London Borough of Sutton Air Quality Annual Status Report for 2019 Date of publication: 31 July 2020



This report provides a detailed overview of air quality in the London Borough of Sutton during 2019. It has been produced to meet the requirements of the London Local Air Quality Management statutory process¹.

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

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Abbreviations

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

Pollutant	Objective (UK)	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
	40 μg m ⁻³	Annual mean	31 Dec 2005
Particles - PM ₁₀	50 μ g m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles - PM _{2.5}	25 μg m ⁻³	Annual mean	2020
	Target of 15% reduction in concentration at urban background locations	3 year mean	Between 2010 and 2020
Sulphur Dioxide (SO ₂)	266 μg m ⁻³ not to be exceeded more than 35 times a year	15 minute mean	31 Dec 2005
	350 μg m ⁻³ not to be exceeded more than 24 times a year	1 hour mean	31 Dec 2004
	125 μ g m ⁻³ mot to be exceeded more than 3 times a year	24 hour mean	31 Dec 2004

Table A. Summary of National Air Quality Standards and Objectives

Note: ¹ by which to be achieved by and maintained thereafter

1. Air Quality Monitoring

1.1 Locations

The London Borough of Sutton operated four automatic monitoring stations in 2019

- two kerbside sites: ST4 Sutton Wallington and ST6 Sutton Worcester Park, both measuring NO2 and PM10;
- two industrial sites: ST8 Sutton Beddington Lane measuring NO2 and PM10 and ST5 Sutton Beddington Lane (north) measuring NO2, PM10 and PM2.5.

Table B. Details of Automatic Monitoring Sites for	2019
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Site ID	Site Name	X (m)	Y (m)	Site Type	In AQMA?	Distance from monitoring site to relevant exposure (m)	Distance to kerb of nearest road (N/A if not applicable) (m)	Inlet height (m)	Pollutants monitored	Monitoring technique
										Chemiluminescent
ST4	Wallington	528925	163804	Kerbside	Y	5	0.8	1.5	NO2, PM10	, BAM
ST5	Beddington Lane North	529400	167224	Industrial	Y	6	4.5	1.5	NO2, PM10, PM2.5	Chemiluminescent ; BAM
ST6	Worcester Park	522557	165787	Kerbside	Y	2	1.3	1.5	NO2, PM10	Chemiluminescent ; TEOM/FDMS
										Chemiluminescent
ST8	Beddington Lane	529781	166597	Industrial	Y	330	N/A	1.5	NO2, PM10	; BAM

Table C. Details of Non-Automatic Monitoring Sites for 2019

Site ID	Site Name	X (m)	Y (m)	Site Type	In	Distance from	Distance to kerb Inlet		Pollutants	Tube co-
					AQMA?	monitoring site	of nearest road	height	monitored	located with an
						to relevant	(N/A if not	(m)		automatic
						exposure	applicable)			monitor?
						(m)	(m)			(Y/N)

				Urban						
ST21	Glastonbury Road	525567	166291	Background	Y	6	2	2	NO2	Ν
	Dorset Road,									
ST22	Belmont	525063	162474	Roadside	Y	12	2	2	NO2	Ν
	Sandy Lane									
ST23	South	529734	163868	Roadside	Y	5	2	2	NO2	N
ST24	Derry Road	530130	165404	Roadside	Y	7	2	2	NO2	N
ST25	Staines Avenue	523874	165683	Roadside	Y	15	2	2	NO2	Ν
ST26	West Street	527683	164663	Roadside	Y	2	2	2	NO2	Ν
	Hackbridge			Urban						
ST07	Primary	528401	166038	background	Y	0	56	2	NO2	N
		527786	165021	Urban						
ST08	Victor Seymour			background	Y	0	33	2	NO2	N
ST29	Park Lane	528339	164615	Roadside	Y	2	6	2	NO2	N
		527284	165778	Urban						
ST10	Muschamp Priory			background	Y	0	20	2	NO2	N
	Sherwood Park			Urban						
ST11	School	529835	165041	background	Y	0	35	2	NO2	N
				Urban						
ST32	Alcorn Close	525184	165845	background	Y	40	25	2	NO2	N
ST33	Carshalton Road	526021	164025	Roadside	Y	3	1	2	NO2	N
ST34	Oakhill Road	525772	165118	Roadside	Y	10	1	2	NO2	N
	Gander Green									
ST35	Lane	524782	165167	Roadside	Y	10	1	2	NO2	Ν
	Croydon Rd,			_						
ST36	Beddington	530645	164839	Roadside	Y	0	11	2	NO2	Ν
	Haddon Road/St			_						
ST27	Nicholas Way	525691	164599	Roadside	Y	11	2	2	NO2	N
	Brighton Road,			_						
ST38	Sutton	526046	163636	Roadside	Y	2	10	2	NO2	Ν
	Rose Hill									
ST39	roundabout	526019	166469	Roadside	Y	6	2	2	NO2	Ν
	38 High Street,									
S140	Cheam	524357	163599	Roadside	Y	2	1	2	NO2	N
				Urban				_		
ST42	Royston Park	526605	165364	Background	Y	20	95	2	NO2	N
ST43	Chiltern Road	525883	162518	Roadside	Y	13	1	2	NO2	N
H1	Hackbridge Road	528359	166067	Roadside	Y	0.5	17	2	NO2	N
			4000	Urban						
H2	Clover Way	528437	166275	background	Y	0	25	2	NO2	N
H3	57 London Rd	528637	166021	Roadside	Y	0	5	2	NO2	N
BL	Beddington Lane	529400	167235	Roadside	Y	15	2	2	NO2	Ν

ST21	Glastonbur	y Road	525567	166291	Urban Background	Y	6	2	2	NO2	Ν
	Dorset	Road,									
ST22	Belmont		525063	162474	Roadside	Y	12	2	2	NO2	Ν
	Sandy	Lane									
ST23	South		529734	163868	Roadside	Y	5	2	2	NO2	Ν

