LONDON BOROUGH OF TOWER HAMLETS

AIR QUALITY ANNUAL STATUS REPORT 2024

Date of Publication: 02 June 2025

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

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

Contents

Tables

Figures

Abbreviations

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

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

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

Notes:

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

(2) 2021 World Health Organisation Air Quality Guidelines

(3) London Mayoral Objective

1. Air Quality Monitoring

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2024

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA?	Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) (1)	Distance to kerb of nearest road (m) (2)	Inlet Height (m)
TH2 and TH2P	Mile End (1)	Roadside	535927	182221	NO_2, NO, NO_x, $PM_{2.5}$	YES	Whole Borough AQMA	Chemiluminescence; BAM for $PM_{2.5}$	1m (offices) (40m residential)	3	3
TH004	Blackwall	Roadside	538290	181452	NO_2, NO, NO_x, $PM_{2.5}$, PM_{10}, O_3	YES	Whole Borough AQMA	Chemiluminescence; UV photometric; FDMS TEOM (for PM)	29m (residential)	3	3
TH002	Victoria Park	Background	536487	184238	NO_2, NO, NO_x, $PM_{2.5}$, PM_{10}	YES	Whole Borough AQMA	Chemiluminescence; BAM for $PM_{2.5}$andPM_{10}	290m (residential)	300	2
TH001	Millwall Park	Background	538052	178559	NO_2, NO, NO_x, PM_{10}, O_3	YES	Whole Borough AQMA	Chemiluminescence; BAM UV absorption	60m (residential)	60	1.5
TH005	King Edward Memorial Park (KEMP) (2)	Roadside	535384	180752	NO_x, NO_2 $PM_{2.5}$	YES	Whole Borough AQMA	T200 Chemiluminescence; BAM 1020	12m (residential)	2	1.5

Notes:

(1) Mile End: BAM PM 2.5 monitor installed in 2019
(2) King Edward Memorial Park: Installed in May 2023

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	Colombia Rd / Gossett Street	Kerbside	533883	182815	NO_2	Whole Borough AQMA	5	0.5	N	2.4
2	Calvert Ave / Boundary Street	Kerbside	533507	182569	NO_2	Whole Borough AQMA	4	0.5	N	2.3
3	Bethnal Green Rd / Brick Lane	Kerbside	533860	182442	NO_2	Whole Borough AQMA	3	0.5	N	2.3
4	Commercial St / Calvin St	Kerbside	533611	182037	NO_2	Whole Borough AQMA	7	0.5	N	2.4
5	Whitechapel High St (KFC)	Kerbside	533985	181426	NO_2	Whole Borough AQMA	3	0.5	N	2.3
6	Mansell St	Kerbside	533800	181021	NO_2	Whole Borough AQMA	6	0.5	N	2.2
7	St Katherine's Way	Roadside	533992	180376	NO_2	Whole Borough AQMA	10	10	N	2.3
8	Wapping High St / Sampson St	Kerbside	534444	180122	NO_2	Whole Borough AQMA	3	0.5	N	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)
9	Cartwright Street	Kerbside	533955	180805	NO_2	Whole Borough AQMA	5	0.5	N	2.4
10	Whitechapel Rd / Adler St	Kerbside	534133	181509	NO_2	Whole Borough AQMA	6	0.5	N	2.3
11	Brick Lane / Princelet St	Kerbside	533866	181860	NO_2	Whole Borough AQMA	5	0.5	N	2.3
12	Buckfast St / Bethnal Green Rd	Kerbside	534259	182580	NO_2	Whole Borough AQMA	4	0.5	N	2.5
13	Squirries St / Gosset St	Kerbside	534313	182810	NO_2	Whole Borough AQMA	4	0.5	N	2.3
14	Warner Place/Hackney Rd	Kerbside	534255	183130	NO_2	Whole Borough AQMA	17	0.5	N	2.4
15	Parmiter St / Cambridge Heath Road	Kerbside	534881	183240	NO_2	Whole Borough AQMA	4	0.5	N	2.2
16	Paradise Row / Bethnal Green Rd	Kerbside	534959	182757	NO_2	Whole Borough AQMA	3	0.5	N	2.3
17	Finnis St / Three Colts Lane	Kerbside	534783	182385	NO_2	Whole Borough AQMA	2	0.5	N	2.2

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
18	Sidney St / Mile End Rd	Roadside	534968	181878	NO_2	Whole Borough AQMA	6	2	N	2.3
19	Philpot St / Commercial Road	Kerbside	534816	181321	NO_2	Whole Borough AQMA	8	0.5	N	2.3
20	Dellow St / The Highway	Roadside	534951	180779	NO_2	Whole Borough AQMA	4	2	N	2.2
21	Queensbridge Rd / Hackney Rd	Kerbside	533985	183122	NO_2	Whole Borough AQMA	4	0.5	N	2.2
22	Wapping Wall / Garnet St	Kerbside	535133	180376	NO_2	Whole Borough AQMA	3	0.5	N	2.4
23	Brodlove Lane	Kerbside	535598	180816	NO_2	Whole Borough AQMA	3	0.5	N	2.2
24	Jubilee Street / Commercial Rd	Kerbside	535174	181290	NO_2	Whole Borough AQMA	5	0.5	N	2.3
25	Cavell St / Stepney Way	Kerbside	534884	181667	NO_2	Whole Borough AQMA	20	1	N	2.3
26	Hannibal Rd / Mile End Rd	Kerbside	535386	182021	NO_2	Whole Borough AQMA	3	0.5	N	2.2

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
27	Roman Rd / Globe Road	Kerbside	535296	182793	NO_2	Whole Borough AQMA	12	0.5	N	2.2
28	Bonner Road	Kerbside	535356	183223	NO_2	Whole Borough AQMA	7	0.5	N	2.7
29	Grove Rd / Old Ford Rd	Kerbside	535930	183385	NO_2	Whole Borough AQMA	12	0.5	N	2.4
30	Fieldgate Street	Kerbside	534239	181565	NO_2	Whole Borough AQMA	8	0.5	N	2.3
31	Whitechapel Market	Roadside	534516	181744	NO_2	Whole Borough AQMA	15	1.5	N	2.2
32	Globe Rd / Mile End Rd	Kerbside	535634	182148	NO_2	Whole Borough AQMA	4	0.5	N	2.3
33	Stepney Green	Urban background	535545	181604	NO_2	Whole Borough AQMA	30	15	N	2.4
34	Pitsea St / Commercial Rd	Kerbside	535797	181164	NO_2	Whole Borough AQMA	4	0.5	N	2.3
35	Narrow St / Limehouse Link	Roadside	535977	180879	NO_2	Whole Borough AQMA	15	1.5	N	2.6

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)
36	Locksley St / St Paul's Way	Kerbside	536704	181647	NO_2	Whole Borough AQMA	40	0.5	N	2.9
37	Rhodeswell Rd	Kerbside	536577	181379	NO_2	Whole Borough AQMA	40	1	N	2.4
38	Ben Johnson Road	Kerbside	536080	181721	NO_2	Whole Borough AQMA	4	0.5	N	2.6
39	Harford St / Mile End Rd	Roadside	536089	182258	NO_2	Whole Borough AQMA	3	1.5	N	2.2
40	Thoydon Rd	Kerbside	536105	183049	NO_2	Whole Borough AQMA	7	0.5	N	2.4
41	Ford Close / Roman Rd	Roadside	536457	183301	NO_2	Whole Borough AQMA	2	1.5	N	2.3
42	Victoria Park (Co-location site)	Urban background	536494	184170	NO_2	Whole Borough AQMA	330	320	Y	2.1
43	Victoria Park (Co-location site)	Urban background	536494	184170	NO_2	Whole Borough AQMA	330	320	Y	2.1
44	Parnell Rd/Old Ford Rd	Kerbside	536875	183740	NO_2	Whole Borough AQMA	4	0.5	N	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)
45	St Stephen's Rd / Tredegar Rd	Kerbside	536713	183070	NO_2	Whole Borough AQMA	3	0.5	N	2.3
46	Rhondda Grove / Mile End Rd	Kerbside	536542	182589	NO_2	Whole Borough AQMA	5	0.5	N	2.5
47	Wentworth Mews	Kerbside	536452	182454	NO_2	Whole Borough AQMA	15	0.5	N	2.5
48	Ackroyd Drive	Kerbside	536768	181772	NO_2	Whole Borough AQMA	40	0.5	N	2.5
49	Dod St / Burdett Rd	Kerbside	537049	181292	NO_2	Whole Borough AQMA	5	0.5	N	2.5
50	Rich Street	Roadside	536937	180987	NO_2	Whole Borough AQMA	3	1.5	N	2.2
51	Watney Market	Roadside	534938	181257	NO_2	Whole Borough AQMA	10	15	N	2.2
52	Wick Lane / Autumn St	Kerbside	537304	183619	NO_2	Whole Borough AQMA	3	0.5	N	2.4
53	Fairfield Road / Tredegar Road	Kerbside	537159	183415	NO_2	Whole Borough AQMA	4	0.5	N	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)
54	Bow Rd / Glebe Terrace	Kerbside	537525	182887	NO_2	Whole Borough AQMA	5	0.5	N	2.4
55	TH Cemetery Park	Roadside	536732	182361	NO_2	Whole Borough AQMA	15	5	N	2.5
56	Bow Common Lane / St Paul's Way	Kerbside	537248	181820	NO_2	Whole Borough AQMA	30	0.5	N	2.3
57	Augusta St / Giraud St	Kerbside	537516	181392	NO_2	Whole Borough AQMA	15	1	N	2.4
58	Dolphin Lane	Kerbside	537539	180688	NO_2	Whole Borough AQMA	7	1	N	2.9
59	Westferry Road / Limehouse Link Jnct	Kerbside	537100	180791	NO_2	Whole Borough AQMA	7	1	N	2.2
60	Cascades, Westferry Road	Kerbside	537115	180074	NO_2	Whole Borough AQMA	18	0.5	N	2.4
61	Bow Rd / Alfred St	Kerbside	537056	182773	NO_2	Whole Borough AQMA	6	0.5	N	2.4
62	Mast House Terrace	Kerbside	537348	178690	NO_2	Whole Borough AQMA	5	0.5	N	2.7

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	Millwall Park	Urban background	538246	178689	NO_2	Whole Borough AQMA	300	250	N	2.3
64	Lime harbour	Kerbside	537953	179357	NO_2	Whole Borough AQMA	10	0.5	N	2.2
65	Manchester Road / East Ferry Road	Kerbside	538032	178360	NO_2	Whole Borough AQMA	2	0.5	N	2.3
66	Millwall Park	Urban background	538258	178689	NO_2	Whole Borough AQMA	300	250	N	2.3
67	Seyssel Street	Kerbside	538544	178767	NO_2	Whole Borough AQMA	15	0.5	N	2.3
68	Manchester Road / Ollife Street	Kerbside	538431	179044	NO_2	Whole Borough AQMA	3	0.5	N	2.3
69	Lawnhouse Close	Kerbside	538190	179750	NO_2	Whole Borough AQMA	30	0.5	N	2.3
70	Admirals Way	Kerbside	537424	179910	NO_2	Whole Borough AQMA	15	0.5	N	2.3
71	Toynbee St / Commercial St	Roadside	533689	181705	NO_2	Whole Borough AQMA	10	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)
72	Prestons Road / Coldharbour	Kerbside	538364	180188	NO_2	Whole Borough AQMA	4	0.5	N	2.2
73	John Smith Mews	Kerbside	538742	180756	NO_2	Whole Borough AQMA	10	0.5	N	2.3
74	Poplar High St / Cotton St	Kerbside	538244	180761	NO_2	Whole Borough AQMA	10	0.5	N	2.2
75	Hale Street	Kerbside	537661	180768	NO_2	Whole Borough AQMA	7	0.5	N	2.3
76	Chrisp Street / E India Dock Road	Kerbside	537940	181021	NO_2	Whole Borough AQMA	20	0.5	N	2.7
77	Morris / Barchester Street	Kerbside	537731	181761	NO_2	Whole Borough AQMA	4	0.5	N	2.5
78	Devons Road / Campbell Road	Kerbside	537577	182232	NO_2	Whole Borough AQMA	10	0.5	N	2.4
79	Hatfield Terrace / Fairfield Road	Kerbside	537355	183059	NO_2	Whole Borough AQMA	3	0.5	N	2.4
80	Wrexham Road	Kerbside	537581	183209	NO_2	Whole Borough AQMA	3	0.5	N	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)
81	Bromley High Street / St Leonards	Kerbside	537868	182912	NO_2	Whole Borough AQMA	5	0.5	N	2.4
82	Devas Street / Devons road	Kerbside	537821	182332	NO_2	Whole Borough AQMA	7	0.5	N	2.4
83	Zetland Street / A12	Kerbside	538178	181747	NO_2	Whole Borough AQMA	50	0.5	N	2.3
84	Blair Street (End of Street)	Roadside	538365	181180	NO_2	Whole Borough AQMA	15	5	N	2.5
85	Portree Street	Kerbside	538895	181296	NO_2	Whole Borough AQMA	4	0.5	N	2.3
86	Newport Avenue	Kerbside	538954	180872	NO_2	Whole Borough AQMA	15	0.5	N	2.6
87	Mile End Road Corner Bancroft Rd	Kerbside	535929	182220	NO_2	Whole Borough AQMA	30	0.5	N	2.3
88	Shirbutt St o/s Holy Family School	Kerbside	537555	180892	NO_2	Whole Borough AQMA	10	0.5	N	2.3
89	Thames Path Storers Quay	Roadside	538730	178733	NO_2	Whole Borough AQMA	4	10	N	2.3

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)
90	Sextant Avenue	Kerbside	538674	178888	NO_2	Whole Borough AQMA	4	1	N	2.3
91	At the entrance of MOT station	Kerbside	539007	181146	NO_2	Whole Borough AQMA	8	1.9	N	2.5
92	At the exit of MOT station	Roadside	538907	181127	NO_2	Whole Borough AQMA	12	3.7	N	2.3
93	Millwall Park-North Greenwich Bowls Club (Co-location site)	Urban background	538016	178569	NO_2	Whole Borough AQMA	60	60	Y	1.5
94	Millwall Park-North Greenwich Bowls Club (Co-location site)	Urban background	538016	178569	NO_2	Whole Borough AQMA	60	60	Y	1.5

1.2 Comparison of Monitoring Results with AQOs

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
TH2 Mile End	535927	182221	Roadside	99.5	99.5	**47**	35	25	26	23	22	21.2
TH004 Blackwall	538290	181452	Roadside	99.6	99.6	**51**	**47**	39	37	28	28	30.6
TH002 Victoria Park	536487	184238	Background	99.4	99.4	26	24	17	16	17	15	13.8
TH001 Millwall Park	538052	178559	Background	99.5	99.5	23	24	17	17	20	17	14.0
TH005 King Edward Memorial Park [c]	535384	180752	Roadside	99.6	99.6	-	-	-	-	-	16	17.8

Notes:

