 and EA65 were the only diffusion tube locations with poor data capture, with a data capture of 18.9%, 64.1%, 56.5%, 69.5% and 41.4% respectively. As the data capture for EA53 was less than 25%, it was insufficient for annualisation.

The annual mean NO₂ concentration results from diffusion tube monitoring locations since 2018 are presented in Table D. The results presented are after adjustments for “annualisation” but not for distance to a location of relevant public exposure (if required), the details of which are described in Appendix A.

Amongst the diffusion tubes, there were two exceedances of the NO₂ annual mean objective in 2024, at sites EA30-32 and EA53b. This is a reduction from 2023 where there were three exceedances at the same monitoring sites as well as EA46. EA30-32 is co-located with the automatic monitor on the Hanger Lane Gyratory. EA53b is located along Acton High Street.

The maximum NO₂ concentration recorded at diffusion tube sites in 2024 was 52.5 µg m⁻³ prior to distance correction at site EA53b along Acton High Street. After distance correction, concentrations at EA53b are reduced but remain above the annual mean NO₂ objective (43.9 µg m⁻³). Monitoring is considered to have started at this site in January 2023 after the diffusion tube at EA53 had been relocated to the opposite side of the road which is closer to relatively longer queues of idling vehicles. This resulted in large increases to annual mean concentrations compared to the seven-year trend, as such EA53 and EA53b are considered separate monitoring sites. The tube was then relocated again in October 2024 from EA53b back to the original EA53 site, away from the idling vehicles and across from a cycle lane. There is insufficient data from EA53 in 2024 to confirm whether exceedances remain in this area.

Overall, there have been decreases in NO₂ concentrations at 58 sites in 2024 compared to 2023. The largest decrease was seen at the EA64 site, Greenford Business Centre, (-6.2 µg m⁻³). Other notable decreases include EA46 (-3.0 µg m⁻³) from 40.5 µg m⁻³ to 37.5 µg m⁻³. This is the first time EA46 has been below the NO₂ annual mean objective in the recent 7-year period.

As there were no diffusion tube locations which saw annual mean concentrations above 60 µg m⁻³ in 2024, it is unlikely that the 1 hour mean NO₂ objective was exceeded at any monitoring location.

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
EA1	516368	182978	Roadside	100.0	100.0	49.4	50.3	36.1	34.6	33.5	29.6	26.3
EA2	516704	180487	Roadside	81.4	81.4	42	38.7	27.7	29.8	28.4	29.9	27.7
EA3	514740	180643	Background	90.5	90.5	21	20.5	15.2	14.9	15.9	13.4	11.0
EA4	515451	180894	Roadside	100.0	100.0	30.1	34.4	24.4	25.9	25.3	23.5	23.3
EA5	516281	178879	Roadside	100.0	100.0	30.7	29.8	21.2	21.1	26.2	25.2	20.4
EA6	515180	180111	Roadside	100.0	100.0	42.8	43	33.5	33.5	35.8	30.4	26.5
EA7	513476	178561	Roadside	92.4	92.4	30.5	28.9	21	22	20.2	19.7	16.7
EA8	512341	179186	Roadside	100.0	100.0	41.1	40.5	27	29.4	32.3	28.7	26.3
EA9	512181	179219	Roadside	100.0	100.0	30.9	31.5	22.4	22.9	23.4	21.7	18.8
EA10	511172	179241	Roadside	100.0	100.0	35	33.2	23.4	24.3	27.2	30.3	25.4
EA11	512657	179706	Roadside	100.0	100.0	28.6	27.5	17.6	20.8	19.3	20.3	18.3
EA12	512673	180069	Roadside	100.0	100.0	34.4	32.5	24	22.6	23	22.2	19.8
EA13	512768	180400	Roadside	100.0	100.0	46	44.3	35.2	32.9	36.2	34.2	32.8
EA14	512812	180516	Roadside	100.0	100.0	40.2	41.2	29.6	31.6	32.5	29.8	27.2
EA15	512442	183769	Roadside	100.0	100.0	37.2	35.2	24.3	27.3	25.2	23.8	20.3
EA16	513056	184241	Roadside	100.0	100.0	33.9	34.6	28.3	25.9	26.7	24.4	21.4
EA17	513794	185348	Roadside	100.0	100.0	33.4	32.8	24.8	23.6	23.1	20.8	18.5
EA18	515402	185313	Roadside	100.0	100.0	31.8	31.7	24.1	25.3	24.2	19.8	18.6
EA19	514985	183770	Roadside	100.0	100.0	35	34.3	24.4	26.7	25.2	23.9	20.1
EA20	514691	183269	Roadside	100.0	100.0	41.6	39.1	28.7	27.9	27.8	23.1	21.9
EA21	514882	183102	Roadside	100.0	100.0	34.4	30	20.2	22.6	20.7	20.2	18.4
EA22	515250	183093	Roadside	100.0	100.0	33.1	33.1	24.6	23.5	22.3	21.2	22.1
EA23	517694	179045	Roadside	100.0	100.0	50.6	52	35.2	31.4	34.1	32.1	29.0
EA24	517045	179292	Roadside	100.0	100.0	33.5	32.7	24.3	25.6	27.6	27.5	24.1
EA25	517644	180613	Roadside	100.0	100.0	52.5	42.2	30.9	30.7	31.8	26.2	22.7
EA26	517745	180826	Roadside	100.0	100.0	60.4	56.2	42.5	44.3	43.6	36.7	33.5
EA27	518022	181114	Roadside	100.0	100.0	31.2	30.2	22.6	22.5	21.5	20.8	17.6
EA28	517909	180971	Roadside	92.7	92.7	42.3	42.1	33.3	36.8	37.4	30.0	30.0

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
EA29	518635	181288	Roadside	100.0	100.0	36.4	35.1	27.1	25.6	25.4	21.8	20.2
EA30, EA31, EA32	518541	182707	Roadside	100.0	100.0	<u>69.4</u>	<u>66.2</u>	50.2	50.3	52	42.5	40.1
EA33	518673	182982	Roadside	90.5	90.5	54.5	56	44.5	40.3	35.9	32.5	30.9
EA34	519126	183383	Roadside	90.8	90.8	35.2	33.9	28.1	25.1	29.5	33.5	29.5
EA35	520020	182180	Roadside	100.0	100.0	49.7	46.6	35.7	33.7	35	28.5	26.9
EA36, EA37, EA38	520430	181950	Roadside	100.0	100.0	54.4	49.4	36.5	35.8	35.3	32.1	28.0
EA39	520426	181958	Roadside	100.0	100.0	48.3	41.4	31.2	28.4	27.1	23.4	22.1
EA40	520782	182771	Roadside	100.0	100.0	33.1	30.6	22	25.9	25.1	22.9	19.4
EA41	521312	182366	Roadside	100.0	100.0	32.6	30	25.2	24.2	23.2	24.9	18.7
EA42	521587	182685	Roadside	100.0	100.0	44.4	45.9	32	35.4	32.6	32.0	27.5
EA43	521303	182056	Roadside	100.0	100.0	36.6	33.2	24.9	24.4	25.4	22.8	19.7
EA44	521389	180953	Roadside	100.0	100.0	32	31.4	22.6	21	21.9	19.7	16.8
EA45	521173	180981	Roadside	100.0	100.0	46.7	39.6	29.3	29.4	29.7	25.9	22.9
EA46	521549	180923	Roadside	90.5	90.5	<u>67.6</u>	59.6	46.1	45.3	46	40.5	37.5
EA47	521557	180996	Roadside	90.5	90.5	43	41.4	32.9	30.5	29	26.4	23.0
EA48	521614	180852	Roadside	100.0	100.0	52.6	47.1	37.8	36.4	39.7	30.8	30.0
EA49	521720	180084	Roadside	100.0	100.0	37.5	35.3	26.7	25.4	24.5	21.6	20.1
EA50	521088	180046	Roadside	100.0	100.0	36.2	34.3	25.7	24.3	23.7	22.0	20.7
EA51	520285	180075	Roadside	100.0	100.0	48.1	48.8	39	39.4	39.9	37.8	35.4
EA52	520092	180063	Roadside	100.0	100.0	29.6	27.5	22.5	22.2	22.6	20.2	18.8
EA53	520030	180141	Roadside	66.7	18.9	47.7	47.5	36.2	34.5	37.2		29.3
EA53b	520044	180125	Roadside	88.9	64.1						52.9	52.5
EA54	520484	178847	Roadside	92.4	92.4	44.3	39.3	28.2	28.9	28.5	24.9	21.7
EA55	520226	180947	Roadside	100.0	100.0	40.5	34.9	27.6	28.2	26.8	24.1	23.1

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
EA56, EA57, EA58	520432	181428	Roadside	100.0	100.0	44.3	41.2	31.3	31.1	30.2	27.7	26.0
EA59	520532	181517	Roadside	100.0	100.0	38.4	34.1	26.6	26	26.1	23.7	22.0
EA60	520739	181824	Roadside	100.0	100.0	39.2	39.8	29.7	26.5	26.1	23.6	22.0
EA61	520713	181592	Roadside	56.5	56.5	37.6	37.1	28.6	26.3	26.9	28.0	24.7
EA62	512026	183762	Roadside	82.7	82.7	-	-	-	-	19.2	18.8	16.1
EA63	513483	182686	Roadside	100.0	100.0	-	-	-	-	24.4	22.0	19.7
EA64	514378	182112	Roadside	69.5	69.5	-	-	-	-	37.8	33.9	29.0
EA65	515276	181990	Roadside	41.4	41.4	-	-	-	-	18.2	17.5	16.7
EA66	514521	182949	Roadside	92.2	92.2	-	-	-	-	24	21.3	19.4

☒ 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 2 to Figure 9 show the trends in NO₂ concentrations for 2018-2024 at diffusion tube monitoring sites grouped by monitoring site type: urban background and roadside sites. At the urban background diffusion tube site Brent Lodge Park (EA3) (Figure 2), there is evidence of a decrease in NO₂ concentrations between 2018 and 2024.

The majority of near-road and roadside sites show an overall decreasing trend in annual mean NO₂ concentrations since 2018, with evidence of a stabilisation or slight increase from 2020 to 2022. The decrease in 2020 is likely to be the impact of COVID-19 and resulting lockdowns leading to a decrease in road traffic emissions, with subsequent increases likely attributable to a return to business as usual. 2024 generally saw a gradual decreasing trend at most sites, with two diffusion tube sites showing an increase.

EA53b has been omitted from these figures as there is not enough data to show a trend.

Figure 2. Annual Mean NO₂ Concentrations at the Urban Background Diffusion Tube Sites

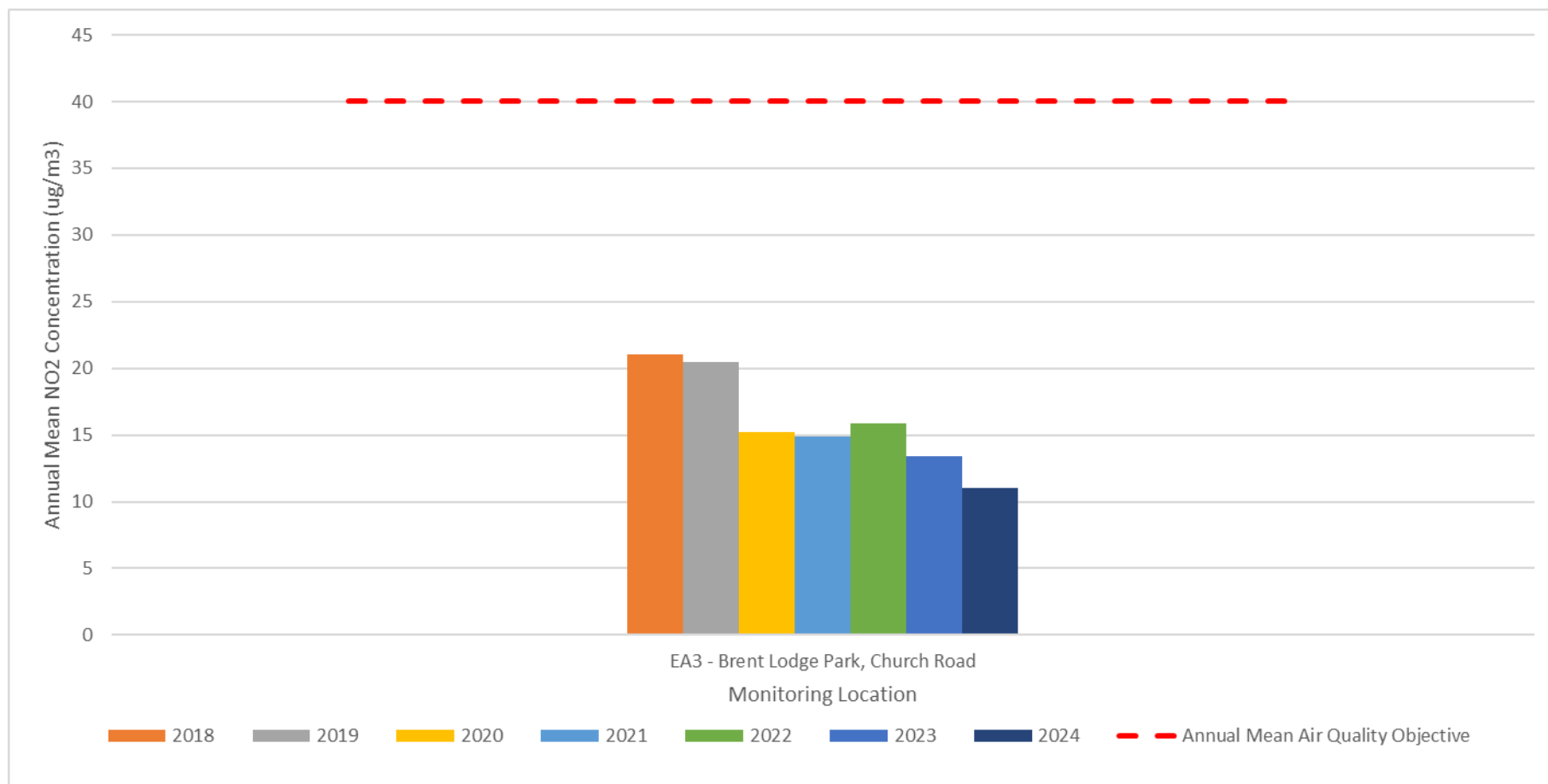


Figure 3. Annual Mean NO₂ Concentrations at Roadside Diffusion Tube Sites (1)

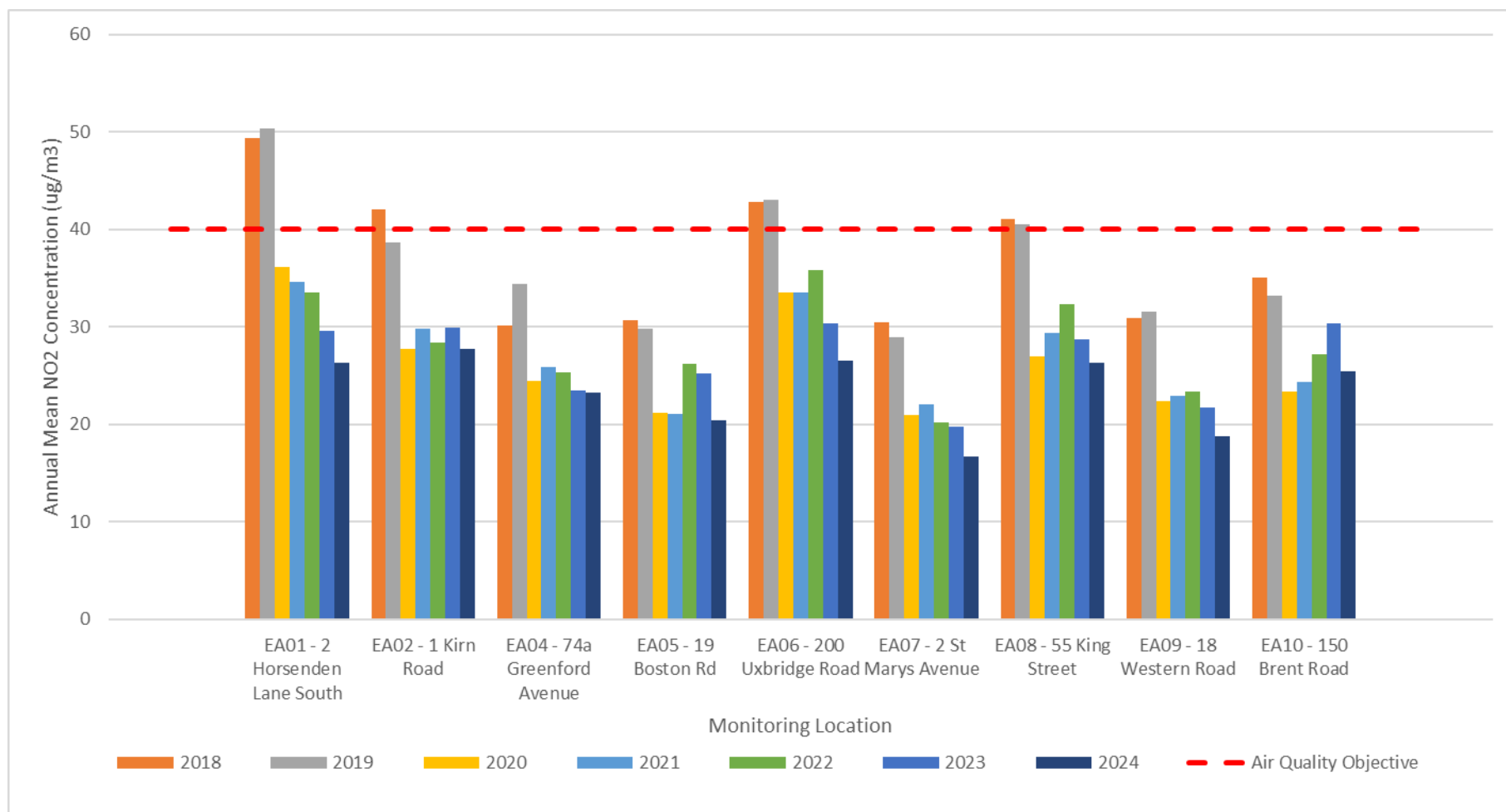


Figure 4. Annual Mean NO₂ Concentrations at Roadside Diffusion Tube Sites (2)

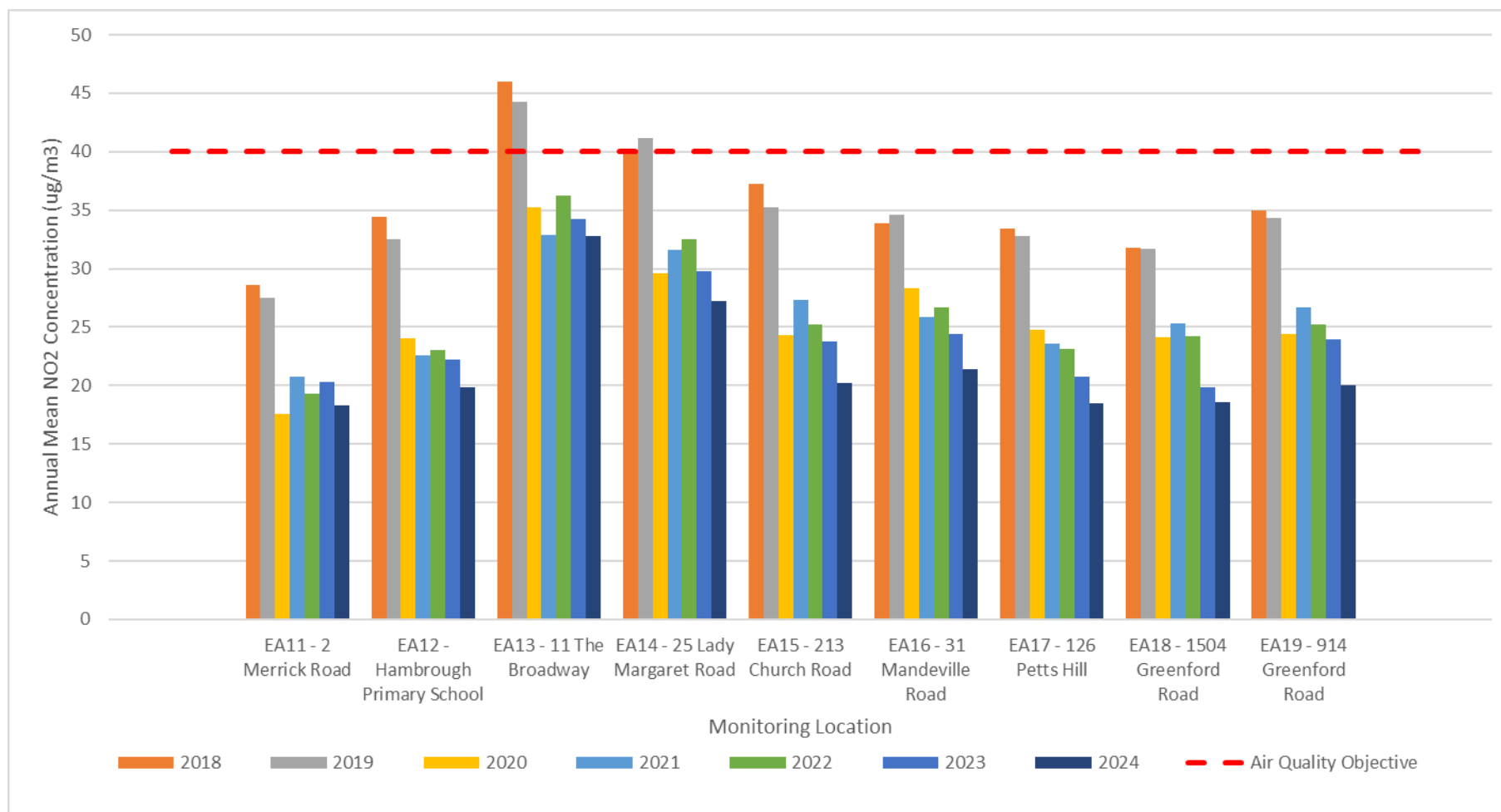


Figure 5. Annual Mean NO₂ Concentrations at Roadside Diffusion Tube Sites (3)