1.2 Comparison of Monitoring Results with AQOs

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

		Valid data	Valid data			Annual Me	ean Concentra	ntion (µg m⁻³)		
Site ID	Site type	capture for monitoring period % ^a	capture 2019 % ^b	2013 ^c	2014 °	2015°	2016 °	2017 °	2018 °	2019 °
ST4	Wallington	Kerbside	N/A	90	<u>71.8</u>	<u>69.6 (*c)</u>	<u>66.6 (*c)</u>	<u>61.4 (*c)</u>	<u>63</u>	53
ST5	Beddington Lane North	Industrial	N/A	97	36 (*c)		36.4 (*c)	32	36	32
ST6	Worcester Park	Kerbside	N/A	99	54.5	49	53.5	52	57	52
ST8	Beddington Lane	Industrial	N/A	96	35.7 (*c)	36	30.5	27	30	25
ST21	Glastonbury Road	Urban Background	N/A	83				27.32	32.07	26.84
ST22	Dorset Road, Belmont	Roadside	N/A	92				37.3	37.24	33.51
ST23	Sandy Lane South	Roadside	N/A	100				32.15	35.02	34.87
ST24	Derry Road	Roadside	N/A	100				26.68	30.6	25.67
ST25	Staines Avenue	Roadside	N/A	100				32.02	34.65	29.74

Table D1. Annual Mean NO₂ Ratified and Bias-adjusted Monitoring Results (µg m⁻³)

		Valid data	Valid data	Annual Mean Concentration (μg m ⁻³)								
Site ID	Site type	capture for monitoring period % ^a	capture 2019 % ^b	2013°	2014 °	2015°	2016 °	2017 °	2018 °	2019°		
				92				36.64	41.27	35.95		
ST26	West Street	Roadside	N/A									
ST07	Hackbridge Primary	Urban background	N/A	100			22.3	21.87	24.17	20.5		
	Victor			100			24.9	23.55	28.52	23.21		
S108	Seymour	Urban background	N/A					07.05	44.40	05.7		
ST29	Park Lane	Roadside	N/A	92				37.85	41.48	35.7		
ST10	Muschamp Priory	Urban background	N/A	92				21.12	24.29	20.13		
ST11	Sherwood Park School	Urban background	N/A	100			26.6	23.39	26.43	22.55		
ST32	Alcorn Close	Urban background	N/A	92	31.5	25.3	27	22.36	27	20.01		
ST33	Carshalton	Roadside	N/A	100	36.1	39.6	42.8	37.34	38.79	34.15		
ST34	Oakhill Road	Roadside	N/A	<u>50</u>			48.1	39.43	42.78	36.61		
ST35	Gander	Roadside	N/A	100			46.3	31.5	34.06	28.66		
ST36	Croydon Rd, Beddington	Roadside	N/A	100	32.5	34.1	35.9	29.05	32.81	27.37		
ST27	Haddon Road/St Nicholas Way	Roadside	N/A	92				36.78	39.56	34.66		
ST38	Brighton Road, Sutton	Roadside	N/A	100			38.9	34.65	36.83	33.18		
ST39	Rose Hill roundabout	Roadside	N/A	83			36.2	37.07	39.32	41.8		
ST40	38 High Street,	Deedeide		92	50	46.5	48.3	42.9	44.85	42.05		
5140	Cheam	Roadside	N/A	02			247	20.09	21.92	17.05		
ST42	Royston Park	Urban Background	N/A	92			24.1	20.90	21.02	17.30		

		Valid data	Valid data	Annual Mean Concentration (μ g m ⁻³)								
Site ID	Site type	capture for monitoring period % ^a	capture 2019 % ^b	2013°	2014 °	2015°	2016 °	2017 °	2018 °	2019 °		
				92						28.37		
ST43	Chiltern Road	Roadside	N/A									
	Hackbridge			100			33.7	28.9	32.29	32.58		
H1	Road	Roadside	N/A									
				92			29.1	26.5	29.26	24.33		
H2	Clover Way	Urban background	N/A									
				100			36.6	32.92	32.35	44.46		
H3	57 London Rd	Roadside	N/A									
	Beddington			100					34.11	29.1		
BL	Lane	Roadside	N/A									

Notes: Exceedance of the NO₂ annual mean AQO of 40 μ g m⁻³ are shown in **bold**.

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

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

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

^c Means should be "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Table D1 provides NO_2 monitoring results for the 2019 calendar year at four continuous monitoring stations and 26 diffusion tube monitoring sites after bias adjustment and annualisation where necessary. The Wallington (ST4) and Worcester Park (ST6) AQMSs both show an exceedance of the annual mean AQO. Additionally, two NO_2 diffusion tubes show an exceedance of the same AQO. There are no monitoring sites that exceed the threshold at which an exceedance of the short-term exposure limit is likely.

This shows a slight reduction compared with the previous year when the same two AQMSs showed exceedances as well as three diffusion tubes.



Figure 1: This map shows the nitrogen dioxide monitoring network overlaid on the LAEI16 NO2 concentration raster. The air quality monitoring sites are colour coded to indicate the concentration of NO₂ at a given site for 2019.

Table D2. Calculation of NO₂ at relevant exposure (ug/m³)

The results presented in the table below are after adjustments for bias adjustment, annualisation and distance to a location of relevant public exposure. To estimate the concentration at the nearest receptor, the procedure specified in LLAQM.TG(16) has been applied to all monitoring locations that record an annual mean concentration above the NO₂ annual mean objective of 40ug/m³. The calculation has also been applied to monitoring locations that record an annual mean concentration that is within 10% of the NO₂ annual mean objective (i.e. above 36ug/m³), to account for the inherent uncertainty in diffusion tube monitoring data.