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

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

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

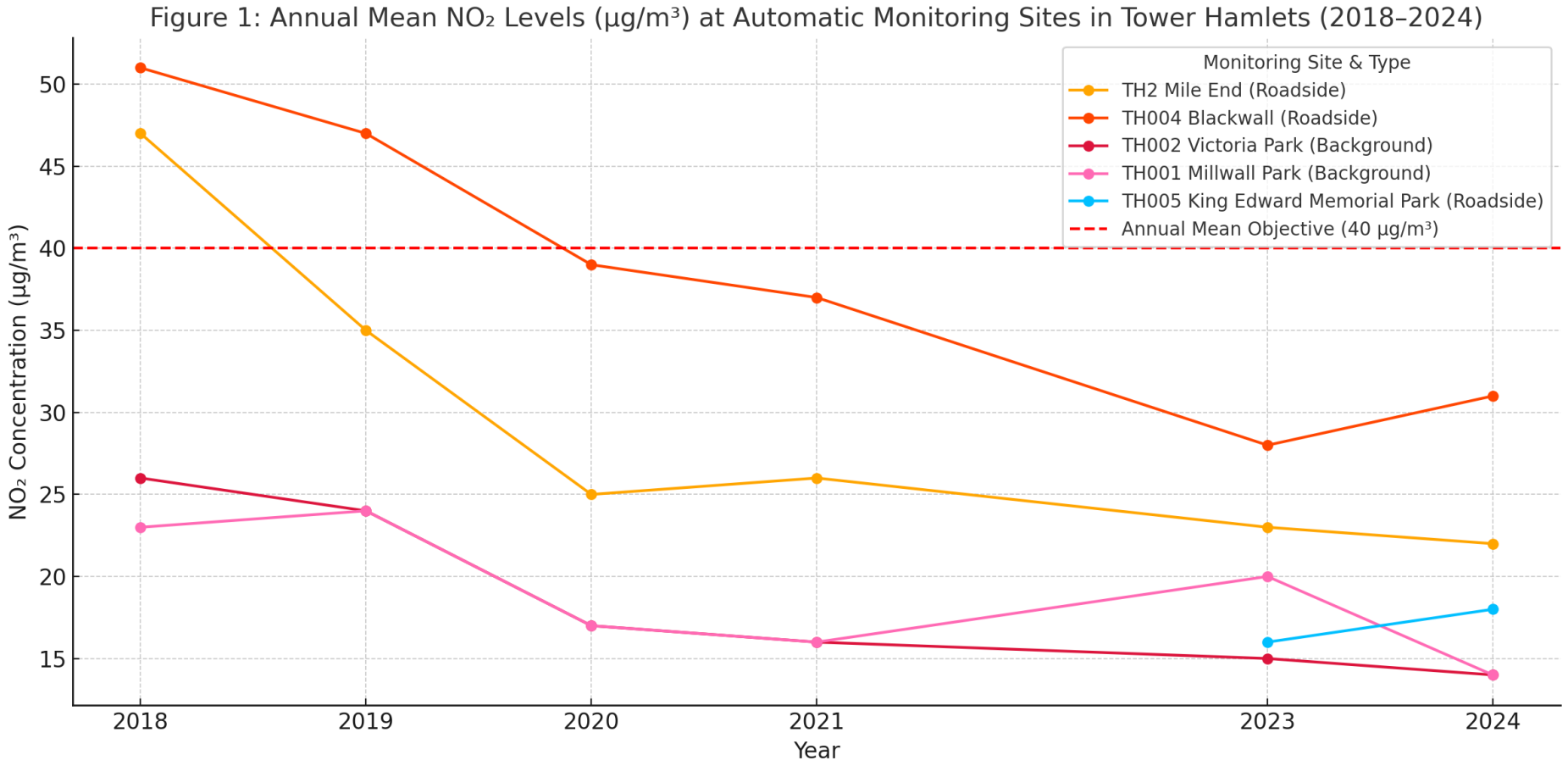
Means for diffusion tubes have been corrected for bias.

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

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

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

(b) Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).
(c) King Edward Memorial Park: Installed in May 2023



Key Insights:

- Roadside sites (TH2 Mile End, TH004 Blackwall, TH005 King Edward Memorial Park) consistently record higher NO_2 levels than background sites, reflecting their proximity to busy roads and dense traffic.

    - Blackwall has the highest values overall, likely due to its location next to the A1261 dual carriageway, a known high-traffic corridor.
    - Mile End also shows elevated levels, but with a gradual decline from 2018 to 2024.
    - King Edward Memorial Park has only recent data but appears to follow a mid-range trend among roadside locations.
- Background sites (Victoria Park and Millwall Park) show a more pronounced and consistent decline in NO_2 levels over time, reflecting improvements in baseline air quality across the borough.
- The contrast between background and roadside trends suggests that while general air quality is improving, roadside pollution remains more resistant to change, potentially due to localised traffic impacts, idling, and congestion.
- 2024 data shows that all sites are now comfortably below the national objective of 40 µg/m³, though continued attention is needed at roadside locations where reductions have slowed or reversed slightly.
- Data capture was good (above 75%) during 2023 at all five sites, and as such, no annualisation has been required.

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

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)(1)	Valid Data Capture 2024 (%)(2)	2018	2019	2020	2021	2022	2023	2024
1	533883	182815	Kerbside	100	100.0	34.0	33.0	24.9	21.5	20.0	19.6	16.5
2	533507	182569	Kerbside	100	100.0	37.0	35.0	26.0	22.0	21.4	20.3	16.6
3	533860	182442	Kerbside	64.2	64.2	36.0	37.0	27.4	26.3	26.4	27.7	23.9
4	533611	182037	Kerbside	100	100.0	**53.0**	**48.0**	34.2	32.7	30.4	26.3	27.0
5	533985	181426	Kerbside	90.6	90.6	**61.0**	**48.0**	33.9	37.7	36.8	32.9	31.8
6	533800	181021	Kerbside	83	83.0	**50.0**	**45.0**	35.2	30.3	32.1	30.5	27.9
7	533992	180376	Roadside	41.5	41.5	28.0	28.0	19.9	19.1	25.4	17.9	16.6
8	534444	180122	Kerbside	92.5	92.5	31.0	30.0	21.6	21.0	21.2	20.4	18.2
9	533955	180805	Kerbside	92.5	92.5	33.0	34.0	24.7	22.2	22.8	20.3	17.5
10	534133	181509	Kerbside	81.1	81.1	**46.0**	**40.0**	28.9	28.1	30.5	25.9	30.7
11	533866	181860	Kerbside	83	83.0	35.0	32.0	24.4	22.2	23.8	21.0	19.3
12	534259	182580	Kerbside	100	100.0	35.0	32.0	24.2	22.5	22.3	22.1	18.1
13	534313	182810	Kerbside	90.6	90.6	38.0	38.0	27.1	25.4	26.1	22.1	18.9
14	534255	183130	Kerbside	100	100.0	38.0	35.0	25.5	22.5	26.1	25.0	23.1
15	534881	183240	Kerbside	100	100.0	**45.0**	**41.0**	30.0	28.5	27.4	24.9	23.7
16	534959	182757	Kerbside	100	100.0	**41.0**	36.0	28.0	28.1	28.4	26.9	20.8
17	534783	182385	Kerbside	100	100.0	29.0	31.0	21.0	20.2	20.5	17.4	15.1
18	534968	181878	Roadside	90.6	90.6	**40.0**	37.0	29.0	27.9	26.1	26.5	25.6
19	534816	181321	Kerbside	92.5	92.5	**44.0**	**41.0**	31.0	29.5	29.5	26.4	22.3
20	534951	180779	Roadside	90.6	90.6	**52.0**	**49.0**	34.0	37.5	37.8	33.3	27.4
21	533985	183122	Kerbside	100	100.0	**55.0**	35.0	26.0	24.4	24.4	23.8	21.0
22	535133	180376	Kerbside	92.5	92.5	32.0	30.0	23.0	24.6	23.8	19.8	16.3
23	535598	180816	Kerbside	92.5	92.5	**43.0**	**40.0**	30.0	29.3	29.2	26.6	21.4

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
24	535174	181290	Kerbside	84.9	84.9	**64.0**	**47.0**	33.0	37.1	34.8	32.6	25.9
25	534884	181667	Kerbside	60.4	60.4	**40.0**	38.0	30.0	26.3	29.4	28.2	25.9
26	535386	182021	Kerbside	100	100.0	**44.0**	**42.0**	29.0	27.0	25.8	25.0	20.9
27	535296	182793	Kerbside	100	100.0	36.0	34.0	26.0	26.8	24.2	23.4	18.4
28	535356	183223	Kerbside	100	100.0	37.0	35.0	26.0	32.1	32.3	31.4	21.5
29	535930	183385	Kerbside	90.6	90.6	**43.0**	**40.0**	28.0	26.8	26.5	26.1	22.3
30	534239	181565	Kerbside	100	100.0	**46.0**	38.0	28.0	28.2	28.7	26.3	21.4
31	534516	181744	Roadside	100	100.0	**63.0**	**54.0**	**40.0**	**40.4**	37.6	37.9	29.0
32	535634	182148	Kerbside	100	100.0	**48.0**	**42.0**	30.0	30.3	30.9	29.3	27.8
33	535545	181604	Urban Background	92.5	92.5	39.0	28.0	24.0	21.2	20.8	19.0	16.0
34	535797	181164	Kerbside	49.1	49.1	37.0	35.0	26.0	25.8	24.9	22.4	20.6
35	535977	180879	Roadside	90.6	90.6	**86.0**	**77.0**	**54.0**	**60.5**	**59.4**	**54.9**	**45.7**
36	536704	181647	Kerbside	75	75.0	35.0	32.0	26.0	26.2	21.3	24.1	18.6
37	536577	181379	Kerbside	100	100.0	34.0	30.0	27.0	24.8	23.7	21.6	19.8
38	536080	181721	Kerbside	92.5	92.5	36.0	36.0	29.0	28.4	27.3	26.3	21.8
39	536089	182258	Roadside	84.9	84.9	**42.0**	36.0	26.0	28.1	27.1	24.5	20.4
40	536105	183049	Kerbside	100	100.0	36.0	33.0	24.0	24.3	23.8	20.6	17.2
41	536457	183301	Roadside	92.5	92.5	38.0	34.0	26.0	28.9	28.0	25.4	20.5
42, 43	536494	184170	Urban Background	100	100.0	22.0	21.0	17.0	14.9	14.5	14.6	11.0
44	536875	183740	Kerbside	92.5	92.5	35.0	34.0	28.0	27.9	27.8	26.7	23.8
45	536713	183070	Kerbside	100	100.0	**56.0**	39.0	31.0	29.4	28.7	25.5	21.5
46	536542	182589	Kerbside	84.9	84.9	**48.0**	33.0	26.0	24.1	24.1	20.6	17.4
47	536452	182454	Kerbside	90.6	90.6	**48.0**	**41.0**	32.0	32.4	29.0	27.1	25.0
48	536768	181772	Kerbside	100	100.0	38.0	37.0	32.0	30.0	28.5	27.6	23.0
49	537049	181292	Kerbside	100	100.0	33.0	30.0	25.0	22.0	21.0	20.1	18.6

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
50	536937	180987	Roadside	92.5	92.5	**42.0**	35.0	29.0	29.5	28.6	26.9	22.6
51	534938	181257	Roadside	67.9	67.9	33.0	29.0	23.0	23.7	23.0	21.6	20.3
52	537304	183619	Kerbside	100	100.0	**40.0**	37.0	30.0	30.3	28.6	27.2	22.6
53	537159	183415	Kerbside	100	100.0	**42.0**	**43.0**	35.0	35.4	32.0	31.2	27.0
54	537525	182887	Kerbside	100	100.0	**60.0**	**50.0**	37.0	38.3	**41.2**	**41.4**	30.4
55	536732	182361	Roadside	100	100.0	23.0	22.0	17.0	16.8	16.5	13.3	11.8
56	537248	181820	Kerbside	100	100.0	37.0	32.0	26.0	25.4	25.3	25.1	21.9
57	537516	181392	Kerbside	90.6	90.6	28.0	27.0	23.0	22.1	21.0	19.6	17.2
58	537539	180688	Kerbside	100	100.0	29.0	28.0	23.0	21.7	22.4	19.9	17.7
59	537100	180791	Kerbside	75	75.0	37.0	31.0	28.0	27.5	27.2	25.0	21.8
60	537115	180074	Kerbside	90.6	90.6	39.0	36.0	34.0	32.2	30.5	27.3	23.8
61	537056	182773	Kerbside	92.5	92.5	35.0	35.0	28.0	25.4	24.5	23.2	20.2
62	537348	178690	Kerbside	100	100.0	29.0	32.0	27.0	26.5	25.2	23.9	21.2
63	538246	178689	Urban Background	83	83.0	22.0	24.0	21.0	20.3	18.6	16.2	15.2
64	537953	179357	Kerbside	100	100.0	38.0	37.0	36.0	36.5	33.3	30.4	28.6
65	538032	178360	Kerbside	100	100.0	28.0	29.0	25.0	23.3	22.7	20.9	18.3
66	538258	178689	Urban Background	100	100.0	25.0	22.0	18.0	19.6	19.7	16.5	14.4
67	538544	178767	Kerbside	90.6	90.6	30.0	31.0	27.0	26.4	24.5	23.2	20.8
68	538431	179044	Kerbside	100	100.0	32.0	34.0	26.0	27.0	25.0	24.9	21.0
69	538190	179750	Kerbside	100	100.0	34.0	31.0	27.0	25.9	24.2	23.7	20.5
70	537424	179910	Kerbside	100	100.0	27.0	29.0	24.0	22.3	22.8	19.4	17.8
71	533689	181705	Roadside	100	100.0	**54.0**	**45.0**	35.0	33.0	31.7	29.5	28.7
72	538364	180188	Kerbside	90.6	90.6	39.0	38.0	30.0	31.2	28.3	28.5	25.3
73	538742	180756	Kerbside	100	100.0	32.0	31.0	25.0	26.0	22.3	21.6	16.9
74	538244	180761	Kerbside	100	100.0	**64.0**	**71.0**	**59.0**	**54.9**	**55.7**	**50.4**	**42.5**

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
75	537661	180768	Kerbside	100	100.0	34.0	29.0	24.0	23.5	22.3	19.9	18.7
76	537940	181021	Kerbside	100	100.0	**45.0**	39.0	33.0	33.4	30.6	31.4	25.8
77	537731	181761	Kerbside	84.9	84.9	37.0	31.0	26.0	22.5	21.7	21.0	18.1
78	537577	182232	Kerbside	100	100.0	**43.0**	36.0	32.0	31.3	30.3	29.0	26.1
79	537355	183059	Kerbside	83	83.0	32.0	28.0	24.0	24.8	22.8	19.7	17.1
80	537581	183209	Kerbside	75	75.0	38.0	35.0	28.0	29.6	26.4	24.9	20.2
81	537868	182912	Kerbside	90.6	90.6	38.0	34.0	29.0	30.7	27.4	24.5	22.0
82	537821	182332	Kerbside	100	100.0	**45.0**	37.0	29.0	32.4	28.5	28.4	22.7
83	538178	181747	Kerbside	100	100.0	**63.0**	**52.0**	**41.0**	**43.3**	**40.9**	**40.1**	33.6
84	538365	181180	Roadside	92.5	92.5	**44.0**	39.0	36.0	32.1	29.9	27.5	24.7
85	538895	181296	Kerbside	90.6	90.6	**45.0**	38.0	34.0	33.5	31.6	29.7	28.2
86	538954	180872	Kerbside	83	83.0	30.0	28.0	22.0	24.6	22.5	21.4	16.8
87	535929	182220	Kerbside	100	100.0	**49.0**	37.0	31.0	30.2	27.9	25.5	22.8
88	537555	180892	Kerbside	75	75.0	28.0	26.0	21.0	21.3	20.0	19.4	17.1
89	538730	178733	Roadside	100	100.0	26.0	26.0	23.0	21.5	21.9	19.7	16.5
90	538674	178888	Kerbside	100	100.0	25.0	24.0	20.0	20.8	19.3	19.3	15.8
91	539007	181146	Kerbside	100	100.0	-	-	-	31.0	23.1	23.6	23.8
92	538907	181127	Roadside	100	100.0	-	-	-	39.3	27.7	29.2	20.8
93, 94	538016	178569	Urban background	100	100.0	-	-	-	-	-	-	13.8

Notes:

