London Borough of Lewisham Air Quality Annual Status Report for 2023

Date of publication: September 2024

This report provides a detailed overview of air quality in London Borough of Lewisham during 2023. It has been produced to meet the requirements of the London Local Air Quality Management (LLAQM) statutory process[1].

Contact details:

The London Borough of Lewisham

Environmental Protection Team

9 Holbeach Rd

Catford

SE6 4TW

environmentalprotection@lewisham.gov.uk

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

Contents

Tables

Abbreviations

Abbreviation	Description
AQAP	Air Quality Action Plan
AQG	Air Quality Guidelines
AQMA	Air Quality Management Area
AQN	Air Quality Neutral
AQO	Air Quality Objective
AQP	Air Quality Positive
BEB	Buildings Emission Benchmark
CAB	Cleaner Air Borough
CCG	Clinical Commissioning Group
COPD	Chronic Obstructive Pulmonary Disease
DFG	Disabled Facilities Grants
DPH	Director of Public Health
DPLN	Deptford Parks Liveable Neighbourhood
EPC	Energy Performance Certificate
ERG	Environmental Research Group
EV	Electric Vehicle
EVCP	Electric Vehicle Charging Points
GLA	Greater London Authority
HMO	Housing in Multiple Occupancy
HSL	Health and Safety Laboratory
JSNA	Joint Strategic Needs Assessment
KPI	Key Performance Indicator
LAEI	London Atmospheric Emissions Inventory
LAQM	Local Air Quality Management
LBL	London Borough of Lewisham
LIP	Local Implementation Plan
LLAQM	London Local Air Quality Management
NRMM	Non-Road Mobile Machinery

Abbreviation	Description
NSL	Marston Holdings - parking enforcement service
PM_{10}	Particulate matter less than 10 micron in diameter
$PM_{2.5}$	Particulate matter less than 2.5 micron in diameter
STARS	Sustainable Travel: Active, Responsible, Safe
TEA	Triethanolamine
TEB	Transport Emissions Benchmark
TfL	Transport for London
ULEZ	Ultra Low Emission Zone

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

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

Notes:

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

(2) 2021 World Health Organisation Air Quality Guidelines

(3) London Mayoral Objective

1. Air Quality Monitoring

1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2023

Site ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Inlet Height (m)
LW6	Lewisham 6 (Laurence House, Catford)	Roadside	537588	173606	NO_2	Y-Lewisham AQMA	Chemiluminescence	n/a	3.6	1.5
LW2	Lewisham 2 (New Cross)	Roadside	536241	176932	NO_2, PM_{10}, $PM_{2.5}$	Y-Lewisham AQMA	Chemiluminescence, TEOM-FDMS	0	6.0	2.5
LW4	Lewisham 4 (Loampit Vale)	Roadside	537912	175838	NO_2, PM_{10}	Y-Lewisham AQMA	Chemiluminescence, BAM	0	7.0	2.5
LW5	Lewisham Deptford	Urban Background	537228	177471	NO_2, $PM_{2.5}$	Y-Lewisham AQMA	Chemiluminescence, TEOM-FDMS	24	2.0	2.5
HP1	Honor Oak Park	Urban Background	536473	174128	NO_2, PM_{10}, $PM_{2.5}$	Y-Crofton Park and Honor Oak Park AQMA	Chemiluminescence, TEOM-FDMS	n/a	n/a	n/a

Notes:

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

(2) N/A if not applicable

2024: There were five continuous monitoring stations in operation within the London Borough of Lewisham (LBL) during 2023.

The previous LW1 Catford site (now LW6) measuring nitrogen dioxide (NO_2), was relocated in November 2021 to Laurence House, 1 Catford Road.

Table C. Details of Non-Automatic Monitoring Sites for 2023

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L1	Chubworthy Street	Roadside	536109	177580	NO_2	Y-Lewisham AQMA	5	2	N	2.5
L2	Bronze Street	Urban Background	537540	177439	NO_2	Y-Lewisham AQMA	0	6	N	2.5
L3	Grove Street	Urban Background	536561	178471	NO_2	Y-Lewisham AQMA	N/A	2	N	2.5
L4	Plough Way	Urban Background	536534	178926	NO_2	Y-Lewisham AQMA	N/A	2	N	2.5
L5	Lee High Road	Roadside	539678	175050	NO_2	Y-Lewisham AQMA	0	5	N	2.5
L6	Le May Avenue	Urban Background	540615	172337	NO_2	N	0	5	N	2.5
L7	Bell Green	Roadside	536556	171810	NO_2	Y-Lewisham AQMA	0	3	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L8	Stondon Park	Roadside	536229	174032	NO_2	Y-Crofton Park and Honor Oak Park AQMA	0	5	N	2.5
L9	Ladywell Road	Roadside	537500	174925	NO_2	Y-Lewisham AQMA	0	3	N	2.5
L10	Whitburn Road	Roadside	538062	175085	NO_2	Y-Lewisham AQMA	1	1	N	2.5
L11	Sparta Street	Roadside	538007	176517	NO_2	Y-Lewisham AQMA	3	3	N	2.5
L12	Montague Avenue, Hilly Fields	Urban Background	537132	175353	NO_2	Y-Lewisham AQMA	N/A	60	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L13	Mayow Road	Urban Background	535804	171567	NO_2	N	0	5	N	2.5
L14	Boyne Road	Urban Background	538482	175792	NO_2	Y- Lewisham AQMA	3	1	N	2.5
L15	Lewisham Road	Roadside	538237	176101	NO_2	Y- Lewisham AQMA	0	10	N	2.5
L16	Loampit Vale	Roadside	537740	175930	NO_2	Y- Lewisham AQMA	0	1.5	N	2.5
L17	New Cross Monitoring Station (Triplicate)	Roadside	536246	176934	NO_2	Y- Lewisham AQMA	0	6	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L18	New Cross Monitoring Station (Triplicate)	Roadside	536246	176934	NO_2	Y-Lewisham AQMA	0	6	N	2.5
L19	New Cross Monitoring Station (Triplicate)	Roadside	536246	176934	NO_2	Y-Lewisham AQMA	0	6	N	2.5
L20	Hatcham Park Road	Roadside	535746	176969	NO_2	Y-Lewisham AQMA	1	4	N	2.5
L21	Brockley Rise	Roadside	536133	173341	NO_2	Y-Crofton Park and Honor Oak Park AQMA	0	3	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L22	Ringstead Road	Urban Background	538060	173816	NO_2	Y-Lewisham AQMA	3	0.5	N	2.5
L23	Catford Hill	Roadside	537178	173365	NO_2	N	6	0.5	N	2.5
L24	Hazelbank Road	Urban Background	538904	172697	NO_2	N	4	2	N	2.5
L26	Shardloes Road	Roadside	536527	175935	NO_2	Y-Lewisham AQMA	3	0.5	N	2.5
L27	Montpelier Vale	Roadside	539604	176090	NO_2	Y-Lewisham AQMA	2	0.5	N	2.5
L28	Baring Road	Roadside	540051	173769	NO_2	N	5	0.5	N	2.5
L29	Holy Cross, Sangley Road	Roadside	538165	173406	NO_2	Y-Lewisham AQMA	0	5	Y	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L30	Christchurch, Perry Vale	Roadside	535535	172679	NO_2	N	1	5	Y	2.5
L31	St Mary Magdalen's RC, Howson Road	Urban Background	536399	175150	NO_2	Y-Crofton Park and Honor Oak Park AQMA	2	2	Y	2.5
L32	Grinling Gibbons, Clyde Street	Urban Background	536944	177665	NO_2	Y-Lewisham AQMA	0	2	N	2.5
L33	St Mary's CE, Lewisham High Street	Roadside	537979	174792	NO_2	Y-Lewisham AQMA	0	2	N	2.5
L34	Sydenham, Dartmouth Road	Urban Background	535071	172346	NO_2	N	0	5	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L35	Kender Primary School	Roadside	535447	176897	NO_2	Y-Lewisham AQMA	N/A	2	N	2.5
L36	Deptford Park School	Roadside	536275	178405	NO_2	Y-Lewisham AQMA	N/A	2	N	2.5
L37	St James Hatcham School	Urban Background	536317	176883	NO_2	Y-Lewisham AQMA	N/A	N/A	N	2.5
L38	Beecroft Primary School	Roadside	536564	174937	NO_2	Y-Crofton Park and Honor Oak Park AQMA	6	2	N	2.6
L39	John Stainer Primary School	Roadside	536308	175721	NO_2	Y-Lewisham AQMA	8	1.7	N	2.6

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L40	Myatt Garden Primary School	Urban Background	536792	176432	NO_2	Y-Lewisham AQMA	4	1.4	N	2.6
L41	Ashmead Primary School	Urban Background	537256	176353	NO_2	Y-Lewisham AQMA	8	0.7	N	2.3
L42	Lucas Vale Primary School	Urban Background	537032	176534	NO_2	Y-Lewisham AQMA	0	2.2	N	2.7
L43	Childeric Primary School	Urban Background	536389	177144	NO_2	Y-Lewisham AQMA	6	2.9	N	2.7
L44	Sir Francis Drake Primary School	Roadside	536028	178107	NO_2	Y-Lewisham AQMA	1	2	N	2.5
L45	Tidemill Academy	Roadside	537228	177284	NO_2	Y-Lewisham AQMA	1	2.9	N	2.7

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L46	St Margaret Lee Primary School	Urban Background	539416	175315	NO_2	Y-Lewisham AQMA	1	2.3	N	2.6
L47	Rathfern Primary School	Roadside	536839	173211	NO_2	N	2	2.1	N	2.5
L48	Holbeach Primary School	Urban Background	537433	173965	NO_2	Y-Lewisham AQMA	25	0.9	N	2.6
L49	St Saviours RC Primary School	Urban Background	538358	175324	NO_2	Y-Lewisham AQMA	3	2.1	N	2.4
L50	Rushey Green Primary School	Urban Background	537836	173400	NO_2	N	0	4.5	N	2.5
L51	290 Brownhill Rd South Circular	Roadside	538803	173683	NO_2	Y-Lewisham AQMA	10	2.2	N	2.6

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L52	St John CofE School	Roadside	538285	171877	NO_2	N	3	3.9	N	2.4
L53	Greenvale School	Urban Background	539319	172362	NO_2	N	1	2.9	N	2.5
L54	Baring Road Medical Centre - Healthwatch Lewisham	Roadside	540485	172665	NO_2	N	10	0.5	N	2.5
L55	Addey and Stanhope School	Roadside	537110	176953	NO_2	Y- Lewisham AQMA	1.8	4.5	N	2.9
L56	Marathon Science School	Roadside	536015	178631	NO_2	Y- Lewisham AQMA	1.4	0.8	N	2.2

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L57	Heath House Preparatory School	Urban Background	539671	176141	NO_2	Y-Lewisham AQMA	3.5	0.1	N	2.5
L58	THE BLACKHEATH HOSPITAL OUTPATIENT CENTRE	Roadside	539442	175762	NO_2	Y-Lewisham AQMA	18	1.5	N	2.5
L59	TLG Lewisham	Urban Background	537986	175738	NO_2	Y-Lewisham AQMA	4	0.5	N	2.5
L60	FLEMMING HOUSE	Urban Background	536660	178717	NO_2	Y-Lewisham AQMA	1.8	1.5	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L61	UNIVERSITY HOSPITAL LEWISHAM	Roadside	537926	174634	NO_2	Y-Lewisham AQMA	35	0.3	N	2.5
L62	Haberdashers' Aske's Hatcham Temple Grove	Roadside	536152	176823	NO_2	Y-Lewisham AQMA	3.8	0.7	N	2.3
L63	St Dunstan's College	Roadside	537092	173415	NO_2	Y-Crofton Park and Honor Oak Park AQMA	20	4.8	N	2.5
L64	Kings Kids Christian School	Urban Background	536352	177541	NO_2	Y-Lewisham AQMA	4	1.4	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L65	St Stephen's CofE Primary School	Urban Background	537319	176485	NO_2	Y-Lewisham AQMA	10	1.3	N	2
L66	Dalmain Primary School	Roadside	536106	173458	NO_2	Y-Crofton Park and Honor Oak Park AQMA	12	1.3	N	2.5
L67	Edmund Waller Primary School	Urban Background	535644	176484	NO_2	Y-Lewisham AQMA	5.8	0.5	N	2.4
L68	Deptford Green School	Roadside	536462	177354	NO_2	Y-Lewisham AQMA	15	0.2	N	2.5
L69	Chelwood Nursery School	Urban Background	536065	175089	NO_2	Y-Lewisham AQMA	0.4	50	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L70	Prendergast Ladywell School	Urban Background	537048	174220	NO_2	Y-Crofton Park and Honor Oak Park AQMA	4.7	2.4	N	2.9
L71	St Margaret's Lee CofE Primary School	Urban Background	539355	175293	NO_2	Y-Lewisham AQMA	1	1	N	2.5
L72	SOUTH LONDON AND MAUDSLEY	Urban Background	538738	174030	NO_2	Y-Lewisham AQMA	8.5	1.3	N	2
L73	LeSoCo	Roadside	537258	176212	NO_2	Y-Lewisham AQMA	18	0.3	N	2.4
L74	Arngask Road	Urban Background	538503	173580	NO_2	N	6.5	1.2	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L75	Eddystone Road	Urban Background	536392	174592	NO_2	Y-Crofton Park and Honor Oak Park AQMA	0.1	1.1	N	2.7
L76	Verdant Lane	Roadside	539519	172846	NO_2	N	9	0.2	N	2.5
L77	Glenfarg Road	Urban Background	538470	173427	NO_2	N	4	2	N	2.5
L78	Torridon Road	Urban Background	538958	173479	NO_2	N	7.5	0.2	N	2.5
L79	Horncastle Road	Urban Background	540204	173780	NO_2	N	5	4	N	2.9
L80	Gellatly Road	Roadside	535505	176274	NO_2	Y-Lewisham AQMA	3	0	N	2.4

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L81	Lee Road	Roadside	539815	175122	NO_2	Y-Lewisham AQMA	6.5	0.2	N	2.5
L82	Perry Hill Bus Stop X	Roadside	536791	172863	NO_2	N	14	0.2	N	2.3
L83	Bellingham Road	Roadside	537967	172366	NO_2	N	6	2.4	N	2.4
L84	Perry Rise	Roadside	536500	172023	NO_2	Y-Lewisham AQMA	1	2	N	2
L85	Health Centre bus stop	Roadside	536528	171882	NO_2	Y-Lewisham AQMA	6	0.3	N	2
L86	Southend Lane Bridge	Roadside	536871	171719	NO_2	Y-Lewisham AQMA	41	0.2	N	2
L87	Kirkdale/Wells Park Road	Roadside	534983	171996	NO_2	N	13	0.2	N	2.2
L88	Sydenham Library	Roadside	536309	171594	NO_2	Y-Lewisham AQMA	5.5	0.1	N	2.4

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L89	Nursery entrance OLSPN	Roadside	536208	171508	NO$_2$	Y-Lewisham AQMA	4.7	2.3	N	2.3
L90	Devonshire Road	Roadside	535538	173700	NO$_2$	Y-Crofton Park and Honor Oak Park AQMA	8	0.8	N	2.5
L91	Hare and Billet Road/Lewisham Hill	Roadside	538924	176411	NO$_2$	Y-Lewisham AQMA	37	0.5	N	2
L92	Camplin St at Brocklehurst St junc	Roadside	535760	177399	NO$_2$	Y-Lewisham AQMA	1.4	0.4	N	2.5
L93	Landmann Way	Roadside	535765	178032	NO$_2$	Y-Lewisham AQMA	0.8	1.9	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
L94	Three Store, Lewis Grove	Roadside	538318	175446	NO$_2$	Y- Lewisham AQMA	0.5	2.8	N	2.5
L95	9A Lewis Grove	Roadside	538371	175562	NO$_2$	Y- Lewisham AQMA	0.8	1.8	N	2.5
L96	191 Lewisham High Street	Roadside	538233	175283	NO$_2$	Y- Lewisham AQMA	6	1.1	N	2.8
SSDT_1	25 Grinstead Road	Roadside	536219	178078	NO$_2$	Y- Lewisham AQMA	12	1.4	N	2.4
SSDT_2	58 Friendly Street	Roadside	537250	176593	NO$_2$	Y- Lewisham AQMA	7	1.8	N	2.2
SSDT_3	1 Lind Street	Roadside	537550	176443	NO$_2$	Y- Lewisham AQMA	23	0.8	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SSDT_4	Goffers Road	Roadside	538982	176645	NO_2	Y-Lewisham AQMA	N/A	2	N	2.1
SSDT_5	121 Pepys Road	Roadside	535947	176287	NO_2	Y-Lewisham AQMA	8	0.7	N	2.5
SSDT_6	101 Jerningham Road	Roadside	536197	176514	NO_2	Y-Lewisham AQMA	9.5	0.6	N	2.4
SSDT_7	41 South Row	Roadside	539761	176431	NO_2	Y-Lewisham AQMA	14	0.9	N	2.5
SSDT_8	1 Belmont Park	Roadside	538795	175291	NO_2	Y-Lewisham AQMA	6	0.5	N	2.4
SSDT_9	19 Manor Road	Roadside	538926	175030	NO_2	Y-Lewisham AQMA	14	0.5	N	2.7

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SSDT_10	94 Hither Green Lane	Roadside	538367	174857	NO_2	Y- Lewisham AQMA	11	1.4	N	2.4
SSDT_11	1 Woodville Close	Roadside	540200	174781	NO_2	Y- Lewisham AQMA	14	0.5	N	2.5
SSDT_12	4 Burnt Ash Road	Roadside	539871	174720	NO_2	Y- Lewisham AQMA	20	0.5	N	2.3
SSDT_13	101 Manor Lane	Roadside	539418	174543	NO_2	Y- Lewisham AQMA	9	0.9	N	1.8
SSDT_14	160 Leahurst Road	Roadside	539063	174543	NO_2	Y- Lewisham AQMA	5	1.7	N	2.5
SSDT_15	185 Hither Green Lane	Roadside	538562	174494	NO_2	Y- Lewisham AQMA	5	1.4	N	2.7

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SSDT_16	140 Chudleigh Road	Roadside	536975	174537	NO_2	Y-Crofton Park and Honor Oak Park AQMA	14	2.3	N	2.2
SSDT_17	112 Crofton Park Road	Roadside	536666	174206	NO_2	Y-Crofton Park and Honor Oak Park AQMA	2	1.9	N	2.4
SSDT_18	George Lane, Holy Trinity Church	Roadside	538313	174269	NO_2	Y-Lewisham AQMA	6	2.2	N	2.5
SSDT_19	193 George Lane	Roadside	538589	174189	NO_2	Y-Lewisham AQMA	12	1.9	N	2.2

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SSDT_20	208 Verdant Lane	Roadside	539498	172969	NO_2	N	15	0.5	N	2.5
SSDT_21	Holme Lacey Road	Roadside	539892	174174	NO_2	Y- Lewisham AQMA	8	2.5	N	2.4
SSDT_22	40B Burnt Ash Road	Roadside	540014	173979	NO_2	Y- Lewisham AQMA	25	0.4	N	2.3
SSDT_23	75 Leyland Road	Roadside	540119	174329	NO_2	Y- Lewisham AQMA	7	0.8	N	2.5
SSDT_24	131 Woodyates Road	Roadside	540504	173977	NO_2	N	8	2.6	N	2.6
SSDT_25	268 Manor Lane	Roadside	539559	173929	NO_2	Y- Lewisham AQMA	15	0.7	N	2.6