Site ID	Site Name	X (m)	Y (m)	Site Type	Distance to kerb of nearest road (N/A if not applicable) (m)	Distance from kerb to relevant exposure (m)	Annual mean NO ₂ 2019 (ug/m ³)	Background NO ₂ (ug/m ³)	NO ₂ at relevant exposure (ug/m ³)
ST4	Wallington	528925	163804	Kerbside	0.8	5.8	16.4	45.86	34.6
ST6	Worcester Park	522557	165787	Kerbside	1.3	3.3	17.4	51.09	44.4
ST34	Oakhill Road	525772	165118	Roadside	1	11	18.7376	36.61	28
ST39	Rose Hill roundabout	526019	166469	Roadside	2	8	18.74304	41.8	34.3
ST40	38 High Street, Cheam	524357	163599	Roadside	1	3	17.02753	42.05	36.5
H3	57 London Rd	528637	166021	Roadside	5	5	17.18215	44.46	44.5

The calculations have been carried out in accordance with LLAQM Technical Guidance in order to provide information on the concentrations at which relevant exposure occurs. The data shows that there are just two exceedances of the annual mean objective at areas of relevant exposure and these are both at locations adjacent to busy roads. These sites have been identified in the previous ASR.

Table E. NO2 Automatic Monitor Results: Comparison with 1-hour Mean Objective

Site ID	Valid data capture for monitoring period % ^a Valid data capture 2019 % ^b	Valid data	Number of Hourly Means > 200 μg m ⁻³								
		capture 2019 % ^b	2012°	2013°	2014 °	2015°	2016 °	2017 °	2018 °	2019°	
ST4 Wallington	N/A	90	133	69	10	9	22	1	0	0	

	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Number of Hourly Means > 200 μ g m ⁻³							
Site ID			2012°	2013°	2014 °	2015°	2016 °	2017 °	2018 °	2019°
ST5										
Beddington			2		0	0	0	0	0	0
Lane North	N/A	97								
ST6										
Worcester			13	8	3	11	24	11	7	9
Park	N/A	99								
ST8										
Beddington			0	9	0	0	0	0	0	0
Lane	N/A	96								

Notes: Exceedance of the NO₂ short term AQO of 200 μ g m⁻³ over the permitted 18 days per year are shown in **bold**.

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

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

^c Means should be "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Site ID	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Annual Mean Concentration (µg m ⁻³)								
			2012°	2013 ^c	2014 ^c	2015°	2016 °	2017 °	2018 °	2019°	
ST4											
Wallington	N/A	98	27.2	25.5	20.6	16	23	25	23	21	
ST5 Beddington Lane North	N/A	98	24.1		20.5	24	24	31	22	22	
ST6 Worcester Park	99.7	43	28.3	27.7	26.2	23	22	20	20	21(c)	
ST8 Beddington Lane	N/A	94	29.8	22.2	22.8	19	23	23	22	17	

Table F. Annual Mean PM₁₀ Automatic Monitoring Results (µg m⁻³)

Notes: Exceedance of the PM₁₀ annual mean AQO of 40 μ g m⁻³ are shown in **bold**.

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

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

^c Means should be "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Table G. PM₁₀ Automatic Monitor Results: Comparison with 24-Hour Mean Objective

	Valid data	Valid data	Number of Daily Means > 50 μg m ⁻³							
Site ID	capture for monitoring period % ^a	capture 2019 % ^b	2012°	2013°	2014 °	2015°	2016 °	2017°	2018°	2019°
ST4 Wallington	N/A	98	23	6 (39.3)	0 (27.5)	0 (25.3)	5	6	4	7
ST5 Beddington Lane North	N/A	98	21	20 (44.3)	7 (42.4)	13	5 (34)	21	2	13
ST6 Worcester Park	99.7	43	10 (44.3)	5	10 (35.9)	3 (33)	8	2	7	10(c)
ST8 Beddington Lane	N/A	94	17 (59.2)		0 (30.4)	8	8 (37)	5	2	4

Notes: Exceedance of the PM₁₀ short term AQO of 50 μ g m⁻³ over the permitted 35 days per year or where the 90.4th percentile exceeds 50 μ g m⁻³ are shown in **bold**. Where the period of valid data is less than 85% of a full year, the 90.4th percentile is shown in brackets after the number of exceedances.

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

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

^c Means should be "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Table H.	Annual Mean PM2.5 Automatic Monitoring	g Results (µg m ⁻³)	

Site ID	Valid dataValid capture forcapture forcapture formonitoringcapture forperiod % a20	Valid data	Annual Mean Concentration (µg m ⁻³)							
		capture 2019 % ^b	2013°	2014 °	2015°	2016 °	2017 ^c	2018 ^c	2019°	
ST5 Beddington Lane North	N/A	98		12.7	14.8	14.4	15.2	12	11.7	

Notes: Exceedance of the PM_{2.5} annual mean AQO of 25 μ g m⁻³ are shown in **bold**.

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

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

^c Means should be "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

Table I. SO₂ Automatic Monitor Results: Comparison with Objectives

N/A

2. Action to Improve Air Quality

2.1 Air Quality Action Plan Progress

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

Table J.Delivery of Air Quality Action Plan Measures

Measure	Action	 Progress Emissions/Concentration data Benefits Negative impacts / Complaints 	Further information
Engine idling	Discourage unnecessary engine idling	In 2020, LBS has purchased and installed 53 anti-idling signs which have been installed largely in the area around schools. Additionally, 9 large anti-idling banners have been provided for local schools. LBS is participating in the pan-London Anti-idling project funded by the MAQF. As part of this project, two schools have so far been visited.	
Air quality in Council policies	Ensure that Transport and air quality policies and projects are integrated	Highway officers are liaising more closely with colleagues to ensure that Air Quality issues are given proper consideration as part of scheme identification as we II as during scheme design. It has recently been apparent that during the COVID-19 pandemic one of the key issues that was highlighted was the noticeable air quality improvements when traffic flows were greatly reduced during the early stages, and that has set aspirations to deliver schemes that provide opportunities for mode change as wel as environmental change in residental areas. Some of Streetspace projects had a specific focus where changes in vehicles emissions as well as air quality were key considerations as part of the monitoring plans.	
Support and encourage	Implement measures to control speeds and smooth traffic flows in residential	Lacking LIP funding this year we have bid for TfL LSP funding for various measures including Low Traffic Neighbourhoods and school streets, both of which can help reduce the amlount of traffic	

