## Lambeth Air Quality Annual Status Report for 2022



This report provides a detailed overview of air quality in Lambeth during 2022. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process<sup>1</sup>.

### **Contact details:**

Lambeth Sustainability Department <a href="mailto:sustainability@lambeth.gov.uk">sustainability@lambeth.gov.uk</a>

<sup>&</sup>lt;sup>1</sup> LLAQM Policy and Technical Guidance 2019 (LLAQM.TG(19))

### Contents

Abbrev	iations	4
1.	Air Quality Monitoring	6
1.1	Locations	6
1.2	Comparison of Monitoring Results with AQOs	17
2.	Action to Improve Air Quality	33
2.1	Air Quality Action Plan Progress	33
3.	Planning Update and Other New Sources of Emissions	48
3.1	New or significantly changed industrial or other sources	48
4.	Additional Activities to Improve Air Quality	49
4.1	London Borough of Lambeth Fleet	49
4.2	NRMM Enforcement Project	49
4.3	Air Quality Alerts	49
Append	dix A Details of Monitoring Site Quality QA/QC	50
A.1	Automatic Monitoring Sites	50
A.2	Diffusion Tubes	50
A.3	Adjustments to the Ratified Monitoring Data	52
Append	Ix B Full Monthly Diffusion Tube Results for 2022	60

### Tables

Table A.	Summary of National Air Quality Standards and Objectives	5
Table B.	Details of Automatic Monitoring Sites for 2022	6
Table C.	Details of Non-Automatic Monitoring Sites for 2022	7
Table D.	Annual Mean NO2 Ratified and Bias-adjusted Monitoring Results	17
Table E. Objective, N	NO <sub>2</sub> Automatic Monitoring Results: Comparison with 1-hour Mean lumber of 1-Hour Means > 200 μg m <sup>-3</sup>	26
Table F.	Annual Mean PM <sub>10</sub> Automatic Monitoring Results (µg m <sup>-3</sup> )	28
Table G. Objective, N	$PM_{10}$ Automatic Monitoring Results: Comparison with 24-Hour Mean lumber of $PM_{10}$ 24-Hour Means > 50 µg m <sup>-3</sup>	30
Table I. 202	2 SO <sub>2</sub> Automatic Monitoring Results: Comparison with Objectives	32
Table J.Deli	very of Air Quality Action Plan Measures	33
Table K. 48	Planning requirements met by planning applications in Lambeth in 202	22
Table L.Bias	s Adjustment Factor	51
Table M.	Short-Term to Long-Term Monitoring Data Adjustment	53
Table N.	NO2 Fall off With Distance Calculations	56
Table O.	NO2 Diffusion Tube Results	60

## Figures

Figure 1 The mean nitrogen dioxide concentration from 2016 to 2022 at the LB4, LB5 and LB6 monitoring sites	25
Figure 2 The number of 1-hour means exceeding 200 micrograms per meter cubec	ł
from 2016 to 2022	27
Figure 3 The annual mean PM10 concentrations recorded at the LB4, LB5 and LB6	3
sites from 2016 to 2022	29

## Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
AQO	Air Quality Objective
BEB	Buildings Emission Benchmark
САВ	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
<b>PM</b> <sub>10</sub>	Particulate matter less than 10 micron in diameter
PM <sub>2.5</sub>	Particulate matter less than 2.5 micron in diameter
TEB	Transport Emissions Benchmark
TfL	Transport for London

Pollutant	Standard / Objective (UK)	Averaging Period	Date <sup>(1)</sup>
Nitrogen dioxide (NO <sub>2</sub> )	200 µg m <sup>-3</sup> not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
Nitrogen dioxide (NO <sub>2</sub> )	40 μg m <sup>-3</sup>	Annual mean	31 Dec 2005
Particles (PM <sub>10</sub> )	50 μg m <sup>-3</sup> not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
Particles (PM <sub>10</sub> )	40 μg m <sup>-3</sup>	Annual mean	31 Dec 2004
Particles (PM <sub>2.5</sub> )	20 µg m <sup>-3</sup>	Annual mean	2020
Particles (PM <sub>2.5</sub> )	Target of 15% reduction in concentration at urban background locations	3-year mean	Between 2010 and 2021
Sulphur dioxide (SO <sub>2</sub> )	266 μg m <sup>-3</sup> not to be exceeded more than 35 times a year	15-minute mean	31 Dec 2005
Sulphur dioxide (SO <sub>2</sub> )	350 μg m <sup>-3</sup> not to be exceeded more than 24 times a year	1-hour mean	31 Dec 2004
Sulphur dioxide (SO <sub>2</sub> )	125 μg m <sup>-3</sup> mot to be exceeded more than 3 times a year	24-hour mean	31 Dec 2004

 Table A. Summary of National Air Quality Standards and Objectives

#### Notes:

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

## 1. Air Quality Monitoring

#### 1.1 Locations

## Table B. Details of Automatic Monitoring Sites for 2022

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA? If so, which AQMA?	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Monitoring technique
LB4	Brixton Road	531070	175593	Kerbside	Y	0.5	0.5	2	NO <sub>2</sub> , PM <sub>10</sub>	BAM1020, NO <sub>x</sub> Analyser
LB5	Vauxhall Bondway Interchange	530317	177952	Industrial	Y	5	3	2	NO <sub>2</sub> , PM <sub>10,</sub> SO <sub>2</sub>	BAM1020, NO <sub>x</sub> Analyser, SO <sub>2</sub> Analyser
LB6	Streatham Green	529971	171570	Background	Y	15	6	2	NO <sub>2</sub> , PM <sub>10</sub>	BAM1020, NO <sub>x</sub> Analyser

Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA? If so, which AQMA?	Distance to Relevant Exposure (m)	Distance to Kerb of Nearest Road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Tube co- located with an automatic monitor. (Y/N)
AS1	Archbishop Sumner Primary School – Kennington Road/Reedworth Road	531242	178675	Kerbside	Y	0.5	0.5	2.2	NO2	N
AS2	Archbishop Sumner Primary School – near play area	531345	178627	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
BHLTN1	Crescent Lane - Harris Clapham Sixth Form	530089	174598	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
BHLTN2	105 Kings Avenue	530017	174216	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
BHLTN3	Opposite Phambra Food Store	530284	174044	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
BHLTN4	NTCG Brixton Community Church	530525	174616	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
BHLTN5	Kildoran Road Play Area	530138	174836	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
BHLTN6	Richard Atkins Primary School	530301	173773	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
DT1	Brixton AQ Monitoring Station – co-located	531070	175593	Kerbside	Y	0.5	0.5	2	NO <sub>2</sub>	Y
DT2	Brixton AQ Monitoring Station – co-located	531070	175593	Kerbside	Y	0.5	0.5	2	NO <sub>2</sub>	Y
DT3	Brixton AQ Monitoring Station – co-located	531070	175593	Kerbside	Y	0.5	0.5	2	NO <sub>2</sub>	Y

## Table C. Details of Non-Automatic Monitoring Sites for 2022

DT4	Waterloo Rd / Exton Street	531139	180048	Kerbside	Y	1	0.5	2.2	NO <sub>2</sub>	N
DT5	Waterloo Rd / Holmes Terrace	531214	179907	Kerbside	Y	2	0.5	2.2	NO <sub>2</sub>	N
DT6	98 The Cut	531494	179951	Kerbside	Y	1	0.5	2.2	NO <sub>2</sub>	N
DT7	278-282 Kennington Lane (between St. Oswald's Place and Vauxhall St)	530817	178122	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT8	Archbishop Tenninson School, 55 Kennington Oval	530868	177740	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT9	Alverstone House, Kennington Park Road	531196	177653	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT10	Brixton Road/Prima Road	531250	177464	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT11	13 Clapham Road outside Belgrave Hotel	531093	177419	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
DT12	223 Clapham Road outside Richarsdon Court and Costcutter	530404	176321	Kerbside	Y	0.2	0.5	2.2	NO <sub>2</sub>	Ν
DT13	Clapham Road, close to Grantham Road	530363	176269	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT14	378 Clapham Road (by Savoy Mews)	530105	175956	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT15	Clapham Road, outside Roy Ridley House	530009	175719	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT16	Clapham Common tube station, outside Joe Public Café	529413	175284	Kerbside	Y	1	2	2.2	NO <sub>2</sub>	Ν
DT17	8 Stockwell Park Walk	530916	175784	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N

DT18	Stockwell Road/Bellefields Road	531020	175699	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT19	Brixton Road bus stop Q (outside KFC)	531027	175320	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT20	Effra Road/Kellett Road	531038	175092	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT21	22 Brixton Water Lane	531231	174607	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT22	St. Matthew's Estate, outside 6 Hicken Road	530928	174849	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT23	Brixton Hill/Horsford Road (Corpus Christi RC School)	530781	174682	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT24	Brixton Hill/New Park Road	530150	173680	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT25	Christchurch House, Christchurch Road (South Circular)	530461	173470	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT26	Streatham Hill/Wavertree Road	530452	173105	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT27	Streatham Hill Station/opposite 10 Streatham High Road	530255	172632	Kerbside	Y	0.5	0.5	2.2	NO2	Ν
DT28	Streatham High Road/Leigham Avenue	530217	172353	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT29	Streatham High Road/Becmead Avenue	530130	172013	Kerbside	Y	0.5	0.5	2. 2.	NO <sub>2</sub>	Ν
DT30	Public space outside 316 Streatham High Road (opp Stanthorpe Road)	530015	171489	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N

-			1		1			r	r	
DT31	243A Streatham Hill (bus stop opposite Streatham Station)	530101	171148	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
DT32	Clapham High Street (Clapham Library)	529730	175446	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
DT33	Clapham, Old Town	529217	175648	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
DT34	South Circular - past bus stop	529130	174288	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
DT35	South Circular – Oaklands Estate, outside Hawkesworth House	529263	174190	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT36	South Circular – Poynders Court	529420	173996	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT37	South Circular – Christchurch Road/Roupell Road	530821	173309	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT38	South Circular – Fenstanton Primary	531160	173103	Kerbside	Y	1	1	2.2	NO <sub>2</sub>	Ν
DT39	South Circular – Tulse Hill/Norwood Road	531731	173026	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT40	South Circular – Lords Close	532341	172918	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
DT41	Norwood Road/York Hill	531839	172552	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
DT42	380 Norwood Road (O'Girasol)	531923	172225	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
DT43	West Norwood Bus Station	531936	171795	Kerbside	Y	2	2	2.2	NO <sub>2</sub>	Ν
DT44	223-225 Gipsy Road	533016	171534	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
DT45	Gipsy Hill Station	533328	171264	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
DT46	Herne Hill 1	531989	174329	Kerbside	Y	3	3	2.2	NO <sub>2</sub>	N
DT47	Herne Hill 2	531860	174353	Kerbside	Y	0.3	0.1	2.2	NO <sub>2</sub>	N
DT48	Loughborough Junction 1	531972	175331	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N

DT49	Loughborough Junction 2	531856	175680	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
DT50	Acre Lane	530657	175133	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
DT51	Crown Lane School next to bus stop	531557	171047	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
JP1	Jessop Primary School 1- Milkwood Road j/w Heron Rd	532008	175397	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
JP2	Jessop Primary School 2 – opposite 57 Heron Road	532086	175297	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
JP3	Jessop Primary School 3 – by main entrance of the school	532030	175130	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
LI	Loughborough Primary School – inside playground by metal gates	531672	176207	Urban Centre	Y	0.5	5	2.2	NO <sub>2</sub>	Ν
LO	Loughborough Primary School – on Loughborough Road near the playground	531651	176150	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
LTN1	At the junction with Acre Lane and Concanon Road	530622	175112	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
LTN2	At the junction with Bedford Road and Clapham Park Road	530068	175106	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
LTN3	At the opposite end of Bedford Road outside 7oZ Coffee	530043	175668	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
LTN4	At the junction with Edithna Street and Landor Road	530465	175865	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
LTN5	Where Ferndale Road bends to the side by Pulross Road	530917	175578	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν

LTN7	Hillside Road - Palace Road	531147	172879	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
LTN8	Downtown Avenue – Faygate Road	530763	172840	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
LTN9	Faygate Road - Hailsham Avenue	530728	172565	Kerbside	Y	0.3	0.3	2.2	NO <sub>2</sub>	Ν
LTN10	Leighame Vale – Hitherfield Road	531110	172389	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
LTN11	Leigham Court Road – Culverhouse Gardens	530650	172226	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
LTN12	Leigham Court Road/Valley Road/Leigham Vale.	530940	172132	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
LTN13	Top of wellfield road	530288	171810	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
LTN14	289 Leigham Court Road.	531181	171612	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
LTN15	203/205 Valley Road.	530713	171417	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
LTN16	Streatham Wells LTN baseline monitoring. Corner of Hopton Road	530498	171054	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
Point 122	Archbishop Sumner Church of England Primary School – Outside school allotment	531299	178649	Kerbside	Y	0.3	0.3	2.2	NO2	Ν
RS1	Rosendale Primary School – Turney Road opposite school gate on a sign	532317	173611	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
SCOOT	Brixton Road – Opposite St Johns Cresent	531137	175822	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
SH1	Sunny Hill Primary School – school metal fence	530775	171653	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν