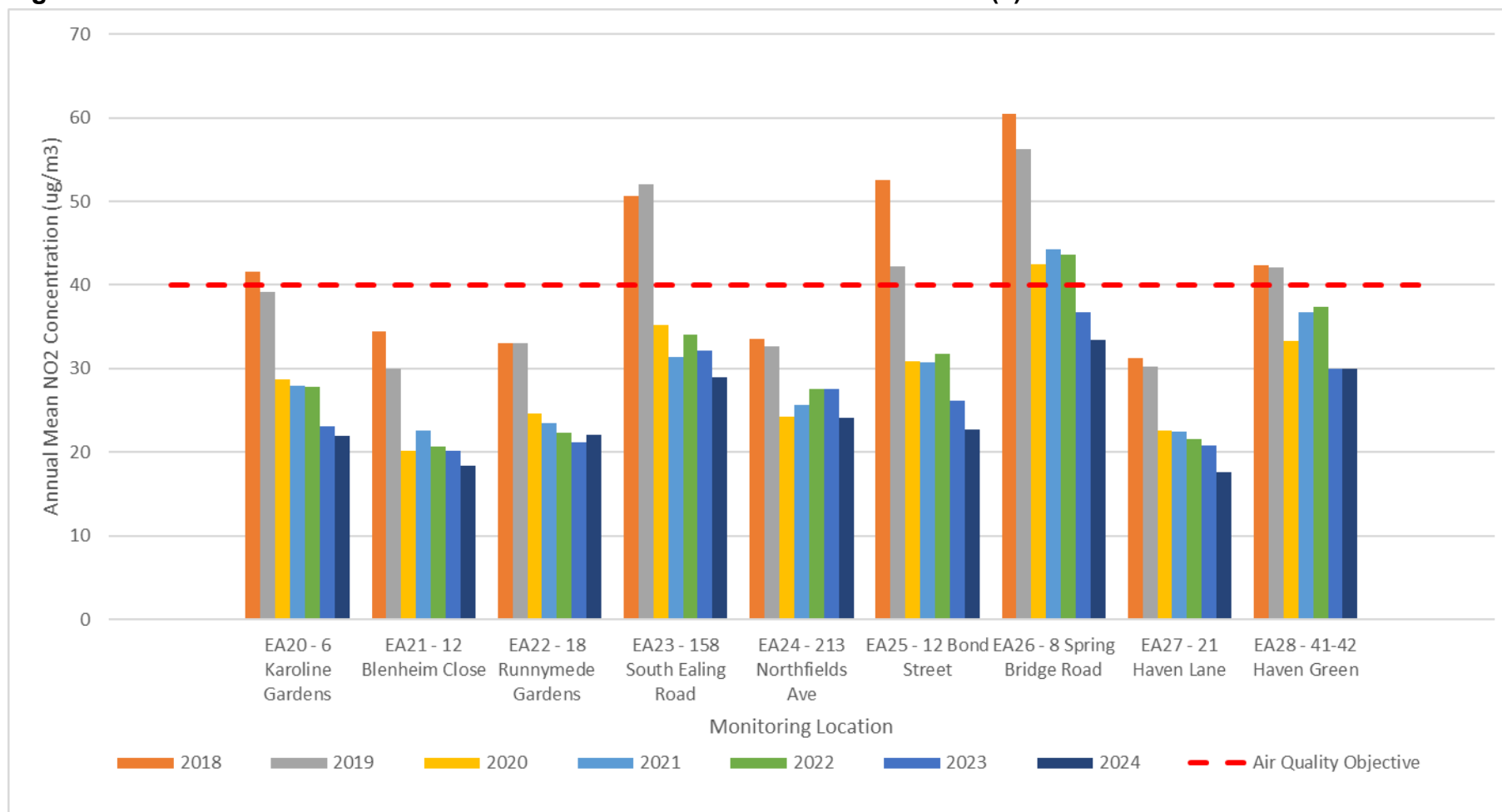


Figure 6. Annual Mean NO₂ Concentrations at Roadside Diffusion Tube Sites (4)

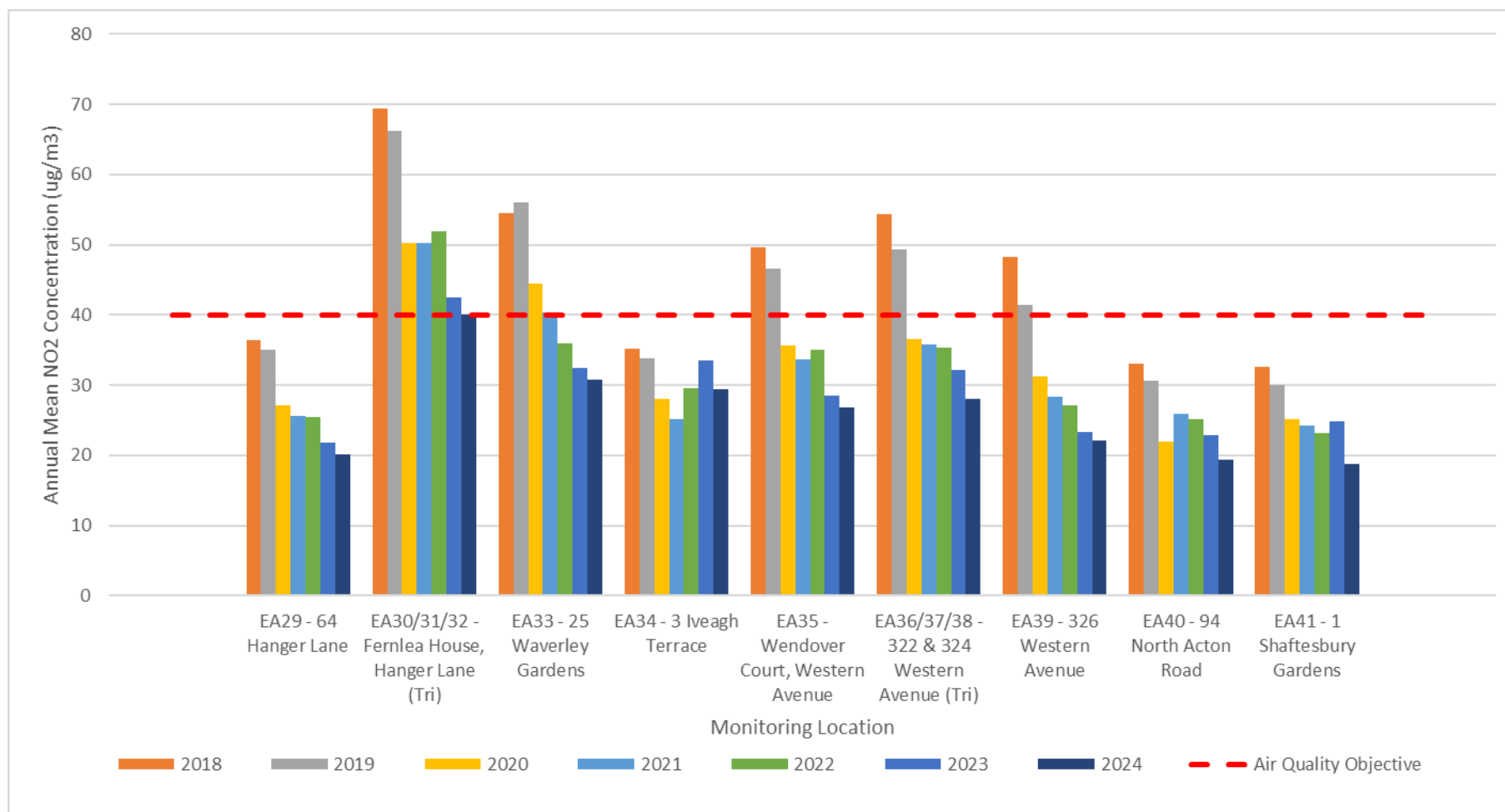


Figure 7. Annual Mean NO₂ Concentrations at Roadside Diffusion Tube Sites (5)

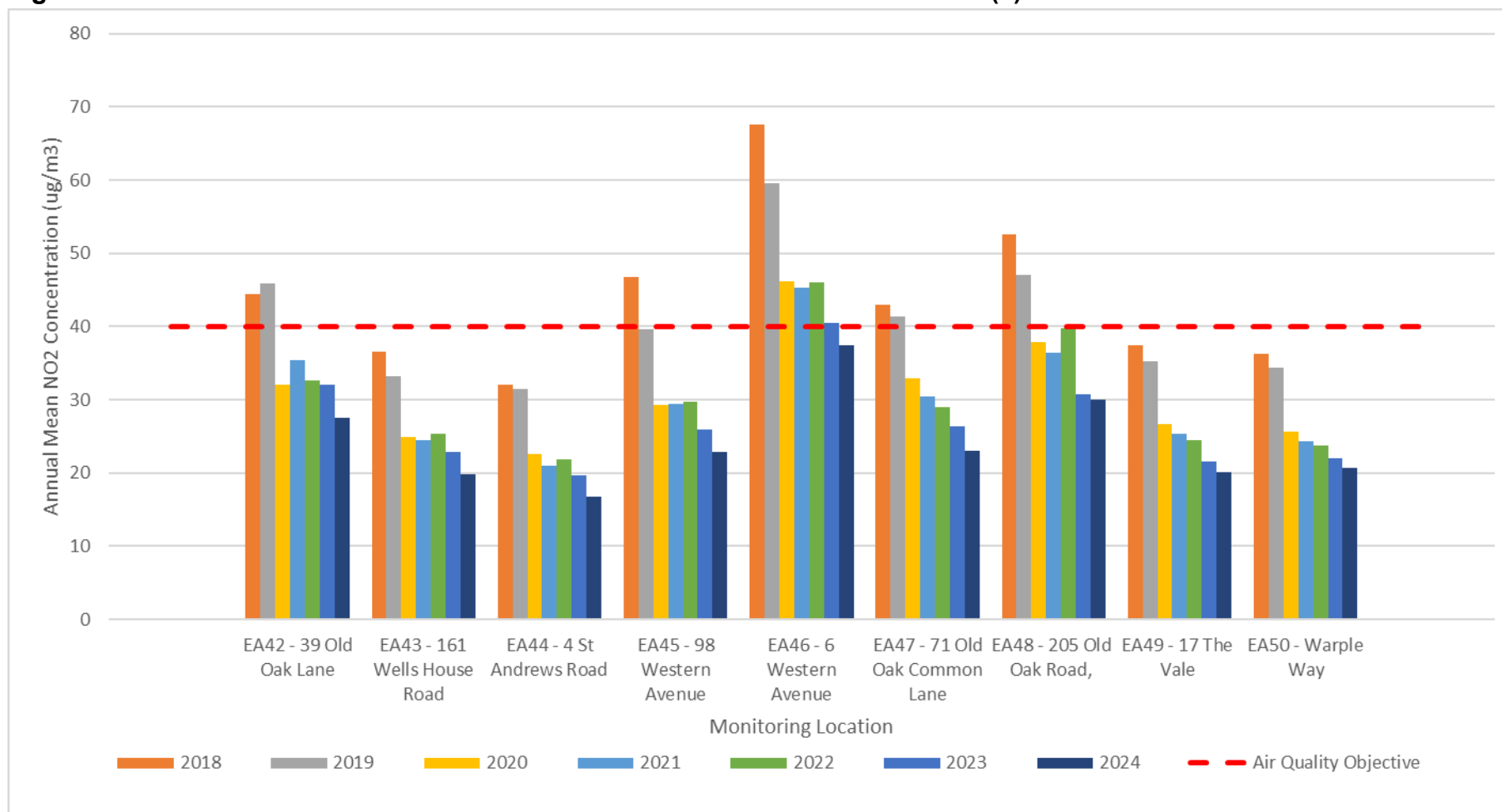


Figure 8. Annual Mean NO₂ Concentrations at Roadside Diffusion Tube Sites (6)

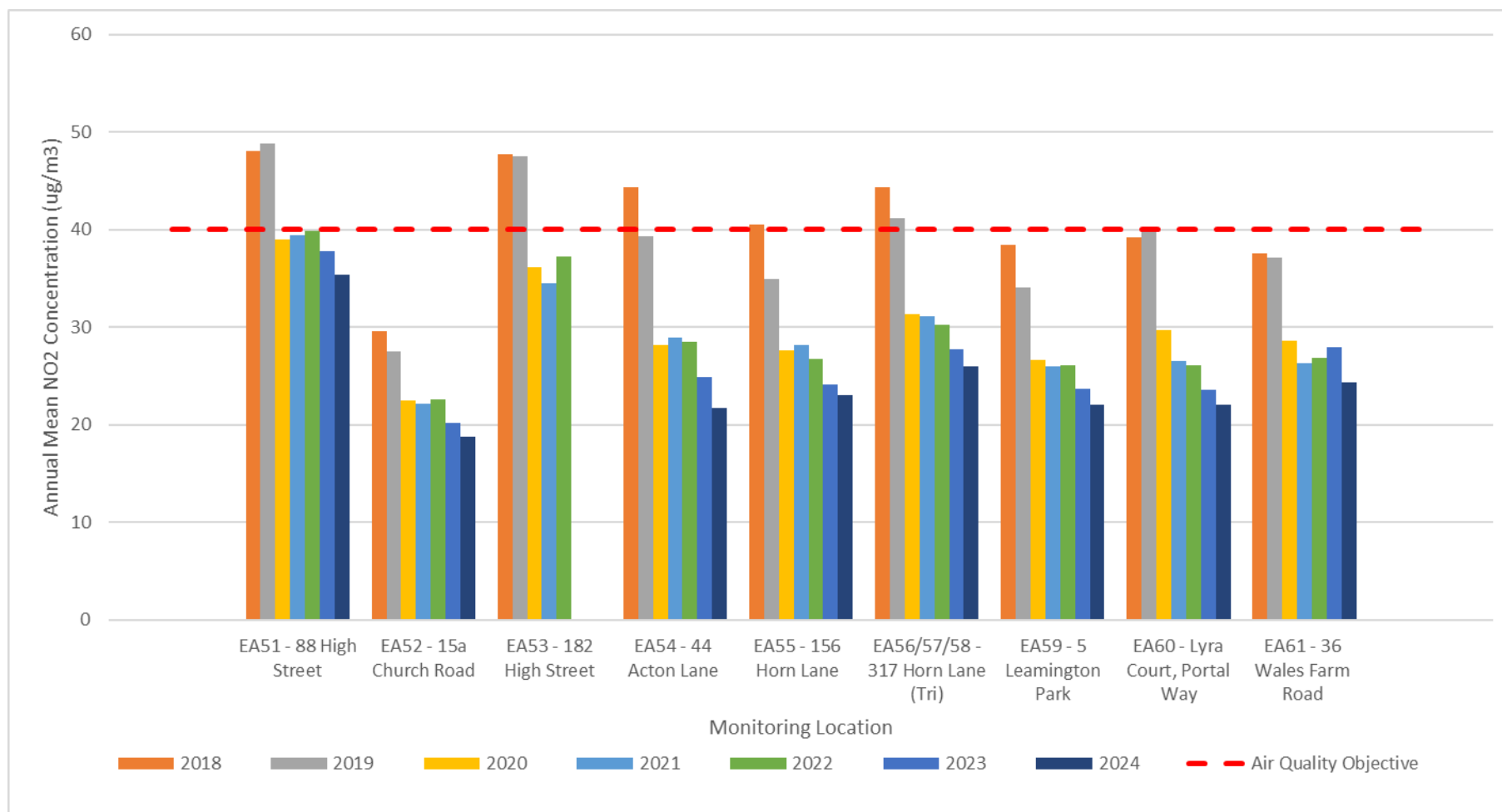


Figure 9. Annual Mean NO₂ Concentrations at Roadside Diffusion Tube Sites (7)

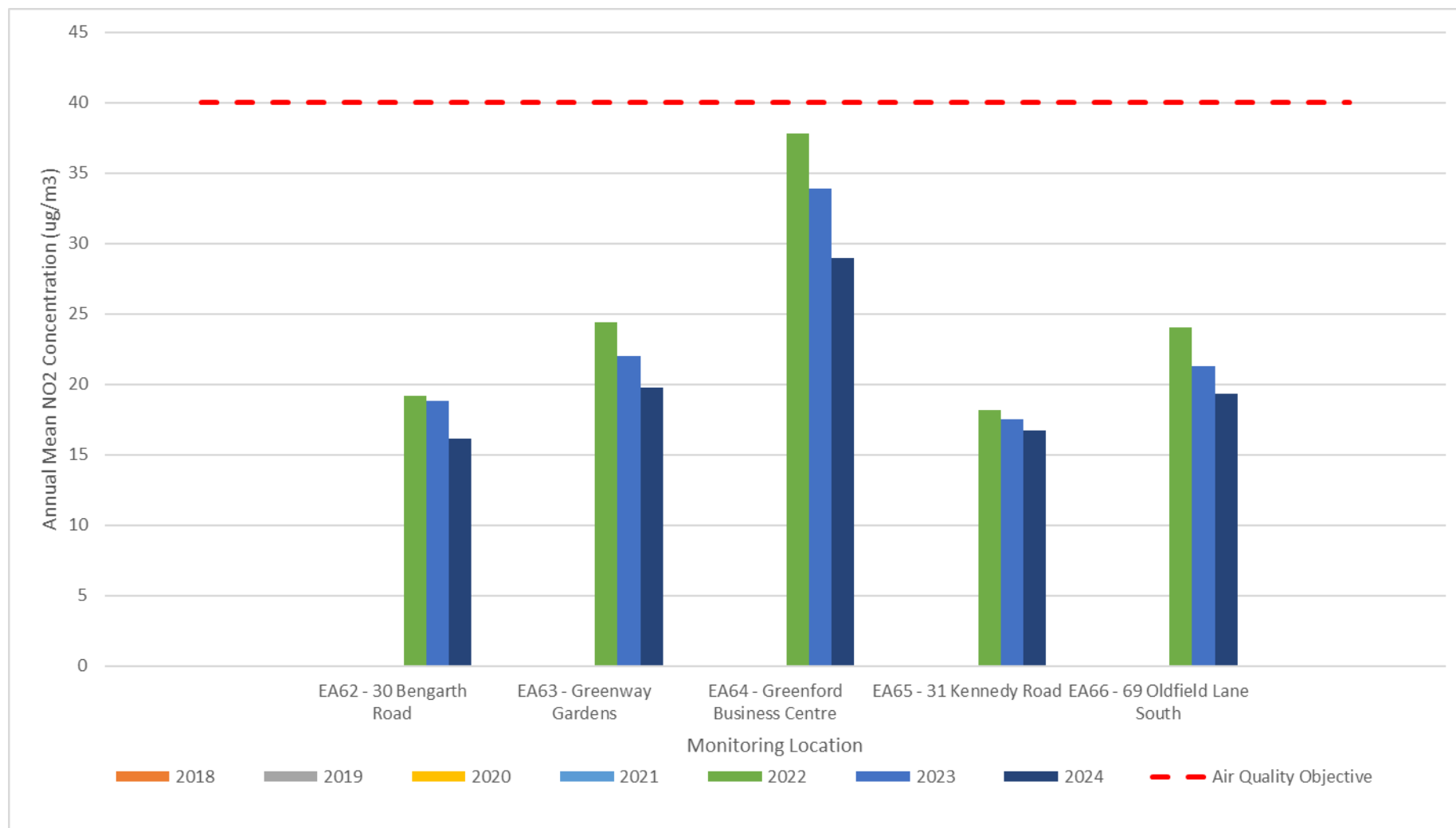


Table F presents the 1-hour mean NO₂ monitoring results at automatic monitoring stations between 2018 to 2024. None of the automatic sites exceeded the 1 hour mean NO₂ objective (200 µg m⁻³ not to be exceeded more than 18 times a year) in 2024. Whilst there were some hourly mean concentrations over the 200 µg m⁻³ threshold in 2019, all monitoring sites have been compliant with the objective since 2018.

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
EA6 Hanger Lane Gyrotory	518537	182708	Roadside	96.2	96.2	0	3	0	0	0	0	0
EA8 Horn Lane	520432	181428	Industrial	93.0	93.0	0	2	0	0	0	0	0
EI1 Western Avenue	520430	181950	Roadside	96.9	96.9	0	0	0	0	0	0	0
EI3 Acton Vale	521134	179771	Urban Background	13.2	13.2	0	0	0 (82)	0 (81)	0 (102)	-	-

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%)

PM₁₀ concentrations are currently measured using TEOMs at most automatic monitoring locations in the London Borough of Ealing. The Horn Lane station is equipped with both TEOM and BAM analysers for PM₁₀ monitoring and results from these are presented separately. The Acton Vale station is equipped with FDMS. The annual mean PM₁₀ results are shown in Table G and the 24-hour mean PM₁₀ results are presented in Table H.

Data capture in 2024 was good (i.e. >85%) at EA6 Hanger Lane, EA8 Horn Lane, and EI1 Western Avenue. EI8 Horn Lane TEOM recorded a data capture of 69.1% for 2024 and had to undergo annualisation as shown in Appendix A. Due to ongoing technical issues with the monitor, there was no data available for EI3 Acton Vale for the majority of 2024, the monitor was fixed in November 2024 and has been monitoring since, but as there is insufficient data to undergo annualisation, the PM₁₀ data at EI3 has not been reported. The annual mean PM₁₀ objective of 40 µg m⁻³ was achieved at all sites during 2024 (where valid data is available), and it has been achieved at all automatic monitoring locations in the borough since 2018. However, it should be noted that all the automatic monitoring locations were in exceedance of WHO AQG for annual mean PM₁₀ (15 µg m⁻³). The highest annual mean PM₁₀ concentration in 2024 was recorded at EA8 Horn Lane (27.3 µg m⁻³).

The number of exceedances of the 24-hour mean objective (50 µg m⁻³) was within the permitted 35 days per year at all sites in 2024, with EA8 recording the highest number of days (22) with 24-hour concentrations above 50 µg m⁻³. There are several industries within vicinity of EA8 that have potential to lead to 24-hr PM₁₀ concentrations higher than 50 µg m⁻³, most of these industries are regulated by the Environment Agency (EA). Both the EA and LBE conducted site visits in the past and investigations are still ongoing as to identify the cause.

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
EA6 Hanger Lane Gyrotory	518537	182708	Roadside	84.3	84.3	28	25	23	20	18	17.6	20.2
EA8 Horn Lane	520432	181428	Industrial	93.0	93.0	25	28	24	26	27	28.5	27.3
EI8 Horn Lane TEOM	520432	181428	Industrial	69.1	69.1	26	25	21	23	27	23.8	22.6
EI1 Western Avenue	520430	181950	Roadside	86.8	86.8	28	26	23	25	25	21.3	22.4
EI3 Acton Vale	521134	179771	Urban Background	11.3	11.3	19	18	16	16	17	-	-

Notes

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

Exceedances of the PM₁₀ annual mean concentration target 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
EA6 Hanger Lane Gyratory	518537	182708	Roadside	84.3	84.3	12	13	7	4	3 (30)	9	2 (36)
EA8 Horn Lane	520432	181428	Industrial	93.0	93.0	7	15	9	13	13 (52)	27	22
EI8 Horn Lane TEOM	520432	181428	Industrial	69.1	69.1	7	16	5	9	18	15	9 (47)
EI1 Western Avenue	520430	181950	Roadside	86.8	86.8	14	21	11	11	14 (41)	10	1
EI3 Acton Vale	521134	179771	Urban Background	11.3	11.3	2	9	3 (30)	1	4 (36)	-	-

Notes

Exceedances of the PM₁₀ 24-hour mean objective (50 µg m⁻³ over the permitted 35 days per year) are shown in **bold**.