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

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

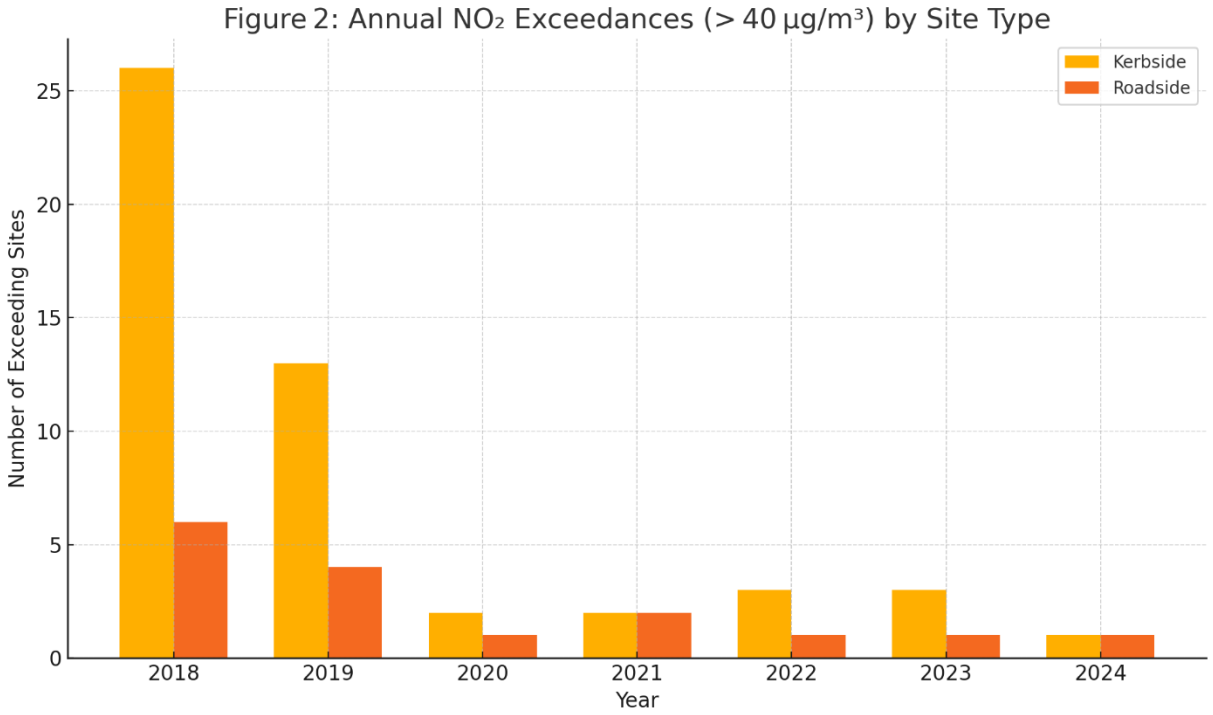
NO_2 annual means exceeding 60µg m^{-3}, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

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

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

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

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



Key Insights from 2024 Diffusion Tube Monitoring

Question: Is air quality getting better?

Answer: Yes – the borough-wide average NO_2 fell another 14% from 2023 to 2024 and is now approximately 45% lower than in 2018.

Question: Where are the worst spots in 2024?

Answer: Two roadside tubes are still above the UK annual limit (40 µg/m³): Tube 35 (Narrow St / Limehouse Link) at 45.7 µg/m³, and Tube 74 (Poplar High St / Cotton St) at 42.5 µg/m³.

Question: Urban vs Roadside – how do the levels compare?

Answer: Roadside sites remain higher, with an average of 23.7 µg/m³, compared to kerbside sites at 22.0 µg/m³ and urban-background sites at 14.1 µg/m³.

Question: What was the biggest year-on-year improvement in 2024?

Answer: Tube 54 (Bow Road) dropped by 11 µg/m³ (a 27% reduction) – the largest improvement recorded.

Question: Which site showed the least improvement or worsened in 2024?

Answer: Tube 10 (Manchester Road) increased by 4.8 µg/m³ (a 19% rise), making it the only location with a clear setback.

Question: Which part of the borough struggles the most with air quality?

Answer: The central corridor along the A13 / Commercial Road – especially East India Dock Road – has the densest cluster of high readings. This includes Tubes 35, 31, 54, 74, and 83. The average difference between north–south and east–west zones is less than 3 µg/m³.

In 2024, nitrogen dioxide (NO_2) levels were monitored at 94 locations across the borough using diffusion tubes. The results show a clear and ongoing improvement in air quality, with 92 out of 94 sites representing 98% compliance, meeting the national annual mean objective of 40 µg/m³.

Only two locations initially recorded exceedances: sites 35, and 74. However, after applying distance correction calculations to reflect the nearest relevant residential exposure (in accordance with Local Air Quality Management guidance), no site remained above the objective.

The biggest absolute improvement in NO_2 levels between 2023 and 2024 was seen at Tube 54 on Bow Road (kerbside), where concentrations dropped from 41.4 µg/m³ to 30.4 µg/m³, a reduction of 11 µg/m³, or 27%. This sharp fall may be linked to recent changes in local traffic flow following the completion of nearby roadworks.

The second largest absolute drop was at Tube 28 on Bethnal Green Road, where levels fell from 31.4 µg/m³ to 21.5 µg/m³, a 9.9 µg/m³ (or 32%) decrease. This is likely due to signal timing adjustments by TfL, which helped reduce congestion and improve traffic efficiency along this busy corridor.

The third most improved site was Tube 35 (Narrow St / Limehouse Link). Here, NO_2 dropped from 54.9 µg/m³ in 2023 to 45.7 µg/m³ in 2024, a reduction of 9.2 µg/m³ (17%). The improvement may be linked to the introduction of a new bus lane and upgrades to cleaner Euro VI buses, both of which reduce vehicle emissions on this heavily trafficked route.

Over seven years of monitoring (2018–2024), NO_2 levels have shown a marked downward trend across the borough. These improvements are likely driven by a combination of factors:

- The expansion of London's Ultra Low Emission Zone (ULEZ), which discourages high-emission vehicles from entering the area,
- Cleaner bus and taxi fleets,
- Increased adoption of walking and cycling infrastructure,
- Changes in local travel behaviour, and
- Targeted traffic management interventions.

Urban background and residential kerbside sites in particular have shown steady, sustained improvements year on year.

A significant drop in NO_2 was observed in 2020, partly due to reduced traffic during COVID-19 restrictions. However, the continued year on year reductions into 2023 and 2024 indicate that longer term measures such as ULEZ expansion, cleaner vehicle technology, and local interventions are driving sustained air quality improvements.

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %(a)	Valid data capture 2024 %(b)	2018	2019	2020	2021	2022	2023	2024
TH2	535927	182221	Roadside	99.5	99.5	0	1	0	0	0	0	0
TH004	538290	181452	Roadside	99.6	99.6	0	0	0	0	0	0	0
TH002	536487	184238	Background	99.4	99.4	1	0	0	0	0	0	0
TH001	538052	178559	Background	99.5	99.5	0	0	0	0	0	0	0
TH005	535384	180752	Roadside	99.6	99.6	-	-	-	-	-	0 (91)	0

Notes

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

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

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

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

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

Key Insights:

In 2024, compliance against the 1-hour mean NO_2 objective was achieved at all five automatic monitoring sites.

Since 2020, there were no exceedances of the 1-hour mean, 200µg m^{-3} at any of the automatic monitoring site.

In 2019, only 1 exceedance occurred at Mile End automatic monitoring site (roadside site), although significantly below the permitted 18 days per year.

In 2018, only 1 exceedance occurred at Victoria Park automatic monitoring site, again significantly below the permitted 18 days per year.

Data capture rate of more than 99% was achieved at all nitrogen dioxide automatic monitoring stations.

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %(a)	Valid data capture 2024 %(b)	2018	2019	2020	2021	2022	2023	2024
TH004 Blackwall	538290	181452	Roadside	99.5	99.5	20	20	17	18	-	15	16.2
TH002 Victoria Park	536487	184238	Background	97.5	97.5	18	18	18	18	13	15	13.2
TH001 Millwall Park	538052	178559	Background	92.6	92.6	18	18	17	16	16	14	14.0

Notes

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

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

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

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

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

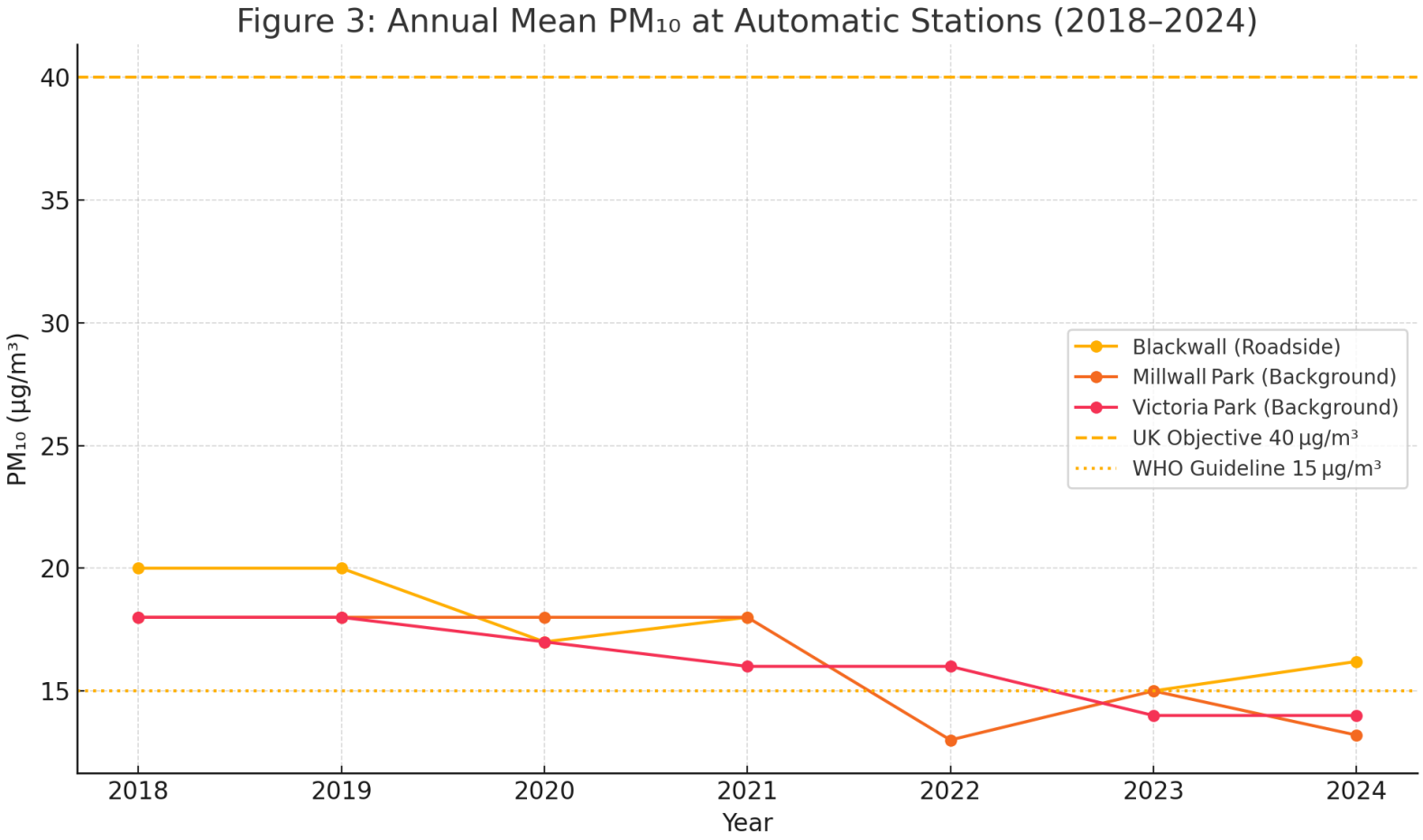


Figure 3: Annual Mean PM₁₀ at Automatic Stations (2018–2024)
PM₁₀ (µg/m³)
40
35
30
25
20
15
2018
2019
2020
2021
2022
2023
2024
Year
Blackwall (Roadside)
Millwall Park (Background)
Victoria Park (Background)
UK Objective 40 µg/m³
WHO Guideline 15 µg/m³

Key Insights:

1. **Data capture remains excellent**
   • All three stations exceeded the 75 % regulatory requirement in 2024; Blackwall achieved >99 %, giving high confidence in the results.

2. **Continued compliance with the UK objective**
   • Every site stayed well below the 40 µg m-³ annual mean limit for the eighth consecutive year (since 2017).

3. **Progress towards WHO 2021 guideline (15 µg m-³)**
   • Both background sites now meet the WHO level (13.2 and 14 µg m-³).
   • Blackwall roadside remains slightly above at 16.2 µg m-³, but the gap to the guideline has narrowed to ~1 µg m-³.

4. **Trend highlights**
   • Blackwall (roadside): After a marked fall to 15 µg m-³ in 2023, a modest rebound to 16.2 µg m-³ was observed in 2024. Nevertheless, the long-term trajectory since 2017 is still downward (≈ 19 % reduction overall).
   • Millwall Park: The 2022 spike (13 µg m-³) was followed by a temporary rise to 15 µg m-³ in 2023, but 2024 returned to 13.2 µg m-³, the lowest in the record and comfortably below WHO guidance.
   • Victoria Park: Levels have gradually edged downwards from 18 µg m-³ in 2018 to 14 µg m-³ in 2023 and stabilised at the same value in 2024.

5. **Spatial picture**
   • The roadside location still records the highest PM_{10}, reflecting direct traffic influence near the Blackwall Tunnel approaches.
   • Background sites continue to demonstrate lower concentrations, underscoring the importance of local traffic-management for further gains.

   Overall, 2024 consolidates the borough's compliance with legal PM_{10} limits and shows encouraging progress towards more stringent WHO air-quality guidelines, though the Blackwall roadside hotspot still warrants focused attention.