SP1	Sudbourne Primary School – Hayter Road by school entrance	530628	177333	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
SP2	Sudbourne Primary School – Sudbourne Road near the playground	530738	174966	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
SR1	In front of Pret A Manger	531267	179825	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
SR2	Opposite the Wellington	531189	179969	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
SR3	Tenison Way bus Stop	531006	180079	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
SR4	Next to bridge by Azzurro Italian bar Sutton Walk	530951	180064	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
SR5	At corner, opposite Gail's	530835	179873	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
SR6	London Eye bus stop	530768	179896	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
SR7	Silver lamppost on grass, behind sign "Welcome to Jubille Garden"	530655	180011	Urban Centre	Y	0.5	115	4	NO <sub>2</sub>	Ν
SR8	By bridge on Belvedere Road	530823	180123	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
SR9	Entrance of Southbank Centre	530845	180251	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
SR10	By The Green Room	530965	180267	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
SR11	Opposite The Understudy	531020	180433	Urban Centre	Y	0.3	70	2.2	NO <sub>2</sub>	N
SR12	Upper Ground and Cornwall Road	531118	180337	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
SR13	Upper Ground and Duchy Street	531287	180420	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
SR14	On fence by The Wharf	531222	180500	Urban Centre	Y	0.3	90	2.2	NO <sub>2</sub>	N

SR15	Coin street and Stamford Street	531259	180282	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
SR16	Cornwall Road by "Meantime in London B&B"	531205	180162	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
SR17	Opposite Property Partners	531283	179951	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
SR18	Opposite Culture Grub	531418	179913	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
SR19	At corner, opposite KCL Maxwell Building	531056	180134	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
SR20	On road sign on top of the stairs on bridge	530935	180259	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
SR21	On bridge, on road sign right before the stairs	530902	180319	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
SS1	St Stephen's Church of England Primary School – near to the entrance to school on Dorset Road	530501	177330	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
ST1	Guy's and St Thomas' Hospital inside nursery play area	530804	179582	Kerbside	Y	2	2	2.2	NO <sub>2</sub>	Ν
ST2	Guy's and St Thomas' Hospital outside nursery play area	530780	179582	Kerbside	Y	0.3	0.3	2.2	NO <sub>2</sub>	Ν
STA1	St Anne's Catholic Primary School – sign post near entrance to school on Durham Street	530703	177997	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
STA2	St Anne's Catholic Primary School – on	530621	177957	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N

	school fence on Harleyford Road by the playground									
VP1	Vauxhall Primary School – on Tyers Terrace	530810	178254	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
VP2	Vauxhall Primary School – Vauxhall Street by school entrance	530800	178341	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
VX1	Opposite SIS building	530371	178067	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	Ν
VX2	Goding street, New Spring Gardens Walk	530483	178200	Kerbside	Y	0.5	2	2.2	NO <sub>2</sub>	Ν
VX3	Glasshouse walk and Vauxhall walk	530571	178300	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
VX4	In front of Tintagel House	530408	178326	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
VX5	Next to Embarkment bus stop	530440	178522	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
VX6	Vauxhall walk – Jonathan Street	530619	178466	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
VX8	Opposite the Jolly Gardeners	530753	178616	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
VX9	Opposite the Fire Brigades Headquarter	530493	178745	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
VX10	Opposite The Workshop	530565	178760	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N
VX11	Old paradise street – opposite St Gabriel's House	530729	178897	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
VX12	Old paradise street opposite 1-28 superton walk	530858	178878	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν
VX13	Opposite Lambeth Palace (Stop SD)	530607	178961	Kerbside	Y	0.3	0.5	2.2	NO <sub>2</sub>	N

WP1	Wyvil Primary School – on signpost	530281	177513	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	N
WP2	Wyvil Primary School – school metal fence	530246	177510	Kerbside	Y	0.5	0.5	2.2	NO <sub>2</sub>	Ν

#### 1.2 Comparison of Monitoring Results with AQOs

The results presented are after adjustments for "annualisation" and for distance to a location of relevant public exposure (if required), the details of which are described in Appendix A.

Site ID	Site type	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	2016	2017	2018	2019	2020	2021	2022
LB4 (Brixton Road)	Automatic	N/A	98	<u>92</u>	<u>75</u>	<u>74.2</u>	<u>60.1</u>	<u>56.2</u>	<u>57.6</u>	<u>63.6</u>
LB5 (Vauxhall Bondway Interchange)	Automatic	N/A	99	<u>65</u>	<u>61</u>	51.1	45.6	33.7	32.5	28.9
LB6 (Streatham Green)	Automatic	N/A	99	33	28.8	33.8	31.8	25.8	27.4	23.3
AS1	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	20.3	21.5	25.5
AS2	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	22.9	22.7	22.3
BHLTN1	Diffusion	72.7	65.4	N/A	N/A	N/A	N/A	N/A	N/A	26.5
BHLTN2	Diffusion	90.9	82.7	N/A	N/A	N/A	N/A	N/A	N/A	28.0
BHLTN3	Diffusion	81.8	75.0	N/A	N/A	N/A	N/A	N/A	N/A	24.6
BHLTN4	Diffusion	63.6	57.7	N/A	N/A	N/A	N/A	N/A	N/A	19.5
BHLTN5	Diffusion	72.7	69.2	N/A	N/A	N/A	N/A	N/A	N/A	19.1

 Table D.
 Annual Mean NO2 Ratified and Bias-adjusted Monitoring Results

Site ID	Site type	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	2016	2017	2018	2019	2020	2021	2022
BHLTN6	Diffusion	81.8	76.9	N/A	N/A	N/A	N/A	N/A	N/A	20.3
DT1, DT2, DT3	Diffusion	65.4	65.4	N/A	N/A	<u>76.0</u>	<u>75.4</u>	56.9	0.0	<u>60.4</u>
DT4	Diffusion	80.8	80.8	N/A	N/A	39.1	35.5	25.9	19.6	28.5
DT5	Diffusion	75.0	75.0	N/A	N/A	57.9	49.6	34.1	43.3	38.3
DT6	Diffusion	92.3	92.3	N/A	N/A	43.2	38.0	25.1	23.1	31.4
DT7	Diffusion	92.3	92.3	N/A	N/A	48.8	41.6	29.2	30.9	28.1
DT8	Diffusion	100.0	100.0	N/A	N/A	49.9	46.7	31.4	35.4	30.1
DT9	Diffusion	84.6	84.6	N/A	N/A	57.1	50.7	35.1	38.1	43.9
DT10	Diffusion	100.0	100.0	N/A	N/A	36.8	33.4	24.5	21.2	21.8
DT11	Diffusion	100.0	100.0	N/A	N/A	48.6	45.7	31.2	30.9	30.8
DT12	Diffusion	92.3	92.3	N/A	N/A	50.6	47.8	36.0	39.1	33.2
DT13	Diffusion	84.6	84.6	N/A	N/A	50.9	47.5	36.4	37.0	35.6
DT14	Diffusion	92.3	92.3	N/A	N/A	50.4	49.3	37.4	38.7	33.3
DT15	Diffusion	84.6	84.6	N/A	N/A	49.8	51.1	39.5	31.1	32.7
DT16	Diffusion	100.0	100.0	N/A	N/A	43.0	37.3	31.3	33.6	31.6
DT17	Diffusion	84.6	84.6	N/A	N/A	44.6	44.8	35.2	39.7	47.3
DT18	Diffusion	50.0	50.0	N/A	N/A	54.1	48.2	31.1	53.8	33.4
DT19	Diffusion	100.0	100.0	N/A	N/A	<u>70.6</u>	<u>63.1</u>	38.8	38.1	41.9
DT20	Diffusion	73.1	73.1	N/A	N/A	38.7	35.7	30.6	34.9	37.3
DT21	Diffusion	75.0	75.0	N/A	N/A	31.6	34.9	22.3	24.8	24.4

Site ID	Site type	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	2016	2017	2018	2019	2020	2021	2022
DT22	Diffusion	82.7	82.7	N/A	N/A	28.4	28.5	21.3	22.4	23.0
DT23	Diffusion	57.7	57.7	N/A	N/A	37.8	29.4	24.7	21.0	24.0
DT24	Diffusion	100.0	100.0	N/A	N/A	36.3	33.4	24.6	21.6	25.0
DT25	Diffusion	92.3	92.3	N/A	N/A	57.0	50.1	35.8	36.3	38.0
DT26	Diffusion	84.6	84.6	N/A	N/A	35.0	34.0	27.6	40.2	29.1
DT27	Diffusion	100.0	100.0	N/A	N/A	<u>63.3</u>	<u>62.9</u>	53.7	59.6	<u>63.0</u>
DT28	Diffusion	92.3	92.3	N/A	N/A	50.3	52.7	42.6	38.2	44.6
DT29	Diffusion	84.6	84.6	N/A	N/A	<u>62.9</u>	<u>62.7</u>	49.1	54.7	47.6
DT30	Diffusion	100.0	100.0	N/A	N/A	54.2	52.7	35.9	43.9	43.4
DT31	Diffusion	92.3	92.3	N/A	N/A	<u>69.7</u>	<u>62.7</u>	49.9	58.2	54.2
DT32	Diffusion	84.6	84.6	N/A	N/A	35.8	36.8	23.8	22.7	23.2
DT33	Diffusion	69.2	69.2	N/A	N/A	36.0	32.2	23.8	23.8	24.0
DT34	Diffusion	100.0	100.0	N/A	N/A	55.6	51.2	36.4	41.6	34.1
DT35	Diffusion	100.0	100.0	N/A	N/A	46.3	40.7	29.6	34.1	31.7
DT36	Diffusion	92.3	92.3	N/A	N/A	52.6	48.8	41.2	37.7	34.3
DT37	Diffusion	100.0	100.0	N/A	N/A	45.9	39.4	31.8	30.3	26.3
DT38	Diffusion	75.0	75.0	N/A	N/A	53.7	47.9	35.2	37.0	35.1
DT39	Diffusion	82.7	82.7	N/A	N/A	50.3	44.9	34.9	32.0	41.5
DT40	Diffusion	100.0	100.0	N/A	N/A	51.5	46.9	36.3	34.6	32.4
DT41	Diffusion	75.0	75.0	N/A	N/A	49.4	41.9	32.0	36.5	47.5
DT42	Diffusion	100.0	100.0	N/A	N/A	52.6	49.9	35.6	35.8	32.2
DT43	Diffusion	57.7	57.7	N/A	N/A	39.7	38.1	29.9	29.7	31.5

Site ID	Site type	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	2016	2017	2018	2019	2020	2021	2022
DT44	Diffusion	57.7	57.7	N/A	N/A	35.3	35.4	25.0	30.0	28.7
DT45	Diffusion	82.7	82.7	N/A	N/A	34.2	28.0	27.2	23.0	20.5
DT46	Diffusion	75.0	75.0	N/A	N/A	42.8	36.0	29.9	22.5	24.7
DT47	Diffusion	67.3	67.3	N/A	N/A	46.1	47.2	30.4	34.4	29.5
DT48	Diffusion	32.7	32.7	N/A	N/A	46.8	48.7	35.3	32.9	43.4
DT49	Diffusion	76.9	76.9	N/A	N/A	39.6	29.0	26.4	21.3	22.0
DT50 1, DT50 2, DT50 3	Diffusion	67.3	67.3	N/A	N/A	N/A	45.7	42.6	32.2	42.0
DT51	Diffusion	92.3	92.3	N/A	N/A	N/A	38.9	28.2	28.0	27.6
JP1	Diffusion	82.7	82.7	N/A	N/A	N/A	N/A	17.4	19.0	24.2
JP2	Diffusion	76.9	76.9	N/A	N/A	N/A	N/A	22.8	15.0	15.2
JP3	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	NA	13.4	18.9
LI	Diffusion	40.4	40.4	N/A	N/A	N/A	N/A	20.7	43.7	22.0
LO	Diffusion	82.7	82.7	N/A	N/A	N/A	N/A	20.4	27.4	21.4
LTN1	Diffusion	84.6	84.6	N/A	N/A	N/A	N/A	26.6	25.5	26.0
LTN2	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	34.7	34.8	31.4
LTN3	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	30.4	34.9	28.8
LTN4	Diffusion	92.3	92.3	N/A	N/A	N/A	N/A	24.6	23.6	21.7
LTN5	Diffusion	82.7	82.7	N/A	N/A	N/A	N/A	22.4	24.3	24.2
LTN7	Diffusion	90.4	90.4	N/A	N/A	N/A	N/A	N/A	N/A	20.8
LTN8	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	28.7	21.0	21.6