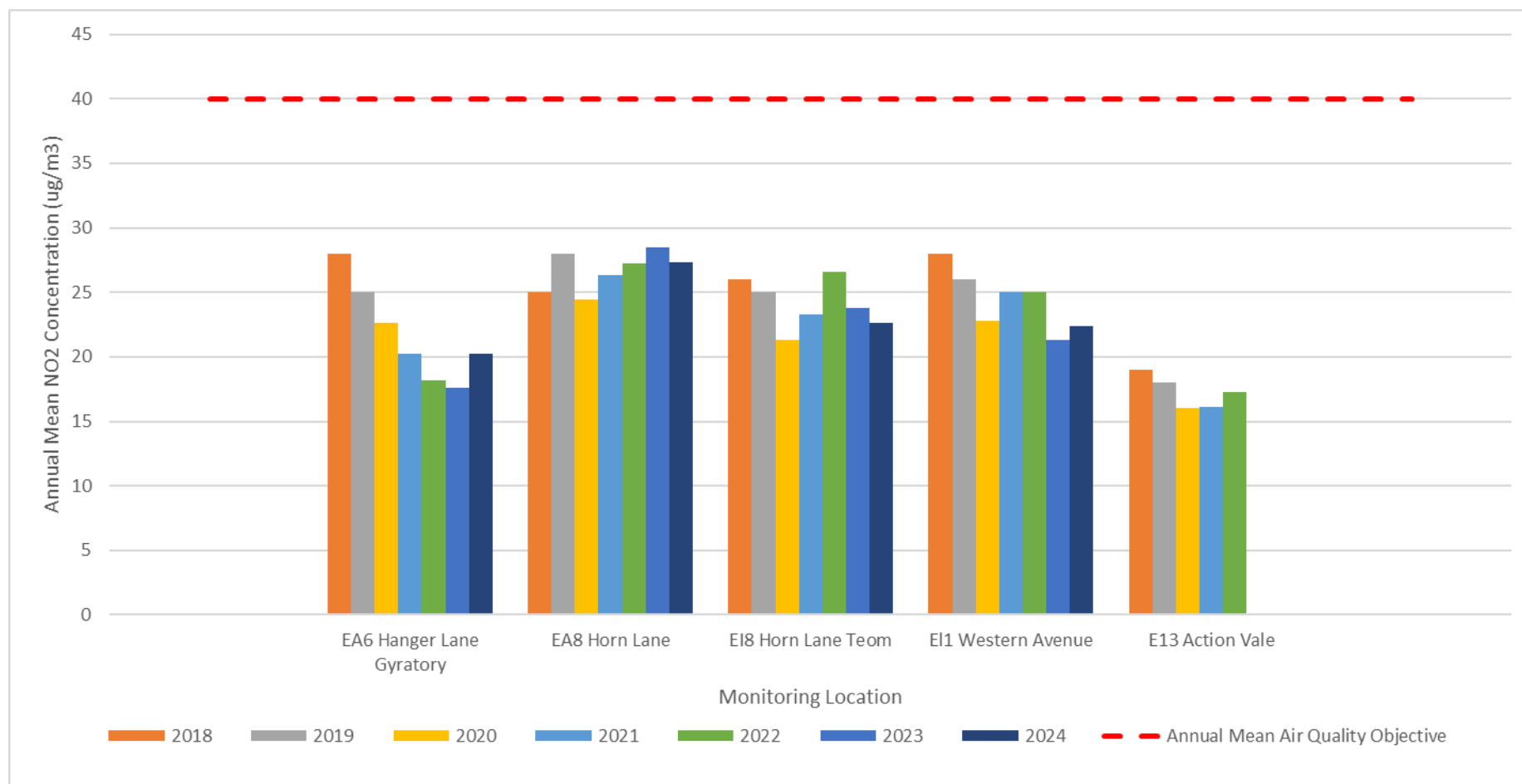
Where the period of valid data is less than 85% of a full year, the 90.4th percentile is provided in brackets.

(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%).

Figure 10 shows the trends in PM₁₀ concentrations at automatic monitoring sites in the borough for the period of 2018 – 2024. The figure indicates a slight downward trend in annual values at Hanger Lane from 2018 to 2023, whilst other monitoring locations do not show a strong discernible trend. However, two sites appear to have experienced an increase in PM₁₀ concentrations in between 2023 and 2024.

Figure 10 Annual Mean PM₁₀ Concentrations at Automatic Monitoring Sites



PM_{2.5} concentrations are not monitored within the borough; however, they can be estimated using a PM_{Coarse} factor in accordance with LAQM.TG(22). PM_{Coarse} factors have been derived for an urban traffic site using Hounslow Brentford (HS5) from the neighbouring borough Hounslow. A PM_{Coarse} factor has not been calculated for the Horn Lane monitoring sites as industrial sites have unique site-specific characteristics, such that PM_{Coarse} factors aren't transferrable.

Calculation of the PM_{Coarse} factors are shown in Table I, application of these factors to Ealing automatic monitors are shown in Table J. The resultant PM_{2.5} concentrations are only indicative and cannot be used for compliance against the AQOs however they do suggest that PM_{2.5} levels are below the Environmental Target Regulations Level (10 µg m⁻³) and London Mayoral Objective (10 µg m⁻³) but have yet to reach WHO AQG levels (5 µg m⁻³).

Table I. PM_{Coarse} factor calculation (µg m⁻³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid PM ₁₀ data capture 2024 %	Valid PM _{2.5} data capture 2024 %	Annual PM ₁₀	Annual PM _{2.5}	PM _{Coarse}
HS5	517425	178070	Urban Traffic	88.1	88.9	23.5	9.3	14.2

Notes

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

Table J. Estimated Annual Mean PM_{2.5} Automatic Monitoring Results for 2024 (µg m⁻³)

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid PM ₁₀ data capture 2024 %	Annual PM ₁₀	Applied PMCoarse	Estimated Annual PM _{2.5}
EA6 Hanger Lane Gyratory	518537	182708	Roadside	84.3	20.2	14.2	6.0
E11 Western Avenue	520430	181950	Roadside	86.8	22.4	14.2	8.2

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 London Borough of Ealing can be found in Table K. The table presents a description of the AQMA that is currently designated within London Borough of Ealing. 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 24-hour mean

Table K. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Ealing AQMA	Declared 14/12/2000	NO ₂ Annual Mean	Borough Wide AQMA	YES	53 µg m⁻³ (NO ₂ annual mean) at Ealing 2 and Ealing 5. 42 µg m⁻³ (NO ₂ annual mean) at Ealing 1. ³	43.9 µg m⁻³ at site EA53b (NO₂ annual mean)	Not compliant for NO ₂ annual mean objective	Air Quality Action Plan 2022-2027 published in Dec 2023	Air Quality Action Plan 2022-27 Ealing Council
Ealing AQMA	Declared 14/12/2000	PM ₁₀ 24-hour mean	Borough Wide AQMA	YES	Compliant at the time of declaration. Ealing 2: 19 days over daily average of >50µg m ⁻³ Ealing 5: 16 days over daily average of >50µg m ⁻³ This is within the permitted	A maximum of 22 daily exceedances of the 24 - hour objective (PM ₁₀ 24 hour mean) at EA8 Horn Lane. This is within the permitted 35 days per year.	Not compliant for PM ₁₀ 24 hour mean objective	Air Quality Action Plan 2022-2027 published in Dec 2023	Air Quality Action Plan 2022-27 Ealing Council

³ King's College London (2000). Air Quality in London 2000. Available at: [Microsoft Word - an report 2000 v3.DOC \(londonair.org.uk\)](#)

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
					35 days per year. ³				

- ☒ London Borough of Ealing confirm the information on UK-Air regarding their AQMA(s) is up to date.
- ☒ London Borough of Ealing confirm that all current AQAPs have been submitted to GLA.

2.2 Air Quality Action Plan Progress

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

Table L. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
12	Public health and awareness raising	Raise public awareness about air quality and provide accurate resources for the public to use to find out about air pollution in Ealing	Ongoing	Environment Protection /Public Health	ONGOING In 2023, Ealing published the Air Quality Strategy which sets out Ealing's vision to improve air quality in the borough. A bespoke air quality website was published in 2024 as part of the DEFRA funding: Clean Air Ealing - Home . The website provides near real-time sensor air quality data and useful advice on what residents and schools can do to reduce pollution.
13	Public health and awareness raising	Encourage schools to join the TfL Travel for Life accredited travel planning programme Further engagement with GPs surgeries, via Public Health, to target and protect vulnerable groups from impacts of air pollution, by	2022 - 2025	Transport/Public Health	ONGOING 44 schools engaged with TfL's Travel for Life accreditation, with schools achieving:

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		increasing free subscription of airTEXT.			- Gold: 26 - Silver: 2 - Bronze: 15 There is 1 additional school engaged & registered on Travel for Life.
14	Public health and awareness raising	Improvement of air quality in and around schools. Extend schools audits to all polluted schools (and potentially to other vulnerable groups, such as nurseries)	Ongoing	Environment Protection /Public Health	ONGOING 1608 school children have been cycle trained - Air quality/active travel workshops delivered at 18 schools
1	Monitoring and core statutory duties	Ealing to maintain the borough's 3 continuous monitoring stations and 60 diffusion tubes	Ongoing	Air quality team	ONGOING Air quality monitoring via 3 continuous monitoring stations and 60 diffusion tubes continued for 2024.
2	Monitoring and core statutory duties	Seek funding for a PM _{2.5} monitor from S106	2022 - 2023	Air quality team	ON HOLD The council is currently evaluating resources required to monitor for PM_{2.5} at Horn Lane, or an alternative, site including installation of a new PM_{2.5} monitor at the site. Although there are no specific measures targeting the reduction

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					of PM _{2.5} currently, it is expected that the combination of actions and that are currently in force or coming into force will help to bring about a reduction of PM _{2.5} . However, discussions are being held with Public Health to devise policies that will specifically target the reduction of PM _{2.5} .
3	Monitoring and core statutory duties	Commission and maintain monitoring of air pollution around the Southall Gasworks site	Monitoring commissioned 2021; to continue through period covered by this plan	Air quality team	COMPLETE Southall monitoring stations were decommissioned on 08/11/2023. Council is currently evaluating resources to recommission monitoring in Southall as background site. Historical data for the Southall air quality monitors can be found here: London Borough of Ealing - Air Quality monitoring service (airqualityengland.co.uk)
4	Emissions from developments and buildings	Ensuring emissions from construction are minimised	Ongoing	Development Management in association with Environment Protection	ONGOING All medium to high-risk developments are required to install air quality sensors prior to any works onsite. Any exceedances are requested to be sent to AQ team to investigate.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Construction sites are requested to set trigger alerts as per study by Kings College London: 15-min mean at 190µg m-3 - Hourly mean at 190 µg m-3 All other small-risk developments are requested to conduct visual site inspections regularly including outside the site boundary, log their observations and investigate any poor air quality exceedances.
5a	Emissions from developments and buildings	Ensuring enforcement of Non-Road Mobile Machinery (NRMM) air quality policies	Ongoing	Development Management in association with Environment Protection	ONGOING In 2024, 31 NRMM conditions were set for major planning applications. When assessing demolition method statement and/or construction environment management plans, minor developments are made aware of NRMM policies and ensure they comply with emission standards set within the guidance. Ealing council continues to collaborate with Merton Council to enforce the Council's NRMM policies. In 2024, 18 sites were audited by Merton Council.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
5b	Emissions from developments and buildings	Reduce emissions from onsite diesel- or petrol-powered generators at construction sites	Ongoing	Air quality Team	ONGOING All major developments are requested to commit to no diesel- or petrol powered generators in their Dust/Air Quality Management Plans or at minimum use Stage V NRMM compliant generator for a very limited time.
6	Emissions from developments and buildings	Reduce emissions from CHP	Ongoing	Development Management in association with Environment Protection	ONGOING All developments are heavily encouraged not to use any combustion sources for heating and hot water. In 2024, all developments were found to be air quality neutral for building emissions and hence, no off-setting payment using DEFRA damages cost was required.
7a	Emissions from developments and buildings	Enforce Air Quality Neutral policies	Ongoing	Development Management in association with Environment Protection	ONGOING In 2024, 33 major planning applications provided AQ assessments. All 33 developments were found to be air quality neutral (AQN) for building emissions. Only 3 developments were found to not be AQN for Transport emissions and discussions are ongoing to

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					propose measures to reduce transport emissions, if not an off-setting payment will be requested.
7b	Emissions from developments and buildings	Reduce emissions from emergency diesel- or petrol-powered generators	Ongoing	Development Management in association with Environment Protection	ONGOING In 2024, 9 major developments had conditions requesting submission of post installation emission testing at the flue for an emergency generator by an accredited laboratory to ensure that NOx emissions standard of 150mg/Nm-3 (at 5% O2) can be achieved.
8	Emissions from developments and buildings	Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new developments	Ongoing	Development Management in association with Environment Protection	ONGOING The London Borough of Ealing's Development (Core) Strategy DPD includes a chapter "Protecting and Enhancing Ealing's Green and Open Spaces". Major developments are checked internally using bespoke s106 calculator for provision of outdoor amenity space, children's play space and allotment / growing spaces for each development. Developers are also requested to use native species.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
9	Public health and awareness raising	Public Health department taking shared responsibility for borough air quality issues and implementation of Air Quality Action Plans	Ongoing	Public Health	ON HOLD Air Quality and Public Health teams to explore closer collaboration to advance this action.
10	Public health and awareness raising	Engagement with businesses to encourage active changes to improve air quality, particularly anchor institutions – such as NHS, schools, and Ealing Council – and their local supply chains	Ongoing	Public Health	ON HOLD Air Quality and Public Health teams to explore closer collaboration to advance this action.
11	Public health and awareness raising	Supporting direct alert service such as airTEXT, and promotion and sharing of high pollution alert services through community engagement and school events	Ongoing	Environment Protection /Public Health	ONGOING Ealing continues to subscribe to GLA's air pollution alerts and the airTEXT service. Public health team to explore embedding airText alerts with the weather alert system.
15	Delivery Servicing and Freight	Update of Procurement policies to reduce pollution from logistics and servicing	Complete	Transport/ Development Management	COMPLETE
16	Delivery Servicing and Freight	Reducing emissions from deliveries to local businesses and residents: Council to take action to raise awareness of Air Quality amongst the business community, by preparing briefing to Ealing's largest businesses.	Short term	Transport and Development Management	COMPLETE

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Briefing will seek to promote use of Evs, using London mayor's Cleaner Vehicle Checker			
17	Borough Fleet Actions	Reducing emissions from council fleets: Migrate existing small vehicle fleet to electric vehicles (EV)	Ongoing	Facilities Management	ONGOING The council retains 32 fully electric vehicles, but limited charging infrastructure limits further transition.
18	Borough Fleet Actions	Reducing emissions from council fleets: Smarter Driver Training for drivers of vehicles in the borough's Own Fleet i.e. through training of fuel-efficient driving and providing regular re-training of staff	Ongoing	Facilities Management	COMPLETE Ealing council currently only has zero emission vehicles for its ICT and Property Services departments and hence monitoring for idling is not required. Monitoring for driver behaviour and training to address any driving issues is still ongoing.
19	Localised solutions	Green Infrastructure (GI)	Ongoing	Development Management, Transport, Highways, Environment Protection, Regeneration	ONGOING Planning policies encourage green roofs, green walls,

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Sustainable Urban Drainage Systems etc. Ealing's new Biodiversity Action Plan is a useful reference for developers and planners on how to encourage developers to increase habitat and biodiversity onsite.
20	Localised solutions	Liveable Neighbourhoods	Ongoing	Transport in partnership with Environment Protection and Regeneration	ONGOING West Ealing Liveable neighbourhood schemes at Jacobs Ladder and Green Passage completed in 2024, Brownlow Rd scheme to be completed in 2025.
21	Localised solutions	Support communities wishing to enact temporary road closures, support and encourage residentled Play Streets, and identify opportunities to increase the size and number of School Streets	Ongoing	Transport/ Highways/ Street Services	ONGOING As of April 2025, there are 43 schools with School Streets in place or ready to launch. 70+ Playstreets across the borough, including 25 new applications for Car Free Day 2024.
22	Cleaner transport	Ensuring that Transport and Air Quality policies and projects are integrated	Ongoing	Shared responsibility between Transport, Street Enforcement and Environment Protection	ONGOING Vortex air quality monitors installed along Church Road in

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					2024 as part of Northolt Levelling Up Fund improvement scheme.
23	Cleaner transport	Discouraging unnecessary idling by taxis and other vehicles	2022 and ongoing	Environment Protection/ Transport/ Street Enforcement	ONGOING Civil enforcement officers have been asking drivers to switch off their engines or move their vehicles when patrolling the borough. This includes hot spot locations including near schools. No PCNs have been issued for idling as we're not permitted to do so however, as most drivers either comply or are parked in contravention to parking restrictions in place so we're able to on some occasions enforce.
24	Cleaner transport	Using parking policy to reduce pollution emissions	2022	Street Services/ Highways	ONGOING The council now offer emission-based parking charging for resident permits and short stay non-residential visitor parking. The council is currently evaluating resources required to implementing emissions-based charging for residential visitor.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
25	Cleaner transport	Installation of Ultralow Emission Vehicle (ULEV) infrastructure	Ongoing	Transport/ Highways	ONGOING 1077 publicly available EV charge points as of 2025 Q1.
26	Cleaner transport	Provision of infrastructure to support cycling	Ongoing	Transport	ONGOING 132 cycle hangars installed as of 2025 Q1 - From 2022/23 to 2023/24, 36% of Ealing residents engaged in 20 minutes of daily active travel. 34% of residents live within 400m of the strategic cycle network.
27	Cleaner transport	Increase cycle training with schools and adults	2022 – 2027 (annually)	Transport	ONGOING 316 adults undertook cycle training in 2024/25 101 residents took part in family cycle training (training which includes at least one adult and child) in 2024/25
28	Cleaner transport	Provision of infrastructure to support pedestrians	Ongoing	Transport	ONGOING In 2024–25, Ealing renewed ~7.5km of footways and resurfaced ~10km of roads, supporting safer and more accessible active travel.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Free-Range Urban Neighbourhood schemes at Kelvin Gardens, Adrienne Avenue, Culmington Road, Occupation Lane and Leighton Road schemes due to be completed in 2025.
29	Cleaner transport	Increasing the proportion of electric and hydrogen vehicles and low emission vehicles in Car Clubs	Ongoing	Transport	ON HOLD No car club projects have been progressed for this period. Major developments are requested to include car club bays where possible.

3. Planning Update and Other New Sources of Emissions

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

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	74 (See Note 1)
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)	49 planning conditions were assessed (See Note 2) 8 developments had AQ monitors and access to live monitoring website was requested, and the rest included visual inspection procedures
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	33
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	3
Number of planning applications with S106 agreements including other requirements to improve air quality	32
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 .	31 conditions included 18 sites were audited: * 1 was self-compliant * 13 were compliant * 1 were non-compliant

Condition	Number
Number of audits (based on the pan-London project report and / or inhouse auditing programme)% of sites unregistered prior to audit % of sites compliant with Stage IIIB of the Directive and/or exemptions to the policy.	* 2 did not require to be registered on NRMM website

Notes:

1. This is the number of full planning applications initially reviewed by officers for air quality impacts. It does not include condition discharge applications where an air quality condition has been set and details are submitted in compliance with the condition.

2. Monitoring is taken to include visual monitoring.

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 Ealing Fleet

The Council's vehicle fleet comprises of:

- a) 32 zero emission fleet representing 41% of the total fleet.
- b) 40 zero emission capable fleet representing 51% of the total fleet.

The rest of the fleet of 6 is not zero emission capable and represents 8%.

4.3 Pan-London NRMM Auditing Project

London Borough of Ealing continues to collaborate with Merton Council to enforce the Council's NRMM policies. Ealing provides Merton with a list of medium to large construction sites that have informed the council that they will be commencing works within 6 months.

The Air Quality Team at Ealing also sets NRMM conditions on major developments and ensures minor developments are aware of NRMM guidance via their Demolition Method Statement and Construction Management Plan.

The following condition is included in major planning applications: 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/>.

4.4 Air Quality Alerts

London Borough of Ealing has subscribed to airTEXT (<https://www.airtext.info/>) and advertises its services on [Ealing Air](#) website and on social media to raise awareness for residents to subscribe. Details of the Councils bespoke air quality project funded by DEFRA will also be released on the [Clean Air Ealing](#) website. Residents will soon be able to sign up for alerts that forecast air pollution and notify them of elevated pollution levels.

4.5 Air Quality Positive

London Borough of Ealing currently haven't received any innovative mitigation measures as part of the Air Quality Positive Statements.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

Each of the four active automatic monitoring sites in the borough were operated as part of the LAQN. Data have traceability to national standards and operational procedures defined for the LAQN. The Horn Lane site is also part of the national Automatic Urban and Rural Network (AURN), operated by the Environment Agency to monitor compliance with the EU Directives. AURN QA/QC procedures involve 4-weekly calibration of NO_x and maintenance of particulate samplers.

PM₁₀ Monitoring Adjustment

Monitoring is conducted using TEOMs at three of the four automatic monitoring stations. There is therefore a need to eliminate the effect of changing humidity on the mass measurement; the TEOM is required to maintain the sample filter at an elevated temperature, which may lead to losses of semi-volatile species such as ammonium nitrate. The Volatile Correction Model (VCM) uses local FDMS monitoring sites to correct TEOM measurements for the loss of volatile components of particulate matter that occur due to the high sampling temperatures employed by this instrument. This adjustment to PM₁₀ data is provided by the London Air Quality Network.

A.2 Diffusion Tubes

AIR is an independent analytical proficiency-testing (PT) scheme, operated by LGC Standards and supported by the Health and Safety Laboratory (HSL). AIR PT is a scheme, started in April 2014, which combines two long running PT schemes: LGC Standards STACKS PT scheme and HSL Workplace Analysis Scheme for Proficiency (WASP) PT scheme.

AIR NO₂ PT forms an integral part of the UK NO₂ Network's QA/QC and is a useful tool in assessing the analytical performance of those laboratories supplying diffusion tubes to Local Authorities for use in the context of Local Air Quality Management (LAQM). Defra and the Devolved Administrations advise that diffusion tubes used for LAQM should be obtained from laboratories that have demonstrated satisfactory performance in the AIR-PT scheme. The results for Socotec (formerly Environmental

Scientifics Group (ESG) Didcot) were overall satisfactory. The laboratory scored 100% satisfactory results between May 2022 and June 2024 (AR050-AR063).

Factor from Local Co-location Studies

Bias adjustment is a calculated factor, which shows whether diffusion tubes are over or under reading ambient concentrations and therefore allows for a correction to be made.

Ealing carries out studies at three sites where triplicate diffusion tubes are co-located with automatic monitors for the purpose of deriving a local bias adjustment factor. In 2024, the combined local bias adjustment factor derived from these studies was 0.73.

Figure 11 shows the details of the calculation of the local bias adjustment factors. The calculation of local bias adjustment factors takes into account both data capture from diffusion tubes and automatic monitors, and also the coefficient of variation (CV) of the triplicate diffusion tubes. If the CV is too high for a particular period, that period is not taken into account when calculating the local bias adjustment factor. Periods where automatic monitoring data capture rates are less than 90% are also excluded.

Figure 11. Local Bias Adjustment Factor Calculation

	STEP 3a Local Bias Adjustment Input 1	STEP 3b Local Bias Adjustment Input 2	STEP 3c Local Bias Adjustment Input 3
Periods used to calculate bias	12	12	11
Bias Adjustment Factor A	0.68 (0.63 - 0.74)	0.77 (0.74 - 0.8)	0.74 (0.7 - 0.79)
Diffusion Tube Bias B	46% (34% - 58%)	30% (24% - 36%)	34% (26% - 43%)
Diffusion Tube Mean ($\mu\text{g}/\text{m}^3$)	53.4	37.3	35.1
Mean CV (Precision)	7.9%	5.7%	6.9%
Automatic Mean ($\mu\text{g}/\text{m}^3$) (for periods used to calculate bias)	36.6	28.7	26.1
Data Capture (for periods used to calculate bias)	100%	100%	95%
Overall Data Capture	100%	100%	93%
Adjusted Tube Mean ($\mu\text{g}/\text{m}^3$)	36 (34 - 40)	29 (28 - 30)	26 (25 - 28)
Overall Diffusion Tube 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
Combined Local Bias Adjustment Factor	0.73		

The national bias adjustment factor for co-location diffusion tube studies in 2023 analysed by Socotec (formerly Environmental Scientifics Group (ESG) Didcot) using a preparation method of 20% TEA/water was calculated to be 0.78. This has been taken from the national bias adjustment spreadsheet 03/25, as shown in Figure 12.

Figure 12. National Bias Adjustment Factor Calculation

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. Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.							This spreadsheet will be updated at the end of June 2025 LAQM Helpdesk Website			
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 shown in blue at the foot of the final column.						
If a laboratory is not shown, we have no data for this laboratory.		If the 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.	If you have your own co-location study then see footnote 1. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953						
Analysed By:	Method	Year	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/ms)	Automatic Monitor Mean Conc. (Cm) (µg/ms)	Bias (B)	Tube Precision	Bias Adjustment Factor (A) (Cm/Dm)
SOCOTEC Didcot	20% TEA in water	2024	KS	Marylebone Road Intercomparison	10	48	36	32.8%	G	0.75
SOCOTEC Didcot	20% TEA in water	2024		Overall Factor ¹ (1 study)				Use		0.75

Discussion of Choice of Factor to Use

A conservative approach was taken, with the national bias adjustment factor selected to be applied to the 2024 monitoring data as it is slightly higher than the local factor.

