

**London Borough of Tower Hamlets Air Quality Annual  
Status Report for 2019**  
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This report provides a detailed overview of air quality in the London Borough of Tower Hamlets during 2019. It has been produced to meet the requirements of the London Local Air Quality Management statutory process<sup>1</sup>.

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<sup>1</sup> 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
CAB	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
PM10	Particulate matter less than 10 micron in diameter
PM2.5	Particulate matter less than 2.5 micron in diameter
TEB	Transport Emissions Benchmark
TfL	Transport for London

**Table A. Summary of National Air Quality Standards and Objectives**

<b>Pollutant</b>	<b>Objective (UK)</b>	<b>Averaging Period</b>	<b>Date<sup>1</sup></b>
Nitrogen dioxide - NO <sub>2</sub>	200 µg m <sup>-3</sup> not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
	40 µg m <sup>-3</sup>	Annual mean	31 Dec 2005
Particles - PM <sub>10</sub>	50 µg m <sup>-3</sup> not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
	40 µg m <sup>-3</sup>	Annual mean	31 Dec 2004
Particles - PM <sub>2.5</sub>	25 µg m <sup>-3</sup>	Annual	2020
	Target of 15% reduction in concentration at urban background locations	mean 3 year mean	Between 2010 and 2020
Sulphur Dioxide (SO <sub>2</sub> )	266 µg m <sup>-3</sup> not to be exceeded more than 35 times a year	15 minute mean	31 Dec 2005
	350 µg m <sup>-3</sup> not to be exceeded more than 24 times a year	1 hour mean	31 Dec 2004
	125 µg m <sup>-3</sup> not to be exceeded more than 3 times a year	24 hour mean	31 Dec 2004

Note: <sup>1</sup> by which to be achieved by and maintained thereafter

## 1. Air Quality Monitoring

Within this section it is obligatory to complete all tables with monitoring data if you have monitors for the specified pollutants. It is not obligatory to include narrative on trends or any graphs, although you are encouraged to do so if you wish.

### 1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2019

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
-	Poplar	537509	180867	Roadside	Y	N/A	N/A	4	NO <sub>2</sub> , PM <sub>10</sub> , O <sub>3</sub>	Station closed
TH2	Mile End <sup>2</sup>	535927	182221	Roadside	Y	1m (offices) (40m residential)	3	3	NO <sub>2</sub> , PM <sub>2.5</sub>	Chemiluminescence; BAM for PM <sub>2.5</sub>
TH004	Blackwall <sup>3</sup>	538290	181452	Roadside	Y	29m (residential)	3	3	NO <sub>2</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , O <sub>3</sub>	Chemiluminescence; UV photometric; FDMS TEOM (for PM)
TH002	Victoria Park	536487	184238	Background	Y	290m (residential)	300	2	NO <sub>2</sub> , PM <sub>10</sub> , PM <sub>2.5</sub>	Chemiluminescence; BAM for PM <sub>2.5</sub> and PM <sub>10</sub>

<sup>2</sup> New BAM PM 2.5 monitor installed in 2019

<sup>3</sup> Site operated by Transport for London

TH00 1	Milwall Park	538052	178559	Background	Y	60m (residential)	60	1.5	NO <sub>2</sub> , PM <sub>10</sub> , O <sub>3</sub> , PM <sub>2.5</sub>	Chemiluminescence; BAM UV absorption

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

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	Tube co-located with an automatic monitor? (Y/N)
1	Colombia Rd/Gossett Street	533883	182815	Kerbside	Y	5	0.5	2.4	NO <sub>2</sub>	N
2	Calvert Ave/Boundary Street	533507	182569	Kerbside	Y	4	0.5	2.3	NO <sub>2</sub>	N
3	Bethnal Green Rd/Brick Lane	533860	182442	Kerbside	Y	3	0.5	2.3	NO <sub>2</sub>	N
4	Commercial St/Calvin St	533611	182037	Kerbside	Y	7	0.5	2.4	NO <sub>2</sub>	N
5	Whitechapel High St (KFC)	533985	181426	Kerbside	Y	3	0.5	2.3	NO <sub>2</sub>	N
6	Mansell St	533800	181021	Kerbside	Y	6	0.5	2.2	NO <sub>2</sub>	N
7	St Katherine's Way	533992	180376	Roadside	Y	10	10	2.3	NO <sub>2</sub>	N
8	Wapping High St/Sampson St	534444	180122	Kerbside	Y	3	0.5	2.4	NO <sub>2</sub>	N
9	Cartwright Street	533955	180805	Kerbside	Y	5	0.5	2.4	NO <sub>2</sub>	N
10	Whitechapel	534133	181509	Kerbside	Y	6	0.5	2.3	NO <sub>2</sub>	N