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

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid data capture for monitoring period %[(a)]	Valid data capture 2024 %[(b)]	2018	2019	2020	2021	2022	2023	2024
TH004 Blackwall	538290	181452	Roadside	99.5	99.5	10	8 (35)	4	0 (27.1)	-	1	0
TH002 Victoria Park	536487	184238	Background	97.5	97.5	1	7 (30)	7	5	4 (31)	1	0
TH001 Millwall Park	538052	178559	Background	92.6	92.6	1	7	5	1	3	0	0

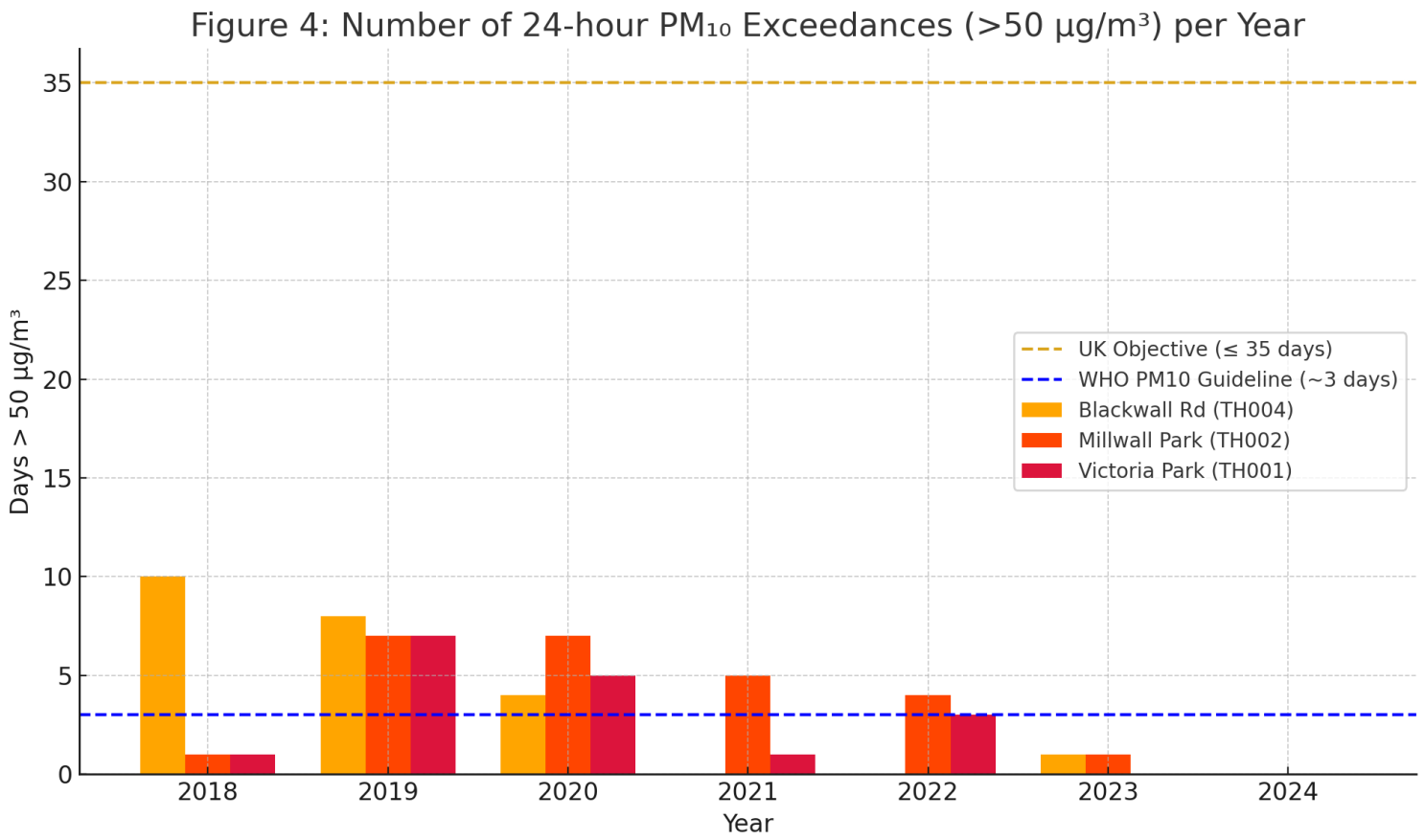
Notes

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

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

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

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



Key Insights – PM_{10} 24-hour exceedances

All three monitoring sites comfortably met the 24-hour PM_{10} objective in every year reported. The highest value on record—10 exceedance days at Blackwall Road (TH004) in 2018—was still only 29% of the UK limit of 35 days. A clear downward trend has followed the 2019 peak, with no rebound observed in subsequent years. In 2024, a milestone was reached: zero exceedance days at all sites for the first time in the dataset. While Blackwall, the borough's roadside site, recorded the most exceedances up to 2020,

it is now broadly in line with background sites, suggesting that local traffic-related PM_{10} peaks have been largely mitigated. A data gap at Blackwall in 2022 due to insufficient capture prevents reporting that year but does not affect overall compliance. Notably, the borough also met the WHO guideline for PM_{10} exceedances (~3 days/year per site) in 2023 and 2024, although only the UK national objectives are legally binding.

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
TH2P Mile End	535927	182221	Roadside	91.6	91.6	-	10	12	11	9	8	8.4
TH004 Blackwall	538290	181452	Roadside	95.4	95.4	13	12	9	11	8	9	9.8
TH002 Victoria Park	536487	184238	Background	96.8	96.8	-	10	12	9	9	8	8.0
TH005[c] King Edward Memorial Park	535384	180752	Roadside	91.5	91.5	-	-	-	-	-	7	8.9

Notes

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

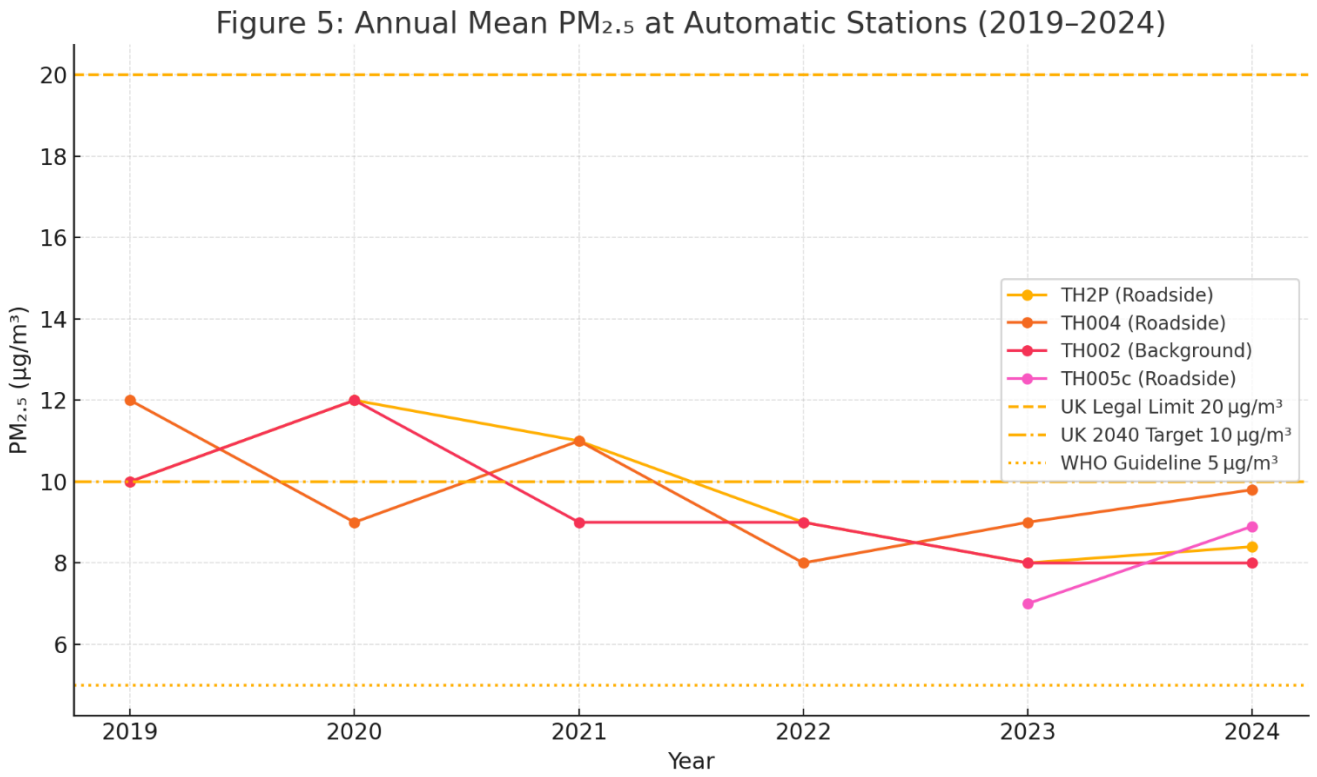
Exceedances of the $PM_{2.5}$ annual mean AQO of 20 µg m^{-3} are shown in **bold**.

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%).

(c) King Edward Memorial Park (TH005): Installed in May 2023.



Key Insights

- Legal compliance: Every site sits far below the current UK legal limit of 20 µg m^{-3} for annual $PM_{2.5}$.
- Steady downward trend: All locations have fallen since 2019, with roadside hotspots now well under 10 µg m^{-3}.
- Approaching future targets: Three of the four stations (TH2P, TH002 and TH005c) are already at or below the UK 2040 target of 10 µg m^{-3}; TH004 is just under 10 µg m^{-3}.
- Still above WHO guideline: Values remain 60–95 % higher than the stringent WHO 2021 guideline of 5 µg m^{-3}, so further gains are needed for full health-based compliance. Although only the UK national objectives are legally binding.

- New site TH005: First full year (2023) recorded 7 μg m^{-3}, rising slightly to 8.9 μg m^{-3} in 2024 but still among the cleanest readings, suggesting benefits from recent local interventions.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

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

A summary of AQMAs declared by London Borough of Tower Hamlets can be found in Table KK. The table presents a description of the borough wide AQMA that is currently designated within London Borough of Tower Hamlets. 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:

I. Nitrogen Dioxide: The London Borough of Tower Hamlets was failing to meet the EU annual average limit for this pollutant at some monitoring stations and modelling indicated it was being breached at several other areas across the Borough.
II. Particulate Matter: Even though the London Borough of Tower Hamlets was meeting the EU limits for PM_{10}, it was exceeding the World Health Organisation (WHO) air quality guideline for this pollutant. We also have a formal responsibility to work towards reductions of $PM_{2.5}$, which is a fraction of PM_{10}. Concentrations of $PM_{2.5}$ are measured at specific monitoring points throughout the Borough. The Council supports the London Mayor's 2030 commitment to achieving the WHO 2005 guidelines levels for $PM_{2.5}$ (10ug/m^3).

The Air Quality Action Plan (AQAP) 2022 – 2027 is the latest AQAP prepared by the London Borough of Tower Hamlets.

An Air Quality Focus Area is a location that has been identified as having high levels of pollution and human exposure, such as residential properties, schools, hospitals, care homes and town centres.

In the London Borough of Tower Hamlets, there are 7 focus areas for Nitrogen Dioxide: Their names and their locations are listed below and showed in Figure 7. These focus areas are based on the LAEI 2016 data. The GLA have now revisited and reviewed the focus areas against the updated 2019 LAEI data. The conclusion is that problem remains at these focus areas, therefore, the 7 focus areas remain unchanged.

Table J - NO_2 Focus Areas LAEI 2019 in Tower Hamlets

NO_2 Focus Areas LAEI 2019 – Tower Hamlets		
Reference ID for Figure 7	**Name**	**LAEI 2016 ID**
1	Tower Hill/Tower Gateway/Cable St/The Highway	157
2	A11 Whitechapel Road to Mile End junction A1205 Burdett Road	158
3	Commercial Road from Aldgate East to junction with Jubilee Street	159
4	A107 Cambridge Heath Rd/Bethnal Green Rd to Mare St/Well Street	160

5	Blackwall A13 East India Dock Road/Aspen Way/Blackwall Tunnel	161
6	Commercial Street	162
7	Aldgate and Aldgate East	163

Figure 6. Map of Air Quality Focus Areas for Nitrogen Dioxide

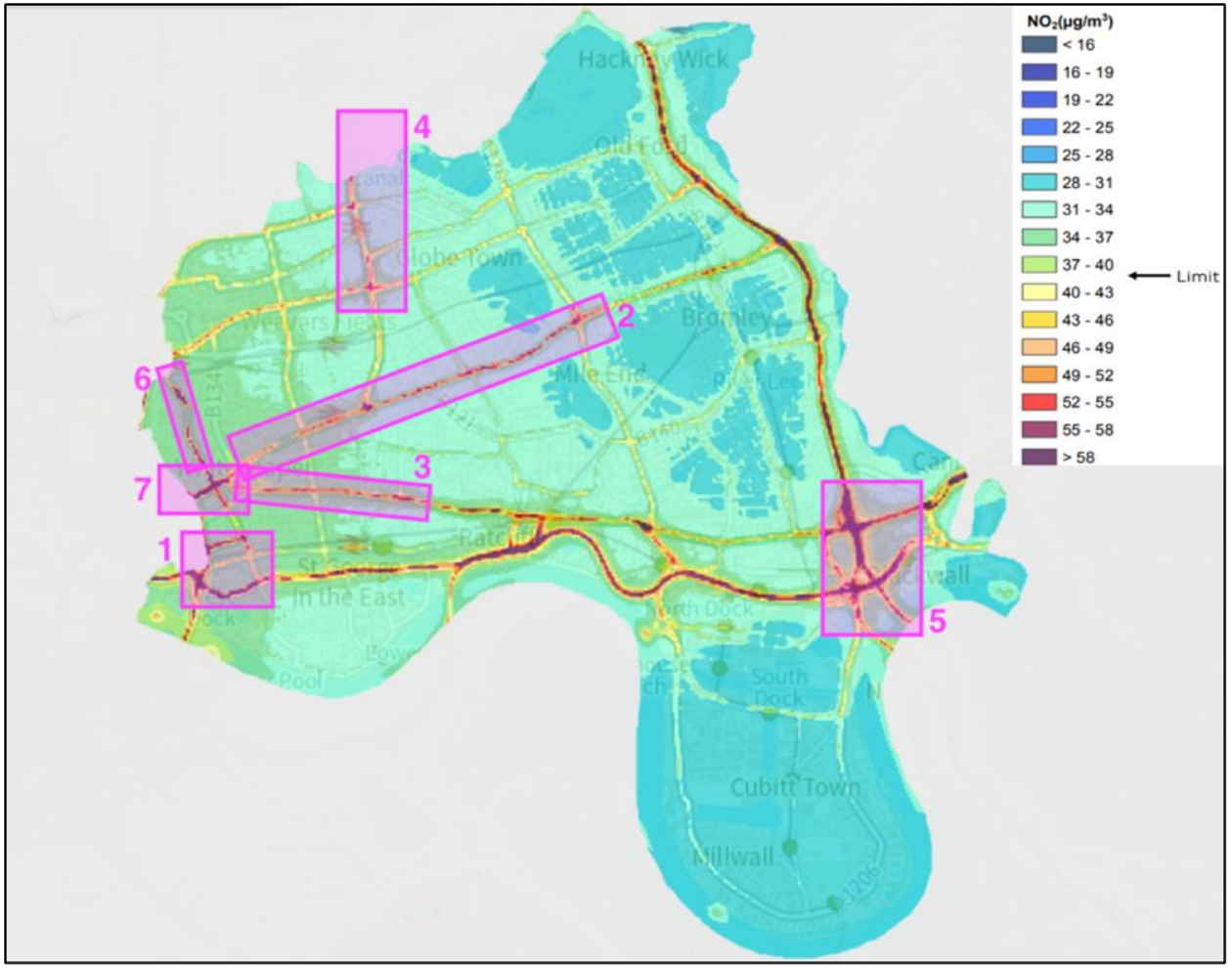


Table K. Declared Air Quality Management Areas

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
Tower Hamlets AQAM	06/12/2000 (as per the UK-AIR DEFRA website: AQMA Details - Defra, UK)	Nitrogen Dioxide (NO_2) (as per the UK-AIR DEFRA website: AQMA Details - Defra, UK)	The whole borough. Source: Transport and Industrial source (as per the UK-AIR DEFRA website: AQMA Details - Defra, UK)	No	NO_2 above annual mean at multiple sites,. (as per the UK-AIR DEFRA website: AQMA Details - Defra, UK)	**NO_2 (Annual Mean) – 2024 Update:** Based on the latest monitored data, **no non-automatic diffusion tube sites exceeded** the annual mean NO_2 objective of 40 µg/m³ at locations relevant to public exposure within the AQMA in 2024. Although a small number of sites recorded concentrations above the objective at the monitoring location, **all were below 40 µg/m³ after distance correction**, confirming no exceedances at relevant exposure points. The **highest concentration at a relevant receptor** in 2024 was **33.9 µg/m³**, recorded at **Diffusion Tube ID 74 (Poplar High St / Cotton St)** after bias adjustment and distance correction.	**NO_2 – Automatic Monitoring Sites:** Compliant with the annual mean objective since 2020, representing 5 consecutive years of compliance within the AQMA. **NO_2 – Non-Automatic Monitoring Sites:** Not all sites have achieved compliance. In 2024, the majority of sites were compliant, but two exceeded the annual mean objective. After distance correction, no sites exceeded at a relevant point of exposure. .	London Borough of Tower Hamlets Air Quality Action Plan (AQAP) 2022 – 2027 Date of publication- 26 October 2022	Visit: https://www.towerhamlets.gov.uk/lgnl/environment_and_waste/environmental_health/pollution/air_quality/Advanced_information_on_air_quality/Action_plan_and_reports.aspx

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
Tower Hamlets AQAM	06/12/2000 (as per the UK-AIR DEFRA website: AQMA Details - Defra, UK)	Particulate Matter (PM_{10}) (as per the UK-AIR DEFRA website: AQMA Details - Defra, UK)	The whole borough. Source: Transport and Industrial source (as per the UK-AIR DEFRA website: AQMA Details - Defra, UK	No	PM_{10} above 24-hour mean at multiple sites. (as per the UK-AIR DEFRA website: AQMA Details - Defra, UK)	PM_{10} 24-hour mean concentrations exceeded the allowable 35 exceedances per year at multiple locations. (Source: UK-AIR Defra AQMA records) **PM_{10} (24-hour Mean):** No exceedances recorded at automatic monitoring sites. The short-term objective of no more than 35 exceedances above 50 µg/m³ was met at all locations. **PM_{10} (Annual Mean):** All automatic monitoring sites were within the 40 µg/m³ limit.	**PM_{10} – Automatic Monitoring Sites:** Compliant with both the annual mean (40 µg/m³) and the 24-hour mean (no more than 35 exceedances of 50 µg/m³) since 2012, representing 13 consecutive years of compliance	London Borough of Tower Hamlets Air Quality Action Plan (AQAP) 2022 – 2027 Date of publication- 26 October 2022	Visit: https://www.towerhamlets.gov.uk/lgnl/environment_and_waste/environmental_health/pollution/air_quality/Advanced_information_on_air_quality/Action_plan_and_reports.aspx

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

☒ **London Borough of Tower Hamlets confirm that all current AQAPs have been submitted to GLA.**

2.2 Air Quality Action Plan Progress

Tower Hamlets' air quality action plan was adopted in 2022. This is a 5-year plan covering period 2022-2027. There are 30 actions to be delivered over the term of the plan by key stakeholders across the Council.