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SSDT_26	389 Hither Green Lane	Roadside	539352	173783	NO_2	Y-Lewisham AQMA	12	2.7	N	2.6
SSDT_27	51 Polstead Road	Roadside	536753	173603	NO_2	Y-Crofton Park and Honor Oak Park AQMA	5	3	N	2.3
SSDT_28	119 Sandhurst Road	Roadside	538723	173345	NO_2	N	8	1.5	N	2.4
SSDT_29	18 Jevington Way	Roadside	541019	173231	NO_2	N	13	0.8	N	2.6
SSDT_30	7 Fordmill Road	Roadside	537530	173095	NO_2	N	8	0.9	N	2.5
SSDT_31	38 Thorpewood Avenue	Roadside	534939	172586	NO_2	N	10	0.6	N	2.4

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SSDT_32	55 Woolstone Road	Roadside	536495	172795	NO_2	N	8	2.2	N	2.2
SSDT_33	3 Brookehowse Road	Roadside	537436	172596	NO_2	N	17	3.3	N	2.7
SSDT_34	136 Thornsbeach Road	Roadside	538471	172660	NO_2	N	14	2.6	N	2.5
SSDT_35	49 Castillion Road	Roadside	539254	172658	NO_2	N	9	2.5	N	2.4
SSDT_36	12 Pragnell Road	Roadside	540601	172744	NO_2	N	23	2.7	N	2.6
SSDT_37	147 Perry Hill	Roadside	536618	172405	NO_2	N	11	1	N	2.6
SSDT_38	Dacres Road	Roadside	535533	172340	NO_2	N	3	2.5	N	2.4
SSDT_39	Wells Park Road	Roadside	534309	172044	NO_2	N	15	2.8	N	2.3

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SSDT_40	22 Mayow Road	Roadside	535924	172207	NO_2	N	14	0.6	N	2.2
SSDT_41	5 Stanton Way	Roadside	536598	171766	NO_2	Y- Lewisham AQMA	16	0.7	N	2.8
SSDT_42	Oakridge Road	Roadside	538788	171517	NO_2	Y- Lewisham AQMA	14	0.5	N	2.2
SSDT_43	198 Glenbow Road	Roadside	539170	170869	NO_2	N	13	3.4	N	2.4
SSDT_44	Glenbow Road, Playing Fields	Roadside	539374	171246	NO_2	N	39	3.3	N	2.3
SSDT_45	165 Downham Way	Roadside	539492	171567	NO_2	N	9	2.7	N	2.6
SSDT_46	Daneswood Avenue, 90 Passfields	Roadside	539732	172202	NO_2	N	13	0.7	N	2.5

Diffusion Tube ID	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [1]	Distance to kerb of nearest road (m) [2]	Tube Co-located with a Continuous Analyser?	Tube Height (m)
SSDT_47	398 Downham Way	Roadside	540091	171644	NO_2	N	6	3.2	N	2.4
SSDT_48	549 Downham Way	Roadside	540331	172103	NO_2	N	12	0.7	N	0.2
SSDT_49	72 Tyrwhitt Road	Roadside	537318	175817	NO_2	Y- Lewisham AQMA	11	0.6	N	2.5
SSDT_50	53 Tressillian Road	Roadside	537111	175716	NO_2	Y- Lewisham AQMA	9	0.7	N	2.4
SSDT_51	110 Drakefell Road	Roadside	535910	175947	NO_2	Y- Lewisham AQMA	2	1.4	N	2.4

Notes:

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

(2) N/A if not applicable.

2024: An additional 3 tubes (L94-L96) were added in June 2023, bringing the total number of diffusion tube sites up to 146.

2023: There were 143 active diffusion tube sites at the start of 2023.

2022: An additional 20 diffusion tubes sites were added in January 2022 (L54 – L73), and then a further 20 sites were added in July 2022 (L74 – L93), bringing the total number of diffusion tube sites up to 143.

2021: Monitoring of NO_2 with diffusion tubes was carried out at 101 sites throughout 2021

2020: An additional 51 tubes were added to the network in September 2020. The 51 new sites were commissioned as part of some modal filters work being undertaken by LBL's transport department, in order to understand the impact of the works on air quality.

1.2 Comparison of Monitoring Results with AQOs

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

Table D. Annual Mean NO$_2$ Monitoring Results: Automatic Monitoring (µg/m^3)

Site ID	Site type	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2017	2018	2019	2020	2021	2022	2023
LW6	Roadside (Automatic)	94.6	94.6	-	-	-	-	-	25.5	23.6
LW2	Roadside (Automatic)	98.1	98.1	**48.9**	**42.1**	37.9	29.1	32.4	29.6	26.3
LW4	Roadside (Automatic)	93.7	93.7	**53.9**	**46.4**	**42.8**	35.6	35.4	38.4	**42.6**
LW5	Urban Background (Automatic)	99.2	99.2	-	-	-	18.7	19.7	19.1	16.5
HP1	Urban Background (Automatic)	98.9	98.9	-	-	24.1	16.1	17.2	16.0	14.9

Notes:

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

Exceedances of the NO$_2$ annual mean AQO of 40 µg m^{-3} are shown in **bold**.

NO$_2$ annual means in excess of 60 µg m^{-3}, indicating a potential exceedance of the NO$_2$ hourly mean AQS objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias.

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

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

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

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

The 2023 annual mean NO_2 concentrations at automatic monitoring sites overall exhibited a continuation of the decreasing trend observed over the seven-year period between 2017 to 2023. For the sites LW2 and LW4, the average decreases were 46% and 21% respectively for the seven-year period. In 2023, there was one monitoring site (LW4) which measured an annual mean concentration above the AQO with a measured NO_2 concentration of 42.6 µg m^{-3}. LW4 is the only monitoring site where NO_2 concentrations increased in 2023 compared to the previous year. In contrast, monitoring sites LW2, LW5, LW6, and HP1 all recorded lower annual mean concentrations in 2023 than in 2022.

LW4 is situated on a busy stretch of road, where high concentrations are typically expected. No significant changes have been observed in the area, although ongoing development nearby could be influencing the rise. The exact cause of the increase remains unclear but will be investigated further.

Table E. Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
L1	536109	177580	Roadside	99.7	99.7	31.6	29.2	28.2	21.9	21.9	20.7	19.0
L2	537540	177439	Urban Background	99.7	99.7	29.0	25.2	25.7	20.1	19.0	18.3	16.9
L3	536561	178471	Urban Background	32.7	32.7	32.7	30.6	27.4	20.6	20.8	20.0	19.4
L4	536534	178926	Urban Background	57.4	57.4	31.7	28.8	27.7	21.1	20.8	19.4	22.1
L5	539678	175050	Roadside	99.7	99.7	30.0	29.9	27.7	21.8	22.7	20.7	18.7
L6	540615	172337	Urban Background	82.1	82.1	32.2	30.5	27.2	22.1	22.2	16.4	17.7
L7	536556	171810	Roadside	99.7	99.7	**43.3**	38.2	39.6	32.5	31.1	29.7	27.4
L8	536229	174032	Roadside	99.7	99.7	38.6	33.5	31.5	24.5	24.8	22.4	21.1
L9	537500	174925	Roadside	99.7	99.7	35.1	36.2	31.9	25.7	25.0	22.2	21.2
L10	538062	175085	Roadside	99.7	99.7	37.3	38.0	31.4	24.7	25.2	22.6	21.4
L11	538007	176517	Roadside	99.7	99.7	34.8	33.6	31.2	23.6	26.0	25.8	24.7
L12	537132	175353	Urban Background	99.7	99.7	26.4	25.3	23.7	19.4	18.6	16.6	16.3
L13	535804	171567	Urban Background	89.8	89.8	26.6	23.8	24.4	19.5	17.8	19.2	17.0
L14	538482	175792	Urban Background	99.7	99.7	29.2	26.3	25.8	21.4	20.0	18.3	18.1
L15	538237	176101	Roadside	99.7	99.7	36.3	33.9	34.0	26.9	24.1	26.2	27.2
L16	537740	175930	Roadside	99.7	99.7	**44.1**	**40.4**	37.0	29.5	31.6	28.0	26.2
L17, L18, L19	536246	176934	Roadside	99.7	99.7	**48.9**	**43.0**	38.1	28.1	29.1	28.4	27.1
L20	535746	176969	Roadside	59.6	59.6	38.6	37.7	34.3	25.6	24.3	22.1	21.6
L21	536133	173341	Roadside	89.8	89.8	**49.7**	**41.2**	39.8	30.1	28.0	25.5	24.8

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
L22	538060	173816	Urban Background	92.3	92.3	31.9	28.1	25.5	22	19.8	18	17.5
L23	537178	173365	Roadside	82.1	82.1	**44.5**	**43.1**	38.7	29.9	28.4	26.5	24.5
L24	538904	172697	Urban Background	79.9	79.9	33.3	32.8	29.9	24.1	23.0	22.8	21.1
L26	536527	175935	Roadside	99.7	99.7	**43.5**	39.0	36.0	29.8	28.6	24.4	22.9
L27	539604	176090	Roadside	92.3	92.3	**52.4**	**43.5**	39.5	31.2	30.5	28.8	28.4
L28	540051	173769	Roadside	99.7	99.7	**55.5**	**46.3**	**41.0**	33.4	31.0	26.7	25.4
L29	538165	173406	Roadside	92.3	92.3	29.0	28.1	24.4	20.4	19.6	18.1	16.7
L30	535535	172679	Roadside	99.7	99.7	28.1	28.7	26.3	19.7	18.7	18.2	15.9
L31	536399	175150	Urban Background	99.7	99.7	24.4	25.9	21.2	17.8	17.4	15.9	14.7
L32	536944	177665	Urban Background	80.2	80.2	28.4	27.4	25.6	20.7	19.7	19.3	18.0
L33	537979	174792	Roadside	99.7	99.7	**40.7**	38.2	33.2	28.2	26.9	24.1	23.4
L34	535071	172346	Urban Background	99.7	99.7	26.4	23.8	24.2	18.3	17.2	15.2	14.4
L35	535447	176897	Roadside	92.3	92.3	31.3	27.1	25.9	19.9	19.7	17.3	16.2
L36	536275	178405	Roadside	99.7	99.7	**43.1**	39.2	37.0	26.3	25.4	22.6	20.6
L37	536317	176883	Urban Background	99.7	99.7	29.2	27.4	25.3	19.6	19.7	17.9	17.0
L38	536564	174937	Roadside	99.7	99.7	-	29.7	30.6	22.5	21.7	21.5	17.7
L39	536308	175721	Roadside	99.7	99.7	-	30.0	29.0	22.8	21.2	19.8	17.6
L40	536792	176432	Urban Background	82.4	82.4	-	23.7	22.7	17.7	17.7	15.5	15.0
L41	537256	176353	Urban Background	99.7	99.7	-	24.0	23.2	17.6	17.2	16.3	14.9
L42	537032	176534	Urban Background	99.7	99.7	-	26.8	26.7	20.6	20.1	18.4	16.5

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
L43	536389	177144	Urban Background	99.7	99.7	-	26.6	27.5	20.2	20.2	18.9	17.5
L44	536028	178107	Roadside	82.7	82.7	-	35.2	32.8	26.1	26.3	26.2	24.3
L45	537228	177284	Roadside	99.7	99.7	-	33.4	28.5	20.4	19.8	18.1	17.8
L46	539416	175315	Urban Background	99.7	99.7	-	24.9	24.7	18.8	17.9	16.5	15.2
L47	536839	173211	Roadside	92.0	92.0	-	27.5	24.8	20.4	17.7	17.4	15.6
L48	537433	173965	Urban Background	99.7	99.7	-	27.3	25.8	20.4	20.3	19.6	17.9
L49	538358	175324	Urban Background	99.7	99.7	-	27.4	24.0	20.3	20.6	17.5	17.6
L50	537836	173400	Urban Background	99.7	99.7	-	24.3	21.8	17.8	16.6	14.7	14.0
L51	538803	173683	Roadside	92.3	92.3	-	**53.5**	**44.9**	34.0	33.3	30.4	29.0
L52	538285	171877	Roadside	99.7	99.7	-	33.2	33.3	27.3	24.2	21.8	20.6
L53	539319	172362	Urban Background	99.7	99.7	-	22.7	20.9	15.9	16.8	15.3	15.0
L54	540485	172665	Roadside	99.7	99.7	-	-	-	-	-	22.4	21.9
L55	537110	176953	Roadside	74.7	74.7	-	-	-	-	-	33.9	20.4
L56	536015	178631	Roadside	79.9	79.9	-	-	-	-	-	22.3	22.1
L57	539671	176141	Urban Background	99.7	99.7	-	-	-	-	-	19.1	19.1
L58	539442	175762	Roadside	99.7	99.7	-	-	-	-	-	26.4	26.8
L59	537986	175738	Urban Background	82.4	82.4	-	-	-	-	-	23.3	22.2
L60	536660	178717	Urban Background	92.3	92.3	-	-	-	-	-	19.3	18.5
L61	537926	174634	Roadside	99.7	99.7	-	-	-	-	-	25.7	24.3
L62	536152	176823	Roadside	90.1	90.1	-	-	-	-	-	24.4	23.3
L63	537092	173415	Roadside	99.7	99.7	-	-	-	-	-	29.7	28.0

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
L64	536352	177541	Urban Background	89.8	89.8	-	-	-	-	-	18.5	17.2
L65	537319	176485	Urban Background	92.0	92.0	-	-	-	-	-	17.5	16.3
L66	536106	173458	Roadside	82.1	82.1	-	-	-	-	-	16.8	14.3
L67	535644	176484	Urban Background	92.0	92.0	-	-	-	-	-	17.6	15.4
L68	536462	177354	Roadside	92.3	92.3	-	-	-	-	-	28.7	28.2
L69	536065	175089	Urban Background	75.0	75.0	-	-	-	-	-	16.5	15.6
L70	537048	174220	Urban Background	92.0	92.0	-	-	-	-	-	16.4	13.6
L71	539355	175293	Urban Background	89.8	89.8	-	-	-	-	-	16.5	15.2
L72	538738	174030	Urban Background	99.7	99.7	-	-	-	-	-	14.5	14.4
L73	537258	176212	Roadside	99.7	99.7	-	-	-	-	-	30.3	29.4
L74	538503	173580	Urban Background	99.7	99.7	-	-	-	-	-	18.3	16.4
L75	536392	174592	Urban Background	99.7	99.7	-	-	-	-	-	19.3	16.7
L76	539519	172846	Roadside	99.7	99.7	-	-	-	-	-	26.4	22.0
L77	538470	173427	Urban Background	92.3	92.3	-	-	-	-	-	17.3	16.1
L78	538958	173479	Urban Background	99.7	99.7	-	-	-	-	-	20.2	18.8
L79	540204	173780	Urban Background	99.7	99.7	-	-	-	-	-	20.5	18.3
L80	535505	176274	Roadside	92.3	92.3	-	-	-	-	-	24.3	22.3
L81	539815	175122	Roadside	99.7	99.7	-	-	-	-	-	23.1	19.3

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
L82	536791	172863	Roadside	59.3	59.3	-	-	-	-	-	-	20.1
L83	537967	172366	Roadside	92.3	92.3	-	-	-	-	-	21.3	18.8
L84	536500	172023	Roadside	67.3	67.3	-	-	-	-	-	30.8	24.9
L85	536528	171882	Roadside	82.1	82.1	-	-	-	-	-	35.3	37.3
L86	536871	171719	Roadside	92.3	92.3	-	-	-	-	-	39.4	31.3
L87	534983	171996	Roadside	84.6	84.6	-	-	-	-	-	26.0	23.3
L88	536309	171594	Roadside	92.3	92.3	-	-	-	-	-	35.3	30.8
L89	536208	171508	Roadside	99.7	99.7	-	-	-	-	-	21.2	17.5
L90	535538	173700	Roadside	99.7	99.7	-	-	-	-	-	19.4	16.6
L91	538924	176411	Roadside	92.3	92.3	-	-	-	-	-	21.2	19.4
L92	535760	177399	Roadside	99.7	99.7	-	-	-	-	-	21.8	18.5
L93	535765	178032	Roadside	89.8	89.8	-	-	-	-	-	27.0	23.8
L94	538318	175446	Roadside	100	49.7	-	-	-	-	-	-	32.1
L95	538371	175562	Roadside	100	49.7	-	-	-	-	-	-	**78.8**
L96	538233	175283	Roadside	100	49.7	-	-	-	-	-	-	39.0
SSDT_1	536219	178078	Roadside	99.7	99.7	-	-	-	22.5	23.3	25.2	22.6
SSDT_2	537250	176593	Roadside	89.8	89.8	-	-	-	-	20.0	18.9	18.6
SSDT_3	537550	176443	Roadside	99.7	99.7	-	-	-	21.5	22.6	20.8	19.7
SSDT_4	538982	176645	Roadside	99.7	99.7	-	-	-	24.4	25.5	23.8	23.6
SSDT_5	535947	176287	Roadside	99.7	99.7	-	-	-	19.6	21.1	18.1	17.9
SSDT_6	536197	176514	Roadside	99.7	99.7	-	-	-	22.6	21.3	19.5	18.5
SSDT_7	539761	176431	Roadside	99.7	99.7	-	-	-	24.6	24.5	23.9	23.7
SSDT_8	538795	175291	Roadside	99.7	99.7	-	-	-	25.5	24.5	23.6	20.6
SSDT_9	538926	175030	Roadside	99.7	99.7	-	-	-	19.2	18.8	17.6	16.5
SSDT_10	538367	174857	Roadside	99.7	99.7	-	-	-	27.5	27.3	24.5	22.6
SSDT_11	540200	174781	Roadside	89.8	89.8	-	-	-	17.7	17.4	15.7	14.9
SSDT_12	539871	174720	Roadside	92.0	92.0	-	-	-	26.4	25.3	23.9	21.8
SSDT_13	539418	174543	Roadside	74.5	74.5	-	-	-	20.9	19.7	18.8	16.6
SSDT_14	539063	174543	Roadside	79.9	79.9	-	-	-	17.6	20.7	19.3	17.3
SSDT_15	538562	174494	Roadside	67.6	67.6	-	-	-	22.2	22.7	20.0	18.8