Site ID	Site type	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	2016	2017	2018	2019	2020	2021	2022
LTN9	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	N/A	N/A	16.8
LTN10	Diffusion	76.9	76.9	N/A	N/A	N/A	N/A	34.0	19.1	19.5
LTN11	Diffusion	67.3	67.3	N/A	N/A	N/A	N/A	42.4	44.5	34.7
LTN12	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	N/A	N/A	25.5
LTN13	Diffusion	84.6	84.6	N/A	N/A	N/A	N/A	N/A	27.7	27.7
LTN14	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	N/A	15.9	25.5
LTN15	Diffusion	92.3	92.3	N/A	N/A	N/A	N/A	N/A	20.6	23.8
LTN16	Diffusion	84.6	84.6	N/A	N/A	N/A	N/A	N/A	24.6	33.2
Point 122	Diffusion	32.7	32.7	N/A	N/A	N/A	N/A	N/A	N/A	24.0
RS1	Diffusion	73.1	73.1	N/A	N/A	N/A	N/A	19.5	19.1	16.6
SCOOT	Diffusion	90.4	90.4	N/A	N/A	N/A	N/A	35.0	34.4	33.8
SH1	Diffusion	80.8	80.8	N/A	N/A	N/A	N/A	22.5	16.2	17.1
SP1	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	21.3	16.3	19.7
SP2	Diffusion	84.6	84.6	N/A	N/A	N/A	N/A	19.0	23.2	22.7
SR1	Diffusion	90.4	90.4	N/A	N/A	N/A	N/A	28.5	31.1	30.1
SR2	Diffusion	92.3	92.3	N/A	N/A	N/A	N/A	26.6	32.8	27.9
SR3	Diffusion	67.3	67.3	N/A	N/A	N/A	N/A	38.4	39.2	41.6
SR4	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	35.5	41.1	43.1
SR5	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	31.7	37.5	29.7
SR6	Diffusion	42.3	42.3	N/A	N/A	N/A	N/A	30.4	33.9	33.8
SR7	Diffusion	50.0	50.0	N/A	N/A	N/A	N/A	23.9	26.9	22.5

Site ID	Site type	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	2016	2017	2018	2019	2020	2021	2022
SR8	Diffusion	32.7	32.7	N/A	N/A	N/A	N/A	24.9	19.5	27.1
SR9	Diffusion	55.8	55.8	N/A	N/A	N/A	N/A	NA	20.4	27.3
SR10	Diffusion	50.0	50.0	N/A	N/A	N/A	N/A	28.7	22.1	26.3
SR11	Diffusion	76.9	76.9	N/A	N/A	N/A	N/A	23.5	17.9	25.0
SR12	Diffusion	67.3	67.3	N/A	N/A	N/A	N/A	24.3	25.8	30.9
SR13	Diffusion	82.7	82.7	N/A	N/A	N/A	N/A	23.0	19.1	24.4
SR14	Diffusion	25.0	25.0	N/A	N/A	N/A	N/A	20.4	19.7	21.2
SR15	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	28.9	25.0	30.2
SR16	Diffusion	76.9	76.9	N/A	N/A	N/A	N/A	23.6	19.1	24.9
SR17	Diffusion	67.3	67.3	N/A	N/A	N/A	N/A	24.8	18.9	24.3
SR18	Diffusion	92.3	92.3	N/A	N/A	N/A	N/A	26.4	27.0	23.1
SR19	Diffusion	48.1	48.1	N/A	N/A	N/A	N/A	31.6	35.5	34.7
SR20	Diffusion	80.8	80.8	N/A	N/A	N/A	N/A	44.1	36.3	43.3
SR21	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	29.3	38.1	33.1
SS1	Diffusion	73.1	73.1	N/A	N/A	N/A	N/A	23.0	16.3	21.4
ST1	Diffusion	80.8	80.8	N/A	N/A	N/A	N/A	N/A	N/A	38.1
ST2	Diffusion	59.6	59.6	N/A	N/A	N/A	N/A	N/A	N/A	26.9
STA1	Diffusion	84.6	84.6	N/A	N/A	N/A	N/A	32.1	32.8	34.0
STA2	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	35.2	36.6	35.3
VP1	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	21.1	17.5	16.5
VP2	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	21.7	16.5	21.7

Site ID	Site type	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	2016	2017	2018	2019	2020	2021	2022
VX1 1, VX1 2, VX1 3	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	N/A	29.8	26.4
VX2	Diffusion	90.4	90.4	N/A	N/A	N/A	N/A	N/A	23.4	21.8
VX3	Diffusion	92.3	92.3	N/A	N/A	N/A	N/A	21.3	16.7	20.7
VX4	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	32.3	27.7	29.5
VX5	Diffusion	90.4	90.4	N/A	N/A	N/A	N/A	30.3	26.2	29.6
VX6	Diffusion	92.3	92.3	N/A	N/A	N/A	N/A	27.1	24.3	26.1
VX8	Diffusion	75.0	75.0	N/A	N/A	N/A	N/A	26.1	25.2	23.5
VX9	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	34.9	37.5	31.0
VX10	Diffusion	92.3	92.3	N/A	N/A	N/A	N/A	25.5	20.9	23.9
VX11	Diffusion	67.3	67.3	N/A	N/A	N/A	N/A	23.8	23.4	22.5
VX12	Diffusion	67.3	67.3	N/A	N/A	N/A	N/A	20.2	20.1	18.0
VX13	Diffusion	100.0	100.0	N/A	N/A	N/A	N/A	31.3	33.0	32.3
WP1	Diffusion	55.8	55.8	N/A	N/A	N/A	N/A	25.2	20.6	27.9
WP2	Diffusion	57.7	57.7	N/A	N/A	N/A	N/A	24.5	30.0	24.1

#### Notes:

The annual mean concentrations are presented as  $\mu$ g m<sup>-3</sup>.

Exceedances of the NO<sub>2</sub> annual mean AQO of 40  $\mu$ g m<sup>-3</sup> are shown in **bold**.

NO<sub>2</sub> annual means in excess of 60 µg m<sup>-3</sup>, indicating a potential exceedance of the NO<sub>2</sub> hourly mean AQS objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias.

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

Results have been distance corrected where applicable.

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

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

Since 2016, NO<sub>2</sub> levels have decreased by 31% at Brixton Road LB4, by 56% at Vauxhall LB5, and by 29% at Streatham Green LB6. However, between 2021 and 2022, NO<sub>2</sub> levels increased at Brixton Road LB4 (9%). Average NO<sub>2</sub> concentrations at Vauxhall and Streatham Green continued to decrease.

The LB4 kerbside site at Brixton Road has exceeded the Air Quality Objective in 2022. It has exceeded the objective every year and continues to register high concentrations of NO<sub>2</sub>. NO<sub>2</sub> levels are of concern at the site, as many people live and work in the area, and Brixton Road is used every day by pedestrians and cyclists.

The LB5 site at Vauxhall did not exceed the Air Quality Objective. This is the third consecutive year that the site has not exceeded the objective.

The LB6 background site at Streatham Green did not exceed the Air Quality Objective.



Figure 1 The mean nitrogen dioxide concentration from 2016 to 2022 at the LB4, LB5 and LB6 monitoring sites

#### Passive monitoring

This report presents results for 125 diffusion tube locations across Lambeth. The average concentration recorded across the entire diffusion tube survey in 2022 was 29.2 µg m<sup>-3</sup> which showed very little change from 29.1 µg m<sup>-3</sup> recorded in 2021.

Site ID	Valid data capture for monitoring period %(ª)	Valid data capture 2022 %( <sup>b</sup> )	2016	2017	2018	2019	2020	2021	2022
LB4 (Brixton Road)	N/A	98	539	75	83 (247.87)	11 <b>(196)</b>	1	4	9
LB5 (Vauxhall Bondway Interchange)	N/A	99	1	0	0	0	0	0	0
LB6 (Streatham Green)	N/A	99	0 (0)	0	0	0	0	0	0

## Table E. NO<sub>2</sub> Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 μg m<sup>-3</sup>

#### Notes

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

Exceedance of the NO<sub>2</sub> short term AQO of 200 µg m<sup>-3</sup> over the permitted 18 hours per year are shown in **bold**.

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

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

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



Figure 2 The number of 1-hour means exceeding 200 micrograms per meter cubed from 2016 to 2022

The LB4 site on Brixton Road registered nine exceedances of the 1-hour mean objective this year, an increase on the four exceedances in 2021. This is within the permitted 18 hours per year.

Both LB5 Vauxhall Bondway Interchange and LB6 Streatham Green continued to meet the objective

Site ID	Valid data capture for monitoring period %(ª)	Valid data capture 2022 %(ʰ)	2016	2017	2018	2019	2020	2021	2022
LB4 (Brixton Road)	86	86	40	35	30 (29)	25	24	25	21
LB5 (Vauxhall Bondway Interchange)	95	95	39 (38)	37	34	38	46	46	37
LB6 (Streatham Green)	99	99	20 (22)	28 (26)	20	19	18	18	17

#### Table F. Annual Mean PM<sub>10</sub> Automatic Monitoring Results (µg m<sup>-3</sup>)

#### Notes

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

Exceedances of the PM<sub>10</sub> annual mean AQO of 40  $\mu$ g m<sup>-3</sup> 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%).

Vauxhall LB5 has recorded an annual mean  $PM_{10}$  concentration of 37 µg m<sup>-3</sup> in 2022. It is understood that the spikes recorded at the station are due to contamination from a tube vent which belongs to Transport for London, which is situated immediately next to the air quality station. This vent was previously sealed and has been reopened. The pollution from the vent is contaminating the

readings, and we therefore believe those not to be representative of PM<sub>10</sub> concentrations in the Vauxhall area. The Vauxhall monitor will be moved in 2023 to a nearby location.



Figure 3 The annual mean PM10 concentrations recorded at the LB4, LB5 and LB6 sites from 2016 to 2022

Site ID	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	2016	2017	2018	2019	2020	2021	2022
LB4 (Brixton Road)	86	86	57	27	13 <b>(46)</b>	10 <b>(38.1</b> )	11	10	23
LB5 (Vauxhall Bondway Interchange)	95	95	43 (62.7)	64	45	74	142	148	128
LB6 (Streatham Green)	99	99	2 (33.8)	11 (10)	3	5	4	1	7

# Table G. PM<sub>10</sub> Automatic Monitoring Results: Comparison with 24-Hour Mean Objective, Number of PM<sub>10</sub> 24-Hour Means > 50 μg m<sup>-3</sup>

#### Notes

Exceedances of the PM<sub>10</sub> 24-hour mean objective (50 µg m<sup>-3</sup> 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%).

At Vauxhall LB5 the objective was exceeded. In 2022, 128 days recorded a daily mean above 50 µg m<sup>-3</sup>, which is considerably above the permitted 35 days/year. It is believed the exceedances are due to contamination from a tube vent which belongs to Transport for London, which is situated immediately next to the air quality station's sensors. This vent was previously sealed and has been reopened. The pollution from the vent is contaminating the readings, and we therefore believe those not to be representative of PM<sub>10</sub> concentrations in the Vauxhall area. The Vauxhall monitor was due to be moved in 2022 to a nearby location, however issues locating a suitable power source have delayed the move. The monitor will be moved in 2023.

#### Table I. 2022 SO<sub>2</sub> Automatic Monitoring Results: Comparison with Objectives

Site ID	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	Number of 15- minute means > 266 μg m <sup>-3</sup>	Number of 1-hour mean > 350 μg m <sup>-3</sup>	Number 24-hour mean > 125 µg m <sup>-3</sup>
LB5 (Vauxhall Bondway Interchange)	N/A	100%	0	0	0

#### Notes

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

Exceedances of the SO<sub>2</sub> objectives are shown in **bold** (15-min mean = 35 allowed a year, 1-hour mean = 24 allowed a year, 24-hour mean = 3 allowed a year).

If the period of valid data is less than 85%, the relevant percentiles are provided in brackets.

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

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

There were no exceedances of SO2 concentrations which is in line with previous years' results

## 2. Action to Improve Air Quality

#### 2.1 Air Quality Action Plan Progress

Table J provides a brief summary of Lambeth progress against the Air Quality Action Plan, showing progress made this year.