Table L provides a brief summary of London Borough of Tower Hamlets 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	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
1	Monitoring and other core statutory duties	Maintaining, and where possible expanding monitoring networks, and fulfilling other statutory duties. (b) Continue to ensure that all air pollution monitoring data is available to the public and the website is regularly updated with the latest available data.	Ongoing	LBTH Pollution Team, Socotec, Breathe London, Ricardo – Energy & Environment, Envirotechnology	We continue to maintain and implement both the Borough-wide NO2 diffusion tubes (passive monitoring) and the continuous monitoring networks. We continue to investigate and implement further monitoring where necessary. 5 reference monitoring stations are operating and maintained in the Borough, monitoring pollutants of concern to ensure air quality objectives are being met and to assess the effectiveness of local and regional policies. King Edward Memorial Park site is the latest addition to our reference monitors. London Borough of Tower Hamlets website updated with latest air quality monitoring results: both monthly diffusion tube data, and air quality continuous monitoring data are entered onto LBTH website.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					Data are available in the ASR, on Council plasma screens. and online (Council website).
2	Monitoring and other core statutory duties	Support the London Mayor's 2030 commitment to achieving the WHO interim guideline level for $PM_{2.5}$ annual mean concentration (10ug/m³) with an aspiration to achieving the new WHO target of 5 ug/m³ in the shortest possible time.	Ongoing	LBTH: Pollution Team, Highways/ Transport , Breathe London	We are actively working with the Mayor of London to achieve the WHO interim guideline level for PM2.5 annual mean concentration by 2030. Latest monitoring data shows compliance with the interim guideline levels for PM2.5.
3	Emissions from developments and buildings	Ensuring emissions from construction are minimised.	Ongoing	LBTH: Pollution Team, Highways/ Transport, Sustainbilitity, Publich Health, Planning/ Building Control, Legal	LBTH's Local Plan is in the process of being updated. A Regulation 19 plan i.e. final draft of the plan was consulted on in 2024, with the consultation closing on the 28th October 2024. The Council is targeting to submit the draft local plan to Secretary of State for independent examination by the end of 2025. The emerging local plan includes Policy CG9 Air Quality, which requires in the supporting text that air quality assessments must consider impacts of pollution during construction, major developments are required to include a dust assessment and outline measures to mitigate adverse construction effects. Further detail is provided in Appendix 6 - Air Quality of revised local plan. At this stage it is considered that this policy currently has the lowest weight.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					Current Local Plan Policy: D.ES2 (Air Quality). Development is required to meet or exceed air quality neutral and consider impacts of pollution during construction and operation of the Proposed Development. Current Local Plan Policy: D.TR4 (Sustainable Delivery and Servicing). Development that generates a significant number of vehicle trips for goods or materials during its construction and/or operational phases is required to demonstrate sustainable transport). Current Local Plan Policy: S.TR1 (Sustainable Travel). Travel choice (including connectivity and affordability) and sustainable travel will be improved within the borough and to other parts of London, and beyond. Development will therefore be expected to prioritise the needs of pedestrians and cyclists as well as access to public transport, including river transport, before vehicular modes of transport. Current Local Plan Policy: D.TR2 (Impacts on the Transport Network): Major development and any development that is likely to have a significant impact on the transport network will be required to submit a transport assessment or transport statement as part of the planning application.
4	Emissions from developments and buildings	Ensuring enforcement of non-road mobile machinery (NRMM) air quality policies.	Ongoing	LBTH: Pollution Team, Highways/ Transport, Planning/ Building Control, Merton Council	Planning applications are reviewed by the London Borough of Tower Hamlets Environmental Health Department (Pollution Team) in respect to air pollution and air quality. The Pollution Team provides air quality comments and recommends relevant conditions.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					Relevant NRMM conditions are recommended for each major site during planning consultations. Monthly planning decisions are forwarded to the London Borough of Merton to feed into the London wide NRMM scheme for their inspections on follow up. The 2023-2024 Financial Year NRMM Report, showed that all schemes were complaint. The 2024 Calender Year NRMM Report identified that all but 1 scheme were complaint. Planning sent this case to Planning Enforcement, and an Enforcement Case was opened (Reference: ENF/25/00018). Following enforcement action is was established that the scheme was now complaint with NRMM condition. CIL Tracker of when projects commence on site is now also sent to the Pollution Team, from Planning. Current Local Plan Policy: D.SG4 (Planning and Construction of a New Development), require construction to comply with NRMM low emission zone requirements and minimize air quality and dust pollution. LBTH's Local Plan is in the process of being updated. A Regulation 19 plan i.e. final draft of the plan was consulted on in 2024, with the consultation closing on the 28th October 2024. The Council is targeting to submit the draft local plan to Secretary of State for independent examination by the end of 2025.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					The emerging local plan includes Appendix 6 - Air Quality which sets out the requirements for NRMM in construction phase assessments.
5	Emissions from developments and buildings	Reducing emissions from Combined Heat and Power (CHP) (new developments only) Ensure policy met.	Ongoing	LBTH: Pollution Team, Highways/ Transport, Sustainability, Public Health, Planning/ Building Control, Legal, Merton Council	Planning applications are reviewed by the Borough of Tower Hamlets Environmental Health Department (Pollution Team) in respect to air pollution and air quality. The Pollution Team provides air quality comments and recommends relevant conditions. Planning applications are reviewed for CHP and relevant conditions recommended. LBTH's Local Plan is in the process of being updated. A Regulation 19 plan i.e. final draft of the plan was consulted on in 2024, with the consultation closing on the 28th October 2024. The Council is targeting to submit the draft local plan to Secretary of State for independent examination by the end of 2025. The emerging local plan includes Policy CG3 Low Carbon Energy and Heating, which requires that new development must not be connected to the gas grid and heat must be provided through zero or low carbon fuels, and that gas boilers in domestic or non-domestic developments will not be supported. At this stage it is considered that this policy currently has the lowest weight. Comments are provided on major planning applications as required by GLA SPG on Sustainable Design and Construction.
6	Emissions from developments and buildings	Enforcing Air Quality Neutral policy or its successor	Ongoing	LBTH: Pollution Team, Planning/ Building Control	Major planning applications reviewed by the Borough of Tower Hamlets Environmental Health Department (Pollution Team) in respect to air pollution and air quality. The Pollution Team provides air quality comments and recommends relevant conditions. Air

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					quality neutral policies are adopted. Planning applications for major developments are reviewed to ensure compliance with GLA air quality neutral policy. Current Local Plan Policy: D.ES2 (Air Quality). Development is required to meet or exceed air quality neutral and consider impacts of pollution during construction and operation of the Proposed Development. LBTH's Local Plan is in the process of being updated. A Regulation 19 plan i.e. final draft of the plan was consulted on in 2024, with the consultation closing on the 28th of October 2024. The Council is targeting to submit the draft local plan to Secretary of State for independent examination by the end of 2025. The emerging local plan includes Policy CG9 Air Quality, which requires that all other development proposals are required to meet or exceed the 'air quality neutral' standard at this stage it is considered that this policy currently has the lowest weight.
7	Emissions from developments and buildings	Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new developments.	Ongoing	LBTH Sustainability Development Team, Planning and Building Control	This action is ongoing. The Current Local Plan Policy D.ES3 (Urban Greening and Biodiversity) requires developments to protect and enhance biodiversity, maximising 'living building' elements and increasing the provision of trees. The London Borough of Tower Hamlets' local validation list requires the submission of an Urban Greening Statement for major developments, to provide assessment based on the Urban Greening Factor (UGF) model in accordance with London Plan Policy G5. The London Plan Policy G5 requires major

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					development to achieve a UFG score of 0.4 for residential development and 0.3 for commercial development. LBTH's Local Plan is in the process of being updated. A Regulation 19 plan i.e. final draft of the plan was consulted on in 2024, with the consultation closing on the 28th of October 2024. The Council is targeting to submit the draft local plan to Secretary of State for independent examination by the end of 2025. The emerging local plan includes Policy BO5 Urban Greening, which reinforces the UGF requirement as set out in the London Plan. At this stage it is considered that this policy currently has medium weight. The emerging local plan includes Policy CG9 Air Quality, which requires that new build proposals which provide any private, communal, publicly accessible open space or child play space in areas of sub-standard air quality are required to demonstrate that they have considered positioning and design of the open space to minimise exposure of future users to air pollution. At this stage it is considered that this policy currently has the lowest weight.
8	Emissions from developments and buildings	(a) Consolidate and update Tower Hamlets' historic Smoke Control orders (b) Delivering annual awareness campaigns	Ongoing	LBTH Pollution Team, Planning/ Building Control, Communications	A report has been prepared for Cabinet that seeks approval to launch a public consultation on revoking and reconsolidating the Smoke Control Order and to include moored vessels. Complaints / investigation records are maintained and updated on Council database. Regulatory controls are

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		(c) Enforcement of smoke control zone breaches GLA Key Selected Measure		Pollution Team	in place and investigated and / or enforced reactively through complaint investigations. In 2024, a total of 7 complaints about smoke control zone breaches, 6 of which related to canal boats. 100% of complaints investigated within 3 working days Publicity and campaign about wood burning for smoke control area over winter months. A best practice leaflet aimed at canal boat owners has been produced and promoted via Council's webpage, social media, CRT and relevant boating associations and fortnightly engagement with boat owners during the winter months. For further information, see action 17.
9	Emissions from developments and buildings	Promoting and delivering energy efficiency and energy supply retrofitting projects in workplaces and homes through EFL retrofit programmes such as RE:FIT, RE:NEW and through Borough carbon offset funds.	Ongoing	LBTH: Sustainability, Housing & Regeneration, GLA, Ameresco Ltd, Home-Energy-Advice Service Partner, Residential Retrofit Service Partner	£3.3m of new Carbon Fund projects agreed for delivery over the next 3 years. This includes install more Solar PV across the Council corporate and housing estates and installing LED lighting in Council buildings The Home Energy Advice programme was launched in late 2024. this programme provides energy efficiency advice to residents of council and private homes. The Residential Energy Efficiency Programme is due to launch in Q1 25/26. This programme is for residents in receipt of a qualifying benefit who will receive an assessment of how to make their home more energy efficient. they will then be able to access a grant of up to £10,000 to implement the identified measures.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					The Residential Energy Efficiency Programme is due to launch in Q1 25/26. This programme is for residents in receipt of a qualifying benefit who will receive an assessment of how to make their home more energy efficient. they will then be able to access a grant of up to £10,000 to implement the identified measures. The procurement process closed, and bids were evaluated at the September 2023 moderation meeting. Ameresco was appointed as the contractor in late 2023 The procurement framework went to market as planned in Q3 2023/24, and a service partner was appointed. Both the Residential Energy Efficiency Programme and Home Energy Advice Programme have appointed service partners
10	Emissions from developments and buildings	(a) Planning policy is aligned with Air Quality Positive (GLA Foundation Action) (b) Highway improvements to follow the Healthy Streets approach	Ongoing	LBTH: Pollution Team, Planning/ Building Control	Air Quality Positive Statements are required for developments subject to an Environmental Impact Assessment (EIA), in accordance with London Plan Policy S1 1: Improving air quality. All EIA's in LBTH are accompanied by an Air Quality Positive Statement, and this requirement is made clear in LBTH EIA Scoping Opinions. LBTH's Local Plan is in the process of being updated. A Regulation 19 plan i.e. final draft of the plan was

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		(GLA Foundation Action)			consulted on in 2024, with the consultation closing on the 28th October 2024. The Council is targeting to submit the draft local plan to Secretary of State for independent examination by the end of 2025. The emerging local plan includes Policy CG9 Air Quality, requires that Large-scale development proposals, and major development within Air Quality Focus Areas should achieve 'air quality positive' standards, in line with the Air Quality Positive LPG (2023). At this stage it is considered that this policy currently has the lowest weight. Healthy Streets Assessments were not undertaken in 2024. The Healthy Streets Checklist has been embedded in scheme prioritisation criteria, and aligning with TfL requirements for selected LIP-funded projects. Healthy Streets Assessments will be introduced from 2025 onward.
11	Emissions from developments and buildings	Reduce the use of private cars by residents by encouraging car free developments and limiting number of parking spaces in new developments	Ongoing	LBTH: Planning/ Building Control, Highways/ Transportation, Parking	The Council is reviewing all major planning applications every year to ensure they meet the latest parking standards. Local Plan Policy D.TR3 (Parking and Permit-free), requires developments to meet the parking standards in Appendix 3 of the local plan, to minimise car parking. LBTH Highways are consulted on all relevant planning applications, to ensure this standard is met. This is an ongoing action. All developments are required to be car free other than blue badge accessible bays.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					LBTH's Local Plan is in the process of being updated. A Regulation 19 plan i.e. final draft of the plan was consulted on in 2024, with the consultation closing on the 28th of October 2024. The Council is targeting to submit the draft local plan to Secretary of State for independent examination by the end of 2025. The emerging local plan includes Policy MC4 Parking and Permit-free, which promotes car-free development, and states that residential development is required to be permit-free in terms of on-street parking. All car parking space should be equipped with active electric vehicle charging facilities. At this stage it is considered that this policy currently has the lowest weight.
12	Public health and awareness raising	Public Health department will assist in the development of air quality communications / campaigns to ensure an evidence-based approach is followed to support behavioural change, whilst also advocating for improved air quality locally and regionally.	Ongoing	LBTH: Public Health, Communications, Pollution Team	An Acting Associate Director of Public Health was appointed in 2024 to lead the public health agenda in Tower Hamlets. This is an ongoing action. An Air Quality Communications Strategy Plan has been drafted, and Communications team is developing it together with the Pollution Team. This Plan has been shared with Public Health as well, for collaboration.
13	Public health and awareness raising	Develop an air quality focused Joint Strategic Needs Assessment (JSNA) and maximise opportunities	Ongoing	LBTH: Public Health, Pollution Team	The Air quality JSNA, following recommendation by the Public Health Senior Leadership Team, required to be reviewed and changes to be made. This work was completed in 2024.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		for further research and evaluation.			
14	Public health and awareness raising	Supporting a direct alerts service such as airTEXT, and promotion and dissemination of high pollution alert services, such as the Mayor's air pollution forecasts (GLA Key Selected Measure)		LBTH: Public Health, Pollution Team, Communications, CERC, GLA	The Council uses social media to help disseminate the Mayor's alerts (high and very high) to raise awareness and reduce exposure amongst vulnerable residents. Mayor's air Pollution alerts (high air pollution levels in the borough) coming from airTEXT are posted on Council social media by Comms. AirTEXT is still ongoing and renewed. Annual airTEXT statistics for Tower Hamlets at the end of 2024: Number of Subscribers: 458 Number of new subscribers: 28 Number of airText Tower Hamlets alert days: 16 Number of alerts sent out: 4324
15	Public health and awareness raising	Encouraging schools to join the TfL STARS accredited travel planning programme (GLA Foundation Action)	Ongoing	LBTH: Highways/ Transportation, TFL	The Council works in partnership with schools in the Borough to maintain or apply for the TfL Travel for Life School Travel Plan (previously STARs) accreditation. The Council encourages schools to share their good news stories and activities via the Travel for Life website. Number of schools engaged with the scheme: 47 schools engaged