Table N presents the bias adjustment factors used for LAQM purposes in the borough since 2017.

Table N. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.75
2023	National	03/24	0.75
2022	National	03/23	0.76
2021	Local	-	0.76
2020	Local	-	0.80
2019	Local	-	0.79
2018	Local	-	0.84
2017	Local	-	0.72

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

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

There were four diffusion tube locations which required annualisation, EA53b, EA61, EA64 and EA65. At diffusion tube monitoring site EA53 and automatic monitoring site EI3, data capture was below <25% for all pollutants measured, hence these sites were unable to be annualised. There was one automatic monitoring site (EI8 Horn Lane TEOM) where data capture was below <75% but >25% for PM₁₀ only and hence this site was also annualised.

The continuous monitoring data chosen for annualisation of diffusion tube NO₂ data were the following AURN urban background sites: London Bloomsbury, London Hillingdon and London Westminster. London Bloomsbury and London Hillingdon were also used for the annualisation of PM₁₀ data, as London Westminster does not monitor PM₁₀ data London North Kensington was also used.

Table O outlines the calculations for the annualisation factors applied to the NO₂ monitoring data. Table P outlines the calculations for the annualisation factors applied to the PM₁₀ monitoring data.

Distance Adjustment

If an exceedance is measured at a monitoring site which is not representative of public exposure, the procedure specified in LLAQM.TG(19) is used to estimate the concentration at the nearest receptor. Distance correction was required at one location in 2024. Background concentrations have been obtained from Defra-mapped background concentrations for 2024 for the grid-square where the monitoring site is located. Details of this can be found in Table P.

Table O. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor London Bloomsbury	Annualisation Factor London Hillingdon	Annualisation Factor London Westminster	Average Annualisation Factor	Raw Data Annual Mean ($\mu\text{g m}^{-3}$)	Annualised Annual Mean ($\mu\text{g m}^{-3}$)	Comments
EA53b	1.0464	1.0405	1.0904	1.0591	66.1	70.0	
EA61	0.9091	0.9767	0.9013	0.9290	35.4	32.9	
EA64	0.9379	0.9334	0.9283	0.9332	41.4	38.6	
EA65	0.8808	0.9499	0.8898	0.9068	24.6	22.3	

Table P. Automatic PM₁₀ Monitoring Data Adjustment

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	EI8	
			Period Mean (P _m)	Ratio (A _m / P _m)
London Bloomsbury	94.0	12.4	13.0	0.953
London Hillingdon	99.7	12.9	13.2	0.978
London N. Kensington	99.6	11.9	12.4	0.954
Average (R _a)			0.962	
Raw Data Annual Mean (M)			23.5	
Annualised Annual Mean (M x R _a)			22.6	

Table Q. 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
EA53b	0.5	2.0	52.5	17.6	43.9	<i>Predicted concentration at Receptor above AQS objective. Note there is no relevant public exposure.</i>

Appendix B Full Monthly Diffusion Tube Results for 2024

Table R. 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 (0.75)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
EA1	516368	182978	44.5	41.7	31.3	31.8	31.4	33.1	30.3	31.8	34.4	38.6	38.3	33.6	35.1	26.3	-	
EA2	516704	180487	42.8	42.6	37.2	33.0		34.0	34.9		35.6	36.1	39.1	34.1	36.9	27.7	-	
EA3	514740	180643	19.6		14.6	10.9	12.5	12.6	11.8	13.1	11.6	17.2	18.4	19.1	14.7	11.0	-	
EA4	515451	180894	36.2	31.1	26.9	30.0	30.4	29.0	28.1	24.0	33.0	35.6	37.1	30.9	31.0	23.3	-	
EA5	516281	178879	35.0	30.5	26.4	21.5	23.9	27.7	26.1	25.9	28.3	24.8	29.5	26.3	27.2	20.4	-	
EA6	515180	180111	37.1	39.5	35.2	29.8	33.0	27.9	37.4	30.8	43.4	41.1	36.5	32.3	35.3	26.5	-	
EA7	513476	178561	29.3	28.4	20.6	18.2	15.2	19.4	17.8	20.4		23.3	25.4	26.2	22.2	16.7	-	
EA8	512341	179186	37.7	38.2	36.4	29.2	31.2	30.9	34.6	32.3	37.3	37.6	43.0	32.9	35.1	26.3	-	
EA9	512181	179219	30.7	29.4	22.0	22.2	21.5	21.7	21.4	22.8	27.0	26.9	27.3	28.0	25.1	18.8	-	
EA10	511172	179241	46.9	41.5	36.9	30.9	30.8	31.7	30.2	31.2	32.5	32.2	33.4	27.9	33.8	25.4	-	
EA11	512657	179706	27.4	28.7	19.9	20.5	23.1	22.2	20.1	20.8	25.6	26.3	31.4	26.7	24.4	18.3	-	
EA12	512673	180069	33.0	32.0	29.7	23.5	22.8	20.5	25.1	23.4	23.5	31.1	32.6	20.3	26.5	19.8	-	
EA13	512768	180400	44.2	53.9	47.7	37.3	39.5	36.4	42.8	42.6	38.4	46.6	52.6	42.1	43.7	32.8	-	
EA14	512812	180516	42.8	43.1	40.1	33.9	35.7	35.3	36.3	31.6	24.8	35.8	39.0	36.5	36.2	27.2	-	
EA15	512442	183769	36.3	29.5	26.6	23.9	21.4	22.3	22.1	21.7	25.6	29.8	34.3	30.5	27.0	20.3	-	
EA16	513056	184241	35.7	32.1	27.2	27.2	22.6	27.7	25.1	26.4	29.0	27.2	29.1	32.9	28.5	21.4	-	
EA17	513794	185348	30.9	30.4	25.9	20.1	19.8	17.5	21.5	21.1	22.8	29.9	31.6	24.8	24.7	18.5	-	
EA18	515402	185313	30.1	31.5	25.6	19.4	22.1	19.9	19.1	20.3	23.8	29.7	29.9	25.9	24.8	18.6	-	
EA19	514985	183770	35.6	32.9	26.4	25.1	20.1	21.9	22.6	22.4	26.9	29.5	34.7	23.0	26.8	20.1	-	
EA20	514691	183269	31.9	36.2	32.9	25.4	26.7	26.9	25.4	25.2	24.3	33.1	32.6	29.9	29.2	21.9	-	
EA21	514882	183102	30.9	27.1	20.9	21.8	20.7	18.3	18.7	16.5	26.6	23.3	43.6	25.5	24.5	18.4	-	
EA22	515250	183093	42.0	35.0	36.4	29.5	26.8	27.7	25.4	24.3	28.5	29.4	22.6	26.2	29.5	22.1	-	
EA23	517694	179045	46.6	43.6	30.8	33.6	33.8	35.9	38.3	38.9	40.6	43.4	39.9	38.8	38.7	29.0	-	
EA24	517045	179292	40.4	35.1	30.1	29.6	30.4	23.8	27.7	24.0	33.2	37.1	38.2	35.5	32.1	24.1	-	
EA25	517644	180613	35.3	34.0	20.2	27.6	29.3	25.8	28.6	27.2	33.2	32.8	36.2	33.3	30.3	22.7	-	
EA26	517745	180826	45.2	44.7	38.2	38.1	42.2	44.3	47.2	47.6	46.0	49.6	49.1	43.3	44.6	33.5	-	
EA27	518022	181114	29.2	22.8	20.6	17.8	18.1	16.8	19.1	19.9	23.9	28.8	33.1	30.7	23.4	17.6	-	
EA28	517909	180971		39.1	33.0	29.1	35.8	35.7	39.2	37.1	42.2	43.5	65.2	40.0	40.0	30.0	-	
EA29	518635	181288	32.4	33.4	30.2	22.7	20.4	20.7	21.0	20.5	23.8	29.3	34.9	33.1	26.9	20.2	-	
EA30	518541	182707	60.2	54.6	63.9	56.1	53.8	49.7	60.2	42.5	50.4	42.3	49.1	45.8	-	-	-	Triplicate Site with EA30, EA31 and EA32 - Annual data provided for EA32 only
EA31	518541	182707	57.7	66.6	58.3	50.7	52.8	51.1	55.3	49.8	53.2	49.9	55.7	49.4	-	-	-	Triplicate Site with EA30, EA31 and EA32 - Annual data provided for EA32 only

EA32	518541	182707	54.7	59.8	58.5	49.4	52.1	53.4	52.0	45.6	67.2	54.4	57.1	39.7	53.4	40.1	-	Triplicate Site with EA30, EA31 and EA32 - Annual data provided for EA32 only
EA33	518673	182982	46.9	37.6	34.1	40.6		45.0	37.8	39.2	43.9	43.0	44.4	40.1	41.1	30.9	-	
EA34	519126	183383	48.8	43.5	39.3	35.7	35.4	31.1	33.2		38.4	40.8	41.9	44.3	39.3	29.5	-	
EA35	520020	182180	43.3	38.0	29.9	31.7	35.9	30.6	33.5	27.8	40.6	38.0	40.0	40.9	35.9	26.9	-	
EA36	520430	181950	43.1	47.3	36.5	36.1	33.9	30.7	32.5	27.9	34.1	38.9	38.2	37.6	-	-	-	Triplicate Site with EA36, EA37 and EA38 - Annual data provided for EA38 only
EA37	520430	181950	50.9	43.0	39.8	36.2	37.2	32.6	32.6	23.3	36.9	39.9	40.0	42.6	-	-	-	Triplicate Site with EA36, EA37 and EA38 - Annual data provided for EA38 only
EA38	520430	181950	45.3	47.9	40.9	36.9	37.4	32.0	30.7	27.3	34.5	34.5	44.0	39.7	37.3	28.0	-	Triplicate Site with EA36, EA37 and EA38 - Annual data provided for EA38 only
EA39	520426	181958	37.8	35.6	30.9	27.9	27.1	24.6	23.2	21.7	27.6	32.2	37.5	27.7	29.5	22.1	-	
EA40	520782	182771	25.1	29.1	24.5	23.0	22.6	21.2	23.0	20.5	29.7	31.9	34.2	25.8	25.9	19.4	-	
EA41	521312	182366	33.6	30.9	24.8	21.3	23.4	22.7	22.6	22.8	26.4	28.2	16.9	25.8	25.0	18.7	-	
EA42	521587	182685	38.0	50.9	34.6	30.9	33.3	30.0	33.2	34.8	42.5	45.1	39.1	27.4	36.7	27.5	-	
EA43	521303	182056	33.9	30.4	20.4	23.2	22.6	22.3	21.4	20.0	27.3	32.6	35.1	26.7	26.3	19.7	-	
EA44	521389	180953	31.9	28.4	22.8	20.3	20.2	9.0	18.4	18.4	20.8	26.8	24.9	27.0	22.4	16.8	-	
EA45	521173	180981	36.0	36.4	24.3	28.5	27.5	26.9	23.8	24.7	33.7	35.2	34.7	35.1	30.6	22.9	-	
EA46	521549	180923	53.0	47.6	47.8	46.3	53.6	46.8	51.5	40.3	54.3		52.4	56.4	50.0	37.5	-	
EA47	521557	180996	38.0	38.6	30.3	28.8	28.7	28.5	30.0	28.5	31.5		25.4	29.2	30.7	23.0	-	
EA48	521614	180852	43.6	43.0	34.9	38.4	38.7	35.8	41.2	33.1	44.2	40.5	47.4	39.8	40.1	30.0	-	
EA49	521720	180084	35.0	29.2	24.4	23.1	23.7	19.4	22.4	21.8	26.8	31.1	33.6	31.2	26.8	20.1	-	
EA50	521088	180046	35.1	26.7	25.6	24.7	26.6	22.4	25.9	22.8	32.1	28.6	33.1	28.0	27.6	20.7	-	
EA51	520285	180075	54.9	55.5	46.8	47.8	47.4	44.1	46.0	40.0	53.7	49.9	38.3	42.2	47.2	35.4	-	
EA52	520092	180063	34.1	26.8	21.0	22.1	22.0	20.5	20.3	18.1	27.2	29.3	31.5	27.8	25.1	18.8	-	
EA53	520030	180141										40.6		37.5	39.1	29.3	-	
EA53b	520044	180125	65.0	53.3	67.5	67.3		70.4	65.9	65.2	73.9				66.1	52.5	43.9	
EA54	520484	178847	38.1	34.2	27.5	25.6	26.4	24.5	27.7	21.9	31.9	29.2		31.0	28.9	21.7	-	
EA55	520226	180947	37.0	37.3	29.5	25.5	26.6	23.5	28.7	26.4	36.1	36.5	35.9	26.2	30.8	23.1	-	
EA56	520432	181428	45.6	42.1	23.0	31.4	29.0	27.9	34.2	31.3	38.3	38.2	35.2	30.9	-	-	-	Triplicate Site with EA56, EA57 and EA58 - Annual data provided for EA58 only
EA57	520432	181428	43.9	40.4	33.9	29.7	31.1	31.5	32.1	27.4	37.6	37.8	42.3	37.8	-	-	-	Triplicate Site with EA56, EA57 and EA58 - Annual data provided for EA58 only

EA58	520432	181428	37.8	40.8	30.1	32.7	29.9	29.1	30.7	31.3	37.1	38.9	43.8	33.6	34.7	26.0	-	Triplicate Site with EA56, EA57 and EA58 - Annual data provided for EA58 only
EA59	520532	181517	33.9	35.8	26.3	25.6	27.1	19.6	27.1	25.4	33.5	34.8	34.6	28.6	29.4	22.0	-	
EA60	520739	181824	36.2	34.0	29.3	25.0	25.0	23.9	25.9	22.7	29.9	34.0	39.9	26.2	29.3	22.0	-	
EA61	520713	181592	40.3	36.9	35.5	27.6					35.1		40.8	31.7	35.4	24.7	-	
EA62	512026	183762	29.0		24.3	17.7	15.1	14.6		17.2	18.1	27.0	26.8	24.9	21.5	16.1	-	
EA63	513483	182686	36.5	26.1	26.2	19.1	22.6	20.2	21.9	24.8	26.1	32.3	31.6	28.4	26.3	19.7	-	
EA64	514378	182112	45.4	43.8	42.5		41.0			41.1		41.8	36.7	38.9	41.4	29.0	-	
EA65	515276	181990	27.6		19.2						21.4	26.4		28.3	24.6	16.7	-	
EA66	514521	182949	33.2	32.5	24.3	20.6	20.2	16.3		20.2	24.9	31.8	35.1	24.7	25.8	19.4	-	

☒ 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.

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

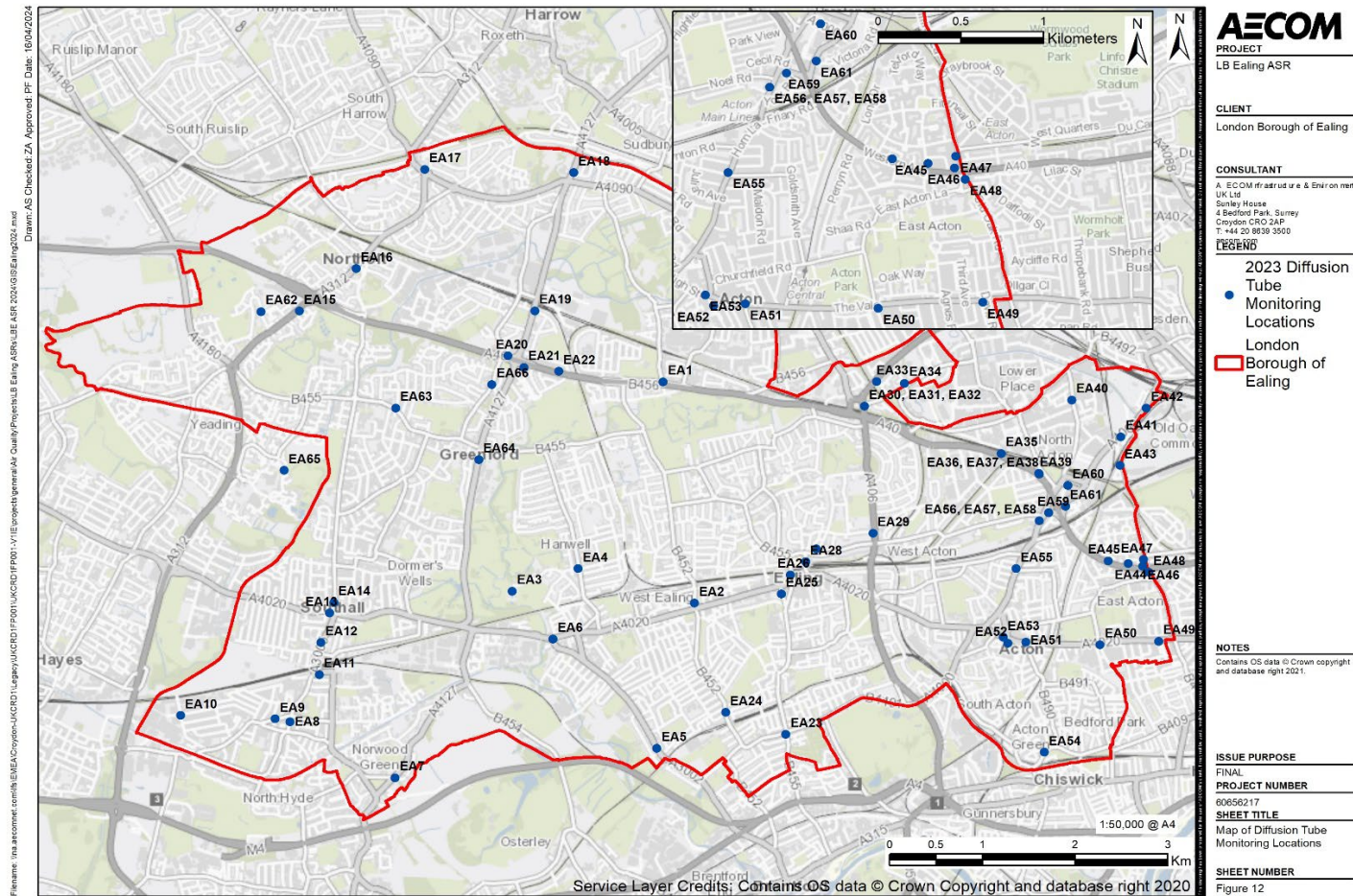
Notes:

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.

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



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LEGEND
2023
Automatic Monitoring Locations
London
Borough of Ealing

NOTES
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ISSUE PURPOSE
FINAL
PROJECT NUMBER
60656217
SHEET TITLE
Map of Automatic Monitoring Locations
SHEET NUMBER
Figure 13

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Enfield Council 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 Enfield during 2024. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process¹.

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

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Abbreviations

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

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

Pollutant	Standard / Objective / Guideline	Averaging Period	Date⁽¹⁾
Nitrogen dioxide (NO ₂)	200 µg m ⁻³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	40 µg m ⁻³	Annual mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	WHO AQG ⁽²⁾ : 10 µg m ⁻³	Annual mean	
Particles (PM ₁₀)	50 µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 45 µg m ⁻³ not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM ₁₀)	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 15 µg m ⁻³	Annual mean	
Particles (PM _{2.5})	10 µg m ⁻³	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)
ENF1	Bush Hill Park	Suburban	533881	195831	NO2	Yes	Borough wide	Chemiluminescent	8.0	N/A	1.5
ENF4	Derby Road	Roadside	535056	192470	NO2	Yes	Borough wide	Chemiluminescent	32.0	3.0	2.5
ENF5	Bowes Primary School	Roadside	529893	192224	NO2	Yes	Borough wide	Chemiluminescent	1.0	3.0	2.5
ENF7	Prince of Wales School	Urban Background	536886	198497	NO2	Yes	Borough wide	Chemiluminescent	4.0	N/A	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)
Enfield 1A	Enfield 1A	Kerbside	532668	196555	NO ₂	YES Borough Wide	4.0	0.5	No	2.5
Enfield 2A	Enfield 2A	Kerbside	529753	194332	NO ₂	YES Borough Wide	5.0	1.0	No	2.0
Enfield 3A	Enfield 3A	Roadside	531981	195305	NO ₂	Yes Borough Wide	10.0	1.0	No	2.0
Enfield 4A	Enfield 4A	Roadside	530966	192714	NO ₂	YES Borough Wide	5.0	1.0	No	2.0
Enfield 5A	Enfield 5A	Roadside	534238	196314	NO ₂	Borough Wide	15.0	1.0	No	2.0
Enfield 6	Enfield 6	Urban Background	526449	198404	NO ₂	YES Borough Wide	1.0	8.0	No	2.0
Enfield 7	Enfield 7	Roadside	535460	199849	NO ₂	Yes Borough Wide	10.0	1.0	No	2.5
Enfield 8A	Enfield 8A	Roadside	534195	192806	NO ₂	YES Borough Wide	9.0	1.0	No	2.0
Enfield 9A	Enfield 9A	Urban Background	529945	192118	NO ₂	Yes Borough Wide	4.0	0.5	No	2.0
Enfield 10	Enfield 10	Urban Background	530161	192032	NO ₂	YES Borough Wide	0.0	8.0	No	1.8
Enfield 11	Enfield 11	Roadside	530448	193845	NO ₂	Yes	9.0	1.0	No	1.8

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 Wide				
Enfield 12	Enfield 12	Roadside	530374	193289	NO ₂	YES Borough Wide	17.0	1.0	No	1.8
Enfield 13	Enfield 13	Roadside	533201	192083	NO ₂	Yes Borough Wide	16.0	1.0	No	2.0
Enfield 14	Enfield 14	Roadside	533304	192130	NO ₂	YES Borough Wide	12.0	1.0	No	2.0
Enfield 15	Enfield 15	Roadside	533322	192044	NO ₂	Yes Borough Wide	14.0	1.0	No	2.0
Enfield 16	Enfield 16	Roadside	533721	191945	NO ₂	YES Borough Wide	50.0	1.0	No	2.0
Enfield 17	Enfield 17	Roadside	533766	192178	NO ₂	Yes Borough Wide	4.0	1.0	No	2.0
Enfield 18	Enfield 18	Roadside	532165	192954	NO ₂	YES Borough Wide	8.0	1.0	No	2.0
Enfield19	Enfield19	Roadside	531878	192668	NO ₂	Yes Borough Wide	10.0	1.0	No	1.8
Enfield 20	Enfield 20	Roadside	531173	192390	NO ₂	YES Borough Wide	16.0	1.0	No	2.0
Enfield 21	Enfield 21	Roadside	530968	192259	NO ₂	Yes Borough Wide	15.0	1.0	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)
Enfield 22	Enfield 22	Kerbside	531260	193415	NO ₂	YES Borough Wide	13.0	0.5	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.