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
SSDT_16	536975	174537	Roadside	99.7	99.7	-	-	-	21.9	20.7	18.8	17.9
SSDT_17	536666	174206	Roadside	99.7	99.7	-	-	-	18.5	18.1	17.1	16.4
SSDT_18	538313	174269	Roadside	99.7	99.7	-	-	-	20.3	20.0	18.8	17.9
SSDT_19	538589	174189	Roadside	99.7	99.7	-	-	-	16.7	18.5	17.3	16.1
SSDT_20	539498	172969	Roadside	99.7	99.7	-	-	-	23.4	22.5	20.6	19.3
SSDT_21	539892	174174	Roadside	99.7	99.7	-	-	-	20.9	18.6	17.3	16.9
SSDT_22	540014	173979	Roadside	89.8	89.8	-	-	-	24.9	25.6	23.0	21.6
SSDT_23	540119	174329	Roadside	99.7	99.7	-	-	-	19.3	18.5	17.0	16.1
SSDT_24	540504	173977	Roadside	99.7	99.7	-	-	-	22.1	23.0	20.0	19.3
SSDT_25	539559	173929	Roadside	92.0	92.0	-	-	-	21.3	22.8	20.7	19.5
SSDT_26	539352	173783	Roadside	99.7	99.7	-	-	-	26.3	24.3	22.6	20.5
SSDT_27	536753	173603	Roadside	99.7	99.7	-	-	-	19.1	18.5	17.6	15.6
SSDT_28	538723	173345	Roadside	99.7	99.7	-	-	-	25.5	25.3	22.5	21.6
SSDT_29	541019	173231	Roadside	99.7	99.7	-	-	-	17.8	18.2	16.6	15.8
SSDT_30	537530	173095	Roadside	74.7	74.7	-	-	-	20.9	20.2	18.8	17.6
SSDT_31	534939	172586	Roadside	92.3	92.3	-	-	-	17.6	17.0	15.3	13.8
SSDT_32	536495	172795	Roadside	92.3	92.3	-	-	-	20.5	18.2	17.7	17.0
SSDT_33	537436	172596	Roadside	99.7	99.7	-	-	-	19.8	19.8	17.0	16.5
SSDT_34	538471	172660	Roadside	92.0	92.0	-	-	-	19.1	18.2	16.6	15.6
SSDT_35	539254	172658	Roadside	99.7	99.7	-	-	-	17.8	18.1	16.7	17.0
SSDT_36	540601	172744	Roadside	99.7	99.7	-	-	-	17.4	15.3	13.5	12.8
SSDT_37	536618	172405	Roadside	99.7	99.7	-	-	-	29.5	28.7	26.6	23.4
SSDT_38	535533	172340	Roadside	89.8	89.8	-	-	-	17.4	15.8	14.9	13.0
SSDT_39	534309	172044	Roadside	84.3	84.3	-	-	-	19.3	18.3	17.9	16.5
SSDT_40	535924	172207	Roadside	89.8	89.8	-	-	-	25.1	22.5	19.6	18.3
SSDT_41	536598	171766	Roadside	92.3	92.3	-	-	-	29.9	30.9	28.4	25.8
SSDT_42	538788	171517	Roadside	39.8	39.8	-	-	-	25.3	24.3	23.0	23.4
SSDT_43	539170	170869	Roadside	99.7	99.7	-	-	-	17.8	16.9	16.3	14.8
SSDT_44	539374	171246	Roadside	82.4	82.4	-	-	-	16.6	14.5	15.0	13.6
SSDT_45	539492	171567	Roadside	99.7	99.7	-	-	-	17.6	17.5	15.6	14.4

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (1)	Valid Data Capture 2023 (%) (2)	2017	2018	2019	2020	2021	2022	2023
SSDT_46	539732	172202	Roadside	92.3	92.3	-	-	-	21.4	20.5	18.9	17.9
SSDT_47	540091	171644	Roadside	92.3	92.3	-	-	-	25.2	24.4	21.1	18.9
SSDT_48	540331	172103	Roadside	89.8	89.8	-	-	-	20.1	20.7	18.9	17.3
SSDT_49	537318	175817	Roadside	99.7	99.7	-	-	-	19.0	17.4	16.5	15.5
SSDT_50	537111	175716	Roadside	57.7	57.7	-	-	-	-	17.9	16.0	15.6
SSDT_51	535910	175947	Roadside	72.5	72.5	-	-	-	28.0	28.2	24.8	23.8

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

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

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

Notes:

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

Exceedances of the NO$_2$ annual mean objective of 40µg/m^3 are shown in **bold**.

NO$_2$ annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO$_2$ 1-hour mean objective are shown in **bold and underlined**.

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

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

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

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

There was one exceedance of the annual mean NO_2 AQO of 40 µg m^{-3} during 2023. L95 (Lewis Grove) measured the highest annual mean concentration at 78.8 µg m^{-3}, although when distance corrected for relevant exposure, the concentration decreased to 74.0 µg m^{-3}. As this is above 60 µg m^{-3}, it is likely that the 1 hour mean NO_2 objective was exceeded at L95 during 2023. This site was added as part of the three new diffusion tubes in 2023 along Lewisham High Street and Lewis Grove. It is situated near a busy junction and is also in a street canyon due to the road layout, which are believed to be the main contributing factors to this high annual mean NO_2 concentration. The highest recorded value at the pre-existing tubes was at L85 (Health Centre bus stop) at 37.3 µg m^{-3}. 91% of the pre-existing diffusion tube locations recorded lower annual mean NO_2 concentrations in 2023 than 2022. All monitoring locations measured an overall decreasing trend in annual mean NO_2 concentrations since 2017. On average, the decrease between 2017 and 2023 at diffusion tube sites was 42% for the seven-year period. L28 (Baring Road), a roadside location, measured an overall decreasing NO_2 trend over the seven-year period (54%), albeit with some yearly variations. Over the last seven years, annual mean NO_2 concentrations at all diffusion tube urban background sites have remained below the annual mean NO_2 AQO of 40 µg m^{-3} and there has only been one exceedance at the roadside locations since 2019- at the new location L95 in 2023.

Table F. NO$_2$ Automatic Monitoring Results: Comparison with 1-hour Mean Objective, Number of 1-Hour Means > 200 µg m^{-3}

Site ID	Valid data capture for monitoring period %([a])	Valid data capture 2023 %([b])	2017	2018	2019	2020	2021	2022	2023
LW6	94.6	94.6	-	-	-	-	-	0	0
LW2	98.1	98.1	0	0	0	0	0 (82)	0 (90)	0
LW4	93.7	93.7	4	0	0	0	0	0	1
LW5	99.2	99.2	-	-	-	0	0	0	0
HP1	98.9	98.9	-	-	0	0	0	0	0

Notes

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

Exceedance of the NO$_2$ short term AQO of 200 µg m^{-3} over the permitted 18 hours per year are shown in **bold**.

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

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

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

In 2023, there were no exceedances of the hourly mean NO$_2$ AQO of 200 µg m^3 at any of the five automatic monitoring locations. There was one occasion when the hourly mean NO$_2$ was recorded above 200 µg m^3 at LW4 (Loampit Vale). However, this was within the permitted 18 hours per year limit as outlined in the hourly NO$_2$ AQO. In the past seven years, there was no discernible trend, although all monitoring locations have met the AQO of 200 µg m^{-3} fewer than 18 times per year since 2017, and there has only been 1 hour at LW4 where concentrations were greater than 200 µg m^{-3} in the last five years.

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

Site ID	Valid data capture for monitoring period %([a])	Valid data capture 2023 %([b])	2017	2018	2019	2020	2021	2022	2023
LW2	83.9	83.9	22.8	21.2	19.8	19.0	21.2	24.1	22.2
LW4	98.9	98.9	20.9	18.6	20.3	18.5	19.0	19.7	17.6
HP1	99.9	99.9	-	-	14.7	13.8	13.6	13.1	11.7

Notes

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

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

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

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

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

In 2023, all three monitoring sites measured annual mean PM$_{10}$ concentrations well below the AQO of 40 μg m^{-3}. However, sites LW2 and LW4 are in exceedance of the WHO AQG for annual mean PM$_{10}$ (15 μg m^{-3}). In 2023, the highest annual mean concentration was measured at LW2, with a concentration of 22.2 μg m^{-3}. Annualisation was not required at any location during 2023. For the entire seven-year period between 2017 and 2023, all three monitoring stations measured an overall downward trend with some fluctuations around this trendline. These variations around the trend are more notable at LW4.

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

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2017	2018	2019	2020	2021	2022	2023
LW2	83.9	83.9	11	4	9	5 (30)	2 (71)	1 (33)	9 (35.6)
LW4	98.9	98.9	7	1	9	8	3	3	3
HP1	99.9	99.9	-	-	7	4	0	3	0

Notes

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

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

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

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

In 2023, LW2 and LW4 measured nine and three instances respectively where the 24-hour mean was greater than the AQO value of 50 µg m^{-3}, whereas HP1 had no instances above 50 µg m^{-3} during the year. However, these are well below the 35 days per year permitted, meaning all monitoring stations achieved compliance with the 24-hour mean AQO. There has been an increase in the number of 24-hour means greater than the AQO threshold value compared to 2022 at LW2, and a decrease at HP1. In the past seven years, the highest recorded number of days where the monitored concentration was greater than the AQO objective value was 11 days at LW2 in 2017.

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

Site ID	Valid data capture for monitoring period %[a]	Valid data capture 2023 %[b]	2017	2018	2019	2020	2021	2022	2023
LW2	95.4	95.4	15.5	15.0	15.0	12.6	13.9	12.6	9.9
HP1	99.9	99.9	-	-	9.9	8.7	8.8	8.1	7.3
LW5	68.4	68.4	-	-	-	8.8	10.1	10.4	9.9

Notes

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

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

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

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

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

PM$_{2.5}$ concentrations are monitored at LW2, HP1 & LW5. In 2023, all sites measured annual mean concentrations below the annual

mean PM$_{2.5}$ AQO value of 20 μg m^{-3}. However, all monitoring locations exceeded the annual mean WHO AQG for PM$_{2.5}$ of 5 μg m^{-3}.

Due to low data capture at LW2, annualisation has been carried out. LW2 measured the highest annual mean concentration in

2023 at 9.9 μg m^{-3}.

2. Action to Improve Air Quality

2.1 Air Quality Management Areas

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

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

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

Table J. Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Lewisham AQMA	Declared 01/07/2001	NO_2 Annual Mean PM_{10} 24-hour mean	The Air Quality Management Areas for the Borough of	Yes	52	**74.0**	Not compliant	Air Quality Action Plan 2022-2027	London Borough of Lewisham Air Quality Action Plan 2022-2027

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
			Lewisham consist of four large AQMAs and a series of ribbon roads.						
Crofton Park and Honor Oak Park AQMA	Declared 30/08/2013	NO_2 Annual Mean	This AQMA consists of the area North of A205 Road and was declared on the basis of anticipated exceedances of the NO_2 annual mean.	Yes	52	N/A	4 years	Air Quality Action Plan 2022-2027	London Borough of Lewisham Air Quality Action Plan 2022-2027

☒ **London Borough of Lewisham confirm the information on UK-Air regarding their AQMAs is up to date.**

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

2.2 Air Quality Action Plan Progress

Table K provides a brief summary of London Borough of Lewisham progress against the Air Quality Action Plan, showing progress made this year. New projects which commenced in 2023 are shown at the bottom of the table.

Table K. Delivery of Air Quality Action Plan Measures

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
1.A	Air Quality (AQ) Monitoring	Maintaining and where possible expanding monitoring networks. Combined with other LA statutory duties, maintaining monitoring networks is critical for understanding where pollution is most acute, and what measures are effective to reduce pollution.	Please see updates provided below.
1.A.1	AQ Monitoring	NO$_2$ diffusion tubes	In 2018, the diffusion tube network was expanded to include 50 additional sites. In September 2020, a further 51 diffusion tubes were installed across Lewisham as part of the Low Traffic Neighbourhood project. In 2022, 40 additional diffusion tubes were deployed around schools, care homes and in areas of significant traffic in the borough. In 2023, 3 additional tubes were deployed to support the regeneration project in Lewisham High Street/Market. There are a total of 144 diffusion tubes located (excluding the 2 duplicates) across the borough. The continuity of the later monitoring regime will depend on funding.
1.A.2	AQ Monitoring	Borough's automatic monitors	The Council will continue to monitor air quality via 4 automatic monitoring stations and assist with the Imperial College London supersite located at Honor Oak Park. The addition of further PM$_{2.5}$ automatic monitors will depend on available funding.
1.A.3	AQ Monitoring	Real time trialling monitoring using Sensors	The Council will continue to monitor air quality via 4 automatic monitoring stations and assist with the Imperial College London supersite located at Honor Oak Park. Maintenance and Service contract has been renewed with WeCare4Air and Imperial College London for 1 year. 20 Breathe London nodes were running in 2023. These sensors provided live concentration data for NO$_2$ and PM$_{2.5}$.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			The Council plans to install around 100 Airscape Sensors across the borough to gather real-time data. This will allow for faster responses to Air Quality issues. The Council is working with Airscape to finalise the contract and identify suitable locations for the sensors.
1.A.4	AQ Monitoring	At a minimum, working towards meeting interim WHO targets for $PM_{2.5}$ by 2030	Lewisham have designed an air quality interactive map which has the DEFRA Air Quality Objectives and WHO objectives as comparisons. All air quality reporting compares data to the DEFRA Air Quality Objectives and WHO objectives. This action is ongoing.
1.B.1	Core statutory duties	Annual Status Report (ASR)	The 2023 ASR report was compiled and submitted as planned to DEFRA and the GLA.
1.B.2	Core statutory duties	Update AQAP every five years at a minimum and follow LLAQM guidance	The AQAP has been audited by an external auditor and the outcomes from the audit have been implemented. The 5 yearly review of the AQAP will follow the prescribed GLA/DEFRA guidance available at the time.
2	Emissions from developments and buildings	Ensuring emissions from construction are minimised	Lewisham Council will adopt air quality mitigation measures for all developments across the borough. Following extensive consultation Lewisham Council submitted the Lewisham Local Plan and its supporting documents to the Secretary of State for its independent examination in November 2023. The Local Plan will address all the issues relevant to sustainable development. Register of NRMM are secured in planning conditions with Construction Environmental Management Plans. An overall reduction of the current LAEI construction related PM_{10} & $PM_{2.5}$ emissions is anticipated. The Highways Maintenance Contract, specifications, include a number of environmental mitigation measures, including emissions from equipment and materials used. The successful tenderer scored the highest for all of the environmental quality indicators. The Council's current term contractor have an Environmental Management System compliant with ISO14001:2015 in place, and they are committed to recycling 98% of their materials to minimise the environmental impact of their work. They are also committed to trial new innovations in technology, machinery, materials, and methodology with a view to reduce carbon footprints and other pollutants such as CO2 and NOx emissions in their operations. New innovations are introduced and reviewed with the Council on a regular basis.
3	Emissions from developments and buildings	Ensuring enforcement of non-road mobile machinery (NRMM) air quality policies	NRMM conditions are being used by the Planning department, the current recording system does not allow the number of conditions applied to be retrieved. The Planning department are exploring how this data can be provided.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
4	Emissions from developments and buildings	Reducing emissions from CHP and enforcing CHP air quality policy. Ensure smaller developments use ultra-low NOx Boilers or other zero carbon low emission options.	All planning policy requirements are considered as part of the development management process.
5	Emissions from developments and buildings	Enforce Air Quality Neutral policy	100% of relevant applications have been confirmed as Air Quality Neutral in compliance with planning policy.
6	Emissions from developments and buildings	Ensuring adequate, appropriate, and well-located green space and infrastructure is included in new and existing developments	Green space mapping has been reviewed through the Regulation 19 Local Plan process informed by the Open Space Review evidence base. All Major applications are being assessed through the Development Management process to ensure they achieve an Urban Greening Factor (UGF) of 0.4 for residential developments and UGF of 0.3 for commercial developments. There are some very urban examples that might not be able to meet the required factor. In these cases, conditions are used to explore how future urban greening can be improved as detailed design work takes place. Improvements to existing open spaces through developer contributions are monitored within the Infrastructure Funding Statement. Biodiversity Net Gain has now become a statutory matter for planning and applies to small and major sites - where 10% improvement must be delivered, the council's planning pages have been updated to reflect this.
7	Emissions from developments and buildings	Ensuring that Smoke Control Zones are appropriately identified and fully promoted and enforced.	Promotion and publicity of woodburning and its impact was undertaken during the Autumn/Winter months as part of the DEFRA funded London Woodburning Project. The whole borough is designated a Smoke Control Area and any complaints regarding wood burning are investigated, this includes providing advice and taking enforcement action if required. This work will be further supported going forward by the Air Quality New Burdens Grant.
8	Emissions from developments and buildings	Promoting and delivering energy efficiency and zero carbon retrofitting projects in workplaces and homes, including	Lewisham Council's website provides practical advice to residents on improving the energy efficiency of their home and this information has been promoted via social media and digital channels. The Council has delivered a range of retrofit projects to its corporate buildings and schools with heat pumps replacing end of life and inefficient boilers and is currently delivering retrofit measures in its housing stock with funding from the Social Housing Decarbonisation Fund. The Council has committed to

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		through using the GLA RE:NEW and RE:FIT programmes, where appropriate, to replace old boilers /top-up loft insulation in combination with other energy conservation measures.	publishing a Housing Retrofit Strategy in 24/25 which will set out plans to extend improvements on energy efficiency and decarbonisation projects across all tenures of housing in the borough.
8.1	Emissions from developments and buildings	Develop and implement strategies for decentralised energy that convert gas heating to low and zero carbon alternatives including heat networks, and upgrade existing large combined heat and power communal heating to cleaner technology alternatives.	The Council has continued to develop the energy master planning work completed in 2020 with detailed techno economic assessments of heat network viability in Catford, Lewisham Town Centre and North Lewisham. The Council has worked closely with Veolia in relation to the potential for built connections from the South East London Combined Heat and Power facility. Further work is in progress at Lewisham Town Centre with local stakeholders to determine the commercial basis for a Green Heat Network Fund bid to support an area based approach to decarbonisation.
8.2	Emissions from developments and buildings	Introduce a requirement for a minimum EPC rating for privately rented sector HMOs covered by both the mandatory and additional licensing schemes. Introduce a requirement for any works covered by the Disabled Facilities	In 2021 the Council delivered a Government funded Minimum Energy Efficiency Standards initiative which raised awareness of the requirements on landlords. Following this project the Private Sector Housing Team took on the enforcement function for MEES in domestic properties which aligns with existing work on the Housing Health and Safety Rating System. The sector has been in a holding pattern on this issue with the outcome of a 2021 consultation on raising MEES standards delayed. The service continues to help residents receiving support through the borough's practical energy advice service to benefit from funding where they qualify. In 21/22 292 households were supported to access retrofit grants the majority of those through the Energy Company Obligation. In 22/23 169 households were supported to access retrofit grants. Just 13 of these were under the Energy Company Obligation due to

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		Grant or discretionary housing improvement grants to meet level D EPC rating in privately owned accommodation.	changes in ECO4 which restricted eligibility, and increased the requirements on suppliers and local authorities using the flexible eligibility scheme. In 2023 the Council was awarded £2.9m under the Social Housing Decarbonisation Scheme enabling retrofit work in the Council's housing stock that will improve thermal efficiency and reduce carbon emissions. This work will deliver works by the end of 23/24 and continue into the following year. The Council's Housing Retrofit Strategy planned for publication in 2024 will set out the approach to decarbonising all tenures of housing. The Housing thematic of the 2024 Action Plan includes actions relating to the Council's own housing, housing managed by other social landlords, private sector housing and owner occupier properties. The Private Sector Housing and Home Improvement Service continues to take action on category 1 health and safety hazards, many of which relate to energy efficiency. Examples include excess cold hazards, or damp and mould hazards. We undertake works to remedy these in privately rented housing, via the property licensing and housing enforcement team, and in owner occupied and housing association properties via the housing improvement and assistance team.
9	Emissions from developments and buildings	Master planning and redevelopment areas aligned with Air Quality Positive and Healthy Streets approaches.	The Council is in the process of developing strategies and policies that are consistent with the Council's policy framework, as well as wider regional and national policies and priorities, including the Healthy Streets approach. Specifically, the Council is currently developing: • A strategy that identifies and prioritises proposed Healthy Neighbourhood areas, outlines the proposed methodology for delivery including a consultation and engagement plan, and makes recommendations on objectives, monitoring, and possible type of interventions. • A strategy that integrates existing policies within Strategic Transport and Highways, alongside other local, regional and national strategies, policies, and guidance into one overarching strategy with an associated delivery plan for active travel improvements over the next 7-10 years. In addition, all projects that are funded by TfL and delivered by the Council are required to adopt the Healthy Streets approach.
9.1	Emissions from developments and buildings	Installation of residential electric charge points on new developments	The Planning department secures electric vehicle charging points by using planning conditions in accordance with the London Plan standards.
10	Public health and awareness raising	Public Health department taking shared responsibility for	The Health Protection Forum (renamed from Committee) signs off the Annual Status Report (ASR) which is chaired by the Director of Public Health or her deputy. The Director of Public Health also chairs