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					% of schools engaged in STARS (TfL Travel for Life) programme (with current level of resources): 47/117 (40%) 3rd KPI: Number of schools at level Bronze, Silver and Gold accreditation: Bronze: 14 Silver: 2 Gold: 22
16	Public health and awareness raising	Extending schools air quality audits to all polluted schools (GLA Key Selected Measure)	Ongoing	LBTH: Pollution Team	In 2024, the Pollution Team met its target by completing four air quality audits at the borough's most-polluted schools.
17	Public health and awareness raising	Tackle issues with emissions from Canal Boats	Ongoing	LBTH: Public Health, Pollution Team, Trading Standards	Trading Standards' involvement focused on conducting retail inspections to assess compliance with the new solid fuel regulations. These inspections were carried out in the first year following the introduction of the regulations, and again in year three. On both occasions, no significant compliance issues were identified. The conclusion was that any old or non-compliant stock had likely worked its way through the supply chain by that point.
18	Public health and awareness raising	Develop and implement a communications strategy for disseminating air quality information in the Borough to	Ongoing	LBTH: Pollution Team, Public Health, Communications	An Air Quality Communications Strategy Plan has been drafted, and Communications team is developing it together with the Pollution Team. This

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		raise awareness of the impacts of poor air quality and encourage behaviour change			Plan has been shared with Public Health as well, for collaboration.
19	Delivery servicing and freight	Updating of procurement policies to reduce pollution from logistics and servicing (GLA Foundation Action)	Ongoing	LBTH: Procurement	Policies are still under review. A partial review is planned for 2025, ahead of a full scale review to follow.
20	Delivery servicing and freight	Reducing emissions from deliveries to local businesses and residents (GLA Foundation Action)	Ongoing	LBTH: Development Management	The Local Plan team are also exploring commissioning a freight study to understand it's impacts and how we can amend the above policy to encourage modal shift and identify potential locations for sustainable freight hubs. We do not have any Key Monitoring Indicators for this in the Local Plan 2020, but as we prepare the new plan, we could work towards a monitoring mechanism to assess this in the future.
21	Borough fleet actions	Reducing emissions from Council fleets by replacing the council's fleet with zero tail pipe emission vehicles (GLA Key Selected Measure)	2035	LBTH: Fleet	The Council's new Fleet Safety Policy & Procedures were launched and rolled out across all services using vehicles. The policy has been issued to all relevant management teams, who have been inducting and issuing it to existing drivers. All new drivers now receive the policy during their initial fleet assessment by Fleet. The procurement of the first 50+ electric vehicles under Phase 1 of the replacement strategy

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					progressed throughout the year. Although progress was affected by charging infrastructure limitations, these vehicles are scheduled for introduction in 2025. Further procurement will continue with a target of reaching 30% electric fleet composition. (Ongoing – Fleet) Additional charging infrastructure was installed across more depots and vehicle parking locations, enabling growth in the number of EVs the Council can operate. (Ongoing –) Cleaner vehicles now make up 5% of the fleet, up from 3.23% in 2023. The Council remains on track to reach 30% cleaner vehicles The original aim of a 100% zero tailpipe emission fleet by 2025 is no longer feasible due to current limitations around permanent parking arrangements and infrastructure capacity and a more realistic target of achieving 30% zero tailpipe emissions by 2027/28, with ambition to go beyond 30% by 2035, depending

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
					on available investment and infrastructure. Planning for Phase 2, covering larger HGVs and buses, is ongoing and closely linked to these infrastructure developments.
22	Localised solutions	Expanding and improving green infrastructure (GLA Foundation Action)	Ongoing	LBTH: Park Operations	The Council has planted 310 trees across the Borough's highways and parks during the 2024 planting season. This is broken down as: - 217 new street trees - 93 new parks trees
23	Localised solutions	Low Emission Neighbourhoods (LENs) and Business Low Emissions Neighbourhoods (BLENs) (GLA Foundation Action)	March 2024	LBTH: Highs/ Transportation, Sustrans, Poplar Harca, Telford Homes, Queen Mary University).	The Tower Hamlets BLEN project, completed in March 2024, focused on reducing emissions from local retail and supporting businesses to adopt low and zero emission operations. Key elements included the Chrisp Street e-cargo bike delivery hub, installation of 10 EV chargers on housing estates, and a workplace travel package. The final report and monitoring sheet have been submitted to the GLA.
24	Localised solutions	Implementing a Carbon Emissions Reduction Programme for Council properties (i.e. council offices) including boiler replacements and insulation projects	Ongoing	LBTH: Sustainability	The main focus in 2024 is installing Solar PV onto the roofs of 7 Council sites. Where possible within the existing budget energy efficiency improvements are made when projects are delivered however there is no allocated funding to carry out energy retrofit projects as the CLM budget is primarily focused on maintenance and maintaining Council sites so they can remain operational. We continue to explore all funding options to support this ongoing work.

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
25	Cleaner transport	Discouraging vehicle idling (GLA Foundation Action)	Ongoing	LBTH: Pollution Team, Parking	The Pollution Team provided training and advice to Civil Enforcement Officers engaging with drivers about idling. Pollution Team continues to respond to idling complaints and continue to undertake enforcement visits to hotspot locations, deploying signage as appropriate. The Pollution Team supports school and community no idling campaigns. Statistics for 2024: - Number / percentage of drivers complying with request (discouraging vehicle idling): 34 vehicles discouraged from idling. 100% comply with request - Number of enforcement visits undertaken: 12 - Number of idling complaints responded to within 3 working days: 21 - Number of anti-idling patrols / events held: 12 - No-idling signs installed: 9
26	Cleaner transport	Regular temporary car free days and pedestrianisation schemes	Ongoing	LBTH: Highways/ Transport, Pollution Team	No car-free days events held, because clarification is needed on whether there is political support for

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		(GLA Key Selected Measure)			holding large-scale car free events and for resident led Play Streets. Play Streets held at Robinson Road, E2 and Louisa Gardens, E1. Successful pilot Play Estate also held on estate road at Cornwall Street, Tarling West Estate, E1.
27	Cleaner transport	Using parking policy to reduce pollution emissions (GLA Foundation Action)	Ongoing	LBTH: Highways/ Transportation/ Parking	The Council uses fees and charges to discourage heavily polluting vehicles in favour of greener vehicles. We have a surcharge for diesel cars and heavily reduced parking fees for electric vehicles, applying to both residents and visitors. In 2024 we had reduce the bands from 9 (A-G) down to 4 bands, with the higher polluting vehicles charged at a higher price. We also increased the charges by RPI to all permit charges. Parking services had successfully introduced 3 new vehicles as part of the car club scheme, whereby these vehicles were open to council staff between Mon to Fri 8am to 6pm. Out of these hours the vehicles were open to the public. Furthermore, we are still working with operating car club providers in the borough to produce a comms plan to all residents, businesses and visitor the benefits of using the car club scheme. We also working with a provider to implement 12 new bays within the borough to improve the accessibility to car clubs.
28	Cleaner transport	Installation of Ultra-low Emission Vehicle (ULEV)	Ongoing	LBTH: Highways/ Transportation	Approval is requested for the Corporate Director to award two contracts covering the installation of 2,035

Measure	LLAQM Action Matrix Theme	Action	Estimated / Actual Completion Date	Organisations Involved	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		infrastructure (e.g., electric vehicle charging points, rapid electric vehicle charging point and hydrogen refuelling stations) (GLA Key Selected Measure)			electric-vehicle charging points, in line with the procurement strategy endorsed by the Mayor in Cabinet in January 2024. The contract documentation is still being finalised
29	Cleaner transport	Provision of infrastructure to support walking and cycling (GLA Key Selected Measure)	Ongoing	LBTH: Highways/Transportation, TFL	New walking and cycling strategy and action plan being developed, due for publication in 2025. 51% of residents live within 400 metres of London Strategic Cycle Network (source: TfL, 2024) Total of 80 secure cycle parking spaces installed in 2024.
30	Cleaner transport	Continue to encourage staff sustainable travel	Ongoing	LBTH: Highways/ Transportation, TFL, Sustrans	Staff travel survey to be carried out in 2025, the first since move over to new offices in Whitechapel in February 2023. Staff travel survey to inform subsequent staff travel plan. Annual Santander Cycle Hire memberships provided to 81 staff in 2024, resulting in 4734 trips. In 2024: A total of 32 Dr Bike sessions held, with 590 bikes fixed.

3. Planning Update and Other New Sources of Emissions

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

The total number of planning applications in 2024 (minor and major applications, requests for Environmental Impact Assessments EIAs, full planning applications, and submissions of details) is 205.

Condition			Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts			51
Number of planning applications required to monitor for construction dust			42
Number of CHPs/Biomass boilers refused on air quality grounds			1
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions			2
Number of developments required to install Ultra-Low NO_X boilers			33
Number of developments where an AQ Neutral building and/or transport assessments undertaken			32
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation			5
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	• Total number of audits in 2024: 20 • % of sites unregistered prior to audit - 20% sites of sites audited were cold engaged and therefore not	NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas	• 40 conditions related to NRMM • 8 developments registered and compliant • 1 development unregistered/uncompliant and being chased

Condition			Number
	registered prior to auditing. - 80% sites audited were not cold engaged and therefore not registered prior to auditing.	NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas)	• 27 conditions related to NRMM • 7 developments registered and compliant • 2 developments unregistered/uncompliant and being chased

Commentary

All major planning applications are referred to the Pollution Team for review and comments. Each application is individually reviewed to ensure that the GLA SPGs on the 'Sustainable Design and Construction', as well as **'**The Control of Dust and Emissions During Construction and Demolition' is followed.

Where there are compliance issues, Pollution Officers recommend either further information to be obtained from the applicant, or relevant conditions recommended including NRMM conditions where necessary. Enforcement of planning conditions are a matter for the planning department. Where breaches of NRMM condition is identified by the London borough of Merton NRMM team, this is referred to planning enforcement for follow up action.

3.1 New or significantly changed industrial or other sources

No new sources were identified in 2024.

4. Additional Activities to Improve Air Quality

4.1 London Borough of Tower Hamlets Fleet

As of 2024 update, the council operates a fleet of approximately 300 vehicles.

a) Zero emission vehicles:

We currently have 13 fully electric vehicles, which are classed as zero emission. This represents approximately 4.3% of the total fleet.

b) Zero emission capable vehicles:

We do not currently operate any hybrid or plug-in hybrid vehicles, so there are no zero emission capable vehicles in the fleet beyond the fully electric ones.

The council is committed to transitioning to a cleaner fleet in line with our air quality and climate targets, and we continue to assess opportunities to expand our electric vehicle (EV) provision.

4.2 Planning Enforcement

Tower Hamlets continue to support the NRMM project by:

- Providing match funding.
- Forwarding details of major applications determined by the Council to the project team.
- Checking sites for completion.
- Follow up action on non-compliance reported to us.
- Including NRMM condition on major planning applications consent.

4.3 Pan-London NRMM Auditing Project

Continued participation in the pan-London NRMM auditing project

Tower Hamlets will continue to support and resource the Greater London Authority's Non-Road Mobile Machinery (NRMM) audit and enforcement programme for the 2025-2026 financial year.

Standard NRMM planning-condition wording

All Non-Road Mobile Machinery (NRMM) used during the course of the development that is within the scope of the Greater London Authority 'Control of Dust and Emissions during Construction and Demolition' Supplementary Planning Guidance (SPG) 2014, or any subsequent amendment or guidance, shall comply with the emission requirements:

a. All plant and machinery to be used at the demolition and construction phases is required to meet Stage IV of EU Directive 97/68/ EC for both NOx and PM.

b. 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/.

An inventory of all Non-Road Mobile Machinery (NRMM) must be kept on site during the course of the demolition, site preparation and construction phases of the development, and must be registered on the online register at https://nrmm.london/. 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 manage and prevent further deterioration of existing low quality air across London in accordance with policies SI1 of the London Plan (2021) and D.ES2 of Tower Hamlets Local Plan 2031 (2020).

Where the condition is applied

- **Planning Decision Notice** – inserted as a **stand-alone pre-commencement condition** on every qualifying permission; applicants must have the condition discharged before any works start.

- **Construction Management Plan / Site Environmental Management Plan** – the CMP/SEMP, which must be approved before commencement, must reproduce the wording and include a live NRMM inventory.
- **Code of Construction Practice (CoCP) 2023** – sets out the same Stage IV and registration requirements and is automatically referenced in the above planning condition.

Which developments receive the condition

- **All Strategic and Major applications** (10 + dwellings or ≥ 1 000 m² floorspace).
- **Minor or Basement schemes** that involve substantial demolition, piling or earthworks, **or** that are located within an Air-Quality Focus Area or adjacent to sensitive receptors (schools, hospitals, care homes) – added at the case officer's discretion, guided by Local Plan policy D.ES2 and the CoCP submission matrix.
- Very small infill and householder projects are assessed case by case; the condition is added wherever Stage IV-rated plant is likely to be used.

Summary

Tower Hamlets will maintain full support for the pan-London NRMM audit. The updated Stage IV NRMM condition is secured on the Decision Notice, mirrored in the CMP/SEMP and referenced in the CoCP, and is applied to every Strategic and Major scheme plus any Minor or Basement site with meaningful air quality risk.

4.4 Air Quality Alerts

Tower Hamlets support *air*TEXT (https://www.airtext.info/). Details can be found in Action 6 of Table I 'Delivery of Air Quality Action Plan Measures'.

The borough cascades the Mayor's air quality alert messages through social media.

4.5 Air Quality Positive

No, Tower Hamlets does not yet have any submitted *Air Quality Positive* Matrices that contain innovative mitigation measures we would wish to showcase as a GLA case study.

Appendix A Details of Monitoring Site Quality QA/QC

A.1 Automatic Monitoring Sites

Calibrations at all Tower Hamlets automatic monitoring sites are undertaken by Ricardo Energy & Environment. Millwall Park and Victoria Park are both background sites, so they are calibrated every 4 weeks. Tower Hamlets roadside sites (Blackwall, Mile End, and King Edward Memorial Park) are calibrated every 2 weeks. All sites are provided with ISO 17025 QC audits by Ricardo every 6 months.

PM_{10} Monitoring Adjustment

Millwall Park – 1020 Heated BAM, correction applied Victoria Park – TEOM, VCM correction applied Both VCM and BAM correction is applied automatically when data is downloaded from Air Quality England web site.