cycling and walking	areas where pedestrians and cyclists are to be given greater priority	using residential roads. Funding awarded in tranche 1 will be spent by end of September 2020 with a further round to be bid for, awarded and delivered by end of March 2021. 20mph schemes are still part of the annual LIP package, and these are being considered on a needs basis whereby incremental changes to the bororugh road network will continue to see 20mph zones and limits joined up - creating wider networks where low speeds are the norm. These will continue to be a key element of the LIP submission, and were also a major part of the borough Liveable Neighbourhood bdi that looked at step change proposals around Sutton Town Centre, which also included measures to reduce speeding on the Sutton town centre gyratory - reducing the severance impact that is currently experienced here.	
Car clubs	Encourage car sharing by promoting Car Clubs in order to reduce vehicle ownership and increase the proportion of electric, hydrogen and ultra-low emission vehicles within Car Clubs	Updated planning guidance on Car Clubs included as part of new Sustainable Transport Strategy, to be consulted on in 2020. Existing car clubs SPG from remains in place for now. Procedures are currently being developed by Strategic Planning team to ensure that car club provisions secured through planning condition are monitored using the GLA's London Development Database (LDD) (shortly to be relaunched as the London Planning Data Hub) and subsequently reported in the Sutton Authority Monitoring Report (AMR) from 2019-20 onwards.	
Public engagement and awareness raising	Support communities wishing to enact temporary road closures, encourage Play Streets and run campaigns to raise awareness of benefits of not using a private motor vehicle	4 communities applied for Play Streets road closures. One event took place 10 March but the others did not due to poor weather. All 4 communities were planning Spring and Summer 2020 events when lockdown took place.	
Low emission vehicles	Offer residents free or discounted parking charges for zero emission vehicles (e.g. electric) within Council- run car parks and free or discounted parking permits for zero emission vehicles	Concessions for electric/hybrid vehciles in car parks (multi-story car parks in Sutton and surface car parks in Wallington, Carshalton and Cheam) are in place (https://www.sutton.gov.uk/info/200195/parking/1242/car_parks/8). CO2 based charging structure implemented in existing CPZs (Sutton and Belmont) providing cheaper permits for lower emmitting vehicles. Expansion of permit criteria to new Permit Parkign Areas in Hackbridge, Carshalton and St Helier being implemented. Any new schemes being implemented as part of the Geographical Area 2 and 3 of the Parkign Strategy, which involve resident permits, will have the same charging structure.	
Parking policies	Use parking policies to help reduce pollution emissions	CO2 based charging structure implemented in existing CPZs (Sutton and Belmont) providing cheaper permits for lower emmitting vehicles. Expansion of permit criteria to new Permit Parkign Areas in Hackbridge, Carshalton and St Helier being implemented. Any new schemes being implemented as part of the	

		Geographical Area 2 and 3 of the Parkign Strategy, which involve	
		resident permits, will have the same charging structure.	
Low	Installation of ULEV infrastructure	Procedures are currently being developed by Strategic Planning	
emission	including both standard and rapid	team to ensure that the number of active and passive electric	
vehicles	electric vehicle charging points	vehicle charging points implemented as part of developments of	
		10 units or more are monitored using the GLA's London	
		Development Database (LDD) (shortly to be relaunched as the	
		London Planning Data Hub) and subsequently reported in the	
		Sutton Authority Monitoring Report (AMR) from 2019-20 onwards.	
		Research is also underway within Strategic Planning to establish	
		and map the number and type of electric vehicle charging points	
		within the borough and to monitor this on an annual basis through	
		the preparation of Sutton's Authority Monitoring Report (AMR).	
		Sources of information will include the following interactive	
		mapping portal s such as https://www.carwow.co.uk/electric-	
		cars/charging-points.	
Support and	Review of road space allocation to	Cycle schemes and bus priority schemes are both measures that	
encourage	identiav opportunities for improving bus	feature as part of the boroughs annual LIP submission and	
cycling	journey times, public transport options	officers work closely with TfL colleagues to identify locations	
eyemig	and the cycling experience while	where it is considered schemes would bring the most benefits.	
	minimising impacts of emissions caused	With the LIP programme on pause in 20/21 no schemes are	
	by congestion	coming forward but those key areas where proposals are being	
		investigated include Worcester Park - which is a cross borough	
		scheme, as the concestion and traffic impacts are equally an	
		issue for Kingston and Sutton. Further work is also underway	
		refreshing the Cycle Network as part of the preparation of the	
		Sustainable Trasport Strategy and this is identify strategic routes	
		for completion such as the East - West corridor between	
		Worcester Park and Waddon, as well as future route demands on	
		a North South baiss between Hackbridge and Wallington	
Support and	Provision of infrastructure and support	According to Transport for London's (TfL) Travel in London Report	
encourage	to encourage a modal switch to walking	No 12 (September 2010) the percentage of journeys made by	
active travel	and cycling	walking within the borough (as a 3-year average) has fallen from	
		24% in 2017 18 to approximately 22% in 2018 10. The propertion	
		of tring made by bike has remained roughly the same increasing	
		from 1.3% in 2017-18 to approximately 1.5% in 2019 10. This	
		data is reported in Sutton's Authority Monitoring Report (AMP)	
Support and	Work with Transport for London and	This work is oppoind	
encourage	other relevant providers to improve	THIS WOR IS UNGOING.	
public	nublic transport connections, sucilability		
transport use	for passangers and a cleaner flast mill		
transport use	for passengers and a cleaner fleet mix		