Action n.	LLAQM Action Matrix Theme	Action	Deadline	Progress
1.1		Include a policy on air quality as part of the Local Plan review	Complete	As explained in our <u>2021 ASR</u> , this action is now complete
1.2	Emissions from	Work with neighbourhood planning forums on area- specific air quality policies in emerging neighbourhood plans Explore the potential for	Throughout Plan Throughout	<ul> <li>We are committed to support and work together with any local community that wishes to write a Neighbourhood Plan, with policies that improve air quality for local residents.</li> <li>The council has one made neighbourhood plan – the South Bank and Waterloo Neighbourhood Plan. This includes policies on air quality stating that development proposals must show how they contribute to the improvement of air quality in South Bank and Waterloo, and encourages development which would contribute to an improvement in air quality along identified pedestrian routes known as 'greenways'.</li> <li>In 2022, Lambeth funding from Neighbourhood CIL and S106 funding was</li> </ul>
	Buildings (actions 1- 9)	allocation of funds from s106 planning obligations aimed at offsetting air quality impacts from a development. Explore potential to add an Air Quality Fund should Lambeth CIL Charging Schedule be reviewed	Plan	<ul> <li>Lambeth Community Solar – Norwood School project - £15,000 worth of S106 funding allocated in June 2020 to part finance the installation costs of a solar photovoltaic (PV) system at Norwood School. The 83kW solar PV will save an average of 18 tonnes CO2e a year, which contributes towards Lambeth's ambition to be carbon neutral by 2030. None of this funding allocation has been spent yet.</li> <li>CLIP Investment Programme Air Quality - £45,000 worth of Neighbourhood CIL was allocated in Oct 2017 to run air quality projects to identify and implement localised solutions under Theme 5 of the AQAP in order to reduce residents' exposure to poor air quality. £34,982.83 has been spent to date. Last expenditure occurred in Apr 2020.</li> </ul>

Table J. Delivery of Air Quality Action Plan Measures

1.4	Identify and manage the impact of growth and regeneration on waste management and industrial processes regulated under the Environmental Permitting Regulations	Throughout Plan	<ul> <li>Our <u>Air Quality Guidance Note</u> requires Air Quality Assessments submitted with planning applications to consider the impact of industrial processes regulated under the Environmental Permitting Regulations (EPR). Our <u>map of Part B industrial processes</u> regulated under LAPPC, alongside the <u>LAPPC public register</u>, should inform developers.</li> </ul>
2.1	Educate and raise awareness amongst developers of Non-Road Mobile Machinery (NRMM) and enforce NRMM policies	Complete	As explained in our <u>2019 ASR</u> , this action is now complete
2.2	Develop internal processes to continue to educate and raise awareness amongst developers of NRMM; and enforce NRMM policies after funding expires in March 2019	Throughout Plan	<ul> <li>We are continuing to work with Merton and other boroughs as part of the pan-London NRMM project.</li> <li>Participation in the NRMM project is secured until March 2024 to continue to educate and raise awareness amongst developers of NRMM and enforce NRMM policies.</li> </ul>
2.3	Continue to research pollution mitigation measures as part of Londor Low Emission Construction Partnership (LLECP); promote LLECP scheme, findings and recommendations among developers operating in the borough	Complete	As explained in our <u>2019 ASR,</u> this action is now complete
2.4	Continue work and legacy of LLECP after funding expires in March 2019	March 2022	<ul> <li>As explained in previous ASRs, funding from the MAQF is secured until March 2024 to continue to educate and raise awareness amongst developers of NRMM, and enforce NRMM policies.</li> </ul>
2.5	Carry out an investigation into whether a Construction Impact Monitoring Officer(s) should be recruited to		As explained in our <u>2019 ASR,</u> this action is now complete

	mo	onitor and enforce against		
3	CF qu	HP and biomass air ality policies	Throughout Plan	<ul> <li>Lambeth Local Plan Policy EN3 encourages the development of decentralised energy systems. These will include CHP within the context of London Plan Policy SI3. The supporting text to this policy acknowledges that the carbon savings from gas engine CHP are now declining and notes that existing networks will need to establish decarbonisation plans. Low-emission CHP systems to support areawide heat networks continue to be considered on a case-by-case basis. These policies are followed when planning applications are reviewed.</li> <li>An external consultant (replacing in-house advice from June 2022) is consulted on air quality aspects of major planning applications, applications affecting sensitive receptors such as schools and applications for sites in Air Quality Focus Areas. This includes a review of emissions from proposed energy centres. Relevant London-wide air quality standards are secured by planning condition."</li> </ul>
4	Im Air	plementing London Plan r Quality Neutral Policy	Throughout Plan	<ul> <li>Lambeth Local Plan paragraph 9.2 states that Lambeth will apply London Plan Policy SI1 Improving air quality to all development proposals in the borough, along with associated Mayoral guidance on Air Quality Neutral and Air Quality Positive standards and on ways to reduce construction and demolition impacts. Local Plan Policy EN4 secures compliance with SI1 (the air quality neutral policy). The Local Plan also notes at 9.3 that Opportunity Areas in the borough (Nine Elms Vauxhall and Waterloo) should adopt an air quality positive approach that actively reduces air pollution in accordance with London Plan Policy SI1.</li> <li>Accordingly, Lambeth implements London Plan SI1 for all development proposals in the borough."</li> </ul>
isv5	En ap loc infi an infi	nsuring adequate, ppropriate, and well- cated green space and frastructure is included nd protected developments	Throughout Plan	<ul> <li>We are undertaking a review of the air quality guidance note which will strengthen the advice for developers to include greening as part of developments for biodiversity, air quality and wellbeing.</li> </ul>
6	En	nsuring emissions from Instruction are minimised	Throughout Plan	<ul> <li>We are continuing to work with LB Merton on the pan-London NRMM project to increase compliance with NRMM engine emissions standards.</li> </ul>

				<ul> <li>Construction sites determined to be high risk for dust impacts, or medium risk and close to a sensitive receptor will be required to monitor PM<sub>10</sub> on site and stop activities when exceedances of a trigger level occur.</li> <li>Our <u>Air Quality Guidance Note</u> includes information regarding minimising emissions during construction and is under review.</li> <li>Lambeth Planning Enforcements investigate reports of poor air quality suspected to be due to construction.</li> <li>In 2022 the council submitted an application for grant funding to run a trial Construction Emissions Response System using air quality monitors to inform enforcing against air pollutant emissions on construction sites.</li> </ul>
7	Ensi Con fully and	suring that Smoke ntrol Zones are propriately identified and promoted l enforced	March 2021	<ul> <li>In October 2020 we successfully applied to the DEFRA Air Quality Grant Scheme 2020/21 and have been awarded £31.5k. The initial phase of the project is begun in late 2021, with NO2 and PM data being collected from walking routes in Streatham and Clapham. The data was used in 2022 to create a report of the findings and help shape a borough-wide awareness raising campaign.</li> <li>Our online resources continue to remain available on our <u>dedicated</u> webpage of the air quality website. Woodburning regulations are changing, and more power is given to local authorities to tackle this source of pollution. We update our online resources with new relevant information on a regular basis.</li> <li>We have joined woodburning working group led by the GLA, with the aim of coordinating our actions to tackle woodburning with other London-boroughs and remain updated on relevant legislation.</li> <li>Our residents can report a breach of a Smoke Control Order by completing an <u>online form.</u></li> </ul>
8.1	Lam full u unde to re boile	nbeth Housing to make use of funding available ler RE:NEW scheme and eplace at least 250 lers each year	Throughout Plan	<ul> <li>We are working with other London boroughs as part of the West London Coalition for the Green Homes Grant Local Authority Delivery scheme, led by LB Ealing. The coalition was awarded grant funding for retrofit of homes likely to be living in fuel poverty and has been delivering energy efficiency improvement works in homes across the borough throughout 2021. Lambeth Council also provided £100,000 top-up funding for additional measures to further benefit households. The scheme primarily focused on fabric upgrades such as insulation, plus 8 highly inefficient gas boilers were replaced.</li> </ul>

8.2		Promoting RE:NEW scheme to individual households, social and private landlords to increase uptake of the scheme in the borough	Throughout Plan	<ul> <li>The RE:NEW scheme has been withdrawn and Lambeth is no longer participating, however we are promoting other schemes that achieve similar aims.</li> <li>Sustainability Officers held a series of workshops for residents to advise how to reduce energy and save money, including on: 4 November 2019, 25 February 2020 and 12 March 2020.</li> <li>Sustainability Officers redesigned and/or produced new guides for residents, to raise awareness of air pollution and minimise energy consumption at home.</li> <li>Sustainable Warmth was promoted in 2022 via direct mail outs to households who are eligible for the scheme. We also promoted the opportunity via advice centres in Lambeth, third sector forums and internal networks and through digital communications channels.</li> </ul>
8.3		Explore opportunities for Lambeth to make full use of the RE:FIT information support scheme to retrofit all remaining public buildings including schools, libraries and leisure centres	Throughout Plan	<ul> <li>The council is investing £1.4m to retrofit 23 schools, a selection of corporate and community buildings, and Brockwell Hall, funded through a combination of Public Sector Decarbonisation Scheme grant and council capital investment.</li> <li>The council has secured additional 500k grant funding ad will be matching 250k to retrofit Upper Norwood Library, and 14 Bayliss Road.</li> <li>In 2022 the council submitted funding applications to retrofit the 18 buildings with the largest energy consumption in the council's portfolio, including 3 leisure centres.</li> </ul>
9		Review and enforce emissions management control techniques at facilities the Council regulates under the Environmental Regulations	Throughout Plan	<ul> <li>In 2022, part B permit holders in Lambeth decreased from 58, to 55 with no new permits being issued. Evidence was submitted on time to Defra.</li> <li>Lambeth has no Part A installations</li> </ul>
10	Public Health and	Director of Public Health is fully briefed on the scale of the problem, what is being done and what is needed	Throughout Plan	• The climate change and Sustainability team continues to have a strong relationship with the public health team and have worked closely on the development of Lambeth's new Air Quality Action Plan.
11	Awareness Raising (Actions 10-23)	Public Health teams support engagement with local stakeholders (businesses, schools, community groups and	Throughout Plan	In 2022 the resource pressure of the Covid-19 pandemic eased and colleagues from Public Health supported with engagement on Air Quality as well as the development of the council's new Air Quality Action Plan.

	healthcare providers) and are asked for their support	
12.1	JSNA includes air quality as Throughout a key theme and has up to Plan date information on air quality impacts	<ul> <li>Public Health is keen to work with colleagues across the council to include measurable key indicators in the air quality action plan, with a view to embedding evaluation and developing remedial actions to improve outcomes.</li> </ul>
12.2	Communications campaign Throughout highlighting health impacts Plan of poor air quality	<ul> <li>We updated our <u>air quality webpage</u> with new content on Lambeth's new Air Quality Vision and how we will be working towards WHO interim targets on air quality. Our health resources for older residents have been re-designed in 2020 to be more appealing and are available <u>here</u></li> <li>In 2022 Lambeth has rolled out a network of lightweight air quality monitors across the whole borough that gives residents access to real time air quality information.</li> </ul>
13	Strengthening co-ordination Throughout with Public Health by Plan ensuring that at least one consultant grade public health specialist within the borough has air quality responsibilities outlined in their job profile	<ul> <li>During 2022 as the pressure of the Covid-19 pandemic eased regular meetings between Climate Change and Sustainability were resumed, allowing a forum for both teams to coordinate on work to improve air quality and to minimise exposure to air pollution for sensitive receptors and the general public.</li> </ul>
14	Ensure that the lead officer Throughout for Transport has been fully Plan briefed on the Public Health duties and the fact that all directors (not just Director of Public Health) are responsible for delivering them, as well as on air quality opportunities and risks related to transport in the borough	<ul> <li>Sustainability officers continue to work closely with the Transport team on Air Quality issues and ensure that officers are briefed on all Public Health duties.</li> <li>The lead officer for Transport has provided updates to this Action Table.</li> </ul>
15.1	Prepare information pack Throughout for businesses on how to Plan help improve air quality and	<ul> <li>Our business info pack available <u>here</u> has been re-designed to be more appealing and continues to remain available on our website. We update it on a regular basis with new content, and we continue to direct</li> </ul>

	reduce exposure for employees and customers	<ul> <li>businesses onto it at every opportunity (e.g. during online meetings, conferences, in-person events).</li> <li>We continue to work with BIDs on a regular basis to raise awareness of air pollution among their businesses.</li> </ul>
15.2	Annual businessThroughoutengagement event toPlaneducate and raiseawareness regarding airquality; and to find jointworking opportunities	• Throughout 2022, Lambeth council engaged with a range of businesses and anchor institutes through our Climate Action Plan workstreams, to raise awareness around sustainability and better understand how we can work with BIDs to improve air quality in Lambeth.
16.1	Promote and build on the Throughout work of airTEXT to alert Plan sensitive receptors and other vulnerable citizens of high pollution days	<ul> <li>In 2021 Lambeth submitted a joint bid with Southwark to redevelop the current airTEXT alert system to improve sign ups and reach, as well as creating a new digital system to be used by schools and health care setting within both boroughs.</li> <li>Throughout 2022 the Climate Change and Sustainability team worked with colleagues from Southwark in planning the development of the new alert system.</li> <li>Lambeth Council continues to promote airTEXT</li> </ul>
16.2	Increase promotion of Throughout cycling and walking Plan websites and apps, such as walkit.com	<ul> <li>Link to www.lambeth.gov.uk/cycling with everything that goes out</li> <li>Link to cycleconfident.com to book cycling also</li> <li>Suggested use of TfL journey planner to plan cycling and walking journeys including Santander</li> </ul>
17.1	Continue to actively engage Throughout with all schools in the Plan STARS programme	<ul> <li>36 schools are currently taking part in STARS in Lambeth, Lambeth is currently expanding resources within the team to provide more officer time to this workstream.</li> </ul>
17.2	Continue to support schools Throughout to implement travel plans Plan moving from bronze to silver to gold	<ul> <li>In 2022, there were 7 schools with bronze travel plans, 9 with silver and 20 with gold.</li> </ul>
17.3	Engage with Nurseries Throughout Plan	<ul> <li>In 2020, Triangle Nursery was recommended for inclusion in the green screen programme and to be delivered in 2021/22.</li> <li>In late 2020, the Climate Change and Sustainability Team allocated LIP funding towards a green screen at Guy's and St Thomas' Day Nursery. The nursery was identified as being exposed to the pollution from a major road by the Air Quality Team at Guy's and St Thomas' Hospital. The green screen was installed in 2021 and diffusion tubes have been utilised to monitor its impact.</li> </ul>