	Rd/Adler St									
11	Brick Lane/Princelet St	533866	181860	Kerbside	Y	5	0.5	2.3	NO <sub>2</sub>	N
12	Buckfast St/Bethnal Green Rd	534259	182580	Kerbside	Y	4	0.5	2.5	NO <sub>2</sub>	N
13	Squirries St/Gosset St	534313	182810	Kerbside	y	4	0.5	2.3	NO <sub>2</sub>	N
14	Warner Place/Hackney Rd	534255	183130	Kerbside	y	17	0.5	2.4	NO <sub>2</sub>	N
15	Parmiter St/Cambridge Heath Road	534881	183240	Kerbside	y	4	0.5	2.2	NO <sub>2</sub>	N
16	Paradise Row/Bethnal Green Rd	534959	182757	Kerbside	Y	3	0.5	2.3	NO <sub>2</sub>	N
17	Finnis St/Three Colts Lane	534783	182385	Kerbside	Y	2	0.5	2.2	NO <sub>2</sub>	N
18	Sidney St/Mile End Rd	534968	181878	Roadside	Y	6	2	2.3	NO <sub>2</sub>	N
19	Philpot St/Commercial Road	534816	181321	Kerbside	Y	8	0.5	2.3	NO <sub>2</sub>	N
20	Dellow St/The Highway	534951	180779	Roadside	Y	4	2	2.2	NO <sub>2</sub>	N
21	Queensbridge Rd/Hackney Rd	533985	183122	Kerbside	Y	4	0.5	2.2	NO <sub>2</sub>	N
22	Wapping Wall/Garnet St	535133	180376	Kerbside	Y	3	0.5	2.4	NO <sub>2</sub>	N
23	Brodlove Lane	535598	180816	Kerbside	Y	3	0.5	2.2	NO <sub>2</sub>	N
24	Jubilee Street/Commercial Rd	535174	181290	Kerbside	Y	5	0.5	2.3	NO <sub>2</sub>	N

25	Cavell St/Stepney Way	534884	181667	Kerbside	Y	20	1	2.3	NO <sub>2</sub>	N
26	Hannibal Rd/Mile End Rd	535386	182021	Kerbside	Y	3	0.5	2.2	NO <sub>2</sub>	N
27	Roman Rd/Globe Road	535296	182793	Kerbside	Y	12	0.5	2.2	NO <sub>2</sub>	N
28	Bonner Road	535356	183223	Kerbside	Y	7	0.5	2.7	NO <sub>2</sub>	N
29	Grove Rd/Old Ford Rd	535930	183385	Kerbside	Y	12	0.5	2.4	NO <sub>2</sub>	N
30	Fieldgate Street	534239	181565	Kerbside	Y	8	0.5	2.3	NO <sub>2</sub>	N
31	Whitechapel Market	534516	181744	Roadside	Y	15	1.5	2.2	NO <sub>2</sub>	N
32	Globe Rd/Mile End Rd	535634	182148	Kerbside	Y	4	0.5	2.3	NO <sub>2</sub>	N
33	Stepney Green	535545	181604	Urban background	Y	30	15	2.4	NO <sub>2</sub>	N
34	Pitsea St/Commercial Rd	535797	181164	Kerbside	Y	4	0.5	2.3	NO <sub>2</sub>	N
35	Narrow St/Limehouse Link	535977	180879	Roadside	Y	15	1.5	2.6	NO <sub>2</sub>	N
36	Locksley St/St Paul's Way	536704	181647	Kerbside	Y	40	0.5	2.9	NO <sub>2</sub>	N
37	Rhodeswell Rd	536577	181379	Kerbside	Y	40	1	2.4	NO <sub>2</sub>	N
38	Ben Johnson Road	536080	181721	Kerbside	Y	4	0.5	2.6	NO <sub>2</sub>	N
39	Harford St/Mile End Rd	536089	182258	Roadside	Y	3	1.5	2.2	NO <sub>2</sub>	N
40	Thoydon Rd	536105	183049	Kerbside	Y	7	0.5	2.4	NO <sub>2</sub>	N
41	Ford Close/Roman Rd	536457	183301	Roadside	Y	2	1.5	2.3	NO <sub>2</sub>	N
42	Victoria Park (Co-location site)	536494	184170	Urban background	Y	330	320	2.15	NO <sub>2</sub>	Y
43	Victoria Park (Co-	536494	184170	Urban	Y	330	320	2.1	NO <sub>2</sub>	Y