London LEZ	Promote awareness of Low Emission Zones and creation of local Low Emission Zones	In September 2019 Sutton Council led on a joint Business LEN bid with Kingston Council, located on Central Road, Worcester Park. This bid was unsuccessful.	
FORS	Encourage existing contractors providing Council services to be members of the Fleet Operator Recognition Scheme and obtain Gold accreditation	The procurement guidance includes mandatory instructions to follow the sustainability and social value strategies. This objective will be supported by this process on a case by case basis.	
Procurement actions	Update local authority procurement policies to encourage contractors with fleets of more than 10 vehicles providing Council services to reduce emissions from their fleets and reduce pollution from logistics and servicing	Policy not yet updated - will form a part of Environmental Strategy which is being reviewed to respond to the climate emergency. It will be prioritised in 2020/21 No update from procurement as policy will inform how tenders are assessed.	
Reducing emissions from freight	Retiming of freight deliveries to commercial centres	A successful trial of early deliveries has been carried out in Sutton Town Centre. This trial saw deliveries starting from 4am within the area. The effect of this was to limit sensitive exposure to emissions from delivery vehicles and to reduce pressure on the road network at peak times.	
Reducing emissions from freight	Reduce emissions from deliveries through e.g. promotion of consolidation and/or Virtual Loading Pays with priority loading for ultra-low emission delivery vehicles	We are working with Croydon to identify a site for freight consolidation but suitable sites are in short supply. Discussions are ongoing. The procurement guidance includes mandatory instructions to follow the sustainability and social value strategies. This objective will be supported by this process on a ase by case basis.	
Procurement actions	Procurement policies to be developed to encourage new contractors providing Council services to only use vehicles that meet Euro VI emissions standards	The procurement guidance includes mandatory instructions to follow the sustainability and social value strategies. This objective will be supported by this process on a case by case basis.	
Low emission vehicles	Increase the number of hydrogen, electric, hybrid, bio-methane and cleaner vehicles in the borough's fleet	The procurement guidance includes mandatory instructions to follow the sustainability and social value strategies. This objective will be supported by this process on a ase by case basis.	
Using planning condition to mitigate poor air quality	Ensure emissions from construction and/or demolition are minimised	Planning conditions relating to air quality are summarised in Table K. Officers apply relevant air quality conditions when consulted on planning applications. In addition, new guidance has been writen for our forthcoming website regarding controlling emissions through the planning approval process. This guidance clarifies to developers which sites will be reviewed for air quality, it stipulates compliance with the SPGs for Control of Dust and Emissions during Construction and Demolition, and Sustainable Design and Construction Practice, it recommends the structure of a standard air quality assessment and recommends compliance with relevant IAQM guidance on assessment of risk.	

Using planning condition to mitigate poor	Ensure enforcement of Non-Road Mobile Machinery (NRMM) air quality policies	The procurement guidance includes mandatory instructions to follow the sustainability and social value strategies. This objective will be supported by this process on a ase by case basis. The use of our standard NRMM planning condition during 2019 is summarised in Table K. Additionally, the Council is taking part in the pan-London NRMM project, funded by the MAQF.	
air quality Using planning condition to mitigate poor air quality	Reduce emissions from Combined Heat & Power (CHP) including through enforcement of air quality policies on energy sources in new developments	Zero planning applications for biomass boilers were recieved and zero were approved in 2018-19. Zero planning applications for CHP plants over 500kW were recieved or approved in 2018-19. Sutton's Authority Monitoring Report (AMR) currently reports on the capacity of energy supply systems implemented as part of completed developments within the borough (such as biomass and CHP) but it is intended to extend this monitoring to planning applications received and permissions from 2019-20 onwards	
Using planning condition to mitigate poor air quality	Enforce Air Quality Neutral policies	Quantitative assessment of the Council's performance against this action can be found in Table K of this report. Assessment of a developments performance against Air Quality Neutral policy is expected of any major development in the borough. Our forthcoming air quality website clarifies this requirement for developers.	
Using planning condition to mitigate poor air quality	Ensure that Air Quality Positive and Healthy Streets approaches are incorporated within future master- planning and redevelopment areas	There are currently no master planning or major site planning being undertaken by Strategic Planning. All major planning applications must meet Policy SI 1 of the 2019 Intend to Publish London Plan, which requires all new development to be "at least Air Quality Neutral" in other words air quality positive. The policy also requires that Air Quality Assessments should be submitted with major applications. Transport for London is a consultee on certain planning applications and its representations do request the implementation of Healthy Streets principles, where necessary. No training has yet been arranged for Council officers.	
Using planning condition to mitigate poor air quality	Ensure adequate, appropriate and well located green space and infrastructure is included in new developments	All major residential or non-residential developments granted planning permission from 2018-19 onwards have either (a) been supported by evidence in support of the planning application to demonstrate that they will achieve the minimum Green Space Factor (GSF) score required by Local Plan Policy 33 or (b) have been required via a 'pre-commencement' planning condition to demonstrate this minimum score prior to the start of building work on site. A Technical Guidance Note on the implementation of the GSF was approved at Sutton's Housing, Economy and Business (HEB) Committee in June 2018.	