17.4	Travel Plans Poster Completed campaign for under 5s: link between active travel and	Throughout 2022 data was collected to help to measure the impact of the green screens installed at Guy's and St Thomas' Day Nursery.     As explained in our <u>2019 ASR</u> , this action is now complete
18	air quality Air quality at schools and Throughout other educational Plan institutions	<ul> <li>We continue to work with Idling Action London to raise awareness of the dangerous impact of idling, particularly around schools. We continue to direct Lambeth schools onto the website and resources of Idling Action London at every opportunity, and we actively encourage schools to host their online sessions and assemblies.</li> <li>10 schools in Lambeth received green screens in 2022.</li> <li>Areas reported to have high levels of idling that cause nuisance to residents have signage installed to warn drivers that they could be issued PCNs if they continue</li> </ul>
19.1	Air Quality to be considered Throughout when making decisions Plan	<ul> <li>Throughout 2022 Lambeth's Climate Change and Sustainability carried out reviews on 128 decision reports to assess their compatibility with the council's Air Quality Vision.</li> <li>Lambeth's <u>Air Quality Vision</u> was formally adopted in November 2021. This included a commitment to "integrating air quality considerations into everything we do, reviewing how each department can contribute to our air quality goals, and ensuring all work and decisions undertaken by the council are consistent with our air quality goals."</li> <li>The Air Quality Vision committed the council to doing everything in its power to:         <ul> <li>Meet World Health Organisation Interim Target 2 (30µg/m<sup>3</sup>) for annual mean levels of Nitrogen Dioxide by 2030.</li> <li>Meet World Health Organisation Interim Target 4 for PM<sub>10</sub> (20 µg/m<sup>3</sup>) and PM<sub>2.5</sub> Interim Target 4 (10µg/m<sup>3</sup>) ahead of 2030.</li> </ul> </li> </ul>
19.2	Air quality awareness Throughout increased amongst Plan Lambeth officers	<ul> <li>The Climate Change and Sustainability Team launched Net Zero Heroes, an awareness raising programmed delivered in partnership with behaviour change experts "Jump", open to all Lambeth staff, which rewards them for completing positive environmental actions. This includes air quality actions, such as cycling to work instead of driving, taking an air pollution knowledge quiz, or participating in a step challenge. The Net Zero Heroes programme features regularly on</li> </ul>

20	Work with Lamber	h Youth Throughout	<ul> <li>the staff weekly newsletter. The programme's homepage can be seen <u>here</u>.</li> <li>The Climate Change and Sustainability Team run monthly 'Climate, Cakes and Chats' lunch time sessions that address a range of climate issues, including air quality.</li> <li>A question about how much CO<sub>2</sub> each officer saved by not travelling/as much was in the staff travel survey to help increase awareness</li> <li>The Climate Change and Sustainability team worked with Lambeth</li> </ul>
	Council to raise av	wareness Plan	Youth Council on the development of the Climate Action Plan in 2022
21.1	Work closely with colleagues in Adu Care and Housing identify vulnerable	Throughout It Social Plan to citizens	<ul> <li>In 2021 Lambeth secured Mayor's Resilience Fund to develop a tool to identify the impact of PM<sub>2.5</sub> pollution on sensitive receptors in Lambeth. The data company Blockdox worked with Lambeth and the GLA to develop a map that used LAEI data to illustrate exposure and risk levels at nurseries, schools, health and care settings across the borough.</li> <li>In 2022 Lambeth has rolled out a network of lightweight air quality monitors across the whole borough that gives residents access to real time air quality information.</li> </ul>
21.2	Work closely with and other relevant organisations to p tailored leaflets fo citizens and to vis events aimed spe older citizens	Age UK Complete roduce rolder it future cifically at	As explained in our <u>2019 ASR</u> , this action is now complete
22	Engagement with other minority eth citizens	black and Throughout nic Plan	<ul> <li>In the development of the council's new Air Quality Action Plan, in order to ensure that black and other minority ethnic citizens were consulted on the plan, face to face consultation was carried out at estates that were identified as having a high exposure to air pollution and a large population of residents who are sensitive receptors to air pollution. The responses from this exercise gave useful incites from black and other minority ethnic citizens who were underrepresented in the online consultation.</li> </ul>
23	Annual Residents Quality Conferenc	Air Throughout e Plan	• The council made a decision not to go forward with the Air Quality Conference in 2022 and will be replacing the function performed by the conference with a new Air Quality Forum in 2023.

24.1		Procurement policy to include a requirement for suppliers providing services over £100,000 to have attained silver Fleet Operator Recognition Scheme (FORS) accreditation	Completed	As explained in our <u>2019 ASR</u> , this action is now complete
24.2		Update procurement policy to give preferential scoring to bidders delivering goods and services with zero or low emission vehicles when there is a heavy transport element to the tender	Completed	As explained in our <u>2019 ASR</u> , this action is now complete
25		Consolidation (Low Emission Logistics)	Throughout	<ul> <li>We remain members of Cross River Partnership, working on a consolidation project with Brixton BID, as part of Clean Air Villages a freight and consolidation hub was launched in 2022.</li> </ul>
26		Introduce Virtual Loading Bays (VLB) allowing the user to book kerb space online for loading and unloading at a particular time and place; and priority for ultra-low emission delivery vehicles	Completed	In the AQAP we have now created Action 50 to monitor the development of the Brixton Liveable Neighbourhood. This action is therefore marked as complete, as it has been superseded by Action 50.
27	Delivery, servicing and freight (actions 24- 26) Borough Fleet Actions (actions 27-31)	Obtain Fleet Operator Recognition Scheme (FORS) Gold accreditation for Lambeth's own fleet	March 2022	<ul> <li>Due to the current resourcing levels, and the plan to centralise fleet management with a new fleet management team the FORS level still remains at bronze for Lambeth landscapes. Once the new fleet management team is in place we will be setting up a multi-tiered system where by business groups can achieve varied standards of FORS for example Lambeth Parks can progress to silver and gold whilst the remaining business groups catch up.</li> </ul>
28		Increase the number of hydrogen, electric, hybrid, bio-methane and cleaner vehicles in the borough's	March 2022	<ul> <li>We are working to increase the number of zero emission vehicles in our fleet. At present we have over a third of our fleet as electric or hybrid:</li> <li>a) Parks &amp; Leisure – 20 electric and 4 hybrid vehicles</li> <li>b) Housing Services – 15 electric and 24 hybrid vehicles</li> </ul>

		fleet and accelerate uptake		<ul> <li>c) Democratic services – 1 hybrid vehicle</li> </ul>
		of new Euro VI/6 vehicles		d) L ibraries $-2$ electric vehicles
				e) Waste services – 15 electric vehicles
				f) 17 new RCVs purchased in 2021 are all Euro 6 standard and
				ULEZ compliant
29		Smarter Driver Training for Lambeth fleet drivers to increase fuel efficient driving	Throughout Plan	<ul> <li>Lambeth's new fleet team is currently developing a full training and development plan for Lambeth.</li> </ul>
30		Conduct feasibility study for introducing regenerative street sweepers into Lambeth's street cleansing fleet	March 2022	<ul> <li>In 2022 a project investigating the impact of street sweeping on air quality in partnership with the Environmental Research Group at Imperial College London was completed. Throughout the project several street sweepers were tested on roads in Lambeth and Southwark and researchers from the Environmnetla Research Grou assessed their air quality impact. A full report on the project was produced in 2022.</li> </ul>
31		Review of car users to determine whether the number of Lambeth officers driving vehicles for work could be reduced	Complete	As explained in our <u>2019 ASR</u> , this action is now complete
32	Borough Fleet Actions (actions 27-31) Localised Solutions (actions 32-39)	Green Infrastructure	Throughout Plan	<ul> <li>Green screens were put up in 10 schools across Lambeth in 2022.</li> <li>In 2022, SuD projects were implemented at St Andrew's Church of England Primary School, La Retraite RC Girls School, Archbishop Sumner CoE Primary School, Rosendale Primary School and Turne School.</li> <li>Seven smart rainwater harvesting butts have been installed at Crimsworth Road with a further 93 to be installed over 2023.</li> <li>The Low traffic Neighbourhood schemes that have been implement include rain gardens.</li> </ul>
33		Investigate other measures, such as building a Low Emission Neighbourhood (LEN)	Throughout Plan	<ul> <li>In 2022 decisions were made to make the remaining experimental I Traffic Neighbourhoods implemented as part of our Covid Transpor Response permanent.</li> <li>Two more Low Traffic Neighbourhoods were announced in 2022 at Brixton Hill and Streatham Wells. Engagement on the design for Streatham Wells began during 2022.</li> <li>Key measurable objectives of the LTNs are to reduce motor vehicle traffic overall, which is expected to have a positive impact on air</li> </ul>

				quality. We are currently investigating the potential for Zero Emissions Zones in Lambeth as part of our Climate Action Plan.
34		Investigate whether to install Santander bikes or other bike schemes outside Brixton Underground station, along Brixton Hill, Streatham Hill and Streatham	March 2022	<ul> <li>TfL have agreed they support expansion of the cycle hire scheme west to Clapham and east to Herne Hill, subject to borough's funding capital costs. Developer contributions are the most likely source of funding for further expansion and planning officers actively seek contributions from suitable developments within the expansion area on a continuous basis.</li> <li>The dockless e-scooter trial continues to expand the shared mobility offer in Lambeth and there is significant room for growth in this area, both with e-scooters and dockless bike hire.</li> </ul>
35	Localised Solutions (actions 32-39)	Lambeth is already part of the Central London Air Quality Cluster Group, which includes Southwark. Increase joint working with other neighbouring boroughs (Wandsworth, Merton, Croydon, Bromley and Lewisham) to tackle air pollution	Throughout Plan	<ul> <li>Lambeth continues to work with LB Merton and the Regulatory Services Partnership (LBs Merton, Richmond and Wandsworth) on the pan-London NRMM project.</li> <li>We are part of the West London Green Homes Grant group of boroughs for the Local Authority Delivery arm of the grant scheme, led by LB Ealing.</li> <li>We remain a member of the London Air Quality Network to monitor air pollution across London and make real time air quality data available to all our residents</li> <li>We continue to remain members of the Central London Air Quality Cluster Group, and provide regular updates to the GLA</li> <li>Lambeth council attends the SE London Asthma Network, working in partnership with Lewisham, Bromley, Southwark, and Eltham.</li> </ul>
36	Highways and Transport (actions 40- 51)	Continue project to reduce pollution at Waterloo station from idling taxis	March 2022	<ul> <li>The issue of idling taxis at Waterloo station is referenced under Policy P5d and Project Reference Pr3 of the South Bank &amp; Waterloo Neighbourhood Forum's now adopted <u>Neighbourhood Plan</u>. There is local support for action on this ongoing issue, and we are looking to address this more closely in 2022.</li> </ul>
37		Building green screens at Schools	March 2022	<ul> <li>Green screens were put up in 6 schools across Lambeth in 2021 and a further 10 green screens were installed during 2022.</li> </ul>
38		Recruit citizens to help form a Steering Group to monitor our Air Quality Action Plan	Throughout Plan	<ul> <li>The Lambeth Air Quality Action Plan Steering Group supported the Climate Change and Sustainability team in the development of the new Air Quality Action Plan dung 2022.</li> <li>The steering group gave feedback on the draft Air Quality Action Plan as part of the council's consultation process.</li> </ul>

		-		• The group is intended to form part of the Air Quality Forum that is due to be established over 2023, anyone that is interested in participating in the forum can email <u>sustainability@lambeth.gov.uk.</u>
39		Get sign-off for report and implement Tree Wardens scheme	Complete	As explained in our <u>2019 ASR</u> , this action is now complete
40.1		Joint anti-idling project with other London Boroughs	Complete	As explained in our <u>2019 ASR</u> , this action is now complete.
40.2		Continue to build on anti- idling work from MAQF project (Action Point 40.1)	March 2022	As explained in our <u>2021 ASR</u> , this action is now complete
41		Work with car clubs to increase amount of electric, hydrogen and ultra-low emission vehicles in their fleet	Throughout Plan	<ul> <li>As per Action 25, thanks to an agreement with ZipCar and Brixton BID, an e-van continues to be available for use to Brixton businesses, at a competitive rate, to reduce pollution from deliveries</li> <li>In addition to Brixton's e-van five of the borough's EV chargepoints are dedicated for car club use.</li> </ul>
42.1		Increase amount of citizens cycling outside the 18-38 age group	March 2022	<ul> <li>Approximately 282 people outside of the age range tried a bike using the TBYB scheme.</li> <li>Approximately 700 people outside of the age bracket took cycle training in 2022</li> <li>We offer Bikeability training to all schools in the borough.</li> </ul>
42.2		Very Important Pedestrian Days	Throughout Plan	We closed 10 roads outside schools to celebrate our achievements with School Streets. 7 were already School Streets and 3 were ones we hope to have a School Street outside of in the coming years
43	Highways and Transport (actions 40- 51)	Parking	Throughout Plan	<ul> <li>St Leonards CPZ has been introduced.</li> <li>A diesel surcharge has been introduced in Lambeth; whereby non- Euro 6 diesel vehicles are charged an additional 50% of the parking tariff.</li> <li>Lambeth will explore the role of parking charges to further improve air quality in line with its upcoming AQAP</li> </ul>
44		Installation of more residential electric charging points	March 2022	<ul> <li>We currently have 285 charge points in the borough which are registered on the National ChargePoint register.</li> <li>We have installed fast chargers on 11 different Lambeth estates</li> <li>Further chargepoints will be installed on-street and on estates throughout 2023</li> </ul>