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		borough air quality issues and implementation of Air Quality Action Plans/ we will ensure that Directors of Public Health (DsPHs) have been fully briefed on the scale of the problem in our local authority area; what is being done, and what is needed.	the Air Quality Strategy and Air Quality Working Group which led the preparation and signing off the 2022-2027 Air Quality Action Plan which was later signed off by the GLA and the Mayoral cabinet.
10.1	Public health and awareness raising	The Council's political leadership will champion the issue of air quality inside and outside of the borough. Our previous Air Quality Champion, Cllr Louise Krupski was appointed in May 2018, and has actively been engaging with the community, schools, and construction companies to promote actions to help reduce air pollution across the borough. Our new Air Quality Champion Cllr Yemesi Anifowose will continue this work.	Cllr Louise Krupski (portfolio holder) has meetings every six weeks with the Head of Environmental Health and the Director of Public Realm to receive regular updates on progress and actions being taken in respect to air quality.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
11	Public health and awareness raising	Engagement with businesses/Public Health Teams will be supporting engagement with local stakeholders (businesses, schools, community groups and healthcare providers). The support will be via the DsPHs when projects are being developed.	This piece of work is ongoing. The Environmental Protection and Public Health Teams are working with schools to raise awareness about the health impacts of air quality not only through the school Superzone work but also through a set of communication materials which have been developed to use with all schools in the borough, and to monitor these health impacts more closely. Lesson plans and lessons were developed as part of the school Superzone round 1 project, these will be further developed so that they can be distributed to all schools across the borough.
11.1	Public health and awareness raising	Director of Public Health to have responsibility for ensuring their Joint Strategic Needs Assessment (JSNA) has up to date information on air quality impacts on the population Strengthening coordination with Public Health by ensuring that at least one Consultant grade public health specialist within the borough has air quality responsibilities outlined in their job profile. Director of Public Health to sign off	The Director of Public Health (DPH) signs off the statutory ASRs and the Air Quality Action Plan (2022-27) through the Air Quality Strategy and Working Groups as both the groups are chaired by the DPH. The ASRs are signed off formally by the Heath Protection Forum (Committee) which is also chaired by the DPH. The Air Quality Joint Strategic Needs Assessment has been updated with up-to-date information on air quality impacts on the population.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		Statutory Annual Status Reports and all new Air Quality Action Plans	
11.2	Public health and awareness raising	Engagement with businesses – Delivery and Servicing Plans (DSP) delivered through Planning process	The Council collaborated with Cross River Partnership to install 12 Delivering London parcel lockers in high-density residential areas and transport hubs. However, due to the 8-week planning process, the lockers weren't installed by the funding deadline in June, so this initiative can't be supported by the CALL programme. The Cross River Partnership suggested including this project in the upcoming Smarter Greener Logistics programme, with Delivering London willing to engage in planning, depending on associated costs.
11.3	Public health and awareness raising	Raise awareness on the impact of indoor air quality on human health	The 'Air Quality in Context' leaflet is due to be reviewed and updated in 2024. Promotion and publicity of woodburning and its impact was undertaken during the Autumn/Winter months as part of the DEFRA funded London Woodburning Project.
12	Public health and awareness raising	Supporting a direct alerts service such as Lewisham App or AirText, and promotion and dissemination of high pollution alert services	No awareness raising of the Lewisham App has been undertaken in 2023 due to an issue which was found with the App and its availability for download through the Google Play Store for Android devices. The Environmental Protection team are working with the App developer to resolve this issue. The promotion of the Lewisham App will resume once it is available for download.
12.1	Public health and awareness raising	Engaging with communities through the work of the Borough of Culture 2022 (BoC) and monitoring number of bids for: a call to action on climate change/working together to deliver change.	DEFRA has approved the ASR. The report has been signed off by DMT and the Health Protection Forum and is now available on the Council Website.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
13	Public health and awareness raising (School)	Encourage schools to join the TfL STARS accredited travel planning programme by providing information on the benefits to schools and supporting the implementation of such a programme	The Council has continued to work closely with Schools and support them in their travel plans and TfL Travel for Life (previously STARS) accreditation. However, the staffing constraints faced by schools have significantly impacted their engagement with the programme. Currently, 6 schools are accredited across the Borough. The Council has also continued to expand school streets in the Borough. Currently Lewisham has the 3rd highest proportion of schools with a traffic-free School Streets scheme out of all the London boroughs. Lewisham's proportion is 46%, a figure significantly higher than the London average of 20% (source: London Boroughs Healthy Streets Scorecard). Two new School Streets are currently planned to be implemented in 2024/25, with another two going through design development. These School Streets introduce traffic restrictions at school drop off and pick up times to support those wanting to walk, cycle or scoot to school, and to help to create a calmer, safer and cleaner environment near to the school gates. The 2024 Climate Action Plan includes an action specifically on School Streets.
14	Public health and awareness raising (schools)	Complete and adopt the draft LBL Air Quality School Action Plan School-specific actions are included in the draft LBL action plan.	The LBL Air Quality School Action Plan (AQAP) has been completed and adopted together with the AQAP. The Council continues to support and encourage schools to compile their own AQAPs using the School Superzone Project to initiate the development of the plans for each school following the prescribed guidance/template. A second School Superzone project has been funded by the GLA (30k), for a superzone to be implemented around Kender Primary School and Edmund Waller Primary School. This is the first time a superzone has encompassed two schools. The project is due to commence in 2024. The project will include air quality and anti-idling workshops at both schools. Anti-idling signage has been installed in 75 locations in the borough near schools and the Council has the power to fine drivers who keep running an engine while stationery without reason. In practice enforcement action is hard to execute as drivers will usually either comply with a request to cut their engine or drive away. Officers continue to work with head teachers and parents to reduce air pollution around schools with workshops on air quality and idling. A bid for funding under the Public Sector Decarbonisation Scheme Phase 3b was approved in early 2023. Works at Downderry School and Honor Oak Community Centre to decarbonise heating are expected to commence in 2024. A Heat Decarbonisation Plan for the Council's main corporate sites was completed in March 2023, external grant funding for a similar programme for Schools has been secured with the work completing in March 2024. The Schools Climate Network was established in

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			2021 and has held 14 meetings since then with staff and pupils from local primary and secondary schools. A Schools Climate Network newsletter is circulated on a termly basis. In January 2024 the Council, in partnership with the Horniman Museum, plans to run a Big Schools Climate Conference with workshops, creative events and discussion.
			The Council's sustainable drainage in schools project won the Trees for Nature and Climate Award at the London Tree and Woodland Awards 2023. Rain gardens and trees in the playgrounds of Rathfern, John Stainer and Deptford Park schools alongside engagement programmes with pupils and teachers have transformed the outdoor space of the schools while delivering 150m^2 new blue infrastructure and draining over 1,700m^2 hardstanding surfaces. At Thornville Road a new rain garden developed in partnership with the local community and funded through Thames Water's Surface Water Management Programme was installed on the highway in November 2023.
			The Public Health and Environmental Protection teams have worked together to carry out air quality audits at 10 schools in Lewisham. These air quality audits were undertaken by WSP, all schools have received copies of the finial audit reports. The schools are now able to access a £5000 Air Quality Starter pack to help them start implementing the measures identified within the air quality audits. 8 schools have provided their spending plans and the funds have been released. The schools which were audited were: Adamsrill Primary School, Ashmead Primary School, Baring Primary School, Edmund Waller Primary School, Fairlawn Primary School, Good Shepherd Primary School, Kender Primary School, Our Lady & St Philip Neri, Stillness Junior School and Torridon Primary School. Measures were identified at nine of the schools which included greening schemes (green screening).
			The Council commissioned MP Smarter Travels to design and deliver a clean air communications campaign to raise awareness of the harm caused by poor air quality and how individuals could take action to reduce their emissions. Lesson plans were developed as part of the project, these will be further developed during 2024 so that they can be distributed to all schools across the borough to educate children and parents about air quality issues. This project was funded through the school Superzone project (Round 1).
			The Council has continued to expand school streets in the borough. There are currently 49 school streets. These School Streets have roads closed to traffic at school drop off and pick up times, physical measures to discourage car use during these times. These measures reduce congestion, improve road safety and air quality making it easier for children and their parents to access the school. The remaining school sites without restrictions are those that are more practically challenging to deliver and

Measure	LLAQM Action Matrix Theme	Action	**Progress** • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			likely to be more costly and potentially more sensitive. For these School Zones approaches are being considered. 1382 children have taken part in Bikeability during 2023. A fleet replacement plan will be submitted to Mayor and Cabinet later this year, this plan will include the costing to transition the fleet to electric as well as replacing like for like and other fuel options (this will consider the creation of a fleet of electric school vehicles for disable/vulnerable children). The feasibility of all options will be considered and the outcome will be a decision for the Mayor and Cabinet with a realistic implementation timeline.
15	Delivery servicing and freight	Update local authority procurement policies to include a requirement for suppliers with large fleets to have attained silver Fleet Operator Recognition Scheme (FORS) accreditation and incorporate the use of the Social Value tool kit for the delivery of additional economic, social and environmental benefits that can be created from the 4 objectives and associated KPIs.	All bidders are obliged to follow the Sustainable Procurement Code of Practice for Contractors 2022. In addition, when Lewisham tenders there is a 10% allocation against social value (as appropriate) for projects above 50k. The most suitable KPIs are selected by the lead stakeholder and in addition this is then measured in the contract.
16	Delivery servicing and freight	Reducing emissions from deliveries to local businesses and residents	All bidders are obliged to follow the Sustainable Procurement Code of Practice for Contractors 2022. In addition, when Lewisham tenders there is a 10% allocation against social value (as appropriate) for projects above 50k. The most suitable KPIs are selected by the lead stakeholder and in addition this is then measured in the contract.
16.1	Delivery servicing and freight (Borough)	Feasibility study of borough-wide freight to support consolidation (or micro consolidation)	Lewisham has been in contact with 'In Post' and have shared asset data. In Post are currently analysing the asset data and will come back to Lewisham if any of the sites are feasible. Lewisham is

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		of deliveries, by setting up or participating in new logistics facilities, and/ or encourage businesses to participate in these.	also in the process of investigating the feasibility of using the Holbeach multistorey car park as a micro-logistics hub and space for green tech uses (materials reuse/circular economy businesses).
17	Borough fleet actions	Increasing the number of hydrogen, electric, hybrid, biomethane and cleaner vehicles in the boroughs' fleet. Accelerate uptake of new Euro VI vehicles in borough fleet.	A travel survey of Council staff was completed in 2023/24. A staff travel plan has been drafted and is expected to go to the Executive Management Team in May 2024. Hired and lease cars are currently under review with an aim to reduce the number. A fleet strategy is currently being drafted, this will determine the timeline and cost burden of transitioning to a zero-emission fleet. This should be approved by Mayor and Cabinet at the end of 2024.
17.1	Borough fleet actions	Reducing emissions from Council fleets by Smarter Driver Training, or equivalent, for drivers of vehicles in borough fleet i.e. through training of fuel efficient driving and providing regular re-training of staff.	Data will continuously be analysed to ensure maximum available efficiencies. All drivers within Street Environmental Services will now be assessed formally once a year on their driving, the assessment includes ensuring drivers are operating optimally and not engaging in practices such as harsh braking.
18	Localised solutions	Expanding and improving green Infrastructure across the borough and in localised areas with high level of pollution (e.g. around the south circular for example)	The current total number of street trees planted 2023-24 is 654. 422 of these were residential trees, these were funded by a combination of UTCF funding (the Forestry Commission and the GLA), Lewisham Council funding, Phoenix Housing funds and residential funding. The rest (Lewisham Blossoms) were funded by the UTCF, Schools, The National Trust, Regular Cleaning and the Grow Back Greener Fund (the GLA)

Measure	LLAQM Action Matrix Theme	Action	**Progress** • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			In addition, 3 tiny forests (600 trees each) in Blythe Hill Fields, Chinbrook Meadows and Forster Memorial Park, and 1800 whips in Beckenham Place Park East project were also planted. In other green spaces in Lewisham 267metres of hedge, 36 larger trees and 535 whips were also planted in 23/24. Since the Climate Emergency Action Plan was published in 2020 the parks service has switched a range of tools and vehicles to electric and this is now the default option when new equipment is required. The latest addition to this in 2023 was an electric small panel van.
19	Localised solutions	Low Emission Neighbourhoods (LENs) or/and Business Low Emission Neighbourhood (BLEN)	Lewisham has not yet been allocated funding for LENs. However, the Council is in the process of developing a strategy that identifies and prioritises proposed Healthy Neighbourhood areas. This will inform the next Healthy Neighbourhood areas that will progress to feasibility and design development stages and will contribute to lower motor traffic emissions.
19.1	Localised solutions	Work with all the relevant organisations to improve air quality on strategic roads such as the South Circular and other major roads around.	The ULEZ was expanded in August 2023. Lewisham continues to work with TfL on the rerouting of the A205 as part of the Catford regeneration project.
20	Cleaner transport: Policy	Ensuring that transport and Air Quality policies and projects are integrated. Ensure that the Head of Transport has been fully briefed on the Public Health duties and the fact that all directors (not just Director of Public Health) are responsible for delivering them, as	The Transport, Fleet and Environmental Health teams all report to The Director of Public Realm which ensures that all related polices and projects are integrated and joined up. The Director of Public Realm also signs off the AQAPs/ASRs.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
		well as on air quality opportunities and risks related to transport in the borough.	
20.1	Cleaner transport: Zoning	Lobbying/working with TfL on: Speed control measures on more Strategic roads, and Low Emission Zones. E.g. lowering the legal speed limit to 20mph in built up residential areas.	Anti-idling signage has been installed in 75 locations in the borough near schools and the Council has the power to fine drivers who keep running an engine while stationery without reason. In practice enforcement action is hard to execute as drivers will usually either comply with a request to cut their engine or drive away. Officers continue to work with head teachers and parents to reduce air pollution around schools with workshops on air quality and idling. The Council is continuing to work together with TfL to promote schemes that lower speed limits, including on the A205, A20, and A2 roads. TfL announced the relevant proposals in September 2023 along with implementation timescales: https://tfl.gov.uk/info-for/media/press-releases/2023/september/tfl-to-launch-65km-of-new-lower-speed-limit-schemes-to-cut-road-danger-across-the-capital-and-save-lives#:~:text=A%2020mph%20limit%20will%20be,to%20go%20live%20in%20October)
21	Cleaner transport: Programme	Discouraging unnecessary idling by taxis and other vehicles and carry out a Council wide anti-idling campaign discouraging unnecessary idling around all venerable receptors. Idling Action Events/workshop s and enforcement around schools	The Lewisham Schools Air Quality/Idling workshops started in November 2022 and the programme is ongoing. Idling signage has been installed in key locations and banners have been produced for schools. This work has been incorporated into a wider Climate Emergency forward plan for 2024 (Greener Lewisham). With upcoming Clean Air Day, there are plans to continue work on this, such as possible workshop and comms messaging around anti-idling.
21.1	Cleaner transport: Programme	Increasing the proportion of electric, hydrogen and ultra-low emission vehicles in Car Clubs.	Officers continue to work with car club operators across the borough to increase the number of residents using car clubs instead of private vehicles. As part of the Sustainable Streets programme, more car club bays will be delivered to support an uptake in car clubs. Car club requirements as part of active travel plans are being captured through the Development Management process for new developments.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
21.2	Cleaner transport: Programme	Working with TFL to promote car scrappage schemes or other retrofit technologies and lobbying government to provide funding for car scrappage schemes.	The Mayor of London has launched a new £210m scrappage scheme providing financial assistance to help eligible Londoners scrap their highest polluting vehicles. The scheme has been and will continue to be promoted by the council.
22	Cleaner transport: Programme	Pedestrianisation: Temporary car free days and pedestrian Days (e.g. no vehicles on certain roads on a Sunday) and similar initiatives.	The feasibility of an enhanced pedestrian zone is currently being explored for Deptford High Street. The Preliminary Design and Detailed Design stages are programmed to be completed in spring 2025. Further funding will be requested through the 2025/26 TfL LIP allocation to carry out the Construction stage.
22.1	Cleaner Transport: Infrastructure	Pedestrianisation / Traffic calming measures/Road system redesign.	The Council remains committed to supporting the Vision Zero principles and are actively working on 20mph speed compliance monitoring and implementation of small schemes to address the areas of noncompliance, working in tandem with the Police and Road Safety Partnership. Speeding remains a criminal offence and consequently is enforced by the Police. Examples of Council infrastructure initiatives, both recently delivered and in progress, which introduce pedestrianisation and traffic calming include: Design development of road danger reduction measures at: • The junction of Sydenham Road and Mayow Road. • Hither Green Lane and Courthill Road between Torridon Road and Lewisham High Street. • Lee Terrace and Belmont Hill between A20 Lee High Road and Lee Road. • The junction of Lee Terrace and Lee Road. • Implementation of traffic calming measures on Downham Way between Northover and Bromley Road. • Implementation of speed compliance measures, such as Vehicle Activated Signs (VAS) at Winn Road, Perry Vale, Baring Road, and Downham Way.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			• Design development of proposed public realm improvements and pedestrianisation at Deptford High Street. • Feasibility of walking and cycling interventions, traffic management measures, and public realm improvements at the Bell Green gyratory. 46 school streets are now operational. Two new School Streets are currently planned to be implemented in 2024/25, with another two going through design development.
22.2	Cleaner transport: Infrastructure	Pedestrianisation/ Lee Green Low Traffic Neighbourhood (LTN)	Mitigations such as new trees have been planted in and around the Low Traffic Neighbourhoods (LTNs). The Lewisham and Lee Green LTN monitoring and evaluation is ongoing. The latest monitoring report presented to Mayor and Cabinet on Wednesday 1 November 2023 showed that: • Overall traffic levels and speeds are continuing to fall on roads within and surrounding the LTN • The LTN has not negatively impacted on air quality in the area, with air quality improving in many locations compared to pre-LTN levels, including on the South Circular • Bus journey times remain at comparable levels for routes near to the LTN • Serious road traffic accidents have fallen on roads within and surrounding the LTN Further monitoring will be carried out in 2024 to measure the impact of the LTN in relation to its key aims.
23	Cleaner transport: Policy	Using parking policy to reduce pollution emissions and adoption of low charges at existing parking meters for zero emission cars. There will be emissions based parking for Short Stay Parking and for motorcycles.	Parking Policy is in place and is being enforced.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
23.1	Cleaner transport: Traffic management	Emissions based parking for Short Stay Parking and for motorcycles.	Parking Policy is in place and is being enforced.
23.2	Cleaner transport: Traffic management	Controlled Parking Zone Extension for Climate Change Emergency.	This is currently in the process of being adopted by the Council but may need to be reviewed now the extended ULEZ has been adopted.
23.4	Cleaner transport: Traffic management	Enhanced parking enforcement for Safer Lewisham and to improve walking and cycling	The latest TfL data for collisions (fatal, serious, and slight) in Lewisham shows a reduction from 917 in 2022 to 878 in 2023. More information can be found at: https://tfl.gov.uk/corporate/publications-and-reports/road-safety
24	Cleaner transport: Infrastructure	Installation of Ultra-Low Emission Vehicle (ULEV) infrastructure. The installation of rapid chargers to help enable the take up of electric taxis, cabs and commercial vehicles (in partnership with TfL and/or OLEV). This action is not related to new development	The Planning department secures electric vehicle charging points by using planning conditions in accordance with the London Plan standards.
24.1	Cleaner transport: Programme	Continue campaigns to promote the use of electric charge points within the borough.	Work relating to electrical charging points will be included in the Climate Emergency Forward Plan. Promotion will also be included in upcoming consultations for the Sustainable Streets Programme, where we are expected to introduce more charging points across Lee, Hither Green, Catford South and Brockley. Communications have been shared across resident news, social media, and press releases. The Electric Vehicle (EV) Infrastructure Implementation Plan 2023 – 2026 was adopted as policy in July 2023. The total number of EV charging points delivered by the Council to date is 250. The programme to roll out EV charging points across the borough is continuing, and it is primarily driven by the

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints
			Sustainable Streets programme in the areas that adopt the proposed measures. The Council have secured £102,080 of funding through the On-Street Residential Chargepoint Scheme (ORCS) and £71,136 through the Local Electric Vehicle Infrastructure (LEVI) Capability Funding. An application for LEVI capital funding to deliver electric vehicle charging infrastructure will be prepared in summer 2024 through a borough partnership with the Royal Borough of Greenwich.
25	Cleaner transport: Infrastructure	Provision of infrastructure to support walking and cycling	The funding secured through the Cycleways Network Development (CND) stream for 2024/25, which was based on bids submitted by the Council, amounted to £774k. This increased by 135% from 2023/24 and was the 5th highest out of all London boroughs. The Council is on track with its targets for the delivery of secure cycle storage facilities, with a total of 232 cycle hangars having been installed to date. Examples of Council infrastructure initiatives, both recently delivered and in progress, which directly support walking and cycling include: • The dockless bike programme and partnership with Lime, which is expanding and improving the operation of cycle hire across the Borough and is delivering marked designated parking bays for e-bikes. • Conversion of existing zebra crossing to signal-controlled crossing at Brockley Road. • New parallel zebra crossing for people who walk and cycle at Perry Rise. • Design development of pedestrian crossings and other crossing improvements to provide safer routes to schools. • Design development of a signal-controlled crossing at Southend Lane, currently anticipated to be implemented in the first half of 2024/25. • Continued delivery of School Streets, such as at Torridon School. • Design development of a cycleway along Deptford Church Street between the A2 Deptford Broadway/Deptford Bridge and the A200 Creek Road, with construction currently anticipated to start between summer and autumn 2024. • Design development to replace the existing footbridge at Waterlink Way, which is part of the National Cycle Network and connects several parks and green spaces in Southeast London and deliver safety and accessibility improvements.