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
ENF1	533881	195831	Suburban	99.3	99.3	26	22	18	18	19	17	15
ENF4	535056	192470	Roadside	99.6	99.6	35	37	28	24	26	26	23
ENF5	529893	192224	Roadside	99.7	99.7	44	41	30	30	28	25	24
ENF7	536886	198497	Urban Background	93.8	93.7	23	23	18	18	18	15	14

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
Enfield 1A	532668	196555	Kerbside	100.0	100.0	47.4	57.6	49.8	46.9	45.6	47.6	45.3
Enfield 2A	529753	194332	Kerbside	100.0	100.0	37.5	37.1	30.8	31.8	28.8	25.1	22.7
Enfield 3A	531981	195305	Roadside	100.0	100.0	28.1	23.1	19.7	20.7	17.1	17.1	14.7
Enfield 4A	530966	192714	Roadside	92.5	92.5	30	30.1	27.6	26	22.2	20.3	22.6
Enfield 5A	534238	196314	Roadside	100.0	100.0	42.5	39.5	33.9	34.3	34.6	30.9	27.8
Enfield 6	526449	198404	Urban Background	100.0	100.0	19.7	14	13.2	11.9	11.9	8.4	8.3
Enfield 7	535460	199849	Roadside	92.5	92.5	23.3	20.6	17.3	17.3	16.7	16.6	17.7
Enfield 8A	534195	192806	Roadside	100.0	100.0	48.9	49.2	48.3	46.2	45.6	48.1	39.1
Enfield 9A	529945	192118	Urban Background	100.0	100.0	26.6	24.3	18.6	18.8	17.3	15.2	15.9
Enfield 10	530161	192032	Urban Background	100.0	100.0	37.5	36.6	29.4	27.8	24.1	23.2	21.2
Enfield 11	530448	193845	Roadside	100.0	100.0	N/A	N/A	N/A	17.4	17.6	16.4	17.0
Enfield 12	530374	193289	Roadside	100.0	100.0	N/A	N/A	N/A	15.4	16.9	13.6	11.5
Enfield 13	533201	192083	Roadside	100.0	100.0	N/A	N/A	N/A	27.7	22.5	21.4	19.9
Enfield 14	533304	192130	Roadside	100.0	100.0	N/A	N/A	N/A	26.6	23.9	25.3	19.0
Enfield 15	533322	192044	Roadside	90.6	90.6	N/A	N/A	N/A	32.8	26.3	21.8	18.3
Enfield 16	533721	191945	Roadside	100.0	100.0	N/A	N/A	N/A	23.4	21.9	18.4	18.4
Enfield 17	533766	192178	Roadside	100.0	100.0	N/A	N/A	N/A	33.5	28.8	23.7	20.3
Enfield 18	532165	192954	Roadside	100.0	100.0	N/A	N/A	N/A	30.4	23.3	21.8	19.0
Enfield19	531878	192668	Roadside	100.0	100.0	N/A	N/A	N/A	27.1	21.1	18.7	16.9
Enfield 20	531173	192390	Roadside	100.0	100.0	N/A	N/A	N/A	25.4	20.8	19.1	18.4

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
Enfield 21	530968	192259	Roadside	100.0	100.0	N/A	N/A	N/A	28.4	27.3	25.9	24.4
Enfield 22	531260	193415	Kerbside	100.0	100.0	N/A	N/A	N/A	N/A	N/A	25.6	22.1

☒ 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%).

7-year data trends for nitrogen dioxide

Over the period 2018 – 2024, all automatic monitoring sites have shown a progressive decline in annual mean concentrations. All background sites have been below the annual mean objective of $40\mu\text{g}/\text{m}^3$, which is not unexpected.

The trend at ENF1 is a steady decline in concentrations of nitrogen dioxide until 2022, when there was a $1\mu\text{g}/\text{m}^3$ increase followed by a decline of $2\mu\text{g}/\text{m}^3$ in 2023 and a further decline of $2\mu\text{g}/\text{m}^3$ in 2024. At ENF7 there has been a continued steady decline in concentrations across the whole 7-year period.

In regard to the roadside locations, at ENF4 concentrations have also been below the objective, this site is positioned in a busy location with standing traffic consistently present during the daytime. Concentrations at this site fell below $30\mu\text{g}/\text{m}^3$ to $28\mu\text{g}/\text{m}^3$ in 2020 with a further decrease in 2021. In 2022 there was a slight increase of $2\mu\text{g}/\text{m}^3$ in comparison to the previous year to $26\mu\text{g}/\text{m}^3$ and this concentration remained unchanged in 2023; in 2024 there has been a decline of $3\mu\text{g}/\text{m}^3$ to $23\mu\text{g}/\text{m}^3$. The slight increase seen in 2022 is likely due to increased traffic levels in comparison to 2021, the decline in 2024 may be due to changes to the traffic composition or weather, only longer-term monitoring will show if the decline continues.

ENF5 is located at Bowes Primary School on the A406 North Circular Road and is 3 metres from the edge of the carriageway at a point where there is regular standing traffic. Until 2020 the annual mean concentration at this site was just above the annual mean objective level. Following 2020 and 2021, where traffic levels were severely impacted by the pandemic it was expected that nitrogen dioxide concentrations would return to levels similar to those measured prior to the pandemic. The monitoring data clearly shows that this is not the case with concentrations at ENF5 falling below those measured in 2020 and 2021. The decline in concentrations has persisted at this site, with reductions in the annual mean seen in 2023 and 2024. The reduction in

concentrations is most likely to be attributed to a combination of factors such as improvements to the vehicle fleet and a change in the number of vehicles using the road network.

The trend at the real-time sites is also seen at the diffusion tube sites as an overall decline at all sites can be seen with no sites being above the 60ug/m³ level in 2024.

Enfield 1A and Enfield 8A were over the annual mean objective after bias-adjustment but following the 'fall-off with distance' adjustment both of these sites were also below the annual mean objective at the nearest receptor. Aside from 2019, Enfield 1A has had very consistent annual mean concentrations with no noticeable decline. Enfield 8A has also had very consistent annual mean results between 2018 – 2023, with this year showing an 8ug/m³ reduction in 2024. Both sites are busy bus routes and the drop off in concentrations may be attributable to changes in the bus fleet.

All other diffusion tube sites have been below the annual mean objective level (with the exception of Enfield 5A in 2018) and the trend for all of them is an overall decline over the 7-year period (please note sites 11-22 were installed later and have less than 7 years of data).

In the case of real-time and diffusion tube monitoring sites the trend over the last 7-years has been a steady decline in nitrogen dioxide concentrations. It was expected that concentrations would increase in 2022 following 2 years heavily affected by the Covid pandemic but this has not been the case and it is assumed that this is a result of changes to the traffic fleet and working habits where more home-working has resulted in lower traffic volumes overall.

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
ENF1	533881	195831	Suburban	99.3	99.3	0	0	0	0	0	0	0
ENF4	535056	192470	Roadside	99.6	99.6	0	0	0	0	0	0	0
ENF5	529893	192224	Roadside	99.7	99.7	0	0	0	0	0	0	0
ENF7	536886	198497	Urban Background	93.8	93.7	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%)

Table F illustrates that there have been no exceedances of the hourly mean objective at the automatic monitoring sites in the last 7 years.

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
ENF5	529893	192224	Roadside	N/A	N/A	18	19	15	15	18	14.7 (annualised)	N/A

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 6-year trend shows that the annual mean at ENF5 remains below the objective level and overall shows a steady decline in concentrations. The slight increase in concentration on 2022 in comparison to 2020 and 2021 is most likely due to an increase in road traffic following the Covid pandemic where 2020 and 2021 had long period of lock-down. The fall is seen again in 2023 although the results must be treated with caution due to a data capture rate of 37% as a result of failure of the analyser. Due to the analyser failure there is no data for 2024, a new analyser was installed in April 2025.

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
ENF5	529893	192224	Roadside	N/A	N/A	2	9	2	0	5	1 (23.1)	N/A

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%).

The trend in the data illustrates that PM₁₀ concentrations comply with the daily mean objective for this pollutant. Overall, there is no particular trend in the data with the number of days exceeding the 50ug/m³ varying year on year with no exceedances of the 24-hour mean objective in any year. There is no data for 2024 as the analyser failed in 2023 and was replaced in April 2025.

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 Enfield Council can be found in

Table I. The table presents a description of the AQMA that is currently designated within London Borough of Enfield. 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 designation are as follows:

- Nitrogen dioxide
- PM₁₀

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
Enfield AQMA	31 st March 2001	NO ₂	Whole borough declaration	YES	50ug/m ³	No exceedance	5 years	Enfield Council Air Quality Action Plan 23/08/2022	https://www.enfield.gov.uk/__data/assets/pdf_file/0017/34271/Enfield-Air-Quality-Action-Plan-2022-Environment.pdf

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
Enfield AQMA	31 st March 2001	PM ₁₀	Whole borough declaration	YES	47 exceedances of the 24-hour mean objective	No exceedance	16 Years	Enfield Council Air Quality Action Plan 23/08/2022	https://www.enfield.gov.uk/__data/assets/pdf_file/0017/34271/Enfield-Air-Quality-Action-Plan-2022-Environment.pdf

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

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

2.2 Air Quality Action Plan Progress

Table J provides a brief summary of Enfield Council'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	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
14	Public health and awareness raising	Encourage schools to join the TfL STARS accredited travel planning programme	Ongoing	Journeys & Places	STARS has now been rebranded as Travel for Life. There are 61 schools involved, 28 are gold, 3 silver and 7 bronze and 23 are engaged.
23	Cleaner transport	Installation of residential electric charge points	Ongoing	Traffic & Transportation	There are 241 public EV charging sockets in the borough
15	Public health and awareness raising	Implement School Streets in appropriate locations to improve air quality at schools	Ongoing	Journeys & Places	There were 26 school streets at the end of 2024 with more to be implemented in 2025. The target is to get 30 schools streets by the end of 2025 and an objective of 50 school streets in the borough altogether.
1	Monitoring and other core statutory duties	Continue to monitor air quality and ensure the network of monitoring sites is appropriate	Ongoing	Environmental Health, Environmental Research Group	The number of automatic monitoring sites has been maintained. All the automatic data is available on the London Air website.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					The automatic monitoring sites and passive sites provide data for both background and roadside locations in the borough. Two new Breathe London sensors have been installed and the PM₁₀ analyser at the Bowes Primary monitoring site has been replaced with an analyser that measures both PM₁₀ and PM_{2.5}.
2	Emissions from developments and buildings	Ensuring emissions from construction are minimised.	Ongoing	Environmental Health, Local Planning Authority	100% of major development applications have had a construction management condition attached to them for the control of dust emissions. Where dust complaints are received in regard to dust from building sites all complaints are investigated by the Commercial Nuisance Officer.
3	Emissions from developments and buildings	Ensuring enforcement of Non Road Mobile Machinery (NRMM) air quality policies	Ongoing	Environmental Health, Merton Council	NRMM was inspected through the London-wide NRMM project. There were 10 audits, 5 were compliant, 4 had no NRMM and one site was non-compliant. 100% of relevant planning applications include an

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					appropriate NRMM planning condition.
4	Emissions from developments and buildings	Reducing emissions from CHP	Ongoing	Environmental Health, Local Planning Authority	Where CHPs and biomass are proposed, planning conditions are applied. There have been no biomass applications in 2024 and any CHP was for gas-fired plant.
5	Emissions from developments and buildings	Enforcing Air Quality Neutral policies.	Ongoing	Environmental Health, Local Planning Authority	Air Quality Neutral is reviewed through Air Quality Assessments for planning applications. There were 3 assessments last year that were not air quality neutral due to transport emissions. All of which were required to put in measures to reduce impacts, such as more electric charging points.
6	Emissions from developments and buildings	Ensuring adequate, appropriate, and well located green space and infrastructure is included in new developments.	Ongoing	Local Authority	Enfield aims to be internationally recognised as the greenest borough in London at the cornerstone of London's national park. The Blue Green Strategy has 7 aims to improve blue and green spaces within the borough.
7	Emissions from developments and buildings	Ensuring that Smoke Control Zones are appropriately identified and fully promoted and enforced	Ongoing	Environmental Health	The whole borough is covered by Smoke Control Area Orders. 100% of complaints relating to smoke from a chimney serving a building in a smoke control area were investigated in 2024.
8	Emissions from developments and buildings	Promoting and delivering retrofit projects.	Ongoing	Property Development	There is an ongoing programme of upgrades to corporate

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					buildings, the current round of which is delivering interventions including insulation, heat pumps and solar PV to a number of sites, including the Civic Centre.
9	Emissions from developments and buildings	Master planning and redevelopment areas aligned with Air Quality Positive and Healthy Streets approaches.	Ongoing	Planning Policy Journeys & Places	The most recent adopted masterplans are for Enfield Town and Meridian Water. Both include elements of the Healthy Streets approach.
10	Emissions from developments and buildings	Carry out air quality assessments of the impact of the existing Low Emission Neighbourhoods and any future schemes.	Ongoing	Journeys & Places	There are currently 2 Low Emission Neighbourhoods which have been assessed and made permanent
11	Public health and awareness raising	Director of Public Health to sign off Statutory Annual Status Reports and all new Air Quality Action Plans.	Ongoing	Environmental Health Public Health	This report will be sent to the Director of Public Health, as will future air quality reports.
12	Public health and awareness raising	Engagement with businesses	Ongoing	Environmental Health Camden Council	The Climate Action Plan includes actions around engaging with businesses both as suppliers to the Council and as part of economic development work. A Sustainable and Ethical Procurement Policy is being developed which includes climate action requirements for suppliers.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					The new MAQF project for anti-idling is aimed at businesses and as part of this project we will be engaging with selected businesses to reduce vehicle emissions.
13	Public health and awareness raising	Promotion of availability of airText	Ongoing	Environmental Health AirText	Enfield Council continues to be part of the airText consortium.
14	Public health and awareness raising	Encourage schools to join the TfL STARS accredited travel planning programme	Ongoing	Journeys & Places	STARS has now been rebranded as Travel for Life. There are 61 schools involved, 28 are gold, 3 silver and 7 bronze and 23 are engaged.
15	Public health and awareness raising	Implement School Streets in appropriate locations to improve air quality at schools	Ongoing	Journeys & Places	There were 26 school streets at the end of 2024 with more to be implemented in 2025. The target is to get 30 schools streets by the end of 2025 and an objective of 50 school streets in the borough altogether.
16	Delivery servicing and freight	Reducing emissions by working with suppliers who are committed to switching to low or zero emission modes of transport	Ongoing	Procurement	The draft Enfield Sustainable and Ethical procurement policy focusses on four main themes: social value, ethical procurement, supporting the local economy and climate action. Where relevant and proportionate, sustainable logistical measures may be

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					required, dependant on the specific contracts being let.
17	Borough fleet actions	Reducing the emissions from the Council's fleet	2030	Fleet & Passenger Transport Services	Currently 18% of the fleet are EV.
18	Localised solutions	Green Infrastructure	Complete	Enfield Council	Enfield's Blue & Green Strategy has been approved and is in place.
19	Localised solutions	Low Emission Neighbourhoods (LENS)	Ongoing	Journeys & Places	Currently there are two Quieter Neighbourhoods, the Fox Lane scheme and the Bowes scheme. Both schemes have now been made permanent.
20	Cleaner transport	Discouraging unnecessary idling by taxis and other vehicles through anti-idling campaigns or enforcement activity	Ongoing	Environmental Health	We are part of the latest London anti-idling campaign, which is focused on emissions from businesses.
21	Cleaner transport	Ensure that transport and air quality policies and projects are integrated	Ongoing	Journeys & Places Environmental Health	The link between air quality and transport policies has been established for many years in Enfield and this will continue to be the case going forward. This is achieved through regular meetings and joint working on projects such as school streets.
22	Cleaner transport	Regular Car Free Days	Ongoing		The Council support play streets which can be applied for usually on the basis of 1 day per month for a year, the council will cover the cost of 1 road closure per year linked to specific events (eg world car free day)

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
23	Cleaner transport	Installation of residential electric charge points	Ongoing	Traffic & Transportation	There are 241 public EV charging sockets in the borough
24	Cleaner transport	Installation of rapid chargers to help enable the take up of electric taxis, cabs and commercial vehicles	Ongoing	Traffic & Transportation	There are 34 rapid EV charging sockets in the borough
25	Cleaner transport	Provision of infrastructure to support walking and cycling	Ongoing	Journeys & Places Traffic & Transportation	The provision of cycling and walking infrastructure is ongoing. There are several large-scale plans which are dependent on funding being secured.
26	Localised solutions	Inspect authorised processes in line with the risk based approach	Ongoing	Environmental Health	100% of inspections due were completed
27	Localised solutions	Continued enforcement of the smoke nuisance provisions of the Environmental Protection Act 1990	Ongoing	Environmental Health	All complaints regarding smoke nuisance were investigated. There were 73 smoke nuisance complaints

3. Planning Update and Other New Sources of Emissions

Table K. Planning requirements met by planning applications in Enfield Council in 2024

Condition	Number <Please complete all fields in this column with the total numbers>
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	10
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>0</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>0</u>
Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>10</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>3</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>1</u>
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.	122 conditions included 8 registered 10 audits 20% sites unregistered prior to audit 83% sites compliant after audit

3.1 New or significantly changed industrial or other sources

No new sources

4. Additional Activities to Improve Air Quality

4.1 London Borough of Enfield Council Fleet

There are 52 zero emissions vehicles in the Council's fleet, this is also the number of zero emission ready vehicles, which is 18% of the council's fleet

4.2 Planning Enforcement

Planning Enforcement investigate alleged breaches of planning conditions, due to the sheer number of complaints the team investigates every year it is not possible for officers to check compliance at every site in the borough. Where the NRMM audits show non-compliance a planning enforcement investigation can be raised for an officer to visit. Breaches of planning control can be actioned with a Enforcement Notice served under the Town & Country Planning Act.

4.3 Pan-London NRMM Auditing Project

Enfield Council is continuing to support the NRMM Enforcement project in 2025-26.

Please provide details on the following:

- What is the standard wording you use for NRMM conditions on construction/demolition sites?
1. Prior to the commencement of the development, evidence of site registration at <http://nrmm.london/> to allow continuing details of Non-Road Mobile Machinery (NRMM) and plant of net power between 37kW and 560 kW to be uploaded during the construction phase of the development shall be submitted to and approved by the Local Planning Authority.
 2. Evidence that all plant and machinery to be used during the demolition and construction phases of the development shall meets Stage IV of EU Directive 97/68/ EC for both NOx and PM emissions shall be submitted to the Local Planning Authority.
 3. During the course of the demolitions, site preparation and construction phases, an inventory and emissions records for all Non-Road Mobile Machinery (NRMM) shall be kept on site. The inventory shall demonstrate that all NRMM is regularly serviced and detail proof of emission limits for all equipment. All documentation shall be made available for inspection by Local Authority officers at all times until the completion of the development.

- Where is this wording applied?

Planning conditions when attached to decisions notices

- What sites is this condition applied to?

The condition is applied to all relevant planning applications.

4.4 Air Quality Alerts

Enfield Council is a member of the airTEXT consortium.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

All sites are calibrated every two weeks, LSO duties are performed in-house; audits take place every 6 months. The sites are audited by a contractor who is engaged by the London Air Quality Network. Any issues raised at audit are fixed during the routine servicing that follows, which is also on a six-monthly basis.

PM₁₀ Monitoring Adjustment

No PM₁₀ data for 2024.

A.2 Diffusion Tubes

- The laboratory supplying the diffusion tubes is Socotec.
- The preparation is 50% TEA:50% acetone.
- Socotec follows the procedures set out in the Harmonisation Practical Guidance.
- The precision results for 2024 were 30 good and 3 bad. The Air NO₂ PT determined that Socotec were deemed to be satisfactory.
- The correction factor applied for the tubes is 0.78 for 2024 (factor taken from the National Bias Adjustment spreadsheet, version 04/25).
- Enfield Council does not have a co-location study.

Discussion of Choice of Factor to Use

Table L. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/25	0.78
2023	National	03/24	0.77
2022	National	03/23	0.76
2021	National	06/22	0.78
2020	National	-	0.75
2019	National	-	0.75
2018	National	-	0.77
2017	National	-	0.77

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

No data required annualization in 2024.

Distance Adjustment

Fall off with distance adjustment was applied to diffusion tubes Enfield 1A and Enfield 8A. The online tool was used to do this.

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
Enfield 1A	0.5	4.5	45.3	13.7	33	
Enfield 8A	1.0	10	39.1	18.8	29.7	

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: Bias Adjusted	Annual Mean: Distance Corrected to Nearest Exposure	Comment
Enfield 1A	532668	196555	65.7	68.9	55.9	47.8	59.1	61.8	59.9	56.6	59	71.2	46	44.7	58.1	45.3	33	
Enfield 2A	529753	194332	37.4	42.2	31.2	19.2	24.9	23.4	26.6	27.4	25.3	36.1	28.3	26.7	29.1	22.7		
Enfield 3A	531981	195305	26.6	21.7	18.8	16.1	14.7	13	14.2	13.4	20.7	22	24.2	20.9	18.9	14.7		
Enfield 4A	530966	192714	34.2	30.7	25.8		21.4	22.3	27.8	25.7	27.6	37.1	35.2	30.5	28.9	22.6		
Enfield 5A	534238	196314	43.9	40.5	32.7	30.3	37.7	33.2	33	33	39	35.8	37.5	31.5	35.7	27.8		
Enfield 6			16	13.1	10.9	9.4	7.9	6.8	5	8.8	7.7	12.7	14.9	14.1	10.6	8.3		
Enfield 7	535460	199849	28.8	22.3		7.6	24.9	22.7	23.5	19.7	29.6	33.8	12.7	23.9	22.7	17.7		
Enfield 8A	534195	192806	61.8	63.2	51.9	52.2	43	50.8	57.9	50.3	51.6	58.8	41.5	19.2	50.2	39.1	29.7	
Enfield 9A	529945	192118	25.3	24.9	13.5	16.8	17.3	15.3	16.4	15.2	20.7	26.6	30.2	22.9	20.4	15.9		
Enfield 10	530161	192032	32.4	33.1	22.9	34.4	24.7	20.3	22.4	22.2	22.7	36.2	29.3	26.2	27.2	21.2		
Enfield 11	530448	193845	28	28.3	18.8	15.3	15.5	14.5	15.6	15.2	19.3	34.3	32.2	25.3	21.9	17.0		
Enfield 12	530374	193289	15.1	22.9	15.6	13.8	11.2	9.6	9	12.6	12.1	22.2	17.7	15.4	14.8	11.5		
Enfield 13	533201	192083	28.4	30.6	23.6	28.2	21.6	22.6	19.1	21.9	21.8	34.2	31.4	22.6	25.5	19.9		
Enfield 14	533304	192130	35.4	31.8	21.4	29.3	21.9	18.2	16.9	21.6	16.6	29.5	21.1	28.1	24.3	19.0		
Enfield 15	533322	192044	29.9	30.8	20.5	23	20.3	15.5	17.1	17.9	24.1		33.5	25.8	23.5	18.3		
Enfield 16	533721	191945	29.9	31.1	17.7	25.9	18.6	18.8	16.9	20.4	24	28.3	31.3	19.6	23.5	18.4		
Enfield 17	533766	192178	37.2	31.9	23	27.1	24.6	20.5	20.3	19.3	30.2	32.7	14.4	31.2	26.0	20.3		
Enfield 18	532165	192954	35.9	35	21.8	16.8	18	18.4	20.9	16	21.7	34.7	29	24.5	24.4	19.0		
Enfield19	531878	192668	23.3	31.6	20	20.6	17	14.4	16.5	15.7	18.2	30.2	29.5	22.6	21.6	16.9		
Enfield 20	531173	192390	30.4	18.6	20.2	36.8	21.2	17.4	18.4	18.7	23.4	30.2	22	26	23.6	18.4		
Enfield 21	530968	192259	36.2	20.2	34.7	24	29.8	33.1	34.1	34.8	34.6	45.8	16.8	31	31.3	24.4		
Enfield 22	531260	193415	35.5	36.9	24	31.8	23.9	24.6	24.4	25.5	31.5	40.2	31.1	10	28.3	22.1		

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

- ☒ 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.
- ☒ Enfield Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

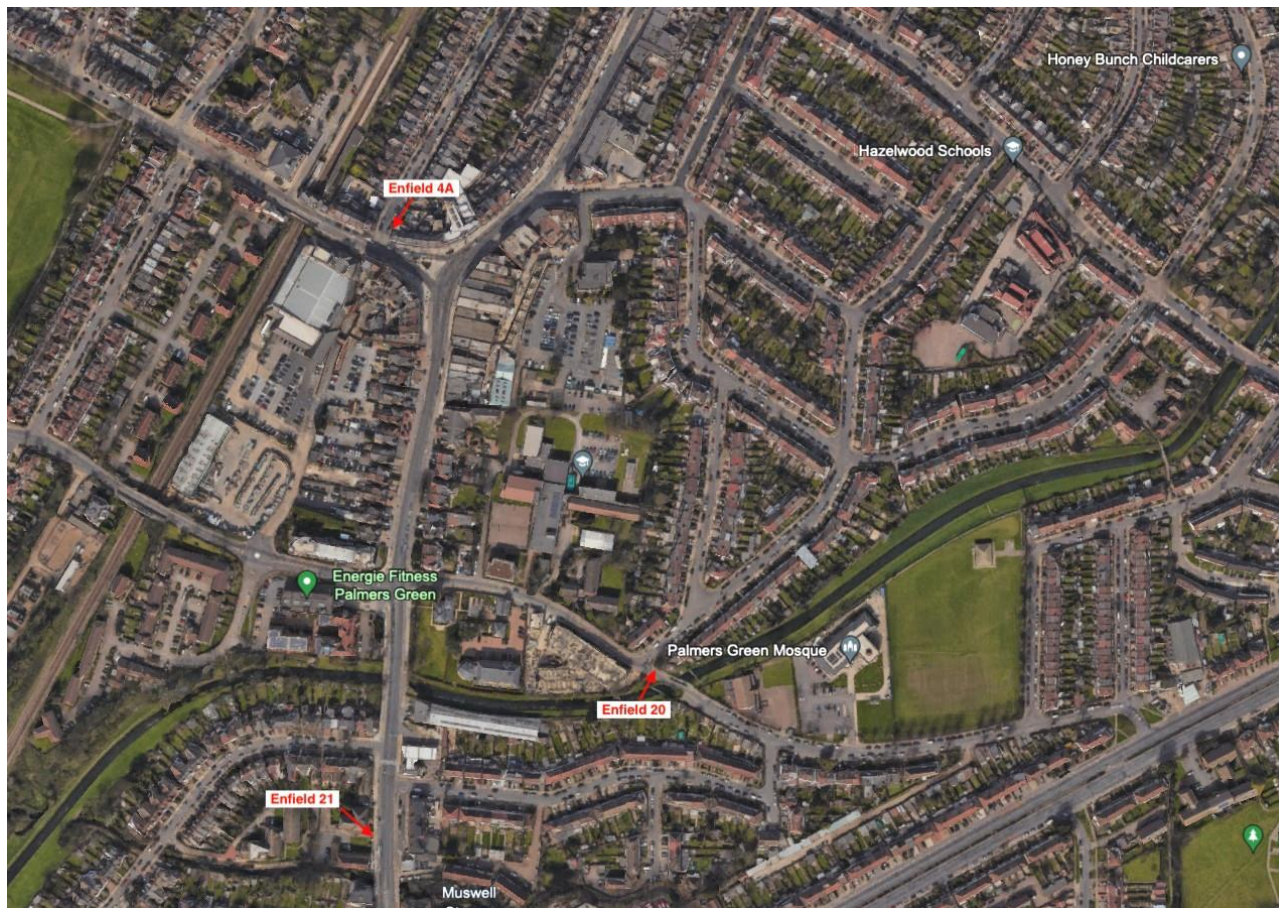
Exceedances of the NO₂ annual mean objective of 40µg m⁻³ are shown in **bold**.