	location site)			background						
44	Parnell Rd/Old Ford Rd	536875	183740	Kerbside	Y	4	0.5	2.4	NO <sub>2</sub>	N
45	St Stephen's Rd/Tredegar Rd	536713	183070	Kerbside	Y	3	0.5	2.3	NO <sub>2</sub>	N
46	Rhondda Grove/Mile End Rd	536542	182589	Kerbside	Y	5	0.5	2.5	NO <sub>2</sub>	N
47	Wentworth Mews	536452	182454	Kerbside	Y	15	0.5	2.5	NO <sub>2</sub>	N
48	Ackroyd Drive	536768	181772	Kerbside	Y	40	0.5	2.5	NO <sub>2</sub>	N
49	Dod St/Burdett Rd	537049	181292	Kerbside	Y	5	0.5	2.5	NO <sub>2</sub>	N
50	Rich Street	536937	180987	Roadside	Y	3	1.5	2.2	NO <sub>2</sub>	N
51	Watney Market	534938	181257	Roadside	Y	10	15	2.2	NO <sub>2</sub>	N
52	Wick Lane/Autumn St	537304	183619	Kerbside	Y	3	0.5	2.4	NO <sub>2</sub>	N
53	Fairfield Road/Tredegar Road	537159	183415	Kerbside	Y	4	0.5	2.4	NO <sub>2</sub>	N
54	Bow Rd /Glebe Terrace	537525	182887	Kerbside	Y	5	0.5	2.4	NO <sub>2</sub>	N
55	TH Cemetery Park	536732	182361	Roadside	Y	15	5	2.5	NO <sub>2</sub>	N
56	Bow Common Lane/St Paul's Way	537248	181820	Kerbside	Y	30	0.5	2.3	NO <sub>2</sub>	N
57	Augusta St/Giraud St	537516	181392	Kerbside	Y	15	1	2.4	NO <sub>2</sub>	N
58	Dolphin Lane	537539	180688	Kerbside	Y	7	1	2.9	NO <sub>2</sub>	N
59	Westferry Road/Limehouse Link jnct	537100	180791	Kerbside	Y	7	1	2.2	NO <sub>2</sub>	N
60	Cascades, Westferry Road	537115	180074	Kerbside	Y	18	0.5	2.4	NO <sub>2</sub>	N
61	Bow Rd/Alfred St	537056	182773	Kerbside	Y	6	0.5	2.4	NO <sub>2</sub>	N