Measure	LLAQM Action Matrix Theme	Action	Progress • Emissions/Concentration data • Benefits • Negative impacts / Complaints

			• Implementation of cycle contraflow facilities to 6 existing one-way roads and design development to deliver another 6 in 2024/25.
			
			• Cycle wayfinding installation at C10 Creekside to Elverson Road and C10 Folkestone Gardens to New Cross, currently anticipated to be delivered in early spring 2024.
			
			• A feasibility of the following new or improved cycle routes:
			
			  • New Cross Gate rail station to Crofton Park rail station
			  • Limes Grove to Lee rail station via Hither Green rail station
			  • Elverson Road Docklands Light Railway (DLR) station to Catford rail station
			
			• Design development of proposed public realm improvements and pedestrianisation at Deptford High Street.
			
			• Public realm, walking, and cycling improvements along the whole length of Creekside.

25.1	Cleaner transport: Policy	Update of Cycling Strategy and policies for the borough.	The Council is on track with its targets for the delivery of secure cycle storage facilities, with a total of 232 cycle hangars having been installed to date. The Council is in the process of developing an Active Travel Strategy that integrates existing policies within Strategic Transport and Highways, alongside other local, regional and national strategies, policies, and guidance into one overarching strategy with an associated delivery plan for active travel improvements over the next 7-10 years. The strategy will help support evidence-based long-term planning for project selection and delivery as well as bids for funding, including future submissions for TfL LIP funding, to improve the cycle network within the borough in line with our transport strategy.
25.2	Cleaner transport: Infrastructure	Increasing cycle parking on street and in new developments in line with London Plan Standards.	Planning is securing cycle parking on street and in new developments as part of the development management process in accordance with planning policy requirements. The Council is on track with its targets for the delivery of secure cycle storage facilities, with a total of 232 cycle hangars having been installed to date. There is a long request list for cycle hangars and new locations are identified based on demand.

3. Planning Update and Other New Sources of Emissions

Table L. Planning requirements met by planning applications in London Borough of Lewisham in 2023

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	37
Number of CHPs/Biomass boilers refused on air quality grounds	0
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	0
Number of developments required to install Ultra-Low NO_X boilers	18
Number of developments where an AQ Neutral building and/or transport assessments undertaken	24
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	1
Number of planning applications with S106 agreements including other requirements to improve air quality	3
Number of planning applications with CIL payments that include a contribution to improve air quality	0
NRMM: Central Activity Zone, Canary Wharf and Opportunity Areas Number of conditions related to NRMM included. Number of developments registered and compliant. Number of audits % of sites unregistered prior to audit Please include confirmation that you have checked that the development has been registered with the GLA through the relevant NRMM website and that all NRMM used on-site is compliant with Stage IV of the Directive and/or exemptions to the policy.	N/A
NRMM: Greater London (excluding Central Activity Zone, Canary Wharf and Opportunity Areas) Number of conditions related to NRMM included. Number of developments registered and compliant. Number of audits % of sites unregistered prior to audit Please include confirmation that you have checked that the development has been registered at www.nrmm.london and that all NRMM used on-site is compliant with Stage IIIB of the Directive and/or exemptions to the policy.	38 conditions included 11 registered and compliant 1 unregistered/uncompliant and being chased.

Lewisham is part of the Pan London NRMM project which aims to reduce emissions from construction sites and almost all major planning applications are now subject to NRMM, air quality and dust conditions. We continue to regulate and help manage

and reduce emissions from developments and buildings by using planning powers to enforce air quality measures, reducing emissions, increase energy efficiency and adoption of Planning Policy that is encouraging car-free developments.

3.1 New or significantly changed industrial or other sources

No new or changed industrial or other sources were identified in 2023.

4. Additional Activities to Improve Air Quality

4.1 London Borough of Lewisham Fleet

As of December 2023, Lewisham Council's fleet includes three electric vehicles. Consequently, the percentage of electric vehicles within the entire fleet remains under 1%.

4.2 NRMM Enforcement Project

Lewisham will continue to support the Pan London NRMM project.

4.2 Air Quality Alerts

Lewisham will continue to support airTEXT (https://www.airtext.info/) and similar resources. As before, Public Health is also promoting the Lewisham Air App through Lewisham Clinical Commissioning Group (CCG) to raise awareness, so that the GPs promote the app to Chronic obstructive pulmonary disease (COPD) and Asthma patients and their careers. The App is also promoted to the respiratory nurses as well to raise awareness amongst COPD & Asthma patients.

This was launched in March 2018. There has been an update to the app to include information in relation to Tranquil Space. This is an exposure reduction initiative, as opposed to targeting emissions. Early warning via text message to vulnerable people, especially those who may be digitally excluded. This enables people to take steps to protect their health.

Appendix A   Details of Monitoring Site Quality QA/QC

A.1   Automatic Monitoring Sites

Calibrations of continuous monitors are carried out with certified calibration gases for each analyser. Routine calibrations are undertaken manually every 2 weeks by the Local Site Operator for LW2, LW4, LW5 and LW6. HP1 is calibrated every four weeks which is the recommended frequency for AURN sites in background locations. The calibration data are sent to ERG (part of Imperial College London), who are responsible for data management, data validation and ratification. Site audits are carried out bi-annually and includes UKAS accredited on-site gas cylinder certification and on-site testing of sampling system efficiency.

A.2   Diffusion Tubes

Diffusion tubes for NO_2 in Lewisham are provided by Gradko International Ltd, using a preparation method of 50% Triethanolamine (TEA) in acetone.

Gradko participates in the AIR-PT scheme. AIR is an independent analytical proficiency-testing (PT) scheme, operated by LGC Standards and supported by the Health and Safety Laboratory (HSL). The Air-PT scheme started in April 2014, combining two long running PT schemes: LGC Standards STACKS PT scheme and HSL WASP PT scheme.

AIR NO_2 PT forms an integral part of the UK NO_2 Network's QA/QC and is a useful tool in assessing the analytical performance of those laboratories supplying diffusion tubes to Local Authorities for use in the context of Local Air Quality Management (LAQM). Defra and the Devolved Administrations advise that diffusion tubes used for LAQM should be obtained from laboratories that have demonstrated satisfactory performance in the AIR-PT scheme.

The results for Gradko International Ltd were overall satisfactory. The laboratory scored 100% satisfactory results between July 2023 and August 2023 (AR058) and 100% satisfactory results between September 2023 and October 2023 (AR059).

National Bias Adjustment Factor

The national bias adjustment factor for 2023 is available from the Defra website[2]. The results of multiple co-location studies are collated, and the average bias adjustment factor is taken for studies using the 50% TEA/acetone preparation method, analysed by Gradko. The national bias adjustment factor for 2023 is 0.83, based on 15 studies. Details are shown in Figure A.1 below.

Figure A. 1 National bias adjustment factor

National Diffusion Tube Bias Adjustment Factor Spreadsheet — Spreadsheet Version Number: 03/24

Follow the steps below **in the correct order** to show the results of **relevant** co-location studies
Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods
Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet
This spreadsheet will be updated every few months: the factors may therefore be subject to change. This should not discourage their immediate use.

This spreadsheet will be updated at the end of June 2024

The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory. | Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.

Analysed By[1]	Method	Year	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision	Bias Adjustment Factor (A) (Cm/Dm)
Gradko	50% TEA in acetone	2023	R	London Borough Of Lewisham	11	33	27	22.7%	G	0.82
Gradko	50% TEA in Acetone	2023	R	London Borough Of Merton	12	37	31	18.5%	G	0.84
Gradko	50% TEA in acetone	2023	KS	Marylebone Road intercomparison	11	47	38	25.7%	G	0.80
Gradko	50% TEA in acetone	2023	R	Royal Borough Of Windsor And Maidenhead	11	27	23	21.6%	G	0.82
Gradko	50% TEA in acetone	2023	R	Royal Borough Of Windsor And Maidenhead	12	24	24	0.6%	G	0.99
Gradko	50% TEA in acetone	2023	R	London Borough Of Richmond Upon Thames	11	18	16	15.6%	G	0.86
Gradko	50% TEA in acetone	2023		**Overall Factor[3] (15 studies)**					Use	0.83

Factor from Local Co-location Studies

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

LBL has one co-location site at New Cross (LW2), where triplicate diffusion tubes are co-located adjacent to the inlet of the continuous monitor, so that diffusion tube concentrations can be adjusted for bias by comparing to the more accurate continuous monitoring dataset. A spreadsheet tool for calculating the locally derived bias adjustment factor for triplicate tubes co-located at a continuous monitor is available from the Defra website, and has been used to calculate the local factor in Figure A.2, which was calculated to be 0.81.

Figure A.2 shows the details of the calculation of the local bias adjustment factors. The calculation of local bias adjustment factors takes into account both data capture

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[2] Defra, Diffusion Tube Bias Adjustment Factors Spreadsheet, April 2023

from diffusion tubes and automatic monitors, and also the coefficient of variation (CV) of the triplicate diffusion tubes. If the CV is too high for a particular period, that period is not taken into account when calculating the local bias adjustment factor. Periods where automatic monitoring data capture rates are less than 90% are also excluded.

Figure A.2 Local bias adjustment factor Calculation

Discussion of Choice of Factor to Use

A conservative approach was taken, with the national bias adjustment factor selected to be applied to the 2023 monitoring data as it is slightly higher than the local factor.

In the past seven years, a mixture of the national bias and local bias adjustment factor have been used depending on the most appropriate for the year. Table M details both the local and national bias adjustment factors for this and previous years in LBL and includes the choice of factor used.

Table M. Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2023	National	03/24	0.83
2022	National	03/23	0.82
2021	National	03/22	0.83
2020	National	03/21	0.82
2019	Local	-	0.91
2018	National	03/18	0.92
2017	Local	-	1.00
2016	National	03/18	1.03

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

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

There were eleven diffusion tube locations which required annualisation for 2023. Additionally, there was one of the automatic monitoring sites (LW2 New Cross) where data capture was below <75% but >25% for $PM_{2.5}$ only and hence this site was also annualised.

Table N outlines the calculations for the annualisation factors applied to the NO_2 monitoring data whilst Table O outlines the calculations for the annualisation factors applied to the $PM_{2.5}$ monitoring data.

Distance Adjustment

A small number of diffusion tubes are not located at relevant public exposure, such as on kerbside lampposts opposed to building facades. Distance correction should only be completed for monitoring sites where the concentration is greater than 36 μg m^{-3}. Distance correction was completed at three sites in 2023, L85, L95 and L96. NO_2 Fall off With Distance Calculations are presented in Table P.

Table N. Short-Term to Long-Term Monitoring Data Adjustment for NO$_2$ Monitoring data

Site ID	Annualisation Factor Deptford	Annualisation Factor Belvedere Bexley	Annualisation Factor London Westminster	Average Annualisation Factor	Raw Data Annual Mean (µg m^{-3})	Annualised Annual Mean (µg m^{-3})	Comments
L3	0.8745	0.8835	0.9078	0.8886	26.3	23.4	
L4	0.9795	0.9723	1.0357	0.9958	26.8	26.6	
L20	0.8958	0.9098	0.9100	0.9052	28.8	26.1	
L82	1.1401	1.0635	1.1353	1.1130	21.7	24.2	
L84	0.8914	0.9240	0.8980	0.9044	33.2	30.0	
L94	1.0872	1.0287	1.1238	1.0799	35.8	38.6	
L95	1.0872	1.0287	1.1238	1.0799	87.9	94.9	
L96	1.0872	1.0287	1.1238	1.0799	43.5	47.0	
SSDT_15	0.9611	0.9703	0.9844	0.9720	23.3	22.7	
SSDT_42	1.0923	1.1337	1.1030	1.1097	25.4	28.1	
SSDT_50	0.9357	1.0223	0.9452	0.9677	19.4	18.8	

Table O. Short-Term to Long-Term Monitoring Data Adjustment for PM$_{2.5}$ Monitoring data

Site ID	Annualisation Factor London Bexley	Annualisation Factor London Bloomsbury	Annualisation Factor London N. Kensington	Annualisation Factor London Westminster	Average Annualisation Factor	Raw Data Annual Mean (µg m^{-3})	Annualised Annual Mean (µg m^{-3})	Comments
LW2	0.9250	0.9588	0.9284	1.0001	0.9531	10.4	9.9	

Table P. NO$_2$ Fall off With Distance Calculations

Site ID	Distance (m): Monitoring Site to Kerb	Distance (m): Receptor to Kerb	Monitored Concentration (Annualised and Bias Adjusted (µg m^{-3})	Background Concentration (µg m^{-3})	Concentration Predicted at Receptor (µg m^{-3})	Comments
L85	0.3	6.3	37.3	17.6	27.6	
L95	1.8	2.6	78.8	21.3	**74.0**	Predicted concentration at Receptor above AQS objective.
L96	1.1	7.1	39.0	21.3	32.2	

To better understand and visualise temporal trends, annual mean concentrations recorded at all NO_2 monitoring locations have been plotted over time and are displayed below in Figure A.3 to Figure A.8, where AQO is the annual mean Air Quality Objective (40 µg/m³) and AQO (ST) is the short-term Air Quality Objective (60 µg/m³).

Figure A.3 Trend in NO₂ concentration at roadside diffusion tube locations (1)
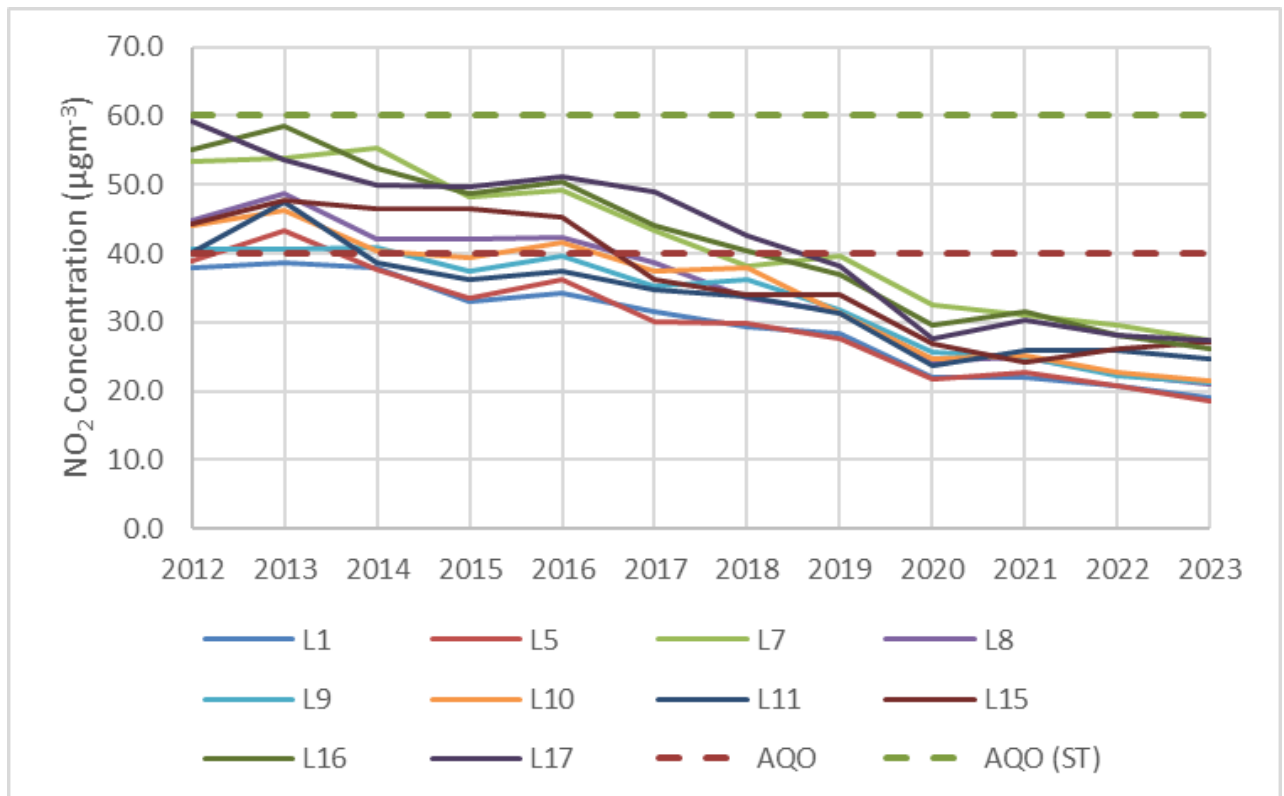
Note: AQO (ST) = 60 µg m⁻³. Diffusion tubes cannot be used to directly compare against the 1-hour mean NO_2 objective. However, LLAQM.TG19 states that at locations where annual mean NO_2 concentrations of greater than 60 µg m⁻³ are monitored the 1-hour mean NO_2 objective is likely to be exceeded.