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 Sites



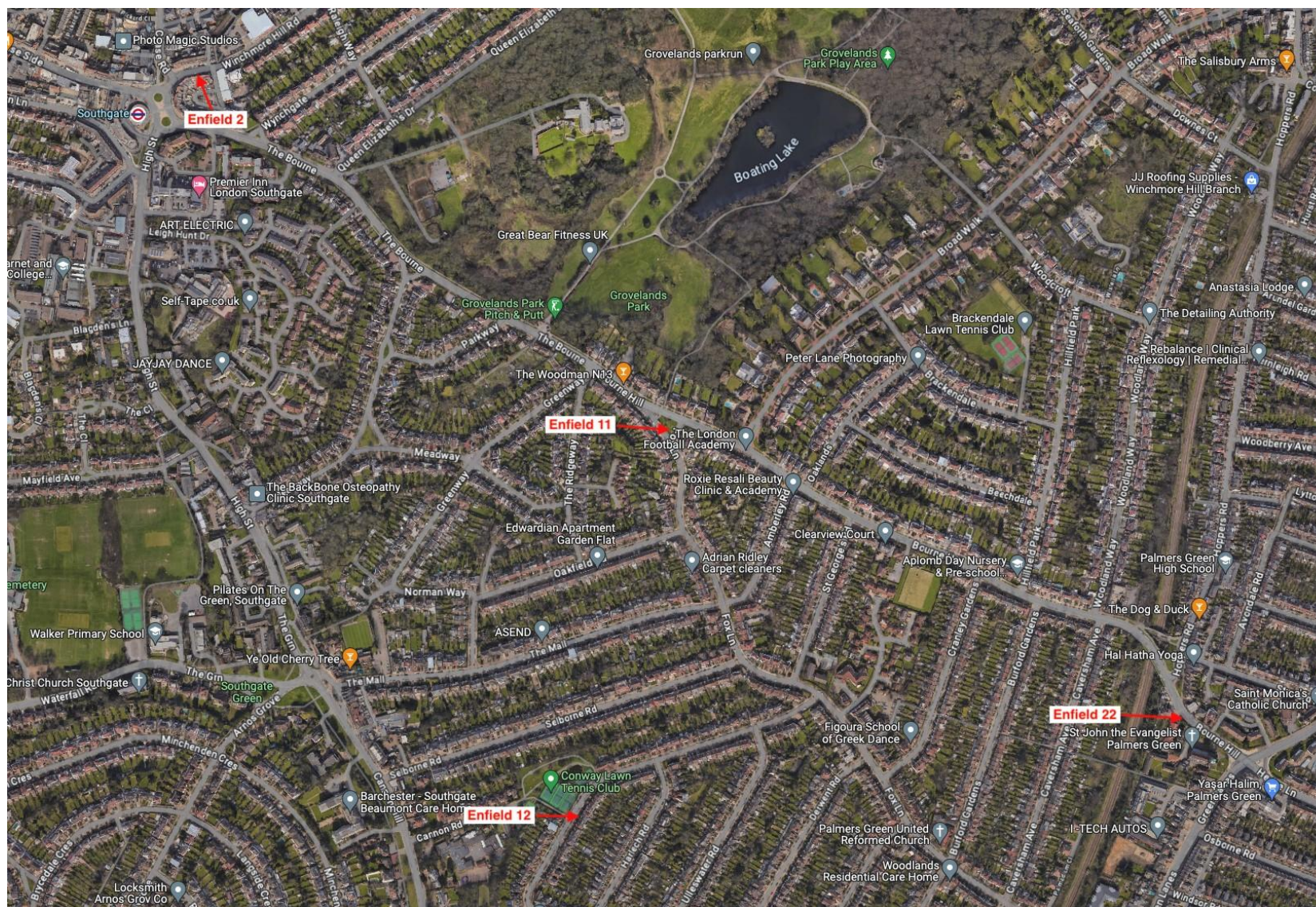














Figure B. Map of Automatic Monitoring Sites

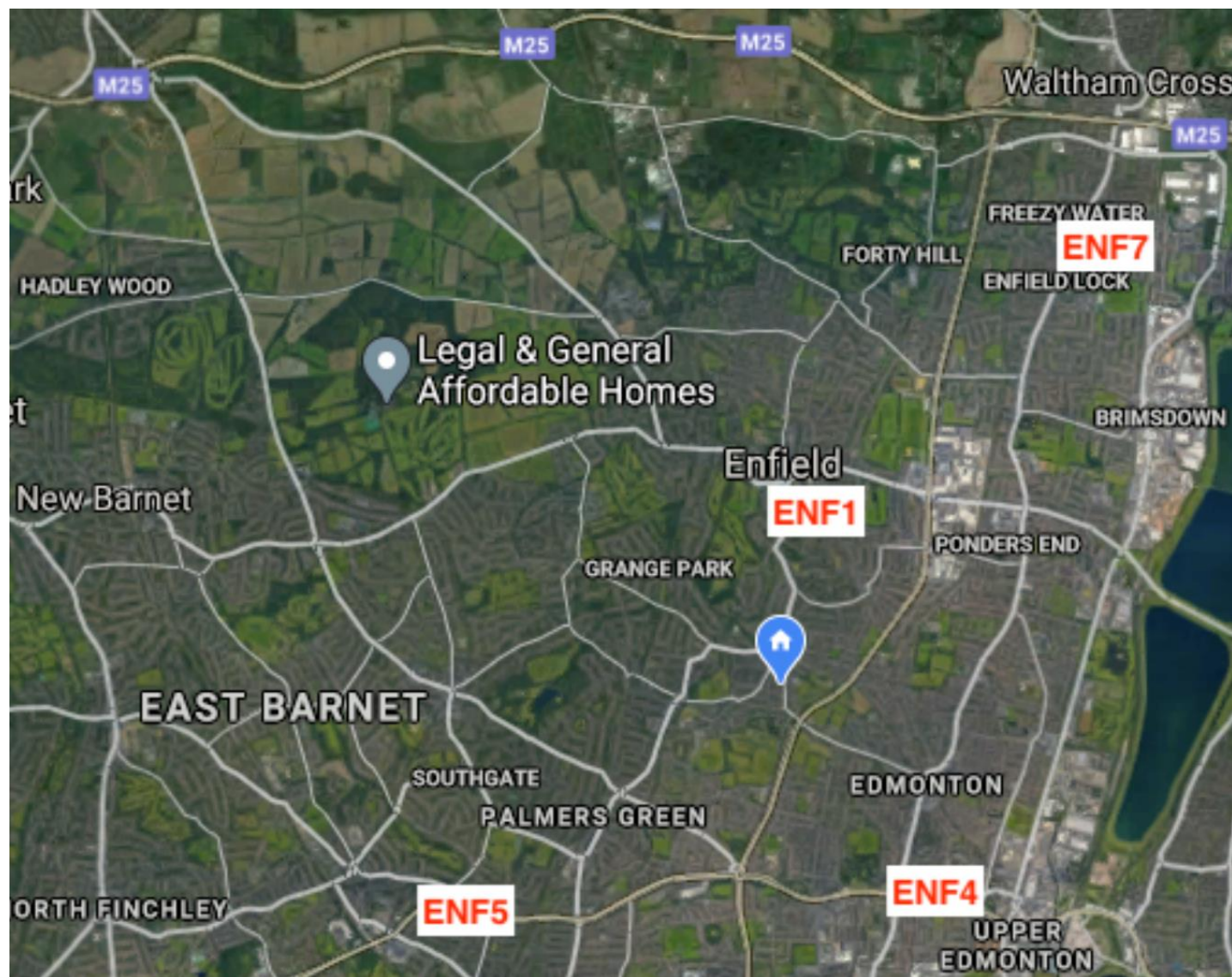


Figure C. AQMA Map: Whole Borough



Royal Borough of Greenwich Air Quality Annual Status Report for 2024

Date of publication: June 2025



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

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

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Abbreviations

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

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

Pollutant	Standard / Objective / Guideline	Averaging Period	Date ⁽¹⁾
Nitrogen dioxide (NO ₂)	200 µg m ⁻³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	40 µg m ⁻³	Annual mean	31 Dec 2005
Nitrogen dioxide (NO ₂)	WHO AQG ⁽²⁾ : 10 µg m ⁻³	Annual mean	
Particles (PM ₁₀)	50 µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 45 µg m ⁻³ not to be exceeded more than 3-4 times a year	24-hour mean	
Particles (PM ₁₀)	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles (PM ₁₀)	WHO AQG ⁽²⁾ : 15 µg m ⁻³	Annual mean	
Particles (PM _{2.5})	10 µg m ⁻³ ⁽³⁾	Annual mean	2040
Particles (PM _{2.5})	London Mayoral Objective ⁽⁴⁾ : 10 µg m ⁻³	Annual mean	2030
Particles (PM _{2.5})	WHO AQG ⁽²⁾ : 5 µg m ⁻³	Annual mean	
Particles (PM _{2.5})	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Particles (PM _{2.5})	WHO AQG ⁽²⁾ : 15 µg m ⁻³	24-hour mean	
Sulphur dioxide (SO ₂)	266 µg m ⁻³ not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO ₂)	350 µg m ⁻³ not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO ₂)	125 µg m ⁻³ 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)
GN5	Hoskins St	Roadside	539018	178007	NO2, PM10, PM2.5	Yes	N/A	Chemiluminescent and TEOM	0.0	5.0	3.0
GB6	Falconwood	Roadside	544997	175098	NO2, PM10, PM2.5	Yes	N/A	Chemiluminescent, TEOM, FDMS	5.0	1.2	3.0
GN6	John Harrison Way	Roadside	539687	179123	NO2, PM10, PM2.5	Yes	N/A	Chemiluminescent, TEOM, FDMS	0.0	3.0	3.0
GR7	Blackheath	Roadside	538141	176710	NO2, PM10	Yes	N/A	Chemiluminescent, TEOM	0.0	10.0	3.0
GR8	Woolwich Flyover	Roadside	540200	178367	NO2, PM10, PM2.5	Yes	N/A	Chemiluminescent, TEOM, BAM	0.0	3.0	3.0

GR9	Westhor ne Avenue	Roadside	541879	175016	NO2, PM10, PM2.5	Yes	N/A	Chemiluminescent, TEOM, FDMS	0.0	12.0	3.0
GN0	Burrage Grove	Roadside	544084	178881	NO2, PM10, PM2.5	Yes	N/A	Chemiluminescent, TEOM, FDMS	1.0	12.0	3.0
GN3	Plumste ad High St	Roadside	545560	178526	NO2, PM10, PM2.5	Yes	N/A	Chemiluminescent, TEOM,FDMS	0.0	5.0	3.0
GN4	Fiveway s Sidcup	Roadside	543582	172653	NO2, PM10	Yes	N/A	Chemiluminescent, TEOM	5.0	2.0	3.0

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

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)
GW23	Siebert Rd	Roadside	540420	177706	NO2	YES	17.2	2.0	No	2.0
GW24	Plumstead Common Rd	Roadside	543806	177951	NO2	YES	3.0	2.0	No	2.0
GW25	Eltham Rd	Roadside	540099	174881	NO2	YES	3.0	2.0	No	2.0
GW26	Foots Cray Rd	Roadside	544015	173139	NO2	YES	0.5	2.0	No	2.0
GW27	Charlton Village	Roadside	541645	177874	NO2	YES	0.5	2.0	No	2.0
GW29	Woolwich Rd	Roadside	541167	178512	NO2	YES	1.5	2.0	No	2.0
GW32	Banchory Rd	Roadside	540664	177235	NO2	YES	17.1	2.0	No	2.0
GW33	Blackheath Hill	Roadside	537971	176776	NO2	YES	1.5	2.0	No	2.0
GW34	Bannockburn School	Roadside	545490	178543	NO2	YES	3.0	2.0	No	2.0
GW35	Woolwich Rd Greenwich	Roadside	539527	178281	NO2	YES	1.5	2.0	No	2.0
GW36	Boord St	Roadside	539320	179234	NO2	YES	30.0	2.0	No	2.0
GW37	De Lucy school	Urban Background	546630	179557	NO2	YES	215.0	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)
GW38a	Westthorne Av	Urban Background	541885	175045	NO2	YES	30.0	2.0	No	2.0
GW39a, GW39b, GW39c	Bexley Rd ECC	Urban Background	543986	174660	NO2	YES		2.0	Yes	2.0
GW40	Sherewsbury House	Urban Background	544065	176996	NO2	YES	575.0	2.0	No	2.0
GW41	Sidcup	Roadside	543391	172765	NO2	YES	3.0	2.0	No	2.0
GW42	Greenwich Church St	Roadside	538317	177652	NO2	YES	2.0	2.0	No	2.0
GW43	Creek Rd	Roadside	537353	177632	NO2	YES	2.0	2.0	No	2.0
GW44	Eltham High St	Roadside	543096	174439	NO2	YES	3.6	2.0	No	2.0
GW106	Gran Depot Rd	Roadside	543505	178576	NO2	YES	1.0	2.0	No	2.0
GW48	Greenwich South St	Roadside	538044	176960	NO2	YES	2.5	2.0	No	2.0
GW49	Woolwich High St	Roadside	543472	179217	NO2	YES	1.0	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)
GW50a, GW50b, GW50c	Woolwich Flyover	Roadside	540203	178367	NO2	YES	3.0	2.0	Yes	2.0
GW51	Bugsby Way	Roadside	539638	179024	NO2	YES	2.0	2.0	No	2.0
GW52	Woolwich High St	Roadside	542842	179108	NO2	YES	1.5	2.0	No	2.0
GW53	Shooters Hill Rd	Roadside	542181	176878	NO2	YES	1.5	2.0	No	2.0
GW54	Westhorne Av	Roadside	541915	175039	NO2	YES	2.5	2.0	No	2.0
GW55a, GW55b, GW55c	Crown Woods Way	Roadside	545005	175097	NO2	YES	1.2	2.0	Yes	2.0
GW56	Sidcup Rd	Roadside	543679	172598	NO2	YES	1.5	2.0	No	2.0
GW57a	Trafalgar Rd	Roadside	538968	177955	NO2	YES	7.0	2.0	No	2.0
GW58a, GW58b, GW58c	Blackheath Hill	Roadside	538143	176712	NO2	YES	10.0	2.0	Yes	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)
GW59a, GW59b, GW59c	Westthorne Av	Roadside	541883	175016	NO2	YES	12.0	2.0	Yes	2.0
GW60a, GW60b, GW60c	Burrage Grove	Roadside	544086	178882	NO2	YES	12.0	2.0	Yes	2.0
GW101	Plumstead Rd	Roadside	544727	178884	NO2	YES	1.0	2.0	No	2.0
GW102	Plumstead Rd	Roadside	544075	178898	NO2	YES	1.0	2.0	No	2.0
GW61a, GW61b, GW61c	John Harrison Way	Roadside	539687	179123	NO2	YES	3.0	2.0	Yes	2.0
GW31	Deansfield School	Roadside	543383	175664	NO2	YES	3.0	2.0	No	2.0
GW103	Wricklemarsh Rd	Roadside	540935	176575	NO2	YES	9.0	2.0	No	2.0
GW104	Sun lane	Roadside	540743	177072	NO2	YES	12.5	2.0	No	2.0
GW105	Clifton Roundabout	Roadside	541143	174294	NO2	YES	5.0	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)
GW30	Indus Rd	Roadside	541372	177070	NO2	YES	5.0	2.0	No	2.0
GW28	Dunblane Rd	Roadside	542656	176207	NO2	YES	7.5	2.0	No	2.0

Notes:

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

(2) N/A if not applicable.

1.2 Comparison of Monitoring Results with AQOs

Table D. Annual Mean 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
GN5	539018	178007	Roadside	99.6	99.3	43	41	34	33	32	30.9	28.5
GB6	544997	175098	Roadside	96.1	95.6	39	36	27	27	22	17.4	16.8
GN6	539687	179123	Roadside	98.1	97.8	34	33	26	25	23	22	19.8
GR7	538141	176710	Roadside	99.6	99.3	35	38	29	30	27	28	26.3
GR8	540200	178367	Roadside	99.7	82.6	57	52	43	40	40	33.1	33.9
GR9	541879	175016	Roadside	99.4	91.0	38	34	25	26	23.6	21	18.9
GN0	544084	178881	Roadside	96.9	88.7	35	33	26	27	26	23	20.2
GN3	545560	178526	Roadside	90.9	83.2	33	34	30	25	25	23	20.6
GN4	543582	172653	Roadside	97.4	89.2	40	37	26	31	27	24	20.7

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
GW23	540420	177706	Roadside	100	100.0	31.1	34.6	27.0	28.0	23.0	24.0	21.9
GW24	543806	177951	Roadside	91.67	90.3	45.8	44.8	35.0	37.0	29.0	31.0	32.0
GW25	540099	174881	Roadside	91.67	92.4	32.2	32.2	27.0	27.0	23.0	21.6	20.9
GW26	544015	173139	Roadside	100	100.0	23.8	26.5	22.0	22.0	18.0	16.1	15.7
GW27	541645	177874	Roadside	83.33	83.2	31.9	34.9	26.0	26.0	23.0	25.8	22.7
GW29	541167	178512	Roadside	100	100.0	53.8	49.2	39.0	38.0	29.0	30.4	27.7
GW32	540664	177235	Roadside	100	100.0	39.3	39.5	32.0	30.0	26.0	25.1	21.5
GW33	537971	176776	Roadside	100	100.0	46.6	47.4	37.0	37.0	31.0	33.6	32.6
GW34	545490	178543	Roadside	100	100.0	33.9	35.3	30.0	28.0	26.0	24.9	22.4
GW35	539527	178281	Roadside	91.67	92.4	48.9	52.9	42.0	34.0	29.0	30.6	28.9
GW36	539320	179234	Roadside	100	92.2	46.9	49.3	41.0	30.5	23.0	23.9	22.5
GW37	546630	179557	Urban Background	100	100.0	21.0	21.9	18.0	18.0	14.0	14.4	14.7

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
GW38a	541885	175045	Urban Background	100	100.0	28.3	29.0	22.0	23.0	21.0	18.6	17.2
GW39a, GW39b, GW39c	543986	174660	Urban Background	100	100.0	17.2	18.5	15.0	16.0	14.0	11.8	10.7
GW40	544065	176996	Urban Background	100	100.0	16.9	18.2	16.0	15.0	16.6	11.1	10.7
GW41	543391	172765	Roadside	100	100.0	44.9	47.7	36.0	31.0	27.0	25.3	22.2
GW42	538317	177652	Roadside	100	100.0	40.1	39.8	32.0	32.0	27.0	28.9	25.8
GW43	537353	177632	Roadside	100	100.0	43.5	44.2	33.0	29.0	26.0	25.8	22.8
GW44	543096	174439	Roadside	100	100.0	43.5	47.8	39.0	42.0	34.0	37.0	36.1
GW106	543505	178576	Roadside	100	100.0	35.5	36.0	31.0	30.0	27.0	25.5	24.1
GW48	538044	176960	Roadside	83.33	84.6	33.1	37.8	31.0	28.0	26.0	29.0	28.0
GW49	543472	179217	Roadside	100	100.0	41.8	43.8	33.0	31.0	28.0	27.9	28.6
GW50a, GW50b, GW50c	540203	178367	Roadside	91.67	90.3	54.3	53.2	49.0	41.0	36.0	38.7	37.1

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
GW51	539638	179024	Roadside	100	100.0	37.0	39.0	30.0	29.0	26.0	27.0	24.3
GW52	542842	179108	Roadside	91.67	90.8	37.2	36.6	24.0	24.0	20.0	19.6	19.5
GW53	542181	176878	Roadside	83.33	82.7	29.0	29.8	24.0	24.0	22.0	21.5	20.3
GW54	541915	175039	Roadside	91.67	92.4	50.6	53.0	41.0	40.0	34.0	31.7	29.6
GW55a, GW55b, GW55c	545005	175097	Roadside	100	100.0	42.1	39.9	30.0	29.0	27.0	23.6	22.3
GW56	543679	172598	Roadside	100	100.0	40.6	39.1	32.0	29.0	25.0	26.1	21.3
GW57a	538968	177955	Roadside	100	100.0	29.5	29.7	24.0	24.0	20.0	21.1	20.5
GW58a, GW58b, GW58c	538143	176712	Roadside	100	100.0	37.9	36.6	29.0	30.0	27.0	25.4	25.0
GW59a, GW59b, GW59c	541883	175016	Roadside	100	100.0	35.4	33.7	25.0	25.0	23.0	21.9	19.5

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
GW60a, GW60b, GW60c	544086	178882	Roadside	100	100.0	29.5	29.3	24.0	21.3	21.0	20.3	19.3
GW101	544727	178884	Roadside	75	75.0	56.5	53.8	44.0	41.0	36.0	40.9	41.6
GW102	544075	178898	Roadside	100	100.0	50.5	51.5	50.0	42.0	34.7	36.5	38.9
GW61a, GW61b, GW61c	539687	179123	Roadside	100	100.0	31.9	32.8	26.0	23.0	23.0	25.0	23.4
GW31	543383	175664	Roadside	100	100.0	26.3	26.0	20.0	21.0	19.0	23.7	21.3
GW103	540935	176575	Roadside	91.67	92.4	35.9	35.1	29.0	28.0	21.0	24.1	22.7
GW104	540743	177072	Roadside	91.67	92.4	43.7	44.9	40.0	31.0	28.0	28.2	27.9
GW105	541143	174294	Roadside	91.67	92.4	46.5	46.0	36.0	36.0	29.0	31.0	28.2
GW30	541372	177070	Roadside	91.67	92.4	33.6	32.7	27.0	26.0	23.0	23.4	22.7
GW28	542656	176207	Roadside	91.67	92.4	31.3	29.8	22.0	23.0	19.0	19.4	17.0

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

☒ Diffusion tube data has been bias adjusted.