45	Installation of rapid Thro chargers to help enable the Plan take up of electric taxis, cabs and commercial vehicles (in partnership with TfL and/or OLEV	<ul> <li>Currently there are 11 rapid (50kW) chargepoints operated by Lambeth.</li> <li>A provider has been selected to install 8 of the 14 ultra-rapid chargers with installation due in 2023</li> </ul>
46	Reprioritisation of road Thru space; reducing parking at some destinations and/or restricting parking on congested high streets and A roads to improve bus journey times, cycl ing experience, and reduce emissions caused by congested traffic	<ul> <li>The council has introduced a range of measures allocating road space to sustainable modes of travel. We have implemented five Low Traffic Neighbourhoods, we have begun consultation on one more in 2022 and are planning a further trial area in 2023. In addition, we have delivered several Healthy Route interventions where we have created segregated space for cycling and new and improved crossings.</li> <li>We continue to work with TfL on the A23 Streatham Hill scheme which is due for implementation when funding becomes available.</li> <li>In early 2023 we published our Kerbside Strategy which sets out how we allocate space on our streets for different uses, prioritising space for non-car modes.</li> </ul>
47.1	Campaign for low-emission Thre buses to serve all routes Plar in Lambeth	<ul> <li>The council continues to press the Mayor to bring forward low- emission buses for the whole of Lambeth.</li> </ul>
47.2	Continue to request Three extension of ULEZ to south Plan of the borough	<ul> <li>The council continued to support proposals to extend the ULEZ to include the south of the borough.</li> <li>The council welcomed confirmation from the Mayor of London in November 2022 that the ULEZ will be expanded across all London boroughs in 2023.</li> </ul>
48	Link air quality to road Thro closures for street parties Plan and the Play Streets scheme	<ul> <li>The new Play Streets policy, webpage, application form and process were launched in 2022.</li> <li>We carried out a suitability assessment on all schools in Lambeth to assess whether a School Street could be implemented there.</li> <li>A total of 25 school streets have been implemented. All are linked to improved air quality.</li> </ul>
49	Read through Lambeth Cor Transport Plan 2011-31, the Cycling Strategy and also the Transport Strategy and add any relevant actions in to AQAP	mpleted As explained in our <u>2019 ASR</u> , this action is now complete.

50	Brixton Liveable Neighbourhood and Lambeth Low Traffic Neighbourhoods	Throughout Plan	<ul> <li>As part of our emergency response to the COVID-19 pandemic, we have been implementing emergency measures to enable people move safety around the borough. These measures include Low Traffic Neighbourhoods. We have agreed and published our programme of interventions and details can be found <u>here</u>. The LTNs have been implemented as trials and in December 2021 a decision was taken to make the Railton and Oval to Stockwell schemes permanent.</li> <li>The Ferndale and Railton LTNs fall within the Brixton Liveable Neighbourhood area. The BLN project itself has been paused pending confirmation of further funding from TfL The Ferndale LTN was made permanent in 2022.</li> </ul>
			<ul> <li>In 2020, the Transport and Climate Change and Sustainability Teams commissioned a consultancy to deliver an air quality modelling project, to assess the air quality implications of the LTNs. Using ADMS-Urban, the consultants will combine multiple data sources (traffic data, meteorological data, terrain data, and data from our air quality monitoring stations and diffusion tubes) to assess changes in NO2, PM<sub>10</sub> and PM<sub>2.5</sub> resulting from the introduction of the LTNs. As explained in Action 21.1, the modelling will result in a series of air quality maps, which will be produced in 2021 and utilised to support the LTNs consultations, and for awareness raising campaigns.</li> </ul>

## 3. Planning Update and Other New Sources of Emissions

# Table K. Planning requirements met by planning applications in Lambeth in2022

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	24
Number of planning applications required to monitor for construction dust	<u>8</u>
Number of CHPs/Biomass boilers refused on air quality grounds	<u>0</u>
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	<u>7</u>
Number of developments required to install Ultra-Low NO <sub>x</sub> boilers	<u>7</u>
Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>23</u>
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	<u>1</u>
Number of planning applications with S106 agreements including other requirements to improve air quality	<u>0</u>
Number of planning applications with CIL payments that include a contribution to improve air quality	<u>0</u>
NRMM: Central Activity Zone , Canary Wharf and Opportunity Areas	
Number of conditions related to NRMM included.	
Number of developments registered and compliant.	
Number of audits	22 conditions included
% of sites unregistered prior to audit	
Please include confirmation that you have checked that the development has been registered with the GLA through the relevant <u>NRMM website</u> and that all NRMM used on-site is compliant with Stage Stage IV of the Directive and/or exemptions to the policy.	
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas)	
Number of conditions related to NRMM included.	
Number of developments registered and compliant.	137 conditions included
Number of audits	6 registered and compliant
% of sites unregistered prior to audit	3 unregistered/uncompliant
Please include confirmation that you have checked that the development has been registered at www.nrmm.london and that all NRMM used on-site is compliant with Stage IIIB of the Directive and/or exemptions to the policy.	and being chased.

#### 3.1 New or significantly changed industrial or other sources

No new sources identified.

## 4. Additional Activities to Improve Air Quality

#### 4.1 London Borough of Lambeth Fleet

As of 2022, Lambeth Council's vehicle fleet included 45 battery electric vehicles, constituting 21% of the total fleet.

#### 4.2 NRMM Enforcement Project

Lambeth continues to work with LB Merton and the Regulatory Services Partnership

(LBs Merton, Richmond and Wandsworth) on the pan-London NRMM project.

#### 4.3 Air Quality Alerts

Lambeth supports promotion of airTEXT. In 2021 Lambeth submitted a joint funding bid with Southwark to redevelop the current airTEXT alert system to improve sign ups and reach and create a new digital alert system to be used by schools and health care settings within both boroughs.

## Appendix A Details of Monitoring Site Quality QA/QC

#### A.1 Automatic Monitoring Sites

Routine calibrations of equipment and periodic site audits were carried out by Enviro Technology, and Imperial College London's Environmental Research Group (ERG). Routine calibrations took place every two weeks

Matts Monitors Ltd have been awarded a contract to deliver the routine calibrations and site audits to March 2024. Ricardo PLC is contracted by Matts Monitors to deliver fortnightly LSO visits.

We continue to be members of the London Air Quality Network, and ERG at Imperial College London is responsible for the automatic monitoring stations' data collection and data processing.

#### PM<sub>10</sub> Monitoring Adjustment

Routine calibrations of equipment and periodic site audits were carried out by Enviro Technology, and Imperial College London's Environmental Research Group (ERG). Routine calibrations took place every two weeks.

Matts Monitors Ltd deliver the routine calibrations and site audits. Ricardo PLC is contracted by Matts Monitors to deliver fortnightly LSO visits. We continue to be members of the London Air Quality Network, and ERG at Imperial College London is responsible for the automatic monitoring stations' data collection and data processing.

#### A.2 Diffusion Tubes

Analysis was performed by Gradko International Ltd. Tubes are prepared with 20% Triethanolamine (TEA) in Water. Tubes are analysed by UV Sprectrophometry. The preparation procedures adhere to the guidance detailed in the document 'Diffusion Tubes for Ambient NO2 Monitoring: Practical Guidance for Laboratories and Users', Issue 1a Feb.2008 (issued by AEA Energy and Environment). Gradko participate in the independent AIR-PT scheme and partake in the annual co-location study. Co-located diffusion tubes are installed at Brixton Road air quality monitoring station LB4. We have compared the diffusion tube data at our colocation site to reference equivalent NO2 analysers.

#### Discussion of Choice of Factor to Use

A national bias-adjustment factor of 0.83 has been used (Gradko bias adjustment factor for 20% TEA in Water in 2022), instead of a local bias-adjustment factor.

The bias-adjustment factors used in previous years are outlined

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2022	National	03/23	0.83
2021	National		0.84
2020	National		0.81
2019	National		0.93
2018	National		0.93
2017	Local		0.84
2016	Local		0.81
2015	Local		0.93

Table L. Bias Adjustment Factor

#### A.3 Adjustments to the Ratified Monitoring Data

#### Short-term to Long-term Data Adjustment

Data capture by our diffusion tubes was less than 75% at 34 sites. Therefore, the means at those sites had to be annualised. The annualization factor is presented in Table M.

We have used background data from the following sites: Streatham Green LB6 (London Borough of Lambeth), Elephant and Castle SK6 (London Borough of Southwark), Covent Garden WM5 (Westminster City Council) and Bloomsbury BL0 (London Borough of Camden). All stations had at least 85% data capture in 2022. All sites outside of Lambeth are well within the recommended radius of under 50 miles – and are all representative of typical London urban background locations.

#### Distance Adjustment

Distance correction has been completed for 19 sites, due to the NO<sub>2</sub> Annual Mean Concentration (bias adjusted and annualised) being greater than 36 µg m<sup>-3</sup> (within 10% of the annual mean objective) and receptors not being located at a point of relevant exposure. This is to estimate the concentration at the nearest receptor. The Fall off with Distance Adjustment calculator included within the Diffusion Tube Data Processing Tool v3.0 published by Defra has been used to perform the calculations. We have used an average of LB6 Streatham Green (London Borough of Lambeth), SK6 Elephant and Castle (London Borough of Southwark), Covent Garden WM5 (Westminster City Council) and Bloomsbury BL0 (London Borough of Camden) figures as the background site.

Site ID	Annualisation Factor LB6 - Streatham Green	Annualisation Factor SK6 - Elephant and Castle	Annualisation Factor WM5 - Covent Garden	Annualisation Factor BL0 - Bloomsbury	Average Annualisation Factor	Raw Data Annual Mean (µg m <sup>-3</sup> )	Annualised Annual Mean (µg m⁻³)	Comments
BHLTN1	1.0309	1.0212	0.9872	1.0646	1.0260	31.1	31.9	
BHLTN4	1.0199	1.0209	1.0314	1.0529	1.0313	22.8	23.5	
BHLTN5	1.0396	1.0449	1.0508	1.0679	1.0508	21.9	23.0	
DT1	1.1493	1.1416	1.1623	1.0913	1.1362	-	-	Triplicate Site with DT1, DT2 and DT3 - Annual data provided for DT3 only
DT2	1.1493	1.1416	1.1623	1.0913	1.1362	-	-	Triplicate Site with DT1, DT2 and DT3 - Annual data provided for DT3 only
DT3	1.1493	1.1416	1.1623	1.0913	1.1362	64.0	72.8	Triplicate Site with DT1, DT2 and DT3 - Annual data provided for DT3 only
DT18	0.9182	0.9176	0.9159	0.8986	0.9126	44.1	40.2	
DT23	0.8796	0.8834	0.8670	0.8917	0.8804	32.8	28.9	
DT33	1.0724	1.0743	1.1101	1.0900	1.0867	26.6	29.0	
DT43	0.8911	0.9057	0.9018	0.9082	0.9017	42.1	37.9	
DT44	0.9570	0.9664	0.9656	1.0403	0.9823	35.1	34.5	
DT47	0.9734	0.9930	1.0283	0.9503	0.9862	36.1	35.6	
DT48	1.1338	1.1759	1.1110	1.1566	1.1443	45.6	52.2	

 Table M. Short-Term to Long-Term Monitoring Data Adjustment

Site ID	Annualisation Factor LB6 - Streatham Green	Annualisation Factor SK6 - Elephant and Castle	Annualisation Factor WM5 - Covent Garden	Annualisation Factor BL0 - Bloomsbury	Average Annualisation Factor	Raw Data Annual Mean (µg m <sup>-3</sup> )	Annualised Annual Mean (µg m <sup>-3</sup> )	Comments
DT50 1	0.8578	0.8757	0.8798	0.9121	0.8813	-	-	Triplicate Site with DT50 1, DT50 2 and DT50 3 - Annual data provided for DT50 3 only
DT50 2	0.8578	0.8757	0.8798	0.9121	0.8813	-	-	Triplicate Site with DT50 1, DT50 2 and DT50 3 - Annual data provided for DT50 3 only
DT50 3	0.8578	0.8757	0.8798	0.9121	0.8813	35.7	31.4	Triplicate Site with DT50 1, DT50 2 and DT50 3 - Annual data provided for DT50 3 only
LI	0.9149	0.9121	0.8845	0.9163	0.9069	29.2	26.5	
LTN11	1.0168	1.0110	1.0161	0.9669	1.0027	41.6	41.8	
Point 122	1.0584	1.0625	1.1132	1.1916	1.1064	26.1	28.9	
SR3	0.9966	1.0113	0.9989	1.0704	1.0193	49.1	50.1	
SR6	0.8847	0.8611	0.8583	0.8522	0.8641	47.1	40.7	
SR7	0.8720	0.8819	0.8489	0.8599	0.8657	31.3	27.1	
SR8	0.8189	0.8303	0.7795	0.7695	0.7996	40.8	32.6	
SR9	0.9792	1.0010	0.9745	0.9154	0.9675	34.0	32.9	
SR10	0.8098	0.8325	0.8232	0.8519	0.8294	38.2	31.7	
SR12	0.9453	0.9452	0.9119	0.9263	0.9322	39.9	37.2	
SR14	0.9358	0.9395	0.8630	0.9176	0.9140	28.0	25.6	