Smoke control	Ensure that Smoke Control Areas are appropriately identified and fully promoted and enforced	In 2019 Sutton Council recieved 18 complaints of smoke that may have represented offences under the Clean Air Act 1993. In the event of a complaint of smoke from a building chimney, complainants are asked to identify the property from where the offence is suspected to originate. EH officers will then send a letter to that property explaining the requirements of the Clean Air Act. If complaints persist, a visit will be made.	
Reducing emissions from domestic energy	Promote and deliver energy efficiency and energy supply retrofitting projects in workplaces and homes through retrofit programmes such as RE:NEW, RE:FIT and through borough carbon offset funds	We are nearly 4 years into the Bolier replacement programme and were due to exchange all Gas Boilers within 10 Years, this has now been rephased so all Boilers will be replaced by 2031, that withstanding we have olny around 450 non energy efficient boilers that will be replaced within the next two years and our current percentage of energy efficient Gas Boilers stands at 91%	
Partnership working with Public Health	Director of Public Health to be fully briefed on air quality issues, to sign off Statutory Annual Status Reports and new Air Quality Action Plans and to support joint working across Council departments on tackling air pollution	Air Quality has been included in section 4 of the borough's JSNA. Air Quality Action Plan working group meetings are chaired by the director of public health and held every two months. Minutes are taken.	
Partnership working with Public Health	Work with Public Health Team on stakeholder engagement to raise awareness of health effects of air pollution and reducing exposure	As part of the pan-London Anti-idling project, two events have so far taken place at schools to raise awareness of air pollution and its consequences on public health. Further sites have been contacted and work has begun to identify fleet operators in the borough who could benefit from such an intervention. The borough actively promoted Car Free Day and Clean Air Day in 2019 holding a number of small events including street parties and Dr Bike stands.	
Workplace travel planning	Engagement with businesses to reduce emissions from associated activities including employees travel to/from and within work	St Helier hospital, Royal Marsden, Institute of Cancer Research and businesses in Quadrant House Sutton were approached with the Workplace Scorecard, however none took it up. Five free Dr Bike checks for staff took place at all of the above in 2019 and 48 bikes were checked.	
Raising awareness	Promotion of sources of information about air quality and health including LoveCLeanAir, AirTEXT and Walkit.com and ensuring people are advised when an air pollution episode is forecast	During 2019, borough residents subscribing to AirTEXT increased by four, from 162 to 166.	
School travel planning	Encourage schools to join the TfL STARS accredited travel planning programme and supporting its implementation	23 primary schools have STARS accredited travel plans	

Raising	Raise awareness of air quality through	As part of the pan-London Anti-idling project, two events have so	
awareness in	education within schools	far taken place at schools to raise awareness of air pollution and	
schools		its consequences on public health. Additionally, 9 anti-idling	
		banners and 53 road signs have been provided for/placed around	
		schools.	
Green	Increase use of vegetation and tree	The green wall at Robin Hood School has now been installed,	
infrastructure	planting to help reduce exposure to air	protecting the school from the adjacent main road. In 2019 LBS	
	pollutants	felled 3157 trees but planted 9521, giving a net increase of 6364.	
LENs	Target areas for implementing package	In late 2019 LBS submitted a bid for a BLEN in Worcester Park.	
	of measures aimed at reducing	This was a joint bid with neighbouring RBK. Unfortunately this bid	
	emissions: Low Emission	was unsuccessful.	
	Neighbourhoods (LENs)		
Air quality	Collect and publish air quality	LBS air quality monitoring data is available on the LoveCleanAir	
monitoring	monitoring data	and LondonAir websites from our passive and automatic	
and		monitoring networks respectively. Additionally, our Annual Status	
awareness		Reports are available via our website. In addition to our	
raising		permanent monitoring network, additional passive monitoring has	
-		been carried out in 2019 around specific highways improvements.	
Air quality	Continue working with Environment	We regularly attend the Beddington ERF Community Liason	
monitoring	Agency on joint approach to regulation	Group which the EA is invited to. In addition, we carried out an	
and	of waste management sites including	educational site visit to the Beddington ERF with neighbouring	
awareness	regular inspections and reviewing of	boroughs.	
raising	monitoring data		

3. Planning Update and Other New Sources of Emissions

Table K.Planning requirements met by planning applications in the London Borough of Suttonin 2019

Condition	Number
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	9
Number of planning applications required to monitor for construction dust	34
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 NOx boilers	7
Number of developments where an AQ Neutral building and/or transport assessments undertaken	7
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	1
Number of planning applications with S106 agreements including other requirements to improve air quality	0
Number of planning applications with CIL payments that include a contribution to improve air quality	0
NRMM: Central Activity Zone and Canary Wharf Number of conditions related to NRMM included. Number of developments registered and compliant. Please include confirmation that you have checked that the development has been registered at <u>www.nrmm.london</u> and that all NRMM used on-site is compliant with Stage IIIB of the Directive and/or exemptions to the policy.	N/A
NRMM: Greater London (excluding Central Activity Zone and Canary Wharf) Number of conditions related to NRMM included. Number of developments registered and compliant. Please include confirmation that you have checked that the development has been registered at www.nrmm.london and that all NRMM used on-site is compliant with Stage IIIA of the Directive and/or exemptions to the policy. Number not in brackets – Applications reviewed in 2019 Number in brackets – Decision notices in 2019	9 conditions recommended 6 confirmed compliant upon inspection 1 confirmed non-compliant upon inspection

The London Borough of Sutton Planning Department consults the Environmental Protection Team on all major planning applications as well as some non-major applications that are likely to be of interest. Applications are reviewed by officers within the team in respect of contaminated land, noise and air quality. Typically, one officer coordinates the team's response and records data such as the air quality conditions that were recommended.

The enforcement of air quality conditions is largely the responsibility of the Planning Enforcement Team unless environmental nuisance issues arise. However, NRMM enforcement is carried out by the LB Merton-led pan-London NRMM enforcement project, funded by the Mayor's Air Quality Fund.

3.1 New or significantly changed industrial or other sources

For 2019 no new sources have been identified.

Appendix A Details of Monitoring Site QA/QC

A.1 Automatic Monitoring Sites

The Council's monitoring stations form part of the London Air Quality Network and QA/QC standards are delivered accordingly. These are considered close, if not equivalent to, the AURN standards. QA/QC is carried out by contractors

PM₁₀ Monitoring Adjustment

The monitoring stations in the London Borough of Sutton are part of the London Air Quality Network and the data is collected and managed (including ratification) by ERG (Environmental Research Group).

A.2 Diffusion Tube Quality Assurance / Quality Control

The diffusion tubes used by the London Borough of Sutton are supplied and analysed by Gradko utilising the 20% triethanolamine (TEA) in water preparation method. A bias adjustment factor of 0.93 for the year 2019 has been derived from the nation bias adjustment calculator dated March 2020.