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

Notes:

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

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%).

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
GN5	539018	178007	Roadside	99.7	91.2	1	0	0	0	0	0(70)	0
GB6	544997	175098	Roadside	86.2	78.9	0	0	0	0	0	0(51)	0 (72)
GN6	539687	179123	Roadside	98.1	89.8	0	0	0	0	0	0	0
GR7	538141	176710	Roadside	99.7	91.2	0	0	0	0	0	0	0
GR8	540200	178367	Roadside	99.7	82.6	0	0	0	0	0	0(95)	0 (92)
GR9	541879	175016	Roadside	99.4	91.0	0	0	0	0	0 (91)	0	0
GN0	544084	178881	Roadside	96.9	88.7	0	0	0	0	0	0	0
GN3	545560	178526	Roadside	90.9	83.2	0	0	0	0	0	0	0 (85)
GN4	543582	172653	Roadside	97.4	89.2	0	0	1	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
GN5	539018	178007	Roadside	99.6	99.3	22	22	19	19	18.8	16	16.3
GB6	544997	175098	Roadside	96.1	95.6	21	19	18	19	17.7	15.8	15.0
GN6	539687	179123	Roadside	98.1	97.8	15	14	19	20	19	16	16.3
GR7	538141	176710	Roadside	99.6	99.3	22	20	19	19	17	14	14.4
GR8	540200	178367	Roadside	98.6	93.6	25	23	21	20	18	16.4	19.2
GR9	541879	175016	Roadside	96.8	96.5	18	15	19	17	19	15	15.3
GN0	544084	178881	Roadside	95.0	94.7	18	17	15	13	14.3	13	13.5
GN3	545560	178526	Roadside	99.8	99.5	18	16	15	13	13.9	12	12.8
GN4	543582	172653	Roadside	99.6	99.3	25	25	23	21	15	14	14.9

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
GN5	539018	178007	Roadside	99.6	99.3	4	12	6	2	4(30.8)	1	0
GB6	544997	175098	Roadside	96.1	95.6	2	8	6	4	4(27.8)	0(26.5)	0
GN6	539687	179123	Roadside	98.1	97.8	0	6	3	3	3	3	0
GR7	538141	176710	Roadside	99.6	99.3	5	7	5	2	3	0	0
GR8	540200	178367	Roadside	98.6	93.6	6	10	5	5	5	2(26.4)	2
GR9	541879	175016	Roadside	96.8	96.5	4	2	5	1	5	0	0
GN0	544084	178881	Roadside	95.0	94.7	3	7	0	0	3(24.9)	0	0
GN3	545560	178526	Roadside	99.8	99.5	1	5	4	0	0(22.1)	0	0
GN4	543582	172653	Roadside	99.6	99.3	10	17	8	3	3	0	1

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 (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
GN5	539018	178007	Roadside	98.8	90.4	9	9	8	7.7	8	6.5	6.9
GB6	544997	175098	Roadside	78.8	60.7	13	12	10	13	9.5	8.7	8.9
GN6	539687	179123	Roadside	97.3	89.0	10	11	9	11	10	8.2	7.3
GR8	540200	178367	Roadside	80.1	80.1	12	11	10	11.5	12	-	9.0
GR9	541879	175016	Roadside	96.1	87.9	11	10	8	7	8.7	10	8.7
GN0	544084	178881	Roadside	99.7	91.2	13	11	12	11	12	-	8.8
GN3	545560	178526	Roadside	99.9	91.4	13	13	9	9.4	8.2	7	9.2

Notes

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

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

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

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

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

Table J. Other Pollutants

O3 Automatic Monitoring Results: 100ug/m3 as an 8 hour mean, not to be exceeded more than 10 times a year

Site ID	Valid data capture for monitoring period % ^(a)	Valid data capture 2024 % ^(b)	2024
GB6	65	65	9
GR8		87	6
GR9		99	3
GN3	64	64	2

Please note: The low capture rate at both GB6 and GN3 is due to technical problems with the Ozone analysers.

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 Royal Borough of Greenwich can be found in Table L. The table presents a description of the one AQMA that is currently designated within Royal Borough of Greenwich. Appendix C provides maps of the AQMA and also the air quality monitoring locations in relation to the AQMA. The air quality objectives pertinent to the current AQMA designation are as follows:

- $<NO_2$ annual mean
- $<PM_{10}$ 24-hour mean

Table K. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Greenwich AQMA	01/07/2001	Nitrogen dioxide NO_2	The entire Borough	YES	NO_2 - $49 \mu g m^{-3}$	NO_2 - $41.6 \mu g m^{-3}$ PM_{10} - $19.2 \mu g m^{-3}$	Not yet compliant	Royal Borough of Greenwich	Link here

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
		Particulate matter PM ₁₀			PM ₁₀ - 27 µg m ⁻³			AQAP 2023-2027	

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

☒ Royal Borough of Greenwich **confirm that all current AQAPs have been submitted to GLA.**

2.2 Air Quality Action Plan Progress

Royal Borough of Greenwich adopted a new AQAP for 2023-2027.

Table M provides a brief summary of Royal Borough of Greenwich'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 L. 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
1	Localised solutions	Undertake a review of our current Smoke Control Orders first implemented in the 1960s to ensure that they are still fit for purpose. Where necessary look to revoke any current Smoke Control Orders and consult on and implement a new single Borough wide Smoke Control Order	Review of SCO- 2026	Local Authority- Environmental Health	Not yet started

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
2	Localised solutions	We are embarking on an ambitious goal to establish 21 new School Streets and enhance the existing 11, resulting in implementing a total of 32 schemes.	2026-2027	Local Authority-Transport	Discussions and planning are ongoing to gather baseline emissions data.
3	Partnership working and raising awareness	We are working in partnership with multiple London Boroughs (co-led by LB Hounslow and LB Camden) to reduce commercial sector vehicle engine idling through engagement and public campaigns. The project will conclude with a research project to assess occupational exposure to air pollutants with vehicles.	2027	Local Authority-Environmental Health	Year one public awareness campaign has been completed.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
1	Monitoring and other core statutory duties	Action 1.1: Complete a review of our existing automatic and diffusion tube monitoring within the borough, to ensure sites remain relevant and to achieve a high standard of data capture.	Ongoing	Local Authority-Environmental Health and Transport Breathe London PLA	The Royal Borough has one of the largest real time monitoring network in London with ten automatic monitoring station sites. A map showing the locations of the monitoring stations, and the sets of our monitoring data can be accessed here . We have 42 diffusion tube sites, with a total of 56 diffusion tubes. Full location and monitoring details can be accessed in our Annual Status Reports, which can be downloaded from our website . Further to this, in May 2019 the Port of London Authority (PLA) installed several continuous air pollution monitors near

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					Greenwich Ship Tier to assess the impact of short-term, local river activity on air quality in the area, including cruise visits. This project is in partnership with Breathe London and LB Tower Hamlets. We are also looking into carrying out short term monitoring in the vicinity of several schools as part of a school streets project. We will use the data to help us consider and decide on implementing practical measures to reduce exposure to harmful pollutants.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Action 1.2: We will explore opportunities to engage and work with schools and community groups to undertake their own air quality monitoring.	Ongoing	Local Authority-Environmental Health and Schools	Breathe London have sensors installed and functional at St Mary Magdeline CE School, Haimo Primary School, Ceres Road (junction with Bannockburn Road and Bannockburn Primary School, and St Mary Magdelene Primary School. We will always look for and be open to opportunities to work with our partners internally and externally to identify any schools that could benefit from monitoring.
		Action 1.3: We will prepare Annual Status Reports (ASRs) detailing	Ongoing	Local Authority Environmental Health	Our current Air Quality Action Plan for 2023-2027 has been published and is

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		progress against each of the AQAP measures and ensure the Royal Borough of Greenwich's AQAP is formally reviewed and updated, as a minimum, every five years			available on our website. Before publication we consulted with our air quality partners, relevant internal partners and with the public.
		Action 1.4: To ensure that the measures contained within this action plan are integrated across council policies and projects, this and future AQAPs will be signed-off, and future Annual Status Reports reviewed at Director level.	Ongoing	Local Authority- all relevant departments	Air quality is considered and integrated across council policies and projects. All relevant departments were consulted with prior to writing of the AQAP for 2023-2027 and all actions were signed off by the relevant departments.
		Action 1.5: We will work collaboratively across all relevant departments including Environmental Health, Public Health,	March 2026	Local Authority- all relevant departments	We collaborated with all relevant departments when writing our AQAP for 2023-2027. Officers from all departments continue to

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Regeneration, Planning & Building Control, Transport, Procurement, Sustainability, Fleet and Waste Services, and Communications to improve air quality in the borough and reduce exposure to air pollution.			consult and collaborate to address any matter that could impact air quality.
		Action 1.6: We will explore opportunities to work more collaboratively with our Air Quality Partners: The Mayor of London, the Environment Agency, the Port of London Authority and our neighbouring boroughs: Lewisham, Bromley, Bexley, Barking and Dagenham, Newham and Tower Hamlets.	Ongoing	Local Authority-Environmental Health	This is an ongoing commitment, and RBG regularly meet with and collaborate with our external partners including the East London Air Quality Cluster Group, GLA, and neighbouring councils. We will be working with several Local Authorities this year to deliver an anti-idling project. This project is being led by

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					LB Camden and LB Hounslow and partially funded by the Mayor of London.
2	Emissions from developments and buildings	Action 2.1: We will publish and enforce a Code of Construction Practice (CoCP) stipulating air quality minimum standards (& other requirements e.g., noise) expected of construction activities carried out within Royal Greenwich to ensure compliance with industry good practice.	March 2024	Local Authority-Planning	The Council's website contains information for developers on controlling dust emissions during demolition and construction. Planning officers either receive comments on applications requiring, through condition, the submission of a Construction Management Plan or will direct developers to the information on the webpage. Planners have also been made aware of the Low

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					Emission Zone for Non Road Mobile Machinery (NRMM) and a condition has been created and been used by Planning throughout 2021 requiring compliance of NRMM with LEZ standard. We will be releasing a Code of Construction Practice in 2025 that will provide advice to assist developers to ensure that construction works are undertaken using best practice.
		Action 2.2: We will review, revise, and implement our air quality related standard planning conditions to ensure construction sites	December 2024	Local Authority- Planning and Environmental Health	Environmental Health and planning continue to request that all developments that could impact air quality are required to have

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		within the borough are suitably assessed, monitored and managed in line with good industry practice, including the GLA NRMM LEZ scheme requirements.			assessments. We review the assessments to ensure standards are in place and mitigation is carried out.
		Action 2.3: We will work with utility companies and statutory undertakers working on the borough's road network to ensure compliance with good industry practice and the NRMM LEZ requirements.	Ongoing/yearly target	Local Authority-Environmental Health and Transport TfL	12 sites were self-compliant and submitted details of their registration to NRMM. 8 sites were non-compliant before interaction however met required emission standards by enacting all recommendations made by officers. 2 sites were non-compliant.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Action 2.4: We will work with the relevant parties to ensure compliance with the air quality provisions of the Silvertown Tunnel CoCP including the NRMM LEZ requirements.	Ongoing	Local Authority-Environmental Health and Transport TfL	The Silvertown Tunnel is complete and is open to the public. We will work with TfL regarding their own AQ monitoring of the area.
		Action 2.5: We will continue to require Air Quality Assessments for all major developments in the borough.	Ongoing	Local Authority-Planning, Environmental Health	In 2024 we received 8 applications for major developments in the borough that were required to submit air quality assessments.
		Action 2.6: We will require all building developments within the borough to comply with the Mayor of London's Air Quality Neutral Standard.	Ongoing	Local Authority-Planning, Environmental Health	All full major planning application approved in 2024 were AQN

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Action 2.7: We will require all development proposals within the borough's defined Air Quality Focus Areas demonstrate that design measures have been proposed and implemented to minimise exposure to poor air quality.	Ongoing	Local Authority-Planning, Environmental Health	One site, through their air quality assessment was identified as requiring additional measures to minimise exposure.
		Action 2.8: We will publish Air Quality Planning Guidance to support developers to understand our air quality and planning requirements within the Royal Borough.	2025	Local Authority-Planning, Environmental Health	We have developed supplementary planning guidance on climate resilience. This should be formally approved by Cabinet in November 2025.
		Action 2.9: We will ensure an Air Quality Positive approach is applied to	Estimated 2025	Local Authority-Planning,	A draft Local Plan is expected in summer 2025,

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		future masterplans prepared in the Royal Borough and large-scale developments requiring an EIA.		Environmental Health	which will guide planning decisions.
		Action 2.10: We will require all relevant commercial kitchen planning applications to identify the most appropriate odour control measures and filtration systems to be employed.	Ongoing	Local Authority-planning, Environmental Health	All applications where a commercial kitchen is proposed includes conditions in respect of odour control.
		Action 2.11: We will continue to raise awareness about the Royal Borough's Smoke Control Area requirements on the council's website and enforce the provisions of the Clean Air Act.	Ongoing	Local Authority-Environmental Health, Communications	Our website is updated with the latest information regarding the borough smoke control area and the Clean Air Act. In 2025 we will review our current smoke control

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					orders to understand if they are still fit for purpose, or if they need to be updated. Where enforcement is necessary, it will be proportionate and in line with our own enforcement policy.
		Action 2.12: Through promotion on the Council's website and active engagement at the point of sale with local suppliers of fuels and appliances, we will raise awareness of the 'Ready to Burn' scheme and 'Eco Design' stoves regulations.	Ongoing	Local Authority-Environmental Health and Communications	Website has up to date information in relation to Clean Air Act requirements. Officers liaised with local shops and suppliers of fuel to provide information on fuels and appliances.
		Action 2.13: We will continue to seek improvements in our	Ongoing	Local Authority-Housing /	To date under the Social Housing Decarbonisation

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		existing building stock within the borough through energy efficiency and retrofit projects and explore future funding opportunities where available.		Sustainability/Asset Management / Repairs	Fund Wave 2.1 we have carried out retrofit of 215 properties. We received £5.3m to retrofit 665 which will be completed within this current wave of funding. RBG applied for Warm Homes: Social Housing Fund Wave 3 in late 2024 and we have been awarded £10.3m which will be used alongside our co-funding to deliver retrofit measures to 1,120 homes.
		Action 2.14: We will use and promote the 'Retrofit Accelerator – Homes' and 'Retrofit Accelerator – Workplace' programmes to	N/A	Local Authority-Housing / Sustainability/Asset	There is no 'Retrofit Accelerator Workplace' programme in place during the timeframe of this AQAP.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		encourage the uptake of energy efficiency retrofitting projects in the borough's workplaces and houses.		Management / Repairs	
3	Public health and raising awareness	Action 3.1: We will continue to raise awareness about the detrimental health effects of air pollution and ensure information regarding local air quality is kept under review and readily available to the local community.	Ongoing	Local Authority- Public Health and Environmental Health	Public health campaigns this year have included promotion of Clean Air Night raising awareness about the harm from burning wood. Our website was updated in 2023 to better reflect current air quality information. Public health continues to engage with local community groups such as the Charlton Athletic Community Trust delivering

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					information to young people about air quality.
		Action 3.2: We will continue to support the airTEXT pollution alert service and promote the service more widely to local GPs and pharmacies along with promotion through the Councils website.	Completed in 2025	Local Authority- Public Health and Environmental Health	In 2024/2025 we carried out a campaign to raise awareness of airTEXT. We promoted the service through GP surgeries and through our libraries. We asked GPs to promote airTEXT within their surgeries and encouraged them to share information with service users who have cardio-vascular or respiratory issues when appropriate. We also sent promotional materials to all our libraries

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					and to Charlton Athletic Community Trust.
		Action 3.3: We will continue to promote and encourage more walking and cycling in the Borough.	Ongoing	Local Authority-Communications and Transport	We use London Plan Policies to reduce car dependency. We also have an Active Travel Action Plan and we provide updates on this plan. The committee update for 2024 can be found here. For 2025 significant work is underway to develop the local cycle network. Collaborations with Transport for London (TfL) are in place to develop cycle routes in Greenwich Town Centre and other areas. An enhanced cycle route

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					scheme in Plumstead and Abbey Wood is being developed based on stakeholder feedback. A procurement process for expanding cycle hangers is also underway, with substantial increases expected by Autumn.
		Action 3.4: We will continue to promote and encourage the borough's schools to engage with the TfL STARS scheme and gain accreditation.	Ongoing	Local Authority-Transport	The TfL STARS scheme has been renamed TfL Travel for Life scheme. This action has been achieved. We have increased the number of schools accredited on the scheme by 10% each year. In 2024 admissions: Gold

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					(27), Silver (1), Bronze (12) and Engaged (19).
		Action 3.5: We will promote and encourage the use of innovative and emerging technologies by local businesses	Ongoing	Local Authority-Communications, Business Team	In March 2024 businesses came together for the Greener Greenwich Summit, organised by the South East London Chamber of Commerce and supported by the Council. 160 plus attendees shared innovative ideas across renewable energy use, waste management, recycling and reuse, sustainable transport, developing green skills, and the use of technology and IT systems to make a difference and to make Greenwich even greener.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
4	Delivering servicing and freight	Action 4.1: In collaboration with Royal Greenwich's business community, we will explore opportunities to implement sustainable freight initiatives within the borough exploring solutions such as last mile delivery, consolidation centres, river freight and delivery retiming.	Ongoing	Local Authority-Transport	We are looking to promote the use of consolidation centres and FORS/CLOCS schemes during construction. We can use DfT traffic data to monitor traffic volumes. Micro-consolidation for freight capital funding requested-work to continue in Transport Planning team including river freight.
		Action 4.1: A Traffic Management Plan will be a requirement for all relevant developments.	Ongoing	Local Authority-Planning and Transport	Though we do not have the exact figures all major developments within the Borough are required to submit a traffic management plan.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Action 4.2: We will introduce the following minimum emission standards in contracts for the use of Heavy Goods Vehicles (HGVs) and Light Duty Vehicles (LDVs) and Cars: - HGVs (>3.5T) - Euro VI - LDVs (≤3.5T) - Zero emission, or where not reasonably feasible, Euro 6 (Diesel) or Euro 4 (Petrol) - Cars – Zero or Ultra Low Emission Vehicle (ULEV), or where not reasonably feasible, Euro 6 (Diesel) or Euro 4 (Petrol).	Completed	Local Authority-Procurement	During procurement process for any new vehicles, we ask for contracts to detail the added social value which includes detail on economic and environmental factors. We ask for all new fleet contracts or new vehicles introduced into our service to at least meet minimum emission standards, if not better.
		Action 4.3: We will introduce minimum emission standards in construction and works	Ongoing	Local Authority-Procurement	During procurement process for any new work contracts, we ask for detail the added social value which includes

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		contracts for construction machinery (Non- Road Mobile Machinery – NRMM) aligned with the Mayor of London’s NRMM Low Emission Zone Central Activities Zone (CAZ) and Opportunity Areas standard but be applicable to all contracts across the whole borough.			detail on economic and environmental factors. We ask for all new works contracts for NRMM to meet at least the minimum standards, if not better.
5	Reducing emissions from council fleets	Action 5.1: Our vehicle fleet will meet the following minimum emission standards • HGVs (>3.5T) - Euro VI • LDVs (≤3.5T) - Euro 6 (Diesel) or Euro 4 (Petrol)	Completed	Local Authority- Fleet Management, Procurement	All vehicles within our fleet meet the emissions standards.
		Action 5.2: We will continue to replace and upgrade our vehicle fleet	2030	Local Authority- Fleet Management	6.1% of our fleet are fully electric and 1.1% of our

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		with zero emission vehicles when reasonably feasible to achieve our goal of 100% zero emissions vehicles by 2030			fleet are plug in hybrid electric.
		Action 5.3: We will maintain a minimum Bronze level as a FORS Accredited Operator.	Ongoing	Local Authority- Fleet Management	This has been maintained for 2024
6	Localised solutions	Action 6.1: We will use the new Green Infrastructure Framework to inform our revised Local Plan and our future Green Infrastructure Strategy.	Ongoing	Local Authority- Planning, Regeneration, Parks and Open Spaces	A draft Local Plan is expected in summer 2025, which will guide planning decisions.
		Action 6.2: We will commission a baseline tree canopy survey to better inform the value and benefits of the Royal Borough's trees and aid	Completed	Local Authority- Regeneration, Parks and Open Spaces	We completed tree canopy baseline assessment in association with ITree/ Treeconomics which we will be using to assess periodic canopy cover / ecosystem

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		the development of our future Green Infrastructure Strategy			benefits changes (when reassessed) and to inform some of our tree planting.
		Action 6.3: We will plant 5000 trees by the end of 2026 as part of the strategy to increase tree canopy within the Royal Borough.	Completed	Local Authority-Regeneration, Parks and Open Spaces	We have achieved our target of planting 5000 trees ahead of schedule.
		Action 6.4: We will prepare a Green Infrastructure Strategy and ensure GI supports both Air Quality Neutral and Air Quality Positive policy approaches to development in the borough and reduced exposure to air pollution.	Ongoing	Local Authority-Regeneration	Our focus is on the Climate Resilience SPD which has been developed and is waiting to be formally adopted. Any new Green Infrastructure Framework will be considered jointly in future with all relevant departments. Our new local plan and Climate resilience

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					SPD will consider Air Quality in their policies.
		Action 6.5: We will combine 'Green Infrastructure' and the 'Healthy Streets' Approach in public high street design to create greener walking and cycling routes to encourage active travel options away from the borough's most polluted streets.	2030	Local Authority-Regeneration, Parks and Open Spaces, Transport	The Council's Transport Strategy was adopted in 2022 and contains several objectives relating to this – on healthier, greener, and cleaner Greenwich. In the planning department we have adopted our Urban Design Guide SPD in 2023, which deals with all elements of street and open space.
7	Cleaner transport	Action 7.1: We will invest and work with TfL to implement the expansion and improvement of cycling infrastructure focussing particularly on	Ongoing	Local Authority-Transport	We continue to work closely with TfL to expand and improve cycling

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		the south and east of the borough and designated Opportunity Areas.			infrastructure in the borough. This includes: The delivery of section 2 of the Greenwich to Woolwich Cycle Route from Anchor and Hope Lane to Woolwich Ferry Roundabout, which is scheduled to begin construction in Summer 2025. Continuing to progress our cycle network development programme which includes seven routes at different stages of development, with construction expected to