Figure A.4 Trend in NO₂ Concentration at roadside diffusion tube locations (2)
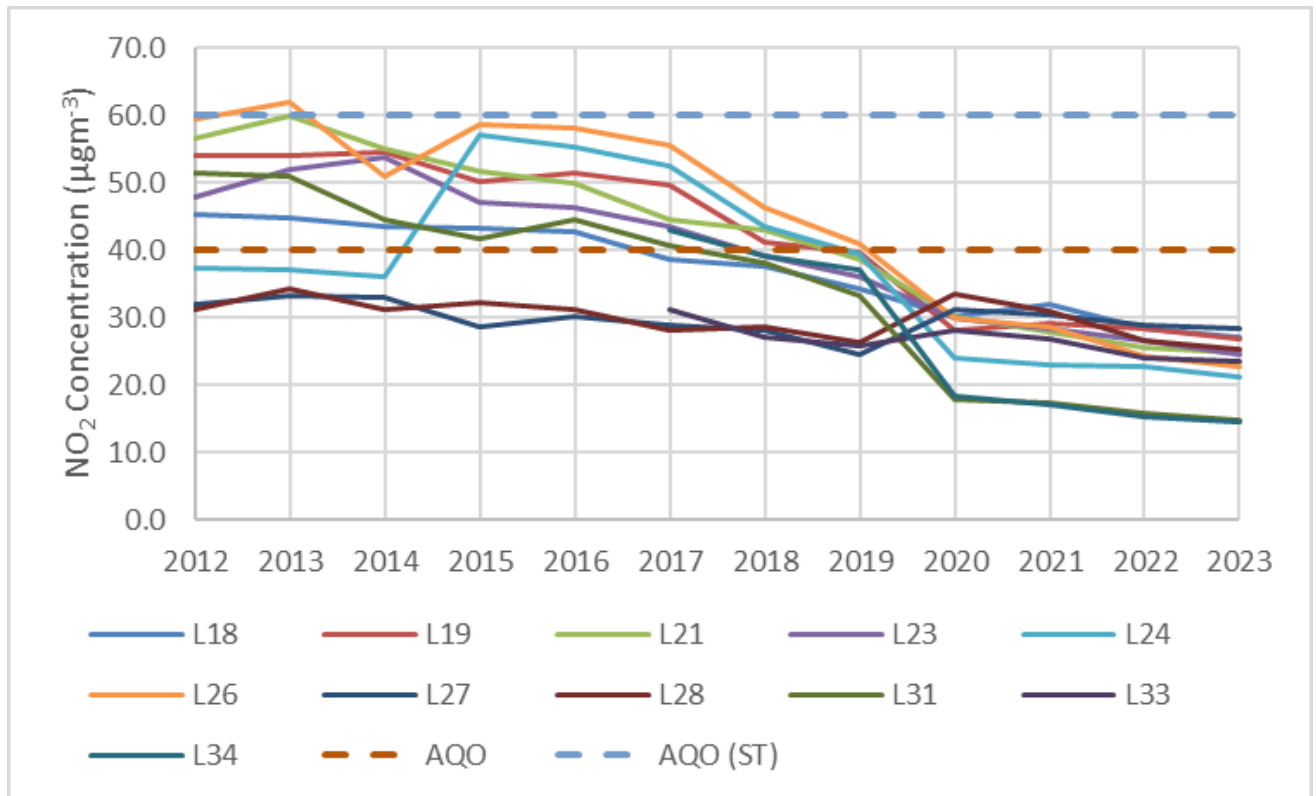
Note: AQO (ST) = 60 µg m⁻³. Diffusion tubes cannot be used to directly compare against the 1-hour mean NO₂ objective. However, LLAQM.TG19 states that at locations where annual mean NO₂ concentrations of greater than 60 µg m⁻³ are monitored the 1-hour mean NO₂ objective is likely to be exceeded.

Figure A.5 Trend in NO₂ concentration at roadside diffusion tube locations (3)
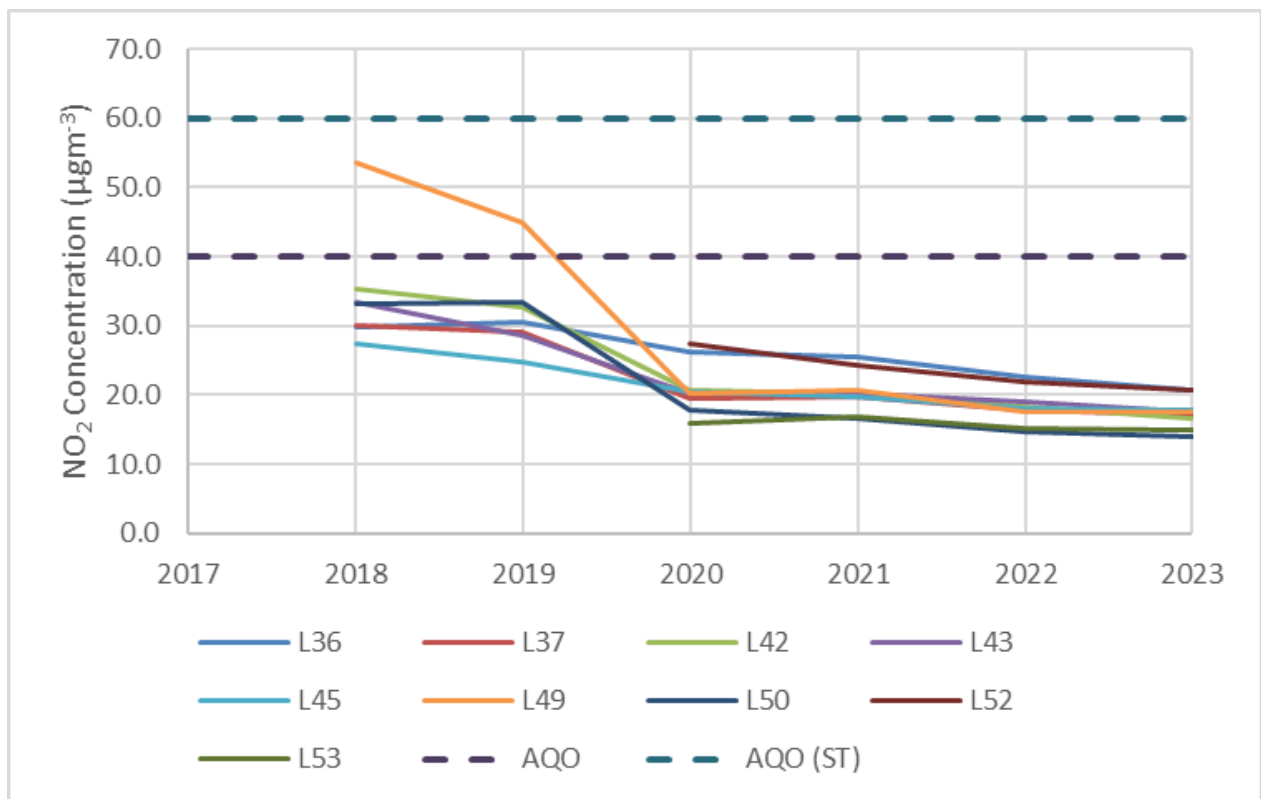
Note: AQO (ST) = 60 μg m⁻³. Diffusion tubes cannot be used to directly compare against the 1-hour mean NO₂ objective. However, LLAQM.TG19 states that at locations where annual mean NO₂ concentrations of greater than 60 μg m⁻³ are monitored the 1-hour mean NO₂ objective is likely to be exceeded.

Figure A.6 Trend in NO₂ concentration at urban background diffusion tube locations (1)
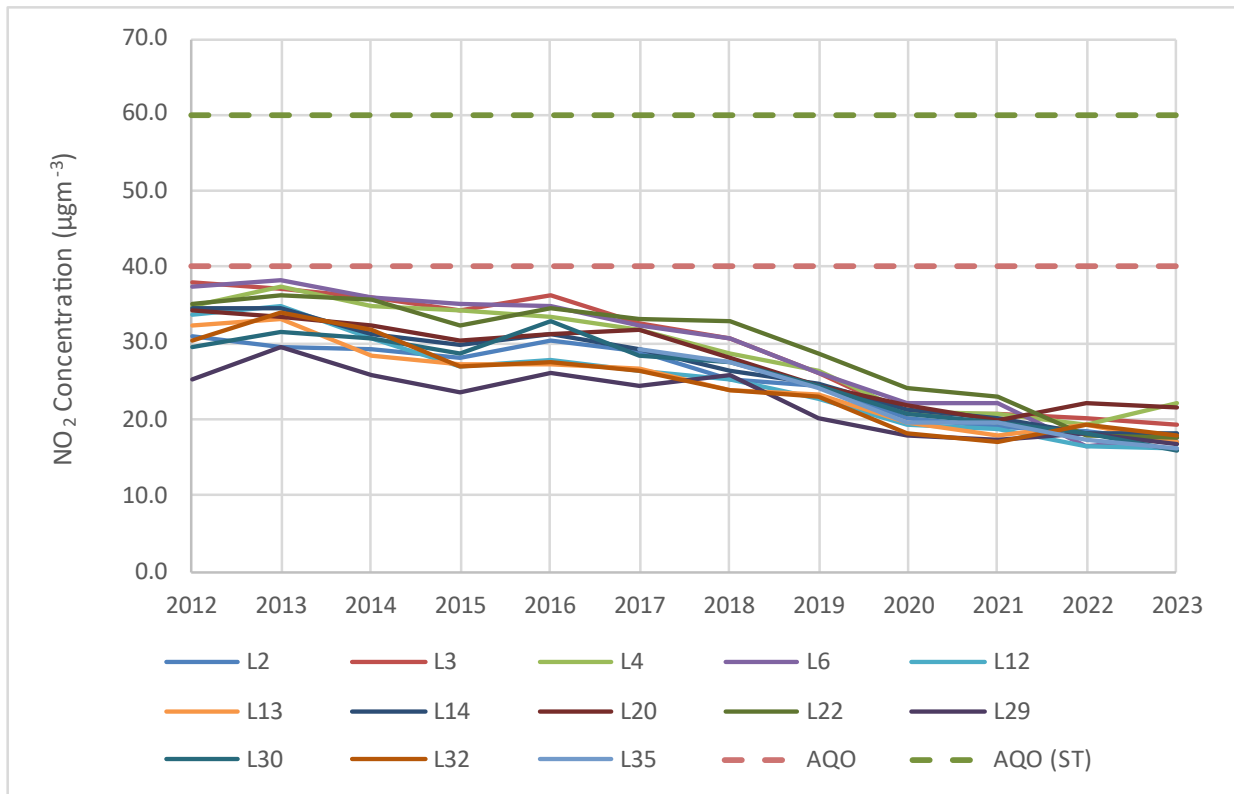
Note: AQO (ST) = 60 μg m⁻³. Diffusion tubes cannot be used to directly compare against the 1-hour mean NO₂ objective. However, LLAQM.TG19 states that at locations where annual mean NO₂ concentrations of greater than 60 μg m⁻³ are monitored the 1-hour mean NO₂ objective is likely to be exceeded.

Figure A.7 Trend in NO₂ concentrations at urban background diffusion tube locations (2)
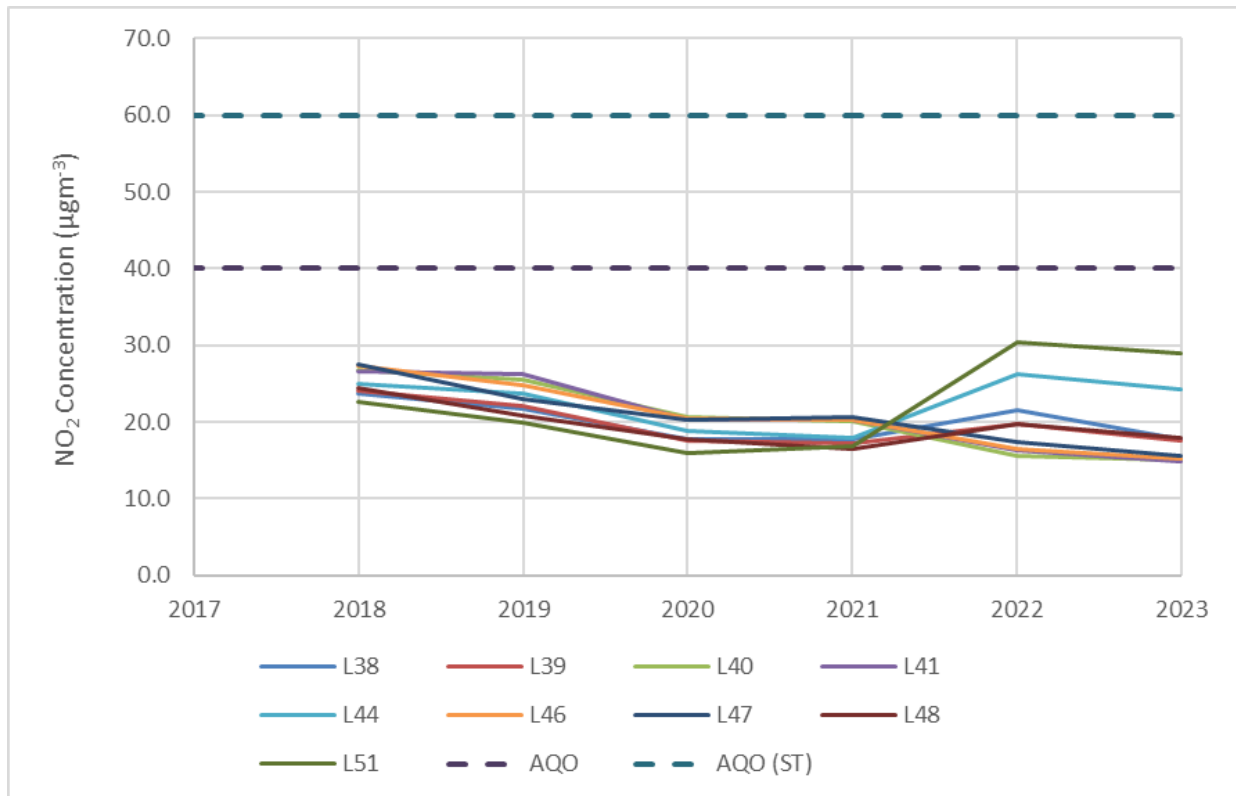
Note: AQO (ST) = 60 µg m⁻³. Diffusion tubes cannot be used to directly compare against the 1-hour mean NO₂ objective. However, LLAQM.TG19 states that at locations where annual mean NO₂ concentrations of greater than 60 µg m⁻³ are monitored the 1-hour mean NO₂ objective is likely to be exceeded.

There are noticeable increases at L44 and L51 between 2021 and 2022, likely influenced by the lifting of travel restrictions following the COVID-19 pandemic. However, both sites show decreases between 2022 and 2023. Meanwhile, L40 continues to show a consistent year-on-year decline.

Figure A.8 Trend in NO₂ concentrations at automatic monitoring stations, roadside and urban background diffusion tube locations (averaged)
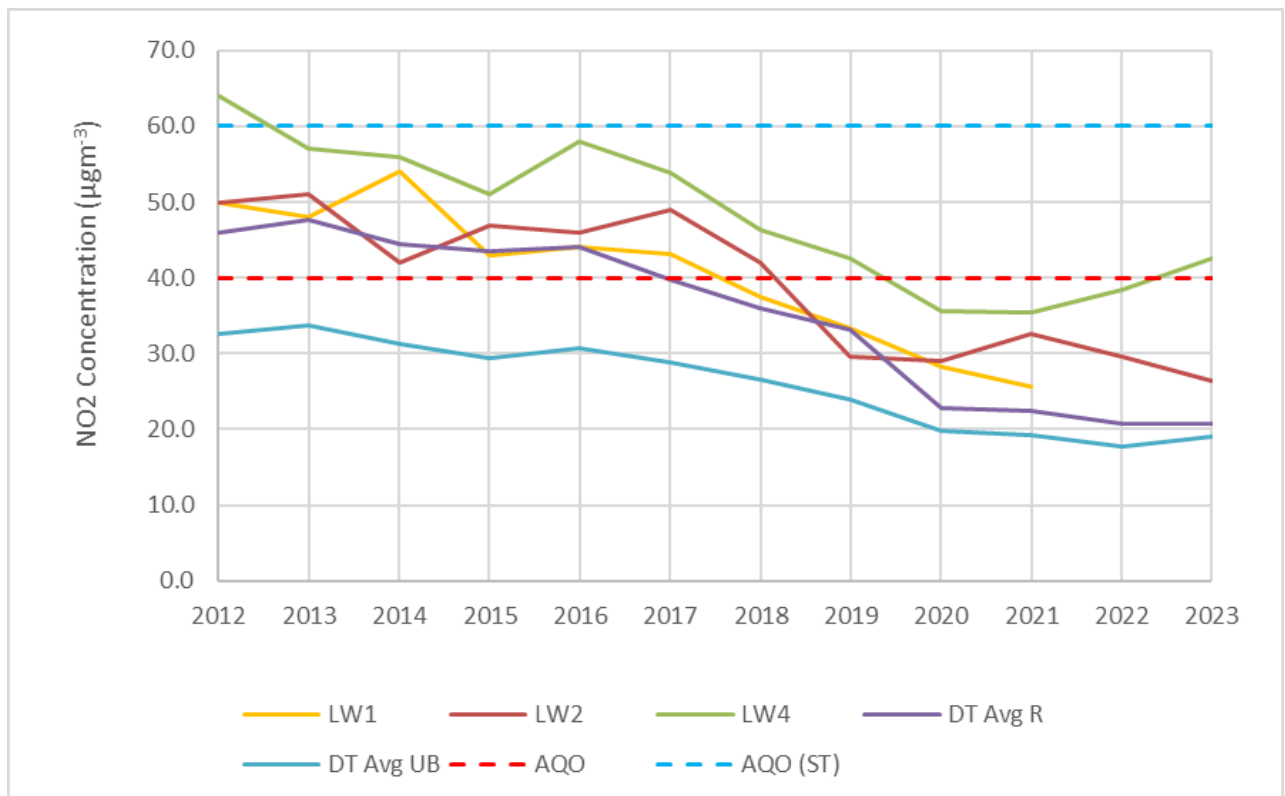
Note: AQO (ST) = 60 μg m^{-3}. Diffusion tubes cannot be used to directly compare against the 1-hour mean NO₂ objective. However, LLAQM.TG19 states that at locations where annual mean NO₂ concentrations of greater than 60 μg m^{-3} are monitored the 1-hour mean NO₂ objective is likely to be exceeded.

LW4 is situated on a busy stretch of road, where high concentrations are typically expected. No significant changes have been observed in the area, although ongoing development nearby could be influencing the rise. The exact cause of the increase remains unclear but will be investigated further.