A.2 Diffusion Tubes

- Lab supplying and analysing the tubes:

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

- Preparation method used:

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

- Confirmation that the lab follows the procedures set out in the Practical Guidance:

The samples have been analysed in accordance with SOCOTEC's standard operating procedure ANU/SOP/1015 Issue 1. This method meets the guidelines set out in DEFRA's 'Diffusion Tubes For Ambient NO_2 Monitoring: Practical Guidance.'

- Results of laboratory precision results:

This analysis of diffusion tube samples to determine the amount of nitrogen dioxide present on the tube is within the scope of our UKAS schedule. Any further calculations and assessments requiring exposure details and conditions fall outside the scope of our accreditation. In the AIR PT intercomparison scheme for comparing spiked Nitrogen Dioxide diffusion tubes, SOCOTEC currently holds the highest rank of a 'Satisfactory' laboratory.

Factor from Local Co-location Studies

As every year, a co-location study was undertaken with the use of the two sets of 2 diffusion tubes at Millwall Park and Victoria Park automatic monitoring sites, which has high quality chemiluminescence results (to national AURN standards).

Two duplicate diffusion-tube pairs are co-located with our automatic stations:

- Millwall Park (TH001): Site IDs 93 and 94
- Victoria Park (TH002): Site IDs 42 and 43

Each automatic analyser therefore has a set of two diffusion tubes alongside it for bias-adjustment and QA/QC purposes.

As per the LLAQM Technical Guidance 22, we have calculated the local bias-adjustment factor from our co-location study (Table L).

Figure 7. Local & National Bias Adjustment Factor for 2024

Local Bias Adjustment Outputs - Information Only

Go back to STEP 3 - Bias Adjustment to define factor

	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	8	11	
Bias Adjustment Factor A	0.91 (0.85 - 0.99)	0.8 (0.71 - 0.91)	
Diffusion Tube Bias B	9% (1% - 17%)	26% (10% - 41%)	
Diffusion Tube Mean (µg/m^3)	15.1	17.7	
Mean CV (Precision)	4.1%	7.2%	
Automatic Mean (µg/m^3) (for periods used to calculate bia	13.8	14.1	
Data Capture (for periods used to calculate bias)	100%	99%	
Overall Data Capture	99%	100%	
Adjusted Tube Mean (µg/m^3)	14 (13 - 15)	14 (13 - 16)	

Overall Diffusion Tube Precision	Poor Overall Precision	Good Overall Precision	
Overall Continuous Monitor Data Capture	Good Overall Data Capture	Good Overall Data Capture	

Combined Local Bias Adjustment Factor	0.85	*Warning - One or more Co-location studies has Poor Overall Diffusion Tube Precision (i.e. CV >10%). Local Bias Adjustment Factor should be treated with caution.*

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.

This spreadsheet will be updated at the end of June 2025

LAQM Helpdesk Website

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

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

Step 1:	Step 2:	Step 3:	Step 4:
Select the Laboratory that Analyses Your Tubes from the Drop-Down List	Select a Preparation Method from the Drop-Down List	Select a Year from the Drop-Down List	Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor[3] shown in blue at the foot of the final column.
If a laboratory is not shown, we have no data for this laboratory.	If a preparation method is not shown, we have no data for this method at this laboratory.	If a year is not shown, we have no data[2]	If you have your own co-location study then see footnote[4]. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953

Analysed By[1]	Method	Year[5]	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m^3)	Automatic Monitor Mean Conc. (Cm) (µg/m^3)	Bias (B)	Tube Precision[6]	Bias Adjustment Factor (A) (Cm/Dm)
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Leeds City Council	11	24	18	36.4%	G	**0.73**
SOCOTEC Didcot	50% TEA in Acetone	2024	UC	Leeds City Council	10	25	19	31.2%	G	**0.76**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	Huntingdonshire District Council	10	28	23	21.1%	G	**0.83**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	North East Lincolnshire Council	11	39	21	84.1%	G	**0.54**
SOCOTEC Didcot	50% TEA in Acetone	2024	UB	North East Lincolnshire Council	10	12	10	20.0%	G	**0.83**
SOCOTEC Didcot	50% TEA in Acetone	2024	R	North East Lincolnshire Council	11	21	18	15.7%	G	**0.86**
SOCOTEC Didcot	50% TEA in acetone	2024		**Overall Factor[3] (33 studies)**				Use		**0.78**

Discussion of Choice of Factor to Use

The diffusion tube data presented within the 2024 ASR have been corrected for bias using an adjustment factor (Table S). Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LLAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Duplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion

tube results with data taken from NOx/NO2 continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

The combined local bias adjustment factor was calculated as 0.85 using the DEFRA NO_2 data processing tool. However, one or more of the co-location studies used to derive this factor exhibited poor overall diffusion tube precision (i.e. coefficient of variation >10%), which reduces confidence in the result.

As a result, Tower Hamlets has opted to use the national database co-location bias adjustment factor of 0.78 for this report. This factor is based on a larger, more statistically robust dataset and provides a higher degree of confidence. It is also a more conservative value, ensuring the reported concentrations are not underestimated.

Table N. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	04/2025	**0.78**
2023	National	03/2024	0.77
2022	National	03/2023	0.76
2021	National	03/2022	0.78
2020	National	03/2021	0.77
2019	National	03/2020	0.75
2018	National	03/2019	0.77
2017	National	03/2018	0.77

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Where data capture for a diffusion tube is between 25% and 75% of a full calendar year (i.e. between 3 and 9 months of valid data), the annual mean concentration must be adjusted ('annualised') before being compared to the annual mean air quality objective, in accordance with the methodology set out in LLAQM.TG(22).

In this case, short-to-long term data adjustment has been undertaken for the following diffusion tube locations:

- Tube 3 – Bethnal Green Rd / Brick Lane
- Tube 7 – St Katherine's Way
- Tube 25 – Cavell St / Stepney Way
- Tube 34 – Pitsea St / Commercial Rd
- Tube 51 – Watney Market

The annualisation calculations were completed using the Diffusion Tube Data Processing Tool, in line with the methodology prescribed in London Local Air Quality Management Technical Guidance (LLAQM.TG(22)). The results are presented in Table O.

No automatic monitoring sites required annualisation.

Distance Adjustment

Where an exceedance of the annual mean objective was recorded at a monitoring location not representative of relevant public exposure, Tower Hamlets applied the distance correction procedure outlined in LLAQM.TG(22) to estimate concentrations at the nearest point of relevant exposure (e.g. building façades or residential receptors).

In line with LLAQM guidance, distance correction was considered at any site where the annual mean NO_2 concentration exceeded 36 µg/m³, and where the monitoring location did not reflect exposure for the general public. This process takes into account the known limitations of the NO_2 Fall-off with Distance Calculator and the Diffusion Tube Data Processing Tool.

Tower Hamlets' diffusion tube data requiring distance adjustment was processed accordingly, and the adjusted values are presented in Table Q.

Table O. Non-Automatic Monitoring Data Adjustment

Site ID	Annualisation Factor Millwall Park	Annualisation Factor Victoria Park	Average Annualisation Factor	Raw Data Annual Mean (µg m^{-3})	Annualised Annual Mean (µg m^{-3})
3	1.0054	0.9863	0.9958	30.7	30.6
7	0.9230	0.9124	0.9177	23.2	21.3
25	1.0917	1.1190	1.1053	30.0	33.1
34	0.9712	0.9819	0.9765	27.1	26.4
51	0.9627	0.9450	0.9539	27.3	26.0

Table P. NO_2 Fall off With Distance Calculations

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted (µg m^{-3})	Background Concentration (µg m^{-3})	Concentration Predicted at Receptor (µg m^{-3})
35	1.5	16.5	45.7	22.3	33.4
74	0.5	10.5	42.5	26.6	33.9

Appendix B Full Monthly Diffusion Tube Results for 2024

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

Site ID	Site Name	X OS Grid Reference	Y OS Grid Reference	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Raw Annual Mean (µg/m3)	Bias Adjusted and Annualised Annual Mean (µg/m3)	Distance Corrected Annual Mean (µg/m3)
1	Colombia Rd/Gossett Street	533883	182815	27.9	30.0	21.3	17.1	17.7	15.1	17.5	15.3	19.7	17.8	31.2	24.0	21.2	16.5	
2	Calvert Ave/Boundary Street	533507	182569	29.7	26.5	21.7	18.9	19.2	17.7	19.9	18.5	18.9	20.2	21.1	23.4	21.3	16.6	
3	Bethnal Green Rd/ Brick Lane	533860	182442	40.0		30.1	21.7			28.6	28.3	28.3		37.9	30.9	30.7	23.9	
4	Commercial St/Calvin St	533611	182037	39.1	38.5	37.1	31.4	33.5	28.5	32.6	28.7	32.1	40.7	42.3	31.4	34.7	27.0	
5	Whitechapel High St (KFC)	533985	181426	41.1	45.8	43.6	38.6	40.6	36.8	38.9	39.4	41.4	37.1	45.6		40.8	31.8	
6	Mansell St	533800	181021	41.1	43.2	42.2	30.5	37.1	31.9	31.4	29.1	34.6	37.0			35.8	27.9	
7	St Katherine's Way	533992	180376	26.1	21.5		18.2	19.4						30.7		23.2	16.6	
8	Wapping High St/Sampson St	534444	180122	26.5	28.0	25.1		21.7	16.6	21.8	20.7	21.7	25.3	33.3	15.4	23.3	18.2	
9	Cartwright Street	533955	180805		21.0	24.3	20.6	22.9	17.9	20.4	18.5	19.6	28.2	33.2	20.0	22.4	17.5	
10	Whitechapel Rd/Adler St	534133	181509	33.4		69.7	64.3	32.9	28.6	28.7	30.8	33.4		39.9	32.0	39.4	30.7	
11	Brick Lane/Princelet St	533866	181860	31.2	30.9	26.8	22.6	24.0		22.0		12.9	24.1	27.4	25.6	24.8	19.3	
12	Buckfast St/Bethnal Green Rd	534259	182580	27.6	30.0	25.2	19.8	24.3	11.1	22.3	18.4	24.8	26.1	31.2	17.4	23.2	18.1	
13	Squirries St/Gosset St	534313	182810	16.7		27.7	21.9	22.3	20.6	25.1	22.3	25.5	27.0	34.2	23.5	24.3	18.9	
14	Warner Place/Hackney Rd	534255	183130	31.0	33.9	29.7	24.1	28.0	25.2	30.6	25.0	31.3	33.6	32.5	31.0	29.7	23.1	
15	Parmiter St/ Cambridge Heath Road	534881	183240	38.1	32.2	29.6	26.0	30.4	26.5	26.9	21.7	32.1	31.9	40.8	28.8	30.4	23.7	
16	Paradise Row/Bethnal Green Rd	534959	182757	26.1	34.0	35.3	22.3	20.0	22.6	26.7	21.7	26.0	28.9	32.8	23.4	26.7	20.8	
17	Finnis St/Three Colts Lane	534783	182385	25.0	25.1	20.5	11.0	18.9	15.5	16.7	15.9	19.4	24.2	27.0	12.5	19.3	15.1	

18	Sidney St/Mile End Rd	534968	181878	37.0	36.7	34.7	28.9	30.3	28.1	28.1	29.0	38.9		34.7	34.8	32.8	25.6	
19	Philpot St/Commercial Road	534816	181321	24.4	37.6	33.6	23.4	27.5	28.9	24.2	26.3	27.4	33.0		28.6	28.6	22.3	
20	Dellow St/The Highway	534951	180779	36.3	43.3	39.7	27.7	26.6	39.0	33.7	37.0	32.1		39.2	31.4	35.1	27.4	
21	Queensbridge Rd/Hackney Rd	533985	183122	33.1	32.1	27.2	21.9	25.7	19.7	26.6	19.9	24.7	28.2	34.4	29.5	26.9	21.0	
22	Wapping Wall/Garnet St	535133	180376	25.2	24.5		15.4	19.4	14.3	17.3	15.6	20.6	25.2	28.8	23.5	20.9	16.3	
23	Brodlove Lane	535598	180816	27.8	33.7		15.3	23.7	29.5	29.9	28.7	22.1	31.1	34.2	25.9	27.4	21.4	
24	Jubilee Street/Commercial Rd	535174	181290		40.0	39.1	35.0	37.3	39.4	33.8	33.5	20.5	40.8		12.3	33.2	25.9	
25	Cavell St/Stepney Way	534884	181667		42.4			28.9	25.4	30.7	28.2	14.4	39.9			30.0	25.9	
26	Hannibal Rd/Mile End Rd	535386	182021	31.0	32.9	28.2	22.2	25.7	26.6	25.5	26.5	24.3	31.9	30.2	16.5	26.8	20.9	
27	Roman Rd/Globe Road	535296	182793	25.2	31.9	26.1	21.1	28.5	22.3	19.6	21.7	13.2	17.5	36.9	19.0	23.6	18.4	
28	Bonner Road	535356	183223	35.0	32.4	27.5	29.6	33.1	30.6	23.5	22.7	21.2	25.9	32.2	17.1	27.6	21.5	
29	Grove Rd/Old Ford Rd	535930	183385	30.8	36.1	31.2	23.8	27.7	24.6	22.4	27.1	29.7	27.4	34.0		28.6	22.3	
30	Fieldgate Street	534239	181565	29.3	24.5	34.6	23.5	28.2	23.9	29.9	29.2	14.6	36.9	33.9	20.2	27.4	21.4	
31	Whitechapel Market	534516	181744	45.1	47.2	34.3	34.9	33.0	35.7	42.8	38.1	19.5	42.0	38.1	35.7	37.2	29.0	
32	Globe Rd/Mile End Rd	535634	182148	30.7	41.1	40.2	30.0	34.8	33.0	31.1	32.7	38.9	41.8	42.8	30.1	35.6	27.8	
33	Stepney Green	535545	181604	24.3	28.0	24.1	14.7	9.9	16.0	16.9	19.6	21.3	24.1		26.6	20.5	16.0	
34	Pitsea St/Commercial Rd	535797	181164	33.5	29.9		18.8			21.8		29.4	29.0			27.1	20.6	
35	Narrow St/Limehouse Link	535977	180879	62.5	61.3	65.8	56.2		55.5	60.2	60.2	69.7	55.2	62.6	35.0	58.6	**45.7**	33.4
36	Locksley St/St Paul's Way	536704	181647		31.9	28.6	16.0	22.1	20.6	19.2	20.2	26.0	29.9			23.8	18.6	
37	Rhodeswell Rd	536577	181379	30.3	33.6	28.1	18.7	21.4	20.1	18.7	18.7	22.5	34.0	32.9	25.8	25.4	19.8	
38	Ben Johnson Road	536080	181721	25.7	31.8	34.4	25.2	27.6	26.4	26.3	25.6	33.4	35.5		14.9	27.9	21.8	
39	Harford St/Mile End Rd	536089	182258	32.4	33.9		22.0	19.1	22.0	22.3	23.4	29.7	31.5		25.4	26.2	20.4	