London Borough of Sutton did not conduct any co-location studies in 2018, so it was not possible to calculate a local adjustment factor. As a result, the national adjustment factor of 0.93 is applied to diffusion tube monitoring results in this report.

National Diffusion Tube			Spreads	neet Vers	ion Numbe	er: 03/20						
Follow the steps below <u>in the correct order</u> to Data only apply to tubes exposed monthly and	This spr	This spreadsheet will be updated										
Whenever presenting adjusted data, you should This spreadhseet will be updated every few mo		at the end of June 2020										
The LAQM Helpdesk is operated on behalf of Defr partners AECOM and the National Physical Labor	Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.											
Step 1:												
Select the Laboratory that Analyses Your Tubes from the Drop-Down List	Select a Preparation Method from the Drop-Down List	Select a Year from the Drop- Down List	Where	e there is only one study for a chosen comb is more than one study, use th	ination, you e overall fac	should use the a ctor ³ shown in bl	djustment facto ue at the foot of	r shown v the final c	vith caution. olumn.	Where there		
If a laboratory is not shown, we have no data for this laboratory.	If a preparation method is not shown, we have no data for this method at this laboratory.	lf a year is not shown, we have no data ²	lf yo	you have your own co-location study then see footnote ⁴ . If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@uk.bureauveritas.com or 0800 0327953								
Analysed By ¹	Method To undo your selection, choose (All) from the pop-up list	Year ⁵ To undo your selection, choose (All)	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm)	Bias (B)	Tube Precision ⁶	Bias Adjustment Factor (A)		
Gradko	20% TE A in water	2019	в	Borough Council of King's Luon and West No	9	27	21	28.4%	G	0.78		
Gradko	20% TEA in water	2019	B	Lancaster City Council	13	40	34	16.4%	G	0.86		
Gradko	20% TEA in water	2019	R	Lancaster City Council	12	31	31	1.6%	G	0.98		
Gradko	20% TEA in Water	2019	R	Monmouthshire County Council	12	39	39	1.3%	G	0.99		
Gradko	20% TEA in water	2019	UC	Belfast City Council	10	29	24	21.8%	G	0.82		
Gradko	20% TEA in water	2019	R	Dudley MBC	12	33	32	4.5%	G	0.96		
Gradko	20% TEA in water	2019	R	Dudley MBC	12	44	42	3.9%	G	0.96		
Gradko	20% TEA in water	2019	UB	Dudley MBC	12	23	19	19.8%	G	0.83		
Gradko	20% TEA in water	2019	UB	Eastleigh Borough Council	12	24	26	-7.1%	G	1.08		
Gradko	20% TEA in water	2019	R	Gateshead Council	12	34	27	23.7%	P	0.81		
Gradko	20% TEA in water	2019	R	R Gateshead Council 11 40 44 -10.5% G 1.12								
Gradko	20% TEA in water	2019	R	R Gateshead Council 10 32 34 -7.2% G 1.08								
Gradko	20% TEA in water	2019	R	Gateshead Council	12	30	25	18.1%	G	0.85		
Gradko	20% TEA in water	2019	R	Thurrock Borough Council	12	29	24	21.6%	G	0.82		
Gradko	20% TEA in water	2019	R	Brighton & Hove City Council	11	45	50	-9.3%	G	1.10		
Gradko	20% TEA in water	2019		Uverall Factor* (27 studies)				L L	Jse	0.93		

Gradko International Ltd is a UKAS accredited laboratory and participates in laboratory performance and proficiency testing schemes. These provide strict performance criteria for participating laboratories to meet, thereby ensuring NO2 concentrations reported are of a high calibre. The lab follows the procedures set out in the Harmonisation Practical Guidance. Gradko previously participated in the Workplace Analysis Scheme for Proficiency (WASP) for NO2 diffusion tube analysis Page 38 and the Annual Field Inter Comparison Exercise. In April 2014, a new scheme, AIR PT13, was introduced. This is an independent analytical proficiency-testing (PT) scheme, operated by LGC Standards and supported by the Health and Safety Laboratory (HSL). AIR PT combines two long running PT schemes: LGC Standards STACKS PT scheme and HSL WASP PT scheme.

Laboratory performance in AIR PT is also assessed by the National Physical Laboratory (NPL) alongside laboratory data from the monthly NPL Field Intercomparison Exercise carried out at Marylebone Road, central London. A laboratory is assessed and given a 'z' score. A score of 2 or less indicates satisfactory laboratory performance.

Gradko International Ltd's performance for 2019 for 100% of samples submitted by Gradko were deemed satisfactory.

The laboratory has also achieved a "good" precision result for 2019. Tubes are considered to have "good" precision where the coefficient of variation of duplicate or triplicate diffusion tubes for eight or more periods during the year is less than 20%, and the average CV of all monitoring periods is less than 10%.

A.3 Adjustments to the Ratified Monitoring Data

Short-term to Long-term Data Adjustment

Where data capture is less than 75% of a full calendar year (less than 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.

In Sutton in 2019, two sites required annualisation. These were the diffusion tube ST34 and the AQMS ST6. The former lost data in the latter part of the year due to tampering. ST6 lost a significant amount of data in the year due to the impact of nearby road painting. Annualisation calculations are presented in the following two tables.