Site ID	Annualisation Factor LB6 - Streatham Green	Annualisation Factor SK6 - Elephant and Castle	Annualisation Factor WM5 - Covent Garden	Annualisation Factor BL0 - Bloomsbury	Average Annualisation Factor	Raw Data Annual Mean (µg m <sup>-3</sup> )	Annualised Annual Mean (µg m⁻³)	Comments
SR17	1.0187	0.9864	0.9943	1.0067	1.0015	29.3	29.3	
SR19	0.9698	0.9764	0.9771	0.8970	0.9551	43.8	41.8	
ST2	0.8552	0.8538	0.8213	0.8887	0.8548	37.9	32.4	
VX11	0.9161	0.9417	0.9354	0.9126	0.9264	29.3	27.1	
VX12	0.9647	0.9699	0.9833	0.9396	0.9644	22.5	21.7	
WP1	0.9812	0.9807	0.9481	0.9944	0.9761	34.4	33.6	
WP2	1.1338	1.1330	1.1851	1.0988	1.1377	25.5	29.0	

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted (µg m <sup>-3</sup> )	Background Concentration (µg m⁻³)	Concentration Predicted at Receptor (µg m <sup>-3</sup> )	Comments
DT1, DT2, DT3	0.5	1.0	60.4	22.4	55.7	Predicted concentration at Receptor above AQS objective.
DT5	0.5	2.5	38.3	22.4	33.8	
DT9	0.5	1.0	43.9	22.4	41.3	Predicted concentration at Receptor above AQS objective.
DT17	0.5	1.0	47.3	22.4	44.2	Predicted concentration at Receptor above AQS objective.
DT19	0.5	0.8	41.9	22.4	40.3	Predicted concentration at Receptor above AQS objective.

#### Table N. NO<sub>2</sub> 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 <sup>-3</sup> )	Background Concentration (µg m⁻³)	Concentration Predicted at Receptor (µg m <sup>-3</sup> )	Comments
DT20	0.5	1.0	37.3	22.4	35.5	
DT25	0.5	0.8	38.0	22.4	36.7	Predicted concentration at Receptor within 10% the AQS objective.
DT27	0.5	1.0	63.0	22.4	58.0	Predicted concentration at Receptor above AQS objective.
DT28	0.5	1.0	44.6	22.4	41.8	Predicted concentration at Receptor above AQS objective.
DT29	0.5	1.0	47.6	22.4	44.5	Predicted concentration at Receptor above AQS objective.

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted (µg m <sup>-3</sup> )	Background Concentration (µg m⁻³)	Concentration Predicted at Receptor (µg m <sup>-3</sup> )	Comments
DT30	0.5	1.0	43.4	22.4	40.8	Predicted concentration at Receptor above AQS objective.
DT31	0.5	0.8	54.2	22.4	51.6	Predicted concentration at Receptor above AQS objective.
DT39	0.5	1.0	41.5	22.4	39.2	Predicted concentration at Receptor within 10% the AQS objective.
DT41	0.5	1.0	47.5	22.4	44.4	Predicted concentration at Receptor above AQS objective.
DT48	0.5	0.8	43.4	22.4	41.6	Predicted concentration at Receptor above AQS objective.

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted (µg m <sup>-3</sup> )	Background Concentration (µg m <sup>-3</sup> )	Concentration Predicted at Receptor (µg m <sup>-3</sup> )	Comments
SR3	0.5	0.8	41.6	22.4	40.0	Predicted concentration at Receptor above AQS objective.
SR4	0.5	1.0	43.1	22.4	40.6	Predicted concentration at Receptor above AQS objective.
SR20	0.5	0.8	43.3	22.4	41.6	Predicted concentration at Receptor above AQS objective.
ST1	2.0	4.0	38.1	22.4	35.6	

## Appendix B Full Monthly Diffusion Tube Results for 2022

Site ID	Valid data capture for monitoring period % <sup>(a)</sup>	Valid data capture 2022 % <sup>(b)</sup>	Jan	Feb	Mar	Apr	Мау	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data	Annual mean – bias adjusted
AS1	75.0	75.0	33.9	51.0	42.4	-	45.5	19.6	24.1	-	-	0.5	27.2	32.7	30.8	25.5
AS2	100.0	100.0	64.0	21.3	28.8	18.0	16.0	34.4	24.9	16.2	19.7	23.9	25.0	30.8	26.9	22.3
BHLTN1	72.7	65.4	-	58.8	31.9	-	-	22.9	20.8	-	26.3	25.6	28.7	33.9	31.1	26.5
BHLTN2	90.9	82.7	-	31.8	36.2	-	27.9	25.9	30.6	31.7	37.7	35.7	39.0	41.2	33.8	28.0
BHLTN3	81.8	75.0	-	60.4	31.7	-	18.7	-	18.7	21.1	27.5	26.4	27.5	34.1	29.6	24.6
BHLTN4	63.6	57.7	-	-	30.8	-	-	16.3	15.8	17.9	23.2	21.9	-	33.6	22.8	19.5
BHLTN5	72.7	69.2	-	-	27.7	20.7	16.2	14.5	15.7	-	24.5	24.0	-	32.1	21.9	19.1
BHLTN6	81.8	76.9	-	-	30.7	23.7	21.1	17.9	19.7	22.6	27.6	27.2	-	29.7	24.5	20.3
DT1, DT2, DT3	50.0	50.0	-	-	-	-	57.4	69.4	66.1	65.6	-	-	70.1	65.0	64.0	<u>60.4</u>
DT4	80.8	80.8	46.0	34.4	31.0	27.1	-	22.9	23.7	37.9	47.9	-	29.6	43.1	34.4	28.5
DT5	75.0	75.0	-	-	46.2	36.4	<0.49	77.7	39.2	34.1	44.9	46.8	47.8	42.3	46.1	38.3
DT6	92.3	92.3	42.3	31.9	113.5	43.8	24.0	20.1	21.4	21.1	-	29.0	33.4	36.2	37.9	31.4
DT7	92.3	92.3	47.6	-	39.3	30.6	26.8	28.1	29.4	30.7	33.5	30.9	36.3	38.8	33.8	28.1
DT8	100.0	100.0	42.9	33.1	44.5	33.4	32.1	30.8	34.4	33.5	38.1	35.1	40.6	37.6	36.3	30.1
DT9	84.6	84.6	-	72.8	46.8	78.0	66.1	40.8	41.7	-	45.3	46.4	45.8	45.7	52.9	43.9
DT10	100.0	100.0	40.3	25.7	29.7	22.3	20.3	18.8	22.0	23.6	24.9	27.6	27.6	32.7	26.3	21.8
DT11	100.0	100.0	45.0	33.1	47.3	31.1	31.5	32.0	34.0	36.7	38.1	40.7	36.3	39.1	37.1	30.8

## Table O. NO<sub>2</sub> Diffusion Tube Results

DT12	92.3	92.3	44.8	40.0	43.3	39.3	36.1	35.7	-	35.7	39.9	38.9	41.9	44.6	40.0	33.2
DT13	84.6	84.6	46.3	36.6	47.9	43.4	36.5	-	59.3	38.3	40.6	37.4	-	42.8	42.9	35.6
DT14	92.3	92.3	50.7	40.4	42.2	31.7	36.9	34.7	-	31.9	39.5	40.6	45.7	47.0	40.1	33.3
DT15	84.6	84.6	51.1	49.3	40.4	34.8	39.2	33.5	-	-	33.9	33.3	38.8	39.8	39.4	32.7
DT16	100.0	100.0	49.0	31.8	44.8	40.0	35.5	30.2	34.1	36.8	38.6	35.8	40.0	39.9	38.1	31.6
DT17	84.6	84.6	-	-	72.6	70.3	43.8	42.0	42.8	139.5	44.4	22.6	42.9	48.8	57.0	47.3
DT18	50.0	50.0	61.4	-	<0.63	-	-	42.3	-	-	42.1	39.8	40.0	38.8	44.1	33.4
DT19	100.0	100.0	52.8	46.5	55.7	53.7	45.3	40.7	48.7	54.6	56.7	49.1	49.5	52.8	50.5	41.9
DT20	73.1	73.1	47.4	2.0	42.4	-	120.8	-	50.5	30.3	33.0	37.6	40.7	-	45.0	37.3
DT21	75.0	75.0	<0.64	65.3	-	-	19.0	20.1	19.2	22.8	27.5	25.9	30.6	34.4	29.4	24.4
DT22	82.7	82.7	34.8	23.4	29.5	19.2	-	-	16.3	41.8	23.0	23.8	29.3	35.9	27.7	23.0
DT23	57.7	57.7	40.3	24.1	46.7	-	19.7	-	-	-	32.8	-	31.6	34.8	32.8	24.0
DT24	100.0	100.0	37.0	24.3	38.1	26.3	23.6	21.7	25.5	30.0	37.2	32.2	31.8	33.2	30.1	25.0
DT25	92.3	92.3	49.9	36.6	46.8	43.5	44.5	40.6	-	57.3	44.1	43.7	47.2	49.8	45.8	38.0
DT26	84.6	84.6	44.2	-	-	34.0	27.5	26.3	27.6	35.6	39.9	29.4	37.3	48.5	35.0	29.1
DT27	100.0	100.0	92.6	82.3	54.1	57.9	71.2	68.4	77.8	81.7	86.9	74.2	85.5	77.9	75.9	<u>63.0</u>
DT28	92.3	92.3	57.2	56.2	53.0	38.6	46.5	51.5	-	44.8	58.8	59.0	64.2	60.8	53.7	44.6
DT29	84.6	84.6	67.9	57.8	-	40.8	34.6	38.1	37.8	-	83.6	65.4	75.7	71.4	57.3	47.6
DT30	100.0	100.0	60.3	45.6	48.9	46.1	49.0	49.0	50.4	53.2	55.9	57.0	56.9	55.4	52.3	43.4
DT31	92.3	92.3	-	51.5	63.4	62.3	61.8	58.2	69.5	77.3	76.0	59.7	67.4	71.3	65.3	54.2
DT32	84.6	84.6	-	53.7	-	26.7	22.0	18.1	20.1	25.5	26.5	25.7	29.0	32.4	28.0	23.2
DT33	69.2	69.2	<0.64	-	-	24.7	19.9	17.6	-	25.6	28.7	29.3	31.3	36.0	26.6	24.0
DT34	100.0	100.0	52.6	38.3	42.7	41.7	38.3	34.2	38.0	48.0	45.5	35.4	34.2	44.3	41.1	34.1
DT35	100.0	100.0	78.3	27.6	42.5	36.6	32.9	27.1	31.8	29.8	40.0	33.6	35.6	42.7	38.2	31.7
DT36	92.3	92.3	57.3	-	40.6	38.4	40.1	37.2	32.6	41.3	46.5	38.8	39.6	42.5	41.3	34.3
DT37	100.0	100.0	38.7	26.5	39.7	30.8	25.3	24.0	29.4	31.5	32.5	30.1	32.8	38.3	31.6	26.3
DT38	75.0	75.0	46.3	33.7	39.0	34.3	-	-	39.1	38.5	41.2	36.6	<0.61	72.1	42.3	35.1
DT39	82.7	82.7	71.5	47.3	48.1	-	37.8	-	65.0	46.9	46.1	41.4	50.1	45.9	50.0	41.5
DT40	100.0	100.0	49.2	44.7	39.4	30.9	37.1	32.5	35.9	35.5	37.6	37.2	46.2	41.7	39.0	32.4