40	Thoydon Rd	536105	183049	22.3	26.9	20.6	21.0	21.0	21.2	20.2	19.3	23.8	23.8	33.8	11.3	22.1	17.2	
41	Ford Close/Roman Rd	536457	183301	33.1	29.6	24.8	23.4	30.0	23.1		21.7	28.7	21.3	35.2	18.4	26.3	20.5	
42, 43	Victoria Park (Co-location site)	536494	184170	19.6	18.4	17.2	9.5	13.3	9.6	11.0	12.9	10.5	14.6	22.5	10.9	14.1	11.0	
44	Parnell Rd/Old Ford Rd	536875	183740	39.5	35.2	33.6	26.9	26.6		21.6	24.3	29.4	34.5	37.6	27.1	30.6	23.8	
45	St Stephen's Rd/Tredegar Rd	536713	183070	33.1	29.7	27.0	21.9	28.3	22.2	24.7	23.9	31.4	29.0	38.7	20.3	27.5	21.5	
46	Rhondda Grove/Mile End Rd	536542	182589		21.7		18.9	19.4	19.6	20.4	18.6	26.2	23.4	31.2	24.2	22.4	17.4	
47	Wentworth Mews	536452	182454	39.0		32.9	25.1	32.3	28.4	28.5	26.8	34.9	38.9	39.2	27.1	32.1	25.0	
48	Ackroyd Drive	536768	181772	28.1	30.7	33.0	24.1	28.2	26.1	29.3	28.2	33.2	37.6	40.4	15.1	29.5	23.0	
49	Dod St/Burdett Rd	537049	181292	27.2	27.9	27.8	18.3	20.9	18.8	19.8	19.6	21.9	30.9	34.5	18.9	23.9	18.6	
50	Rich Street	536937	180987	35.6	29.5	30.1	24.7		22.4	25.5	26.4		32.1	37.1	25.8	28.9	22.6	
51	Watney Market	534938	181257		28.8	25.3				21.8	20.9	26.8	32.5	33.0	29.3	27.3	20.3	
52	Wick Lane/Autumn St	537304	183619	25.9	35.3	29.6	22.8	26.5	25.1	26.0	26.1	31.7	40.7	41.1	17.0	29.0	22.6	
53	Fairfield Road/Tredegar Road	537159	183415	43.8	40.1	38.1	34.6	34.2	29.8	24.2	30.5	37.4	36.1	37.0	29.9	34.6	27.0	
54	Bow Rd /Glebe Terrace	537525	182887	47.5	48.7	53.3	31.1	26.7	31.3	43.2	36.1	24.5	34.0	50.9	39.7	38.9	30.4	
55	TH Cemetery Park	536732	182361	19.9	20.2	16.6	12.3	13.4	12.7	11.5	12.9	16.5	16.6	21.6	8.1	15.2	11.8	
56	Bow Common Lane/St Paul's Way	537248	181820	33.1	28.4	32.0	20.2	28.9	24.4	26.1	25.6	27.2	30.1	32.6	27.7	28.0	21.9	
57	Augusta St/Giraud St	537516	181392	29.1	24.3	22.7	17.4	23.4	17.1	17.9	16.9	22.1		30.5	20.9	22.0	17.2	
58	Dolphin Lane	537539	180688	27.8	27.8	23.7	16.4	21.5	17.7	20.1	20.2	22.6	20.4	32.0	21.5	22.6	17.7	
59	Westferry Road/Limehouse Link jnct	537100	180791		31.5			29.0	22.8	25.8	23.9	27.8	30.9	38.3	21.5	27.9	21.8	
60	Cascades, Westferry Road	537115	180074	30.9	32.8	30.4	28.5	34.0	26.2	30.3	24.6	34.7		33.2		30.6	23.8	
61	Bow Rd/Alfred St	537056	182773	33.1	32.1	25.0	20.6	21.7		22.6	20.5	19.3	30.3	36.6	22.4	25.8	20.2	
62	Mast House Terrace	537348	178690	29.3	28.7	26.7	23.4	28.0	23.4	25.7	24.0	28.5	26.5	34.8		27.2	21.2	

63	Millwall Park	538246	178689	24.4	22.8	17.9	14.9	nul		17.1	16.8		20.7	25.7	15.6	19.5	15.2	
64	Limeharbour	537953	179357	36.2	38.0	37.5	30.9	45.2	35.6	34.7	34.0	37.9	37.1	37.8	34.5	36.6	28.6	
65	Manchester Road/East Ferry Road	538032	178360	26.0	27.8	20.4	20.5	25.1	20.5	21.2	20.8	22.6	25.6	32.2	18.6	23.4	18.3	
66	Millwall Park	538258	178689	25.5	22.7	17.8	16.4	16.0	14.1	14.0	15.7	16.9	21.5	26.6	14.8	18.5	14.4	
67	Seyssel Street	538544	178767	28.6	31.6	24.8	23.8	26.3	22.8	22.8	23.4	24.0	29.1	36.3		26.7	20.8	
68	Manchester Road/Ollife Street	538431	179044	31.7	29.2	21.8	24.3	28.4	25.4	25.1	21.4	29.3	29.4	35.0	22.6	27.0	21.0	
69	Lawnhouse Close	538190	179750	21.9	28.8	28.0	23.9	19.5	26.8	24.0	24.9	25.8	29.3	34.9	27.8	26.3	20.5	
70	Admirals Way	537424	179910	28.6	19.8	21.0	19.4	22.9	19.1	18.8	21.4	22.0	25.3	32.2	22.7	22.8	17.8	
71	Toynbee St/Commercial St	533689	181705	39.4	42.7	37.6	34.1	36.7	30.4	32.6	31.9	36.3	39.6	42.9	37.7	36.8	28.7	
72	Prestons Road/ Coldharbour	538364	180188	30.8	39.1	31.0	25.9	35.8	29.1	27.4	28.4	34.7	35.3	39.9		32.5	25.3	
73	John Smith Mews	538742	180756	17.2	26.0	19.5	17.9	25.4	18.1	18.1	18.1	22.7	22.6	33.4	20.4	21.6	16.9	
74	Poplar High St/Cotton St	538244	180761	51.4	53.7	54.9	50.5	68.7	41.0	60.8	60.6	59.7	61.3	60.7	30.1	54.5	**42.5**	33.9
75	Hale Street	537661	180768	29.8	29.8	21.1	19.9	22.1	18.2	16.6	19.6	20.9	26.4	36.8	27.0	24.0	18.7	
76	Chrisp Street/E India Dock Road	537940	181021	37.6	29.6	37.9	28.2	37.1	29.6	29.4	29.3	39.1	37.5	41.1	19.8	33.0	25.8	
77	Morris/Barchester Street	537731	181761	23.8	30.2	26.7	20.3	24.0		21.1	19.3	24.5	27.5		14.3	23.2	18.1	
78	Devons Road / Campbell Road	537577	182232	33.4	39.9	32.5	30.8	38.4	31.6	27.0	29.9	36.2	39.6	46.7	15.4	33.5	26.1	
79	Hatfield Terrace/Fairfield Road	537355	183059	31.4		25.7	20.7	23.5	16.9	18.5	18.0	18.0	24.0		22.0	21.9	17.1	
80	Wrexham Road	537581	183209	36.4		28.8		28.3	23.5	12.5	21.5	14.1	31.2	36.8		25.9	20.2	
81	Bromley High Street/ St Leonards	537868	182912	36.4	33.2	29.1	27.1	28.3	24.7	23.4	26.5	15.2	28.9	37.1		28.2	22.0	
82	Devas Street /Devons road	537821	182332	39.9	35.5	30.3	24.0	20.3	23.5	24.9	25.0	33.4	35.5	32.6	23.9	29.1	22.7	
83	Zetland Street/A12	538178	181747	52.7	35.9	48.2	42.7	55.0	33.1	39.7	37.9	47.6	45.8	50.9	27.1	43.1	33.6	
84	Blair Street (End of Street)	538365	181180	35.7	44.0	36.2	26.9	29.5	28.1	30.1	31.2	28.0	35.3		23.6	31.7	24.7	

85	Portree Street	538895	181296	42.3	37.2	42.2	34.0	40.4	32.9	32.2	30.3	36.1		41.1	28.9	36.1	28.2	
86	Newport Avenue	538954	180872	23.9	26.1	23.0	19.1	23.6	16.0	17.2	19.8	19.7	26.7			21.5	16.8	
87	Mile End Road Corner Bancroft Rd	535929	182220	36.6	28.9	24.8	26.1	29.8	29.1	26.0	26.1	36.8	23.2	46.9	15.7	29.2	22.8	
88	Shirbutt St o/s Holy Family School	537555	180892	23.5		21.6		21.3	15.9	17.8		20.3	24.1	31.5	21.2	21.9	17.1	
89	Thames Path Storers Quay	538730	178733	20.9	24.8	22.9	15.1	21.4	16.7	18.9	17.6	22.5	27.2	30.7	15.2	21.2	16.5	
90	Sextant Avenue	538674	178888	26.7	25.2	19.2	17.7	20.4	7.5	17.5	15.8	18.7	24.3	29.0	20.4	20.2	15.8	
91	At the exit of MOT station	539007	181146	35.8	35.2	30.4	28.1	34.7	20.0	26.8	29.1	26.5	35.4	41.0	22.8	30.5	23.8	
92	At the entrance of MOT station	538907	181127	32.2	31.6	31.4	21.3	28.3	19.9	21.0	21.0	27.7	29.0	36.7	20.3	26.7	20.8	
93, 94	Millwall Park- North Greenwich Bowls Club(Co-location site)	538016	178569	22.7	21.9	19.5	16.5	15.8	12.5	16.3	14.3	15.8	15.8	23.6	18.2	17.7	13.8	

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

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

☐ **Local bias adjustment factor used .**

☒ **National bias adjustment factor used.**

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

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

Notes:

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

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

See Appendix C for details on bias adjustment and annualisation.

Appendix C Map(s) of Monitoring Locations and AQMAs

Figure 8A. Map of Non-Automatic Monitoring Site(s) and Whole Borough AQMA

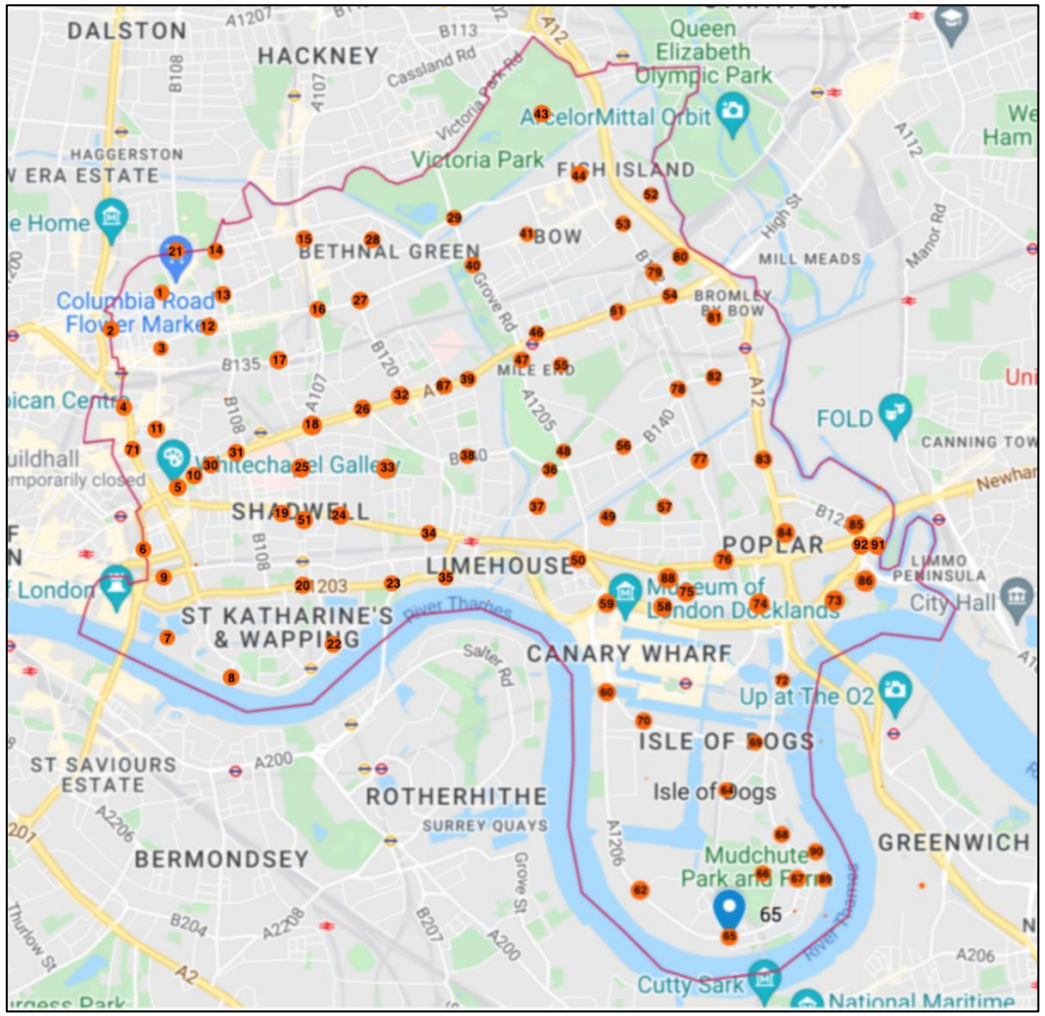
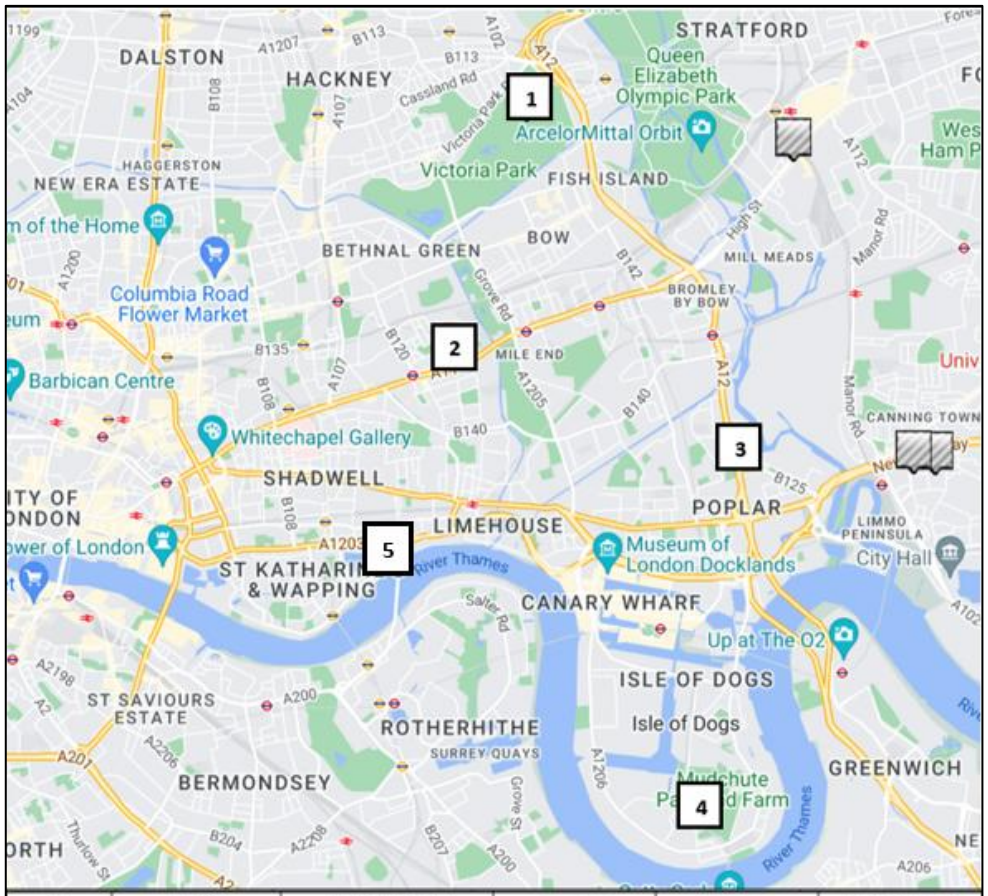


Figure 8B. Map of Automatic Monitoring Site(s)



1	TH002	Victoria Park	536487	184238	Background
2	TH2 and TH2P	Mile End	535927	182221	Roadside
3	TH004	Blackwall	538290	181452	Roadside
4	TH001	Millwall Park	538052	178559	Background
5	TH005	King Edward Memorial Park	535384	180752	Roadside