Appendix B   Full Monthly Diffusion Tube Results for 2023

Table Q. NO$_2$ 2023 Diffusion Tube Results (µg/m^3)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted <(0.83)>	Annual Mean: Distance Corrected to Nearest Exposure	Comment
L1	536109	177580	30.2	31.1	21.2	21.5	19.7	18.9	14.9	21.9	25.5	27.2	24.6	17.6	22.9	19.0		
L2	537540	177439	30.7	29.7	19.4	20.4	17.3	15.2	12.3	16.9	21.8	16.8	26.8	17.2	20.4	16.9		
L3	536561	178471	Missing	36.0	Missing	Missing	19.0	Missing	Missing	Missing	Missing	Missing	28.8	21.4	26.3	19.4		
L4	536534	178926	Missing	30.6	Missing	Missing	Missing	Missing	21.2	24.2	28.8	30.1	29.7	22.6	26.8	22.1		
L5	539678	175050	28.7	30.2	20.7	25.2	24.0	24.0	13.2	18.9	23.4	23.1	22.9	15.3	22.5	18.7		
L6	540615	172337	28.7	29.7	Missing	23.0	18.4	14.3	15.8	16.0	22.5	-	29.8	15.5	21.4	17.7		
L7	536556	171810	39.1	**43.2**	31.8	33.1	31.2	31.5	27.4	30.8	35.1	34.5	31.7	26.2	33.0	27.4		
L8	536229	174032	27.2	34.3	25.0	26.9	25.9	26.2	16.6	23.6	24.8	27.1	28.2	18.6	25.4	21.1		
L9	537500	174925	30.3	35.4	24.6	27.8	27.9	24.5	15.0	23.0	24.4	27.1	27.8	18.1	25.5	21.2		
L10	538062	175085	31.8	36.1	25.7	29.3	30.1	25.0	13.4	21.8	24.9	25.5	28.9	17.4	25.8	21.4		
L11	538007	176517	35.8	35.8	31.7	32.6	29.6	27.3	20.2	27.0	34.0	29.8	30.9	22.8	29.8	24.7		
L12	537132	175353	33.0	30.3	19.8	17.5	15.0	15.0	10.5	17.5	16.9	21.3	24.4	14.4	19.6	16.3		
L13	535804	171567	31.3	31.0	Missing	17.4	15.8	15.9	14.5	17.7	20.1	22.1	23.0	16.1	20.4	17.0		
L14	538482	175792	27.4	32.4	21.1	19.6	15.3	15.8	15.8	19.2	21.5	20.4	27.0	26.1	21.8	18.1		
L15	538237	176101	**41.7**	**44.3**	30.7	31.9	30.3	30.7	28.4	31.0	32.4	31.0	31.0	29.6	32.7	27.2		
L16	537740	175930	36.8	**41.7**	30.1	38.4	35.8	31.6	20.9	25.9	32.0	29.4	34.3	21.4	31.5	26.2		

L17	536246	176934	**40.1**	**41.2**	29.4	32.9	27.9	31.6	28.7	29.3	34.2	32.8	37.2	29.9	-	-	Triplicate Site with L17, L18 and L19 - Annual data provided for L19 only
L18	536246	176934	38.4	**40.1**	30.4	31.6	28.6	30.1	28.3	31.3	34.1	33.0	35.4	28.9	-	-	Triplicate Site with L17, L18 and L19 - Annual data provided for L19 only
L19	536246	176934	37.7	**42.7**	28.9	32.3	29.7	-	27.5	31.6	33.8	Missing	33.0	27.1	32.6	27.1	Triplicate Site with L17, L18 and L19 - Annual data provided for L19 only
L20	535746	176969	36.0	35.0	Missing	24.8	Missing	20.3	Missing	24.5	28.5	Missing	32.3	Missing	28.8	21.6	
L21	536133	173341	38.8	37.2	28.5	25.4	24.3	24.1	23.3	Missing	31.6	34.1	35.2	26.5	29.9	24.8	
L22	538060	173816	31.4	30.9	19.7	18.4	16.5	15.4	14.3	20.6	19.2	20.5	25.5	Missing	21.1	17.5	
L23	537178	173365	38.3	Missing	Missing	31.3	28.0	29.1	22.1	27.6	30.7	32.8	32.1	22.8	29.5	24.5	
L24	538904	172697	37.3	36.7	Missing	23.6	21.8	21.7	18.8	21.1	25.2	26.4	Missing	21.5	25.4	21.1	
L26	536527	175935	31.9	36.0	27.3	27.8	22.9	23.8	19.8	24.4	31.4	31.3	31.2	22.7	27.5	22.9	
L27	539604	176090	**45.1**	**46.0**	32.7	29.8	27.5	25.0	Missing	27.0	33.5	36.6	43.6	30.0	34.3	28.4	
L28	540051	173769	39.5	39.9	29.0	31.1	27.6	27.3	26.0	27.2	30.2	31.2	31.7	26.3	30.6	25.4	
L29	538165	173406	27.5	30.4	18.8	18.5	16.1	15.9	11.4	17.3	Missing	22.0	26.5	17.2	20.2	16.7	
L30	535535	172679	27.0	28.6	19.4	18.8	17.3	16.2	11.3	16.4	17.8	22.6	20.1	14.2	19.1	15.9	
L31	536399	175150	28.0	26.7	17.1	16.7	15.3	14.5	8.7	14.8	15.5	20.0	22.9	11.7	17.7	14.7	
L32	536944	177665	30.1	30.7	Missing	17.3	15.5	Missing	12.4	19.3	22.6	25.0	27.5	16.8	21.7	18.0	
L33	537979	174792	**40.1**	31.8	30.2	26.8	25.5	23.3	21.6	22.2	27.6	29.5	34.7	24.8	28.2	23.4	
L34	535071	172346	23.4	25.9	18.1	16.7	26.9	10.7	8.5	14.0	13.8	16.9	21.4	12.3	17.4	14.4	

L35	535447	176897	27.2	30.3	19.1	18.9	15.6	14.9	11.0	15.5	17.1	20.2	25.3	Missing	19.6	16.2		
L36	536275	178405	34.6	33.9	23.6	22.8	20.1	22.7	15.0	22.4	25.6	27.3	29.9	19.5	24.8	20.6		
L37	536317	176883	31.0	30.5	19.4	20.9	17.8	16.1	11.6	16.6	18.6	20.4	26.4	16.3	20.5	17.0		
L38	536564	174937	26.4	28.2	22.1	22.7	19.5	20.2	13.2	19.5	22.8	21.4	24.9	14.5	21.3	17.7		
L39	536308	175721	33.4	27.6	18.0	22.6	17.8	17.8	11.2	17.8	19.3	23.4	28.9	16.2	21.2	17.6		
L40	536792	176432	27.5	27.3	17.0	17.3	14.7	13.4	9.7	Missing	Missing	18.6	23.0	12.8	18.1	15.0		
L41	537256	176353	26.6	27.4	17.9	16.8	13.7	12.9	10.7	15.7	16.6	20.2	23.8	13.3	18.0	14.9		
L42	537032	176534	29.0	29.5	19.5	16.6	16.5	15.5	13.5	18.7	17.0	22.6	23.2	17.3	19.9	16.5		
L43	536389	177144	28.3	32.2	18.9	19.3	14.0	12.9	13.6	18.7	21.5	23.8	28.3	22.1	21.1	17.5		
L44	536028	178107	**40.9**	**40.1**	29.7	26.0	21.2	Missing	20.8	25.1	Missing	33.1	32.4	24.0	29.3	24.3		
L45	537228	177284	30.0	30.4	20.1	19.7	17.6	17.6	13.5	19.3	21.7	23.5	25.7	18.4	21.4	17.8		
L46	539416	175315	27.5	25.7	18.6	16.7	15.4	12.9	11.2	15.6	17.9	17.4	25.2	16.4	18.4	15.2		
L47	536839	173211	29.4	Missing	20.7	19.3	16.1	15.8	11.9	16.7	16.6	21.5	23.8	14.6	18.8	15.6		
L48	537433	173965	31.5	30.3	25.7	21.3	19.9	16.3	14.0	18.0	19.8	22.1	23.1	17.2	21.6	17.9		
L49	538358	175324	30.7	27.7	21.9	19.7	18.2	16.3	13.4	18.9	19.5	19.8	28.0	19.8	21.2	17.6		
L50	537836	173400	28.6	26.7	17.2	15.1	14.0	11.8	9.7	12.6	14.9	16.0	20.7	15.3	16.9	14.0		
L51	538803	173683	**40.8**	**43.1**	32.4	34.7	30.7	34.3	30.2	34.1	36.6	31.9	36.1	Missing	35.0	29.0		
L52	538285	171877	33.7	31.2	25.4	21.8	17.3	18.9	23.8	20.6	25.8	26.1	29.8	23.5	24.8	20.6		
L53	539319	172362	26.7	25.9	16.2	16.2	14.8	13.6	11.3	15.0	16.9	21.1	24.2	14.3	18.0	15.0		
L54	540485	172665	36.3	33.7	25.6	27.7	25.9	23.5	18.2	22.4	26.3	27.1	30.7	19.1	26.4	21.9		
L55	537110	176953	Missing	34.5	Missing	Missing	27.1	24.0	15.8	23.9	24.4	24.2	27.6	19.8	24.6	20.4		
L56	536015	178631	32.2	35.5	Missing	24.7	20.3	23.3	18.7	Missing	29.3	29.3	30.5	22.7	26.7	22.1		
L57	539671	176141	35.6	34.1	22.6	21.5	20.2	17.6	13.9	19.5	19.2	24.8	27.0	19.8	23.0	19.1		
L58	539442	175762	45.2	43.8	29.3	32.2	30.1	27.5	23.1	25.9	33.4	35.4	33.7	27.7	32.3	26.8		
L59	537986	175738	36.1	Missing	26.5	27.7	24.8	Missing	17.7	24.3	28.9	25.4	30.8	25.5	26.8	22.2		
L60	536660	178717	28.2	32.0	20.8	19.1	14.9	15.6	Missing	19.7	22.1	24.1	26.7	21.5	22.2	18.5		

L61	537926	174634	36.4	36.1	31.1	28.4	29.1	26.3	22.0	24.9	29.3	33.8	34.5	19.5	29.3	24.3		
L62	536152	176823	38.4	39.1	27.8	29.5	23.4	Missing	19.3	27.1	24.6	27.9	26.3	26.2	28.1	23.3		
L63	537092	173415	39.8	39.3	33.9	36.6	33.1	34.7	24.9	33.0	33.4	37.3	36.4	22.3	33.7	28.0		
L64	536352	177541	32.3	31.9	19.6	19.2	15.9	16.3	11.9	17.1	19.6	23.8	-	19.8	20.7	17.2		
L65	537319	176485	29.8	26.4	20.2	Missing	15.2	14.7	11.8	15.5	17.8	22.5	26.9	15.6	19.7	16.3		
L66	536106	173458	28.3	25.6	18.3	17.2	13.1	11.4	11.0	15.2	16.5	Missing	Missing	15.9	17.3	14.3		
L67	535644	176484	30.1	28.6	18.4	16.7	15.8	14.1	10.9	16.5	17.2	Missing	22.3	13.7	18.6	15.4		
L68	536462	177354	41.5	39.9	33.4	33.6	27.9	29.2	Missing	29.6	36.8	37.7	35.9	27.7	33.9	28.2		
L69	536065	175089	28.8	24.7	17.1	Missing	14.4	Missing	Missing	15.2	15.6	18.0	21.2	14.1	18.8	15.6		
L70	537048	174220	12.6	Missing	17.1	17.7	15.8	13.5	10.7	15.0	16.5	19.6	24.8	17.0	16.4	13.6		
L71	539355	175293	28.0	27.1	19.3	16.7	13.5	13.7	12.8	15.1	18.4	19.2	Missing	17.8	18.3	15.2		
L72	538738	174030	26.8	24.3	17.4	15.9	13.6	12.9	10.4	14.6	14.5	18.6	24.1	14.6	17.3	14.4		
L73	537258	176212	45.1	46.4	31.0	36.6	38.3	35.7	26.3	35.4	36.7	34.5	36.7	22.3	35.4	29.4		
L74	538503	173580	28.0	29.5	19.8	19.3	16.8	14.3	11.5	16.7	18.1	21.5	25.4	16.9	19.8	16.4		
L75	536392	174592	28.4	28.0	21.7	20.8	16.7	17.9	12.2	18.9	19.3	21.2	23.4	13.6	20.2	16.7		
L76	539519	172846	34.2	35.8	26.1	23.0	25.0	23.7	17.2	23.6	27.5	28.8	31.2	22.4	26.5	22.0		
L77	538470	173427	29.4	27.6	18.2	17.3	14.8	14.8	11.7	15.7	17.0	21.0	26.3	Missing	19.4	16.1		
L78	538958	173479	32.1	30.8	22.4	22.2	22.0	19.1	15.0	18.4	22.1	24.7	24.6	18.4	22.6	18.8		
L79	540204	173780	34.7	30.8	21.5	20.7	18.7	18.4	12.7	18.8	21.7	24.5	26.4	15.2	22.0	18.3		
L80	535505	176274	28.3	33.2	25.3	27.4	24.0	21.6	Missing	24.2	27.4	31.0	32.2	20.7	26.8	22.3		
L81	539815	175122	29.4	31.7	23.9	24.7	21.4	19.8	15.9	21.0	25.7	24.5	25.0	16.3	23.3	19.3		
L82	536791	172863	Missing	Missing	Missing	Missing	Missing	22.2	15.9	22.7	22.8	26.3	25.5	16.6	21.7	20.1		
L83	537967	172366	Missing	32.0	21.3	22.4	21.9	20.4	16.4	19.1	22.2	26.0	29.6	18.5	22.7	18.8		
L84	536500	172023	38.5	39.8	34.0	34.0	Missing	32.0	Missing	Missing	Missing	32.6	29.1	25.6	33.2	24.9		
L85	536528	171882	53.0	51.6	41.5	Missing	38.1	38.5	42.2	43.2	52.3	52.1	Missing	36.7	44.9	37.3	27.6	
L86	536871	171719	Missing	44.9	34.8	43.3	40.8	39.9	31.4	38.7	44.6	38.1	35.0	22.9	37.7	31.3		

L87	534983	171996	31.9	33.4	18.1	28.8	Missing	24.8	19.3	25.0		**52.0**	27.3	20.4	28.1	23.3	
L88	536309	171594	Missing	**46.6**	37.3	35.5	33.4	36.2	30.9	35.8	**40.7**	**40.3**	38.7	32.6	37.1	30.8
L89	536208	171508	30.0	31.2	20.0	22.0	20.7	20.3	13.2	18.0	18.0	21.9	24.2	13.2	21.0	17.5
L90	535538	173700	30.7	27.3	20.2	19.2	18.0	15.8	11.3	16.7	19.5	23.3	23.7	14.4	20.0	16.6
L91	538924	176411	31.7	33.2	21.7	22.3	19.8	18.1	15.4	20.6	21.6	24.6	28.3	Missing	23.4	19.4
L92	535760	177399	30.4	31.2	22.2	21.7	19.4	15.9	13.9	18.7	23.1	25.7	26.9	18.7	22.3	18.5
L93	535765	178032	36.2	39.0	27.2	32.0	30.0	26.4	18.4	25.9	30.2	30.1	Missing	20.4	28.7	23.8
L94	538318	175446	-	-	-	-	-	-	31.1	35.7	39.8	39.2	37.7	31.0	35.8	32.1
L95	538371	175562	-	-	-	-	-	-	**93.6**	**93.4**	**89.0**	**90.4**	**85.9**	**75.1**	**87.9**	**78.8**	**74.0**
L96	538233	175283	-	-	-	-	-	-	37.4	**49.1**	**49.7**	**50.8**	**42.4**	31.5	**43.5**	39.0	32.2
SSDT_1	536219	178078	36.7	35.6	23.4	24.5	20.4	23.9	19.8	25.2	30.5	31.9	30.4	24.4	27.2	22.6
SSDT_2	537250	176593	30.6	32.6	22.5	22.1	19.7	18.1	13.7	Missing	21.4	23.9	24.9	16.8	22.4	18.6
SSDT_3	537550	176443	34.3	34.3	24.4	23.4	19.9	18.0	14.3	21.2	22.4	26.1	28.9	17.1	23.7	19.7
SSDT_4	538982	176645	36.6	38.0	26.8	29.3	27.5	26.1	23.6	26.0	27.2	27.7	29.1	22.9	28.4	23.6
SSDT_5	535947	176287	31.9	31.5	20.6	21.4	19.3	15.8	12.4	18.3	20.2	23.0	27.5	16.5	21.5	17.9
SSDT_6	536197	176514	36.1	31.8	21.7	22.0	20.7	17.3	14.0	20.1	21.8	22.5	24.6	14.9	22.3	18.5
SSDT_7	539761	176431	**42.4**	**45.8**	27.2	26.1	22.3	22.2	21.7	23.1	29.0	30.1	31.2	22.4	28.6	23.7
SSDT_8	538795	175291	28.6	28.9	26.8	25.6	18.4	21.4	16.8	24.4	25.5	29.6	30.7	21.2	24.8	20.6
SSDT_9	538926	175030	30.6	30.9	20.7	17.7	17.4	15.5	11.7	16.9	17.7	19.3	23.2	17.3	19.9	16.5
SSDT_10	538367	174857	33.1	34.2	27.5	27.1	23.3	21.5	21.0	23.6	27.3	28.9	34.5	25.2	27.3	22.6
SSDT_11	540200	174781	24.5	28.1	17.5	16.3	16.2	14.2	10.6	Missing	16.2	19.3	22.6	12.1	18.0	14.9
SSDT_12	539871	174720	32.9	35.0	26.5	26.6	Missing	22.4	17.4	22.1	30.4	25.9	30.9	19.1	26.3	21.8
SSDT_13	539418	174543	32.6	30.5	21.1	Missing	17.0	15.4	12.1	15.3	17.3	-	Missing	18.5	20.0	16.6
SSDT_14	539063	174543	31.5	27.1	Missing	20.1	17.9	16.5	12.0	Missing	19.5	21.6	25.9	16.6	20.9	17.3
SSDT_15	538562	174494	Missing	32.3	24.1	Missing	22.9	Missing	Missing	19.0	22.1	21.6	27.4	17.3	23.3	18.8
SSDT_16	536975	174537	32.5	31.6	23.4	18.8	16.1	17.8	13.6	17.9	18.7	24.0	28.1	15.6	21.5	17.9