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					begin on several of these routes this and the next financial year. Significant work is underway to develop the local cycle network. Collaborations with Transport for London (TfL) are in place to develop cycle routes in Greenwich Town Centre and other areas. An enhanced cycle route scheme in Plumstead and Abbey Wood is being developed based on stakeholder feedback. A procurement process for expanding cycle hangers is also underway, with

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					substantial increases expected by Autumn.
		Action 7.2: We will deliver the Active Travel Policy Framework Action Plan to support our local community in the transition to reduced reliance on cars and encourage walking or cycling.	Completed	Local Authority-Transport	Transport Strategy has been published and can be found here . The strategy includes active travel measures to help encourage walking, cycling and public transport.
		Action 7.3: We will work with Transport for London to support and lobby for public transport improvements across the borough that foster connectivity, particularly north-south connections, and links to Thamesmead and Abbey Wood.	Ongoing	Local Authority-Transport	Significant work is underway to develop the local cycle network. Collaborations with Transport for London (TfL) are in place to develop cycle routes in Greenwich Town Centre and other areas. An enhanced cycle route scheme in Plumstead and Abbey Wood is being

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					developed based on stakeholder feedback. A procurement process for expanding cycle hangers is also underway, with substantial increases expected by Autumn.
		Action 7.4: We will continue to promote and support car club providers to encourage membership in the Royal Borough and the increased use of electric vehicles.	Ongoing	Local Authority-Transport	We currently have 40 active car club permits.
		Action 7.5: We will deliver the Electric Vehicle Policy Framework Action Plan to implement a comprehensive charging infrastructure network across the borough.	2030	Local Authority-Transport	We are reviewing the locations for future EV investment. We have been successful in obtaining LEVI funding to deliver up to 1,150 lamp post chargers in

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					the borough, with a target of 200 per year.
		Action 7.6: We will continue to use and promote the Workplace Charging Scheme in the borough to encourage and expand the workplace EV Infrastructure.	Ongoing	Local Authority-Transport	We do not currently count the number of business applications, but this can be requested from Office of Zero Emission Vehicles. We will be looking to communicate via press release regarding the grant opportunities for businesses.
		Action 7.7: We will engage with local communities and using an evidence-based approach, we will identify areas in the Royal Borough that would most benefit from the	Ongoing	Local Authority-Transport	We currently have one LTN- this was introduced in November 2024. This is a trial LTN for 18 months which covers The West and East Greenwich

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		implementation of through-traffic reduction schemes.			Neighbourhood Management scheme.
		Action 7.8: We will support any through-traffic reduction scheme identified for potential implementation with real-time air quality monitoring.	Ongoing	Local Authority-Transport	Real time monitoring is collected during scheme delivery of traffic reduction schemes such as LTNs and Neighbourhood Management schemes. Air quality monitoring is implemented as a key metric as part of schemes such as this.
		Action 7.9: We will review the lessons learnt from the permanent and temporary School Streets and explore their continuation and expansion to other schools in the borough.	2026	Local Authority-Transport	We currently have 11 School Streets. Previous feedback taken onboard and our approach has been adjusted accordingly. Engagement with stakeholders is currently ongoing to expand the

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					scheme to another 21 more schools. The potential outcome will be 32 School Streets in total using ANPR enforcement. We are currently looking into carrying out baseline assessments on the current air quality in and around schools.
		Action 7.10: We will support School Streets identified for potential implementation with real-time air quality monitoring.	2026	Local Authority-Transport	Real time monitoring will be installed in partnership with the council's air quality team to ensure that the approach taken and the data collected meets the policy requirements of the councils Air Quality Action Plan. Air quality counts are due to be

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
					commissioned commencing September 2025.
		Action 7.11: We will expand the coverage of Controlled Parking Zones (CPZ's) to the whole borough.	Ongoing	Local Authority-Transport	30% of borough coverage on CPZ and plans to implement a further 50% coverage via Phase 1 of "Sustainable Streets" scheme. Greenwich Council has started a consultation on "Sustainable Streets" scheme which includes plans to extend controlled parking zones in several areas of the borough include Charlton, Kidbrooke and Blackheath, Plumstead, Shooters Hill, West Thamesmead and Woolwich.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress - Emissions/Concentration data - Benefits - Negative impacts / Complaints
		Action 7.12: We will progress an emission-based charging structure to help drive the purchase of low emission vehicles in Royal Greenwich	Completed	Local Authority-Transport	We introduced changes to parking charges as well as resident and business permits, as part of our commitment to achieving net zero carbon emissions by 2030. Since 24th July 2023, charges have been based on vehicles' carbon dioxide (CO2) emissions. This means that vehicles with low emissions will be charged less than those with higher emissions.
		Action 7.13: We will investigate the benefits of introducing road user charging measures such as a workplace parking levy.	Ongoing	Local Authority-Transport	Identified as priority in the Transport Strategy and being explored and is being explored in the 'sustainable streets' consultation, but this was reviewed as part of our

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					Kerbside Strategy but requires own vie on RBG staffing and car parks before commencing with borough wide view on private workplace parking-supporting the expansion of ULEZ.

3. Planning Update and Other New Sources of Emissions

Table M. Planning requirements met by planning applications in Royal Borough of Greenwich in 2024

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	8
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>0</u>
Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>7</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>1</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. 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.	3
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	6

Condition	Number
Stage IIIB of the Directive and/or exemptions to the policy.	

3.1 New or significantly changed industrial or other sources

No new point of source identified. However, the Silvertown Tunnel was officially opened this year.

4.

4.1 London Borough of Greenwich Fleet

6.1% of our fleet are fully electric and 1.1% of our fleet are plug in hybrid electric.

4.2 Planning Enforcement

During the planning process the Planning Department liaise with Environmental Protection Team to request comments on air quality.

When a developer submits a planning application the Planning team consult with Environmental Protection Team, who will review air quality assessments and other documentation related to the development. If air quality concerns are identified, then the Environmental Protection Team will raise this to the Planning Team. The Planning department can impose conditions or obligations through Section 106 agreements to mitigate the impact to air quality.

4.3 Pan-London NRMM Auditing Project

The Borough is continuing to support the NRMM Enforcement project in 2025-2026. The standard wording used for NRMM conditions forms part of our construction management plan and is follows:

Prior to the commencement of the development, a Demolition/Construction Management Plan (D/CMP) shall be submitted to, and approved in writing by, the Local Planning Authority to minimise impacts to the local highway network and to control noise, vibration and air pollutants generated as a result of the construction process.

These documents shall be prepared in accordance with the London Freight Plan, 'The control of dust and emissions from construction and demolition' Supplementary Planning Guidance, the Council's Construction Site Noise Code of Practice, BRE Pollution Control Guides 'Controlling particles and noise pollution from construction sites' and 'Controlling particles, vapour and noise pollution from construction sites'. The D/CMP shall include details of (but shall not be limited to):

- *loading and unloading of plant and materials;*
- *storage of plant and materials;*

- *programme of works;*
- *measures for traffic management and encouragement of sustainable modes of transport for workers;*
- *details of a vehicle booking system*
- *provision of boundary hoarding and visibility zones of construction traffic routing;*
- *hours of construction;*
- *means to prevent deposition of mud on the highway;*
- *likely noise levels to be generated from plant and construction works;*
- *a dust risk assessment using an objective method of measurement for each working site;*
- *means to monitor and control dust, noise and vibrations;*
- *haulage routes;*
- *a site plan identifying location of site entrance, exit, wheel washing, hard standing hoarding (distinguishing between solid hoarding and other barriers such as heras and monarflex sheeting), stock piles, dust suppression, location of water supplies and location of nearest neighbouring receptors;*
- *bonfire policy;*
- *confirmation that a mobile crusher will/won't be used on site and if so, a copy of the permit and intended dates of operation;*
- *details of an air quality impact assessment for the construction phase, including details of monitoring (with particular reference to particulates);*
- *confirmation of all Non-Road Mobile Machinery (NRMM) to be used, or a statement confirming that NRMM will not be used. All Non-Road Mobile Machinery (NRMM) and plant to be used on site of net power between 37kW and 560 kW must be registered at <http://nrmm.london/>. An inventory of all Non-Road Mobile Machinery (NRMM) shall be kept on site during the course of site preparation and construction phases. All machinery 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. This documentation should be made available to local authority officers as required until development completion;*

The development shall be carried out in accordance with the approved details.

Reason 9:

To ensure that the proposed development does not interfere with the free flow of traffic and conditions of safety on the public highway, and to ensure the development process does not have a significant adverse impact on the amenities of nearby residential properties in accordance with Policies E(a) and IM5 of the Royal Greenwich Local Plan: Core Strategy with Detailed Policies (2014).

4.4 Air Quality Alerts

The borough support airTEXT (<https://www.airtext.info/>) and information provided on the website as below:

https://www.royalgreenwich.gov.uk/info/200205/pollution_and_noise/885/air_pollution_warnings_by_text

The website also provides advice for people susceptible to air pollution.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

A Local Site Operator (LSO) visits the monitoring sites every two weeks to visually inspect and check the site operation and to carry out zero/span calibration of the gas analysers. Six monthly UKAS accredited independent equipment audits are carried out by Ricardo Energy & Environment which also carry out on-site certification of gas cylinders. Additionally, six monthly equipment service visits are carried out by Matts Monitors Ltd

PM₁₀ Monitoring Adjustment

PM10 measurements are automatically recalculated as EU reference equivalent using the Volatile Correction Model (VCM) – Correction applied to TEOM measurements. PM2.5 BAM gravimetric equivalent (correction applied)

A.2 Diffusion Tubes

- Diffusion Tubes are prepared and analysed by UKAS accredited Gradko International Ltd
- Diffusion Tubes are prepared using 50% triethanolamine with acetone method and analysed using UV spectrometry
- The lab follows the procedures set out in the Defra Technical Guidance for LAQM TG(19)
- Laboratory Precision Results:

Precision Summary Table

Diffusion Tube Preparation Method	2024 Good	2024 Bad
Gradko, 50% TEA in Acetone	11	0

Gradko participates in the AIR-PT scheme. This is a performance testing programme that has combined two long running PT (proficiency testing) schemes – LCC Standards STAKCS PT scheme and HSL Workplace Analysis Scheme for Proficiency (WASP). The latest results available for Gradko for the latest two periods show that

100% of results have a deviation of less than two, meaning all results were satisfactory.

Discussion of Choice of Factor to Use

- Both Local and National bias adjustment factors were available. The more conservative value was used for the bias adjustment which is the national factor of 0.88 (spreadsheet version 03/25).The impact of this will mean that our readings will be higher than if the Local Bias Adjustment Factor (0.80) were used. The local bias adjustment factor was calculated based on the 6 co-location studies with 'Good data capture' using the diffusion tube data processing tool (DTDPT).

Table N. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	03/25	0.88
2023	Local		0.84
2022	Local		0.82
2021	Local		0.83
2020	Local		0.82
2019	LWEP		0.90
2018	LWEP		0.85
2017	LWEP		0.93

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Distance Adjustment

A calculation to correct for distance was carried out for GW44 Eltham High St, GW50a, GW50b, GW50c Woolwich Flyover, GW101 Plumstead Rd and GW102 Plumstead Rd. The procedure used was that which is specified in LLAQM.TG(19). The local annual mean background NO₂ concentration was taken from Bexley Belvedere a nearby Urban Background continuous monitoring site. The distance adjustment was calculated using the NO₂ fall off with distance tool included within the Diffusion Tube Data Processing Tool. The outputs are shown in Table T.

Table O. Non-Automatic Monitoring Data Adjustment

Annualisation has not been required at any site

Table P. Automatic NO₂ Monitoring Data Adjustment

Annualisation has not been required at any site

Table Q. Automatic PM₁₀ Monitoring Data Adjustment

Annualisation has not been required at any site

Table R. Automatic PM_{2.5} Monitoring Data Adjustment

The annual capture rate for PM_{2.5} at GB6, Falconwood, was below 75%. The annualisation was carried out using the annualisation Tool included within the Automatic Data Processing Tool. The results are shown in the table below.

Background Site	Annual Data Capture (%)	Annual Mean (A _m)	GB6							
			Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)	Period Mean (P _m)	Ratio (A _m / P _m)
Bexley Belvedere	88.2	7.4	7.8	0.960						
Lewisham Deptford	89.5	8.8	8.8	0.999						
Soutwark Elephant&Castle	88.4	8.0	8.2	0.980						
Average (R _a)			0.979							
Raw Data Annual Mean (M)			9.0							
Annualised Annual Mean (M x R _a)			8.9							

Table S. 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
GW44	2.0	5.6	36.1	15.0	31.0	
GW50a GW50b GW50c	2.0	5.0	37.1	15.0	32.4	
GW101	2.0	3.0	41.6	15.0	39.1	Predicted concentration at Receptor within 10% the AQS objective
GW102	2.0	3.0	38.9	15.0	36.6	Predicted concentration at Receptor within 10% the AQS objective

Appendix B Full Monthly Diffusion Tube Results for 2024

Table T. 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
GW23	540420	177706	33.5	24.4	21.4	24.0	26.7	20.9	19.4	17.8	27.3	26.1	34.1	22.6	24.9	21.9		
GW24	543806	177951	39.3	34.7	32.0	34.6	37.0	37.9	35.9	32.6	39.8	34.0	41.8		36.3	32.0		
GW25	540099	174881	31.9	23.5	21.3	20.4	24.7	22.3	21.4	20.5	25.1	27.4		22.4	23.7	20.9		
GW26	544015	173139	20.4	17.0	17.3	14.9	15.7	14.3	15.9	14.0	19.8	23.9	25.4	16.2	17.9	15.7		
GW27	541645	177874	33.3	29.9	24.6	24.5	28.4	26.4		9.7	25.6		33.2	22.6	25.8	22.7		
GW29	541167	178512	41.2	36.8	35.3	31.6	27.6	29.5	29.7	27.0	30.7	34.2	27.7	25.8	31.4	27.7		
GW32	540664	177235	32.9	26.1	23.9	20.7	23.5	20.9	22.6	20.8	24.3	25.1	33.6	19.3	24.5	21.5		
GW33	537971	176776	41.7	38.9	37.2	35.6	35.1	40.0	36.8	30.6	41.3	39.4	38.5	29.1	37.0	32.6		
GW34	545490	178543	31.5	29.0	25.8	19.9	26.3	24.4	24.7	21.1	23.7	32.1	31.3	15.9	25.5	22.4		
GW35	539527	178281	39.7	36.6	32.9	30.6	33.2	33.3	32.1	31.0	32.6	37.4		22.0	32.9	28.9		
GW36	539320	179234	31.6	32.1	24.1	20.8	23.6	22.9		24.4	23.6	28.3	28.4	21.7	25.6	22.5		
GW37	546630	179557	22.9	16.8	15.0	11.5	13.2	13.2	13.3	14.0	15.0	21.1	24.7	19.9	16.7	14.7		
GW38a	541885	175045	25.6	22.2	17.8	14.5	19.7	15.8	18.3	15.3	20.7	23.9	21.7	18.6	19.5	17.2		
GW39a	543986	174660	17.9	13.9	11.3	8.8	11.0	8.8	9.5	9.5	11.8	13.6	16.0	12.8	-	-		Triplicate Site with GW39a, GW39b and GW39c - Annual data provided for GW39c only

GW39b	543986	174660	17.4	14.4	10.1	9.2	10.3	7.0	9.6	9.7	11.7	14.1	16.2	14.7	-	-		Triplicate Site with GW39a, GW39b and GW39c - Annual data provided for GW39c only
GW39c	543986	174660	17.5	13.9	10.7	8.9	10.9	9.1	10.1	9.7	11.8	15.4	17.8	12.5	12.1	10.7		Triplicate Site with GW39a, GW39b and GW39c - Annual data provided for GW39c only
GW40	544065	176996	16.1	14.1	11.4	9.6	11.1	8.6	9.9	9.4	11.8	13.7	17.1	12.4	12.1	10.7		
GW41	543391	172765	32.9	27.6	20.5	24.7	24.6	24.8	22.3	20.1	27.4	23.0	28.8	25.7	25.2	22.2		
GW42	538317	177652	33.7	31.5	26.4	27.4	23.2	30.6	28.8	27.9	32.4	34.3	35.5	19.8	29.3	25.8		
GW43	537353	177632	30.0	32.8	27.8	20.5	25.7	21.9	24.2	21.3	27.3	30.8	24.5	23.5	25.9	22.8		
GW44	543096	174439	44.6	42.6	37.2	40.7	21.7	43.5	44.3	39.0	49.7	44.0	45.6	39.8	41.1	36.1	31.0	
GW106	543505	178576	36.7	30.0	25.3	23.3	26.8	24.3	24.9	20.1	27.3	28.2	37.2	24.7	27.4	24.1		
GW48	538044	176960	38.8	35.7	30.4	29.7	31.1		27.2	27.0		33.3	35.3	30.2	31.9	28.0		
GW49	543472	179217	36.2	34.4	26.4	25.0	31.5	36.8	31.9	27.7	31.3	35.1	42.6	31.1	32.5	28.6		
GW50a	540203	178367	46.1	48.1	44.7	39.8	39.6	42.8	39.9	41.5	38.3	39.9	31.0		-	-		Triplicate Site with GW50a, GW50b and GW50c - Annual data provided for GW50c only
GW50b	540203	178367	47.4	48.9	48.2	37.0	38.9	41.6	42.4	43.9	38.3	40.2	46.4		-	-		Triplicate Site with GW50a, GW50b and GW50c - Annual data provided for GW50c only

GW50c	540203	178367	41.5	47.7	45.7	35.0	41.2	41.2	42.1	42.3	38.1	45.8	45.6		42.2	37.1	32.4	Triplicate Site with GW50a, GW50b and GW50c - Annual data provided for GW50c only
GW51	539638	179024	33.9	33.1	24.0	23.0	28.1	23.8	27.6	25.4	27.0	30.6	30.4	24.0	27.6	24.3		
GW52	542842	179108	27.8	22.5	18.4	18.6		19.9	19.0	18.4	22.7	23.5	29.8	22.7	22.1	19.5		
GW53	542181	176878	28.5	26.6	23.1	18.6	21.0	19.8	22.5	21.4	21.2	27.7			23.0	20.3		
GW54	541915	175039	41.9	33.2		33.0	38.5	30.8	33.4	27.5	35.8	37.1	37.4	21.6	33.6	29.6		
GW55a	545005	175097	28.2	24.8	22.5	25.0	28.1	21.5	24.3	19.9	30.2	29.8	31.4	20.3	-	-		Triplicate Site with GW55a, GW55b and GW55c - Annual data provided for GW55c only
GW55b	545005	175097	32.8	30.1	22.0	20.2		21.3	23.3	20.2	29.6	27.7	32.1	22.6	-	-		Triplicate Site with GW55a, GW55b and GW55c - Annual data provided for GW55c only
GW55c	545005	175097	31.7	25.5	25.1	20.8	28.8	22.2	24.9	18.8	26.3	29.6	19.8	20.7	25.3	22.3		Triplicate Site with GW55a, GW55b and GW55c - Annual data provided for GW55c only
GW56	543679	172598	31.7	26.1	24.4	18.3	26.2	22.8	23.3	21.6	23.7	28.4	31.0	13.4	24.2	21.3		
GW57a	538968	177955	30.4	24.9	21.6	19.8	22.2	21.0	19.6	19.2	20.7	24.1	30.8	24.8	23.2	20.5		

GW58a	538143	176712	34.3	31.0	29.3	27.5	29.2	25.9	26.4	25.1	28.5	29.6	32.2	23.6	-	-		Triplicate Site with GW58a, GW58b and GW58c - Annual data provided for GW58c only
GW58b	538143	176712	33.8	30.5	28.8	27.3	27.3	25.4	26.3	23.1	28.1	28.6	30.8	25.3	-	-		Triplicate Site with GW58a, GW58b and GW58c - Annual data provided for GW58c only
GW58c	538143	176712	33.9	32.4	30.7	25.5	28.4	24.8	27.0	24.0	28.8	28.7	36.4	22.3	28.4	25.0		Triplicate Site with GW58a, GW58b and GW58c - Annual data provided for GW58c only
GW59a	541883	175016	28.2	25.3	21.6	17.7	22.9	17.0	21.7	17.5	24.3	30.5	27.4	20.5	-	-		Triplicate Site with GW59a, GW59b and GW59c - Annual data provided for GW59c only
GW59b	541883	175016	28.0	25.0	21.7	17.2	21.4	17.4	20.3	18.7	25.5	27.9	24.1	16.9	-	-		Triplicate Site with GW59a, GW59b and GW59c - Annual data provided for GW59c only

GW59c	541883	175016	26.4	24.3	23.7	18.7	22.0	16.2	21.8	5.9	23.6	26.4	26.7	21.3	22.1	19.5		Triplicate Site with GW59a, GW59b and GW59c - Annual data provided for GW59c only
GW60a	544086	178882	28.0	24.5	19.9	18.3	23.0	20.0	18.1	15.0	22.9	23.1	26.7	22.1	-	-		Triplicate Site with GW60a, GW60b and GW60c - Annual data provided for GW60c only
GW60b	544086	178882	25.5	24.2	19.9	20.2	23.4	19.4	18.8	17.6	22.8	25.7	27.1	18.9	-	-		Triplicate Site with GW60a, GW60b and GW60c - Annual data provided for GW60c only
GW60c	544086	178882	29.1	20.7	18.6	19.4		20.9	18.5	17.1	21.3	24.8	29.7	20.5	21.9	19.3		Triplicate Site with GW60a, GW60b and GW60c - Annual data provided for GW60c only
GW101	544727	178884	48.6			45.2		44.7	47.6	46.8	45.2	55.4	51.5	40.7	47.3	41.6	39.1	
GW102	544075	178898	46.5	48.0	46.1	40.3	41.7	46.7	44.7	39.9	44.1	49.8	46.4	36.0	44.2	38.9	36.6	
GW61a	539687	179123	32.1	30.8	24.8	21.5	25.1	23.6	22.8	23.1	26.0	24.5	28.9	26.3	-	-		Triplicate Site with GW61a, GW61b and GW61c - Annual data provided for GW61c only

GW61b	539687	179123	32.0	31.7	26.4	23.0	24.3	23.4	23.9	23.0	24.2	29.5	33.2	31.3	-	-		Triplicate Site with GW61a, GW61b and GW61c - Annual data provided for GW61c only
GW61c	539687	179123	33.4	32.0	25.3	22.2	22.7	21.9	23.7	23.8	21.8	31.2	32.2	32.7	26.6	23.4		Triplicate Site with GW61a, GW61b and GW61c - Annual data provided for GW61c only
GW31	543383	175664	27.7	25.8	19.8	23.0	23.8	21.2	20.6	20.4	24.7	27.5	29.8	25.5	24.2	21.3		
GW103	540935	176575	33.8	25.8	22.3	21.5	23.4		20.7	22.8	23.5	28.4	29.8	31.9	25.8	22.7		
GW104	540743	177072	39.1	39.9	30.5	26.7	26.7		28.4	29.6	27.2	30.1	37.7	33.0	31.7	27.9		
GW105	541143	174294	40.7	34.6	27.8	31.4	35.3		30.5	24.8	36.1	32.0	32.4	26.6	32.0	28.2		
GW30	541372	177070	31.6	27.0	23.0	21.7	24.1		22.3	22.8	25.7	27.9	29.7	28.5	25.8	22.7		
GW28	542656	176207	26.1	20.8	16.3	14.8	16.9		18.3	16.0	19.1	20.4	23.7	20.2	19.3	17.0		

☒ 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.

☒ Royal Borough of Greenwich 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.

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



Figure B. Map of Automatic Monitoring Site(s)