DT41	75.0	75.0	-	77.2	40.6	-	60.6	-	104.8	39.2	46.3	46.7	52.0	47.5	57.2	47.5
DT42	100.0	100.0	44.5	38.3	42.6	29.7	35.1	34.0	35.5	36.3	41.0	42.5	42.9	42.5	38.7	32.2
DT43	57.7	57.7	43.9	-	34.7	-	59.7	-	52.4	-	0.6	-	52.8	50.4	42.1	31.5
DT44	57.7	57.7	-	-	31.2	<0.51	-	-	23.7	59.4	32.3	31.2	32.7	35.4	35.1	28.7
DT45	82.7	82.7	33.0	21.7	25.6	22.4	-	-	17.5	22.8	24.1	23.3	26.5	29.4	24.6	20.5
DT46	75.0	75.0	34.5	-	32.5	24.6	25.4	-	21.1	24.8	31.7	-	37.5	35.5	29.7	24.7
DT47	67.3	67.3	43.8	-	-	29.1	39.2	29.0	-	35.0	39.0	-	37.2	36.5	36.1	29.5
DT48	32.7	32.7	-	47.1	-	61.9	<0.49	-	36.8	-	-	-	36.8	-	45.6	43.4
DT49	76.9	76.9	36.6	-	•	21.3	18.8	32.0	30.9	I	24.3	21.3	23.9	29.8	26.5	22.0
DT50	42.3	42.3	-	-	38.6	-	-	-	-	33.6	-	31.3	34.8	36.9	35.7	26.1
DT51	92.3	92.3	49.1	-	37.3	29.2	30.3	29.2	33.1	3.1	34.8	34.4	41.6	43.6	33.2	27.6
JP1	82.7	82.7	37.4	25.4	33.9	26.9	-	20.7	-	22.3	31.2	27.7	29.8	36.3	29.2	24.2
JP2	76.9	76.9	-	-	25.8	17.0	14.1	11.8	13.0	15.5	-	19.4	20.1	28.5	18.4	15.2
JP3	75.0	75.0	34.7	-	27.4	19.3	-	13.1	12.9	15.4	-	29.3	21.5	31.2	22.8	18.9
LI	40.4	40.4	59.4	20.2	32.1	19.7	-	14.5	-	-	-	-	-	-	29.2	22.0
LO	82.7	82.7	37.6	22.4	32.3	-	19.0	-	18.5	19.9	24.2	25.9	26.1	32.2	25.8	21.4
LTN1	84.6	84.6	<0.64	68.2	34.0	23.6	21.5	-	20.5	23.2	26.7	27.6	31.7	36.0	31.3	26.0
LTN2	100.0	100.0	49.3	37.9	39.4	33.3	30.4	31.5	37.5	36.8	45.4	33.3	38.7	41.2	37.9	31.4
LTN3	100.0	100.0	45.0	32.5	36.9	33.5	30.2	27.4	30.0	33.3	38.4	33.2	37.0	38.4	34.6	28.8
LTN4	92.3	92.3	34.4	26.5	34.1	23.8	19.4	17.8	18.7	I	24.7	26.9	29.8	30.8	26.1	21.7
LTN5	82.7	82.7	31.4	59.7	33.0	22.4	-	-	17.1	22.8	24.3	23.9	24.8	31.5	29.1	24.2
LTN7	90.4	90.4	37.4	1.8	27.0	22.6	21.9	20.9	20.9	24.7	31.3	-	31.1	35.5	25.0	20.8
LTN8	100.0	100.0	38.8	24.2	30.0	21.2	19.2	18.3	18.6	23.1	27.8	26.4	31.5	32.8	26.0	21.6
LTN9	100.0	100.0	33.4	18.7	23.7	17.2	14.3	11.6	12.3	17.9	20.5	19.3	23.1	30.8	20.2	16.8
LTN10	76.9	76.9	-	-	-	23.8	19.8	17.7	19.4	21.8	23.0	25.6	27.3	33.1	23.5	19.5
LTN11	67.3	67.3	45.9	-	-	<0.51	55.7	31.0	36.7	-	38.2	34.8	44.2	46.6	41.6	34.7
LTN12	75.0	75.0	-	25.4	27.4	17.7	-	-	16.5	33.5	35.8	34.5	44.5	41.0	30.7	25.5
LTN13	84.6	84.6	38.5	-	34.5	31.9	34.7	-	63.6	20.7	23.3	23.6	28.4	34.1	33.3	27.7
LTN14	100.0	100.0	45.5	26.4	29.5	26.4	23.6	24.8	29.3	29.1	32.5	28.8	35.1	38.2	30.8	25.5

LTN15	92.3	92.3	39.9	-	34.8	29.8	18.9	21.6	21.2	25.8	28.7	27.0	31.3	36.2	28.6	23.8
LTN16	84.6	84.6	75.1	-	-	27.0	63.3	38.2	39.7	27.3	28.6	27.9	35.0	38.1	40.0	33.2
Point 122	32.7	32.7	-	-	-	-	-	-	-	31.4	21.1	25.5	26.5	-	26.1	24.0
RS1	73.1	73.1	-	1.9	23.2	-	-	13.0	12.9	29.7	20.3	22.6	27.6	28.9	20.0	16.6
SCOOT	90.4	90.4	49.7	39.7	39.8	35.6	37.1	37.5	37.4	38.7	45.9	39.9	47.4	-	40.8	33.8
SH1	80.8	80.8	33.0	20.8	23.6	18.2	-	12.8	14.0	18.7	21.1	19.8	24.6	-	20.7	17.1
SP1	100.0	100.0	36.4	20.2	34.6	19.2	21.8	13.8	14.8	19.3	24.8	22.0	24.3	33.2	23.7	19.7
SP2	84.6	84.6	-	0.6	-	19.6	15.8	78.2	28.2	31.3	23.4	21.9	24.3	29.9	27.3	22.7
SR1	90.4	90.4	48.1	35.4	37.3	-	33.2	30.4	33.0	31.5	34.0	36.5	40.6	38.8	36.2	30.1
SR2	92.3	92.3	43.6	32.3	34.9	24.1	25.2	23.6	-	43.4	29.0	35.4	37.5	41.2	33.6	27.9
SR3	67.3	67.3	-	-	45.2	48.4	-	43.7	45.4	-	47.0	52.6	53.6	57.1	49.1	41.6
SR4	75.0	75.0	57.2	-	52.5	44.4	46.2	-	54.4	56.9	52.3	-	58.0	45.4	51.9	43.1
SR5	75.0	75.0	41.0	36.4	15.7	37.6	32.6	34.1	38.5	-	-	-	39.1	47.0	35.8	29.7
SR6	42.3	42.3	48.5	-	42.1	-	74.0	29.6	-	-	-	-	-	41.2	47.1	33.8
SR7	50.0	50.0	43.6	28.4	33.6	25.8	-	21.3	-	-	-	-	-	35.0	31.3	22.5
SR8	32.7	32.7	41.4	28.3	-	-	-	-	-	-	-	-	42.6	50.7	40.8	27.1
SR9	55.8	55.8	40.1	27.0	-	-	-	22.8	25.4	-	49.7	-	35.5	37.6	34.0	27.3
SR10	50.0	50.0	43.3	-	38.0	30.5	-	-	-	28.9	-	-	43.2	45.6	38.2	26.3
SR11	76.9	76.9	-	31.0	31.9	26.5	21.8	-	21.3	-	28.6	35.8	36.7	37.7	30.1	25.0
SR12	67.3	67.3	43.9	30.5	32.3	26.8	-	52.5	44.3	-	-	51.4	-	37.7	39.9	30.9
SR13	82.7	82.7	34.7	28.8	34.0	24.1	-	<0.64	22.4	23.2	26.4	30.7	32.7	36.5	29.3	24.4
SR14	25.0	25.0	-	21.8	-	-	-	-	-	-	-	-	28.9	33.4	28.0	21.2
SR15	100.0	100.0	55.0	38.7	36.6	29.1	32.0	28.4	29.5	30.6	36.0	39.4	40.2	41.2	36.4	30.2
SR16	76.9	76.9	40.3	-	18.2	25.4	21.7	-	-	37.9	27.6	31.1	31.7	35.7	30.0	24.9
SR17	67.3	67.3	43.6	29.7	34.4	24.3	20.5	22.5	-	25.7	-	33.5	-	-	29.3	24.3
SR18	92.3	92.3	43.3	-	32.1	25.3	22.9	18.9	20.0	21.6	24.7	30.2	32.6	34.6	27.8	23.1
SR19	48.1	48.1	44.5	-	-	-	-	34.7	41.6	47.5	-	-	42.9	51.3	43.8	34.7
SR20	80.8	80.8	53.3	47.5	44.1		44.1	46.5	48.9	73.7	49.1	-	57.5	57.3	52.2	43.3

SR21	100.0	100.0	48.5	31.8	46.3	41.7	33.6	32.4	38.8	40.6	41.2	39.5	37.8	47.0	39.9	33.1
SS1	73.1	73.1	35.7	25.5	26.7	-	-	-	16.3	19.1	22.1	26.2	27.0	33.3	25.8	21.4
ST1	80.8	80.8	52.4	46.5	41.7	44.4	-	42.3	48.1	44.4	42.1	-	49.2	48.3	45.9	38.1
ST2	59.6	59.6	46.6	30.9	33.6	35.1	-	-	-	-	-	45.5	35.1	38.2	37.9	26.9
STA1	84.6	84.6	-	-	70.6	34.0	36.1	33.5	35.6	35.4	40.3	37.6	42.4	44.4	41.0	34.0
STA2	75.0	75.0	-	37.1	48.7	33.0	-	33.0	-	69.5	45.0	39.4	40.3	37.1	42.6	35.3
VP1	75.0	75.0	-	22.1	30.4	18.0	15.9	14.7	16.0	17.6	19.8	24.0	-	-	19.8	16.5
VP2	75.0	75.0	34.9	-	48.4	21.2	17.6	15.5	-	20.0	23.1	-	25.6	29.3	26.2	21.7
VX1	34.6	34.6	-	-	-	-	-	-	27.1	-	-	31.7	35.4	40.5	32.6	27.1
VX2	90.4	90.4	34.8	25.6	28.1	21.4	20.3	18.6	18.8	21.6	22.9	-	29.8	32.4	24.9	20.7
VX3	92.3	92.3	34.8	24.6	31.0	20.1	18.4	16.8	17.4	-	24.9	25.8	28.6	31.3	24.9	20.7
VX4	75.0	75.0	-	-	40.5	30.4	31.7	32.2	31.2	32.6	37.7	-	41.6	42.2	35.6	29.5
VX5	90.4	90.4	44.6	35.1	43.7	-	30.2	28.6	29.8	29.9	34.3	37.7	39.2	39.3	35.7	29.6
VX6	92.3	92.3	-	65.0	33.0	24.5	22.5	26.4	22.6	23.5	26.5	29.6	34.1	37.9	31.4	26.1
VX8	75.0	75.0	37.5	24.6	<0.64	39.0	23.5	22.0	22.6	23.3	-	-	28.9	33.4	28.3	23.5
VX9	100.0	100.0	49.5	35.9	42.7	38.8	31.0	27.7	29.7	34.0	38.3	37.0	42.1	41.6	37.4	31.0
VX10	92.3	92.3	40.8	26.9	34.0	22.5	20.7	21.9	-	21.6	29.0	31.6	33.3	34.6	28.8	23.9
VX11	67.3	67.3	35.3	24.0	-	29.1	-	-	-	34.7	24.6	25.3	28.7	32.6	29.3	22.5
VX12	67.3	67.3	32.2	-	29.7	20.8	17.0	15.8	16.3	17.4	<0.57	-	-	31.1	22.5	18.0
VX13	100.0	100.0	47.9	38.0	42.2	31.2	35.9	35.9	38.7	35.9	41.2	34.7	41.7	43.4	38.9	32.3
WP1	55.8	55.8	75.4	25.8	35.9	26.7	-	22.5	24.0	-	-	-	30.5	<0.49	34.4	27.9
WP2	57.7	57.7	-	-	-	-	24.3	19.3	20.7	23.9	28.2	-	30.9	31.4	25.5	24.1

#### Notes

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

Exceedances of the NO<sub>2</sub> annual mean AQO of 40  $\mu$ g m<sup>-3</sup> are shown in **bold**.

NO<sub>2</sub> annual means in excess of 60 µg m-<sup>3</sup>, indicating a potential exceedance of the NO<sub>2</sub> hourly mean AQS objective are shown in **bold and underlined**.

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

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

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

After adjusting for bias and correcting for NO<sub>2</sub> fall-off with distance between monitors and receptors, there were no diffusion tube sites that indicated that receptors were exposed to annual mean concentrations above 60 µg m<sup>-3</sup>.

14 diffusion tube sites recorded annual mean concentrations greater than the 40 µg m<sup>-3</sup> Air Quality Objective, these are the following sites:

- DT1,2,3 Brixton AQ Monitoring Station co-located
- DT9 Alverstone House, Kennington Park Road
- DT17 8 Stockwell Park Walk
- DT19 Brixton Road bus stop Q (outside KFC)
- DT27 Streatham Hill Station/opposite 10 Streatham High Road
- DT28 Streatham High Road/Leigham Avenue
- DT29 Streatham High Road/Becmead Avenue
- DT30 Public space outside 316 Streatham High Road (opp Stanthorpe Road)
- DT31 243A Streatham Hill (bus stop opposite Streatham Station)
- DT41 Norwood Road/York Hill
- DT48 Loughborough Junction 1
- SR3 Tenison Way bus Stop

- SR4 Next to bridge by Azzurro Italian bar Sutton Walk
- SR20 On road sign on top of the stairs on bridge

this is an increase on the 13 sites that observed exceedances in 2021. However, due to collection issues described in the 2021 Annual Status report, the 2021 results should be taken with caution.