Table L1. Short-Term to Long-Term Monitoring Data Adjustment for ST34

Start Date	End Date	LB6 Streatham Green	WA2 Wandsworth Townhall	ST34 Oakhill Road	LB6 when ST34 is Available	WA2 when ST34 is Available
Jan 09	Feb 06	43.05	61.11	43.09	43.05	61.11
Feb 06	Mar 06	36.27	49.73	46.25	36.27	49.73
Mar 06	Apr 03	33.66	41.70	35.97	33.66	41.70
Apr 03	May 01	40.93	54.18	39.36	40.93	54.18
May 01	Jun 05	29.89	39.03	41.23	29.89	39.03
Jun 05	Jul 03	25.76	29.63	38.14	25.76	29.63

Jul 03	Aug 07	20.88	26.15			
Aug 07	Sep 04	19.48	25.40			
Sep 04	Oct 02	26.01	34.16			
Oct 02	Nov 06	31.13	36.50			
Nov 06	06 Dec 04 45.22		51.78			
Dec 04	Jan 08	32.16	36.88			
Ме	an	32.04	40.52	40.67	34.93	45.90
Ratio		0.92	0.88			
Mean Ratio		Ratio	0.90			
ST34 Annualised			36.61			

Table L2. Short-Term to Long-Term Monitoring Data Adjustment for ST6

Background Site	Annual Mean	Period Mean	Ratio
LB6 Streatham Green	32.04	36.76	0.872
WA2 Wandsworth Townhall	40.52	49.15	0.824
Average			0.85
ST6 Annualised			21.44

Appendix B Full Monthly Diffusion Tube Results for 2019

Table M.NO2 Diffusion Tube Results

										Annua	l Mean	NO₂					
Site ID	Site Name	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data ^c	Annual mean – bias adjusted c
ST21	Glastonbury Road	83	83	41.50	36.49	29.52	36.52	25.24	25.35	20.92	21.13	27.50			24.43	28.86	25.11
ST22	Dorset Road, Belmont	92	92		42.63	33.19	40.79	37.28	33.19	36.64	34.13	32.94	29.71	41.02	34.78	36.03	31.34
ST23	Sandy Lane South	100	100	46.76	40.01	39.00	48.98	39.37	32.92	31.53	25.84	34.87	27.92	49.96	32.81	37.50	32.62
ST24	Derry Road	100	100	37.92	31.84	22.58	39.68	27.22	26.33	21.10	17.18	25.57	22.89	36.65	22.20	27.60	24.01
ST25	Staines Avenue	100	100	45.06	40.66	31.04	34.76	29.86	27.85	26.73	25.06	30.67	31.55	34.23	26.24	31.98	27.82
ST26	West Street	92	92	50.78	47.03	37.37	44.74	38.54	34.36	36.28	32.33	38.04	26.27	39.49		38.66	33.63
ST07	Hackbridge Primary	100	100	31.92	25.47	22.73	31.00	20.97	18.75	14.58	12.55	19.80	19.58	29.77	17.42	22.04	19.18
ST08	Victor Seymour	100	100	33.29	30.55	23.83	29.56	23.44	21.70	18.18	17.63	22.62	20.64	33.17	24.83	24.95	21.71
ST29	Park Lane	92	92	44.12	45.06	34.25		42.65	41.17	32.17	30.75	38.25	30.05	51.09	32.68	38.39	33.4
ST10	Muschamp Priory	92	92	35.46	26.92	23.07	31.30	18.14	16.71	14.51	12.98	19.00	18.66		21.36	21.65	18.83
ST11	Sherwood Park School	100	100	34.03	29.46	22.07	30.21	20.46	18.86	17.43	19.64	21.76	20.87	32.36	23.84	24.25	21.1
ST32	Alcorn Close	92	92	31.02	28.42	18.18		22.12	24.16	19.10	17.67	22.75	21.70	27.11	4.46	21.52	18.72

					Annual Mean NO2												
Site ID	Site Name	Valid data capture for monitoring period % ^a	Valid data capture 2019 % ^b	Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data ^c	Annual mean – bias adjusted c
ST33	Carshalton Road	100	100	41.36	38.41	31.57	55.89	36.74	34.85	31.12	29.01	35.83	31.47	44.57	29.78	36.72	31.94
ST34	Oakhill Road	50	50	46.33	49.73	38.68	42.32	44.33	41.01							43.73	38.05
ST35	Gander Green Lane	100	100	40.95	39.93	28.28	36.56	28.47	28.66	23.57	25.18	27.60	26.64	33.97	29.99	30.82	26.81
ST36	Croydon Rd, Beddington	100	100	39.80	33.21	26.72	39.41	24.76	26.17	24.18	19.80	25.80	25.47	40.72	27.17	29.43	25.61
ST27	Haddon Road/St Nicholas Way	92	92	44.98	41.07	33.70	46.08	39.60	36.12	32.35	24.32		33.68	45.91	32.14	37.27	32.42
ST38	Brighton Road, Sutton	100	100	43.41	37.98	30.40	45.14	36.60	37.94	32.86	25.53	32.15	30.44	44.23	31.40	35.67	31.04
ST39	Rose Hill roundabout	83	83	53.54	43.37	42.06	53.40	51.34	46.31	42.19	37.08	43.39			36.82	44.95	39.11
ST40	38 High Street, Cheam	92	92	44.35	46.33	38.94	64.44	43.04	42.59	44.82	40.25	40.15	37.81	54.61		45.21	39.33
ST42	Royston Park	92	92	29.32	22.13	17.55	28.56	16.59	13.80	12.73	10.97	17.28	17.57		18.68	18.65	16.23
ST43	Chiltern Road	92	92	46.64	37.82		30.43	31.61	26.45	19.38	26.08	28.42	26.24	35.71	26.77	30.50	26.54
H1	Hackbridge Road	100	100	41.60	38.00	32.96	44.29	31.20	32.45	26.21	22.89	44.63	30.93	44.63	30.59	35.03	30.48
H2	Clover Way	92	92	38.59	35.03	25.39		24.22	22.05	20.79	20.70	25.59	22.19	32.74	20.53	26.17	22.76
H3	57 London Rd	100	100	64.15	55.49	47.36	48.07	49.33	46.50	48.99	46.58	32.00	41.35	52.55	41.31	47.81	41.59
BL	Beddington Lane	100	100	40.17	45.27	27.91	35.52	28.71	26.31	25.22	26.47	27.62	22.76	37.16	32.34	31.29	27.22

Exceedance of the NO₂ annual mean AQO of 40 μ g m⁻³ are shown in **bold**.

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

- ^b Data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)
- ^c Means should be "annualised" in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%