SSDT_17	536666	174206	27.4	30.0	19.5	17.1	16.4	14.8	12.0	16.9	17.6	21.3	26.4	17.4	19.7	16.4		
SSDT_18	538313	174269	31.7	31.7	21.2	21.2	16.4	14.9	14.4	16.4	18.3	23.2	28.8	20.3	21.5	17.9		
SSDT_19	538589	174189	27.7	27.3	19.7	18.8	18.7	16.5	12.2	17.4	18.5	19.4	23.7	13.1	19.4	16.1		
SSDT_20	539498	172969	31.6	30.6	21.8	22.1	21.3	20.2	16.4	22.9	23.0	22.4	27.9	18.8	23.2	19.3		
SSDT_21	539892	174174	27.3	30.3	20.2	19.5	19.7	17.6	12.8	18.8	18.7	21.5	22.4	16.1	20.4	16.9		
SSDT_22	540014	173979	32.1	34.1	24.3	24.1	24.9	22.2	17.6	Missing	27.8	29.2	29.0	20.5	26.0	21.6		
SSDT_23	540119	174329	26.4	27.1	18.2	18.2	15.7	15.5	11.9	16.7	19.3	21.5	25.3	17.2	19.4	16.1		
SSDT_24	540504	173977	33.2	32.8	21.9	22.9	23.1	21.3	15.1	20.3	21.0	22.4	26.5	18.0	23.2	19.3		
SSDT_25	539559	173929	34.4	33.0	24.2	22.9	Missing	19.3	16.0	19.6	23.5	23.7	25.6	16.8	23.5	19.5		
SSDT_26	539352	173783	35.5	33.4	24.2	24.7	17.4	20.1	16.2	18.8	25.7	25.1	31.5	23.8	24.7	20.5		
SSDT_27	536753	173603	25.1	29.0	18.6	17.2	17.2	14.5	9.8	15.4	17.8	21.4	22.7	16.2	18.7	15.6		
SSDT_28	538723	173345	34.5	33.9	24.8	26.3	23.8	24.6	15.8	22.9	24.4	27.0	32.0	22.1	26.0	21.6		
SSDT_29	541019	173231	29.6	27.7	19.4	18.1	17.1	15.6	11.1	15.3	16.5	21.3	20.0	16.2	19.0	15.8		
SSDT_30	537530	173095	30.5	30.4	20.5	21.5	Missing	16.7	14.0	17.8	21.5	18.0	Missing	Missing	21.2	17.6		
SSDT_31	534939	172586	24.2	26.0	16.5	14.6	13.6	13.4	10.5	14.2	Missing	15.6	21.6	13.0	16.7	13.8		
SSDT_32	536495	172795	29.5	30.2	19.5	19.0	14.9	16.7	12.9	16.7	18.8	22.4	24.7	Missing	20.5	17.0		
SSDT_33	537436	172596	30.2	28.7	19.6	19.3	18.2	16.0	11.4	16.3	19.1	21.3	22.8	15.3	19.8	16.5		
SSDT_34	538471	172660	30.2	28.8	18.6	18.0	15.1	13.0	11.7	15.5	17.3	Missing	25.7	13.3	18.8	15.6		
SSDT_35	539254	172658	30.6	28.4	18.6	18.3	17.8	15.7	13.8	16.6	19.4	23.0	27.0	16.4	20.5	17.0		
SSDT_36	540601	172744	22.5	23.2	15.1	14.6	11.5	11.5	8.9	12.9	14.8	17.6	19.9	12.2	15.4	12.8		
SSDT_37	536618	172405	33.8	**40.1**	28.9	27.9	27.7	26.6	20.3	24.3	28.6	29.4	29.1	21.1	28.1	23.4		
SSDT_38	535533	172340	21.2	24.0	17.0	16.0	12.7	12.2	10.6	13.4	13.9	18.7	Missing	12.6	15.6	13.0		
SSDT_39	534309	172044	28.6	26.3	28.2	Missing	Missing	15.7	10.8	17.0	16.7	18.9	24.2	12.6	19.9	16.5		
SSDT_40	535924	172207	31.6	32.2	Missing	19.9	18.4	17.3	15.6	19.4	20.7	25.8	26.5	15.5	22.1	18.3		
SSDT_41	536598	171766	**43.6**	**43.4**	21.8	29.4	30.1	30.7	22.1	29.2	Missing	32.1	34.3	25.3	31.1	25.8		
SSDT_42	538788	171517	34.4	Missing	Missing	Missing	21.6	Missing	19.8	23.6	27.3	Missing	Missing	Missing	25.4	23.4		

SSDT_43	539170	170869	27.2	26.8	17.5	14.0	15.6	12.6	11.7	15.1	16.8	20.0	21.3	15.0	17.8	14.8		
SSDT_44	539374	171246	26.7	23.5	14.7	13.9	12.8	10.9	10.2	Missing	13.8	14.9	22.6	Missing	16.4	13.6		
SSDT_45	539492	171567	24.1	26.1	16.7	16.6	12.7	14.3	11.2	14.2	16.1	17.7	23.9	14.9	17.4	14.4		
SSDT_46	539732	172202	31.1	30.5	20.1	18.4	17.2	15.7	14.5	16.1	20.2	25.8	28.2	-	21.6	17.9		
SSDT_47	540091	171644	33.0	26.7	23.1	24.9	20.9	19.8	15.5	19.7	20.3	23.2	23.6	Missing	22.8	18.9		
SSDT_48	540331	172103	30.3	28.8	19.4	21.4	18.9	17.9	12.9	16.5	22.1	24.1	Missing	17.0	20.9	17.3		
SSDT_49	537318	175817	28.3	25.4	18.8	19.7	15.2	15.3	10.1	17.4	16.7	20.3	21.6	14.7	18.6	15.5		
SSDT_50	537111	175716	29.8	25.6	18.5	20.4	15.5	Missing	Missing	14.7	Missing	Missing	Missing	11.6	19.4	15.6		
SSDT_51	535910	175947	38.9	Missing	Missing	27.5	22.0	Missing	21.8	26.5	31.6	31.7	33.0	24.9	28.7	23.8		

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

☒ **Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.**

☐ **Local bias adjustment factor used.**

☒ **National bias adjustment factor used.**

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

☒ **LBL confirm that all 2023 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

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

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

Appendix C   Map(s) of Monitoring Locations and AQMAs

Figure A.9 London Borough of Lewisham 2023 Diffusion Tube Network (North)
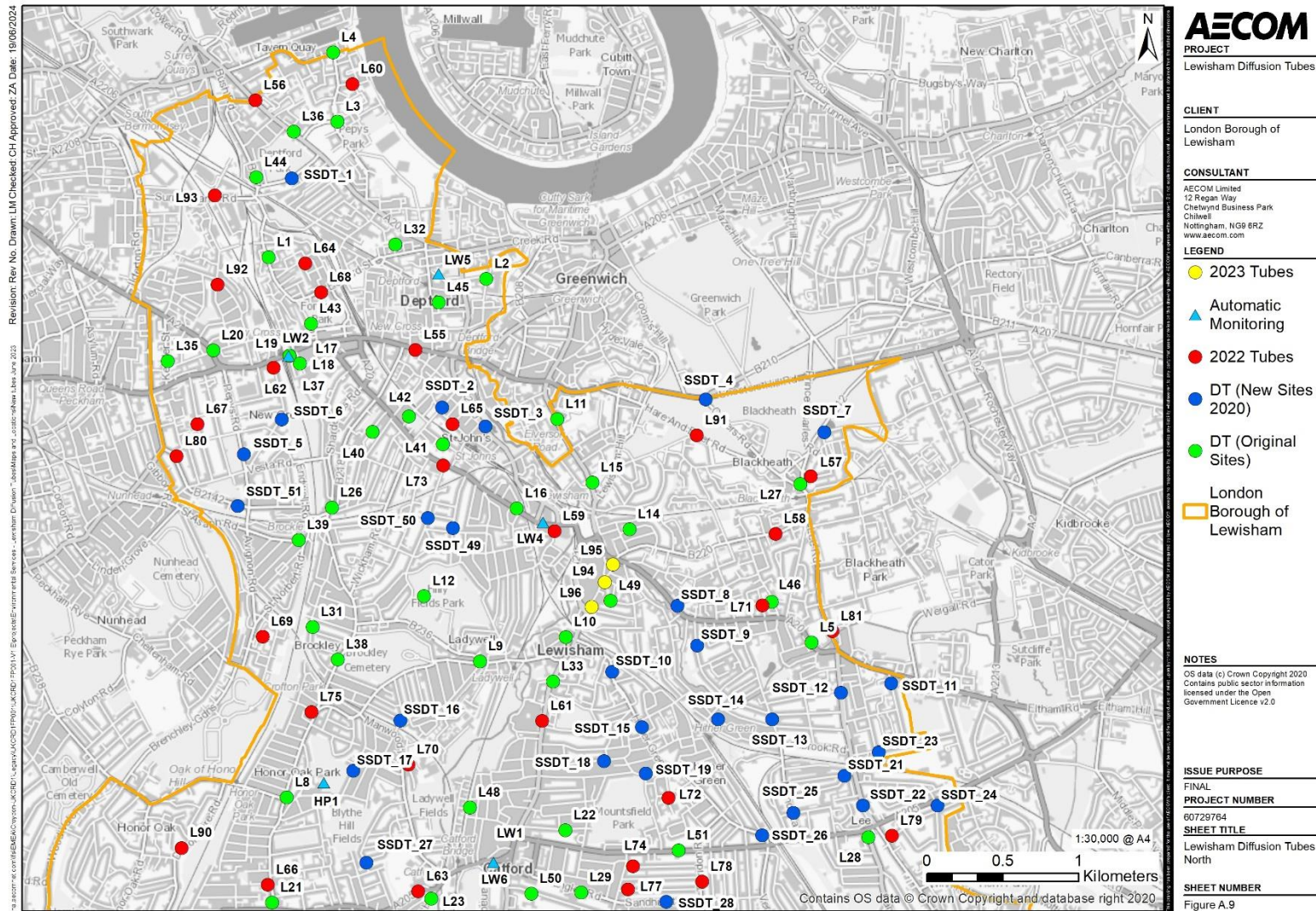
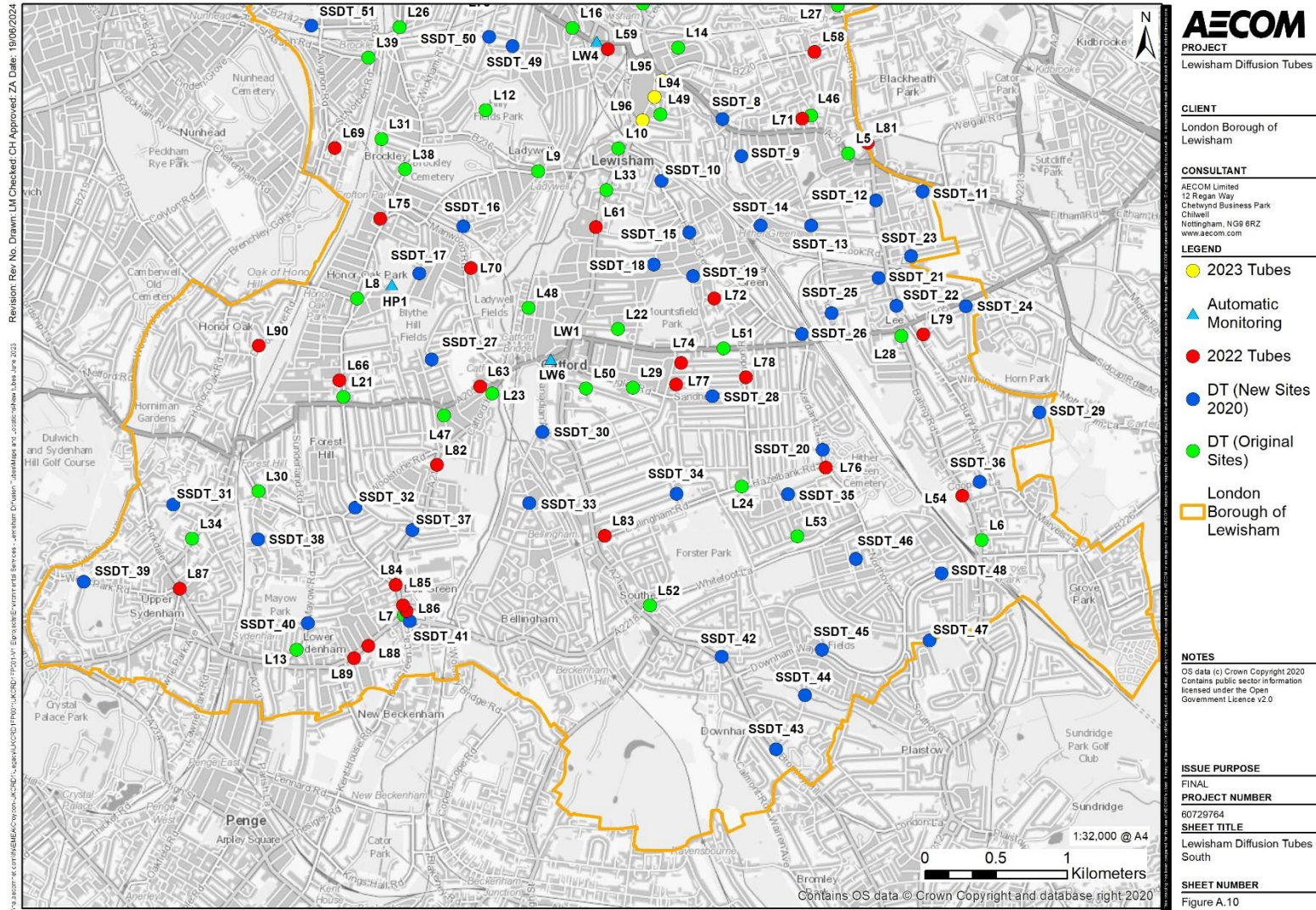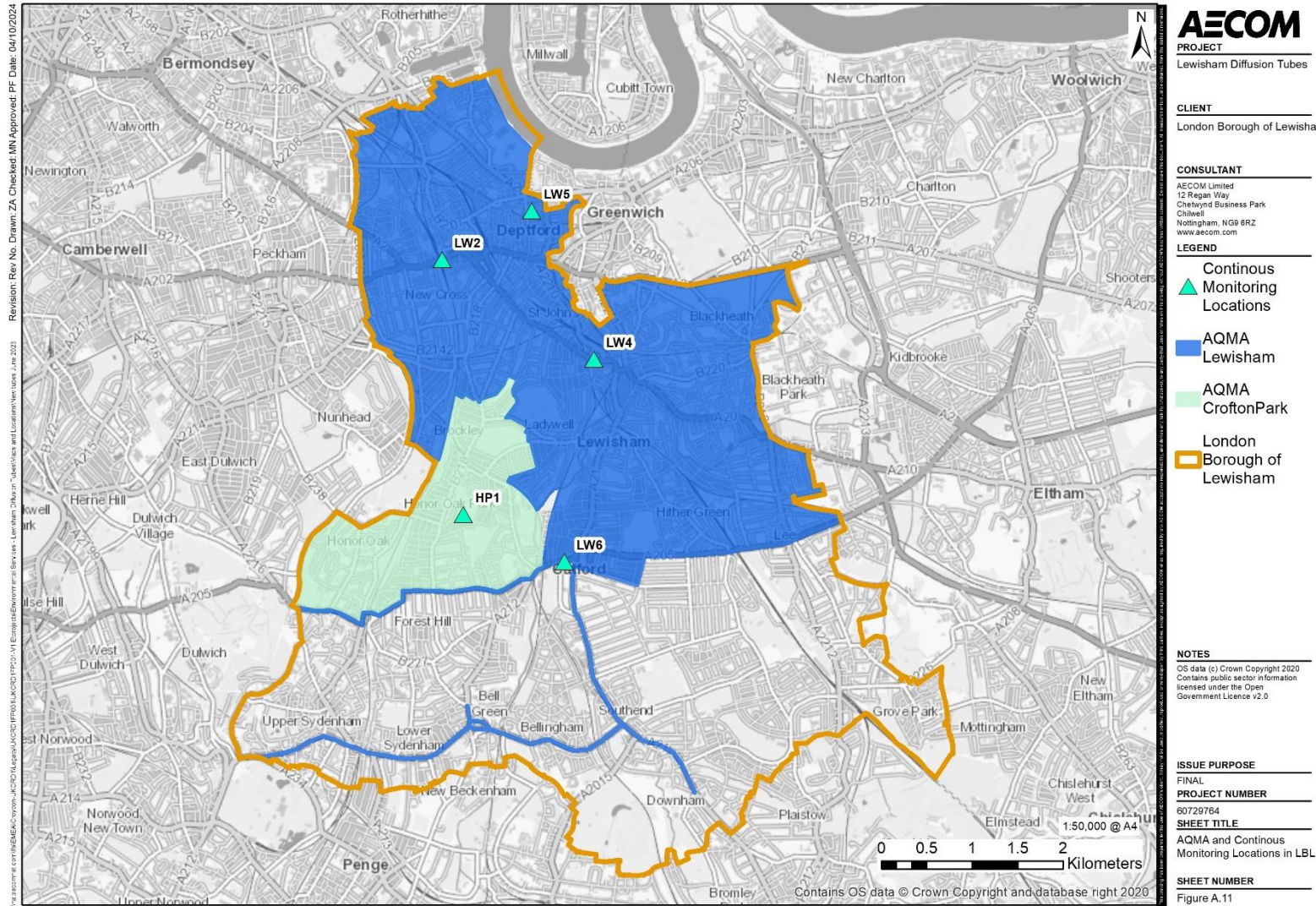# Figure A.10 London Borough of Lewisham 2023 Diffusion Tube Network (South)

Figure A.11 Air Quality Management Areas and Continuous Monitoring Locations in London Borough of Lewisham

Appendix D Changes in NO$_2$ average annual mean concentrations (2013-2023)

Figure A.12 Percentage change of NO$_2$ average annual mean concentrations from previous year (Roadside Sites)

Percentage change of NO$_2$ levels from previous year (Roadside)

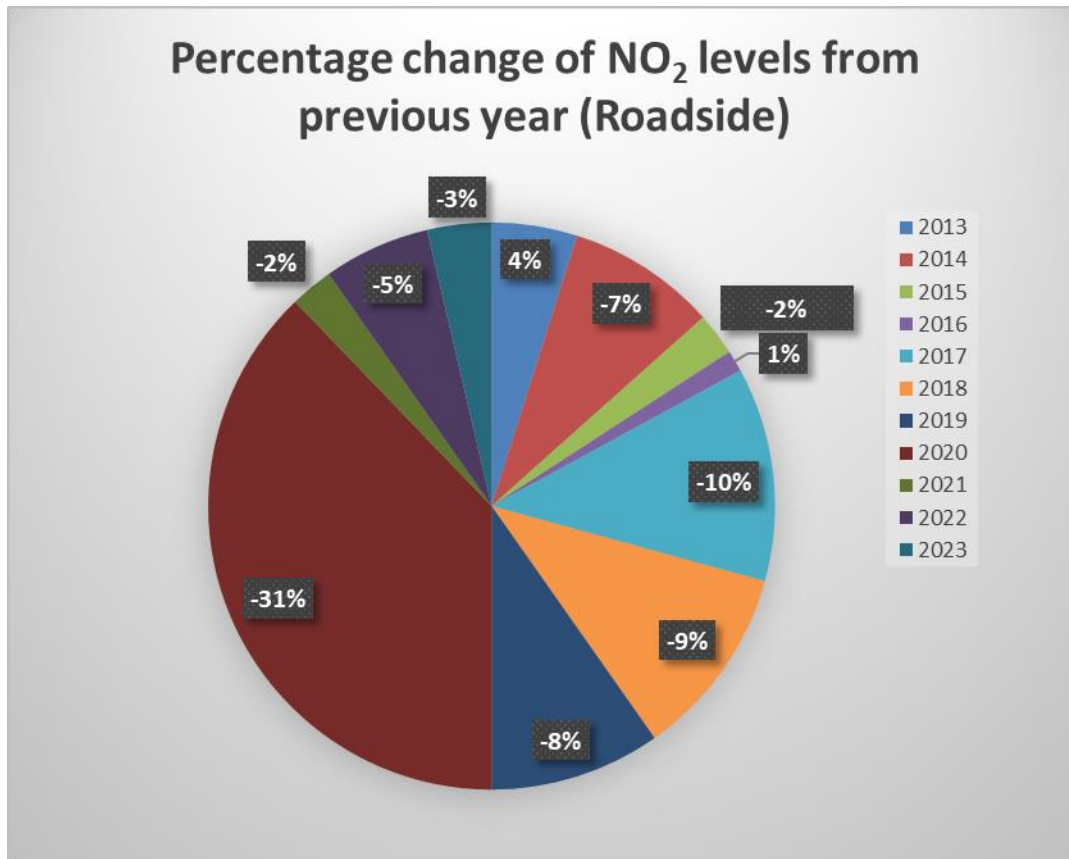Legend: 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023

Figure A.13 Percentage change of NO₂ average annual mean concentrations from previous year (UB Sites)

Percentage change of NO₂ levels from previous year (Urban Background)