62	Mast Terrace House	537348	178690	Kerbside	Y	5	0.5	2.7	NO <sub>2</sub>	N
63	Millwall Park	538246	178689	Urban background	Y	300	250	2.3	NO <sub>2</sub>	N
64	Limeharbour	537953	179357	Kerbside	Y	10	0.5	2.2	NO <sub>2</sub>	N
65	Manchester Road/East Ferry Road	538032	178360	Kerbside	Y	2	0.5	2.3	NO <sub>2</sub>	N
66	Millwall Park	538258	178689	Urban background	Y	300	250	2.3	NO <sub>2</sub>	N
67	Seyssel Street	538544	178767	Kerbside	Y	15	0.5	2.3	NO <sub>2</sub>	N
68	Manchester Road/Ollife Street	538431	179044	Kerbside	Y	3	0.5	2.3	NO <sub>2</sub>	N
69	Lawnhouse Close	538190	179750	Kerbside	Y	30	0.5	2.3	NO <sub>2</sub>	N
70	Admirals Way	537424	179910	Kerbside	Y	15	0.5	2.3	NO <sub>2</sub>	N
71	Toynbee St/Commercial St	533689	181705	Roadside	Y	10	2	2.5	NO <sub>2</sub>	N
72	Prestons Road/Coldharbour	538364	180188	Kerbside	Y	4	0.5	2.2	NO <sub>2</sub>	N
73	John Smith Mews	538742	180756	Kerbside	Y	10	0.5	2.3	NO <sub>2</sub>	N
74	Poplar High St/Cotton St	538244	180761	Kerbside	Y	10	0.5	2.2	NO <sub>2</sub>	N
75	Hale Street	537661	180768	Kerbside	Y	7	0.5	2.3	NO <sub>2</sub>	N
76	Chrisp Street/E India Dock Road	537940	181021	Kerbside	Y	20	0.5	2.7	NO <sub>2</sub>	N
77	Morris/Barchester Street	537731	181761	Kerbside	Y	4	0.5	2.5	NO <sub>2</sub>	N
78	Devons Road / Campbell Road	537577	182232	Kerbside	Y	10	0.5	2.4	NO <sub>2</sub>	N
79	Hatfield Terrace/Fairfield Road	537355	183059	Kerbside	Y	3	0.5	2.4	NO <sub>2</sub>	N

80	Wrexham Road	537581	183209	Kerbside	Y	3	0.5	2.4	NO <sub>2</sub>	N
81	Bromley High Street/ Leonards St	537868	182912	Kerbside	Y	5	0.5	2.4	NO <sub>2</sub>	N
82	Devas Street /Devons road	537821	182332	Kerbside	Y	7	0.5	2.4	NO <sub>2</sub>	N
83	Zetland Street/A12	538178	181747	Kerbside	Y	50	0.5	2.3	NO <sub>2</sub>	N
84	Blair Street (End of Street)	538365	181180	Roadside	Y	15	5	2.5	NO <sub>2</sub>	N
85	Portree Street	538895	181296	Kerbside	Y	4	0.5	2.3	NO <sub>2</sub>	N
86	Newport Avenue	538954	180872	Kerbside	Y	15	0.5	2.6	NO <sub>2</sub>	N
87	Mile End Road Corner Bancroft Rd	535929	182220	Kerbside	Y	30	0.5	2.3	NO <sub>2</sub>	N
88	Shirbutt St o/s Holy Family School	537555	180892	Kerbside	Y	10	0.5	2.3	NO <sub>2</sub>	N
89	Thames Path Storers Quay	538730	178733	Roadside	Y	4	10	2.3	NO <sub>2</sub>	N
90	Sextant Avenue	538674	178888	Kerbside	Y	4	1	2.3	NO <sub>2</sub>	N

**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.

**Table D. Annual Mean NO<sub>2</sub> Ratified and Bias-adjusted Monitoring Results (µgm<sup>-3</sup>)**

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m-3)						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
TH2 Mile End (AURN)	Automatic	N/A	99.52	57	62	53	51.7	48	47	35
TH004 Blackwall	Automatic	N/A	98.71	58	58	58	59	56	51	47
TH002 Victoria Park	Automatic	N/A	98.72	33	44 <sup>c</sup>	33 <sup>c</sup>	32.0	32	26	24
TH001 Millwall Park	Automatic	N/A	93.65	-	-	26 <sup>c</sup>	25.3	26	23	24
Poplar	Automatic	N/A	N/A	33	-	-	-	-	-	-

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m-3)						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
1	Colombia Rd/Gossett Street		100	-	-	38	37	39	34	33
2	Calvert Ave/Boundary Street		91.7	-	-	42	41	40	37	35
3	Bethnal Green Rd/ Brick Lane		100	-	-	47	46	45	36	37
4	Commercial St/Calvin St		100	-	-	<u>66</u>	<u>60</u>	<u>60</u>	<u>53</u>	<u>48</u>
5	Whitechapel High St (KFC)		100	-	-	<u>72</u>	<u>64</u>	<u>62</u>	<u>61</u>	<u>48</u>
6	Mansell St		100	-	-	<u>84</u>	<u>71</u>	<u>75</u>	<u>50</u>	<u>45</u>
7	St Katherine's Way		100	-	-	33	34	30	28	28
8	Wapping High St/Sampson St		100	-	-	35	36	33	31	30
9	Cartwright Street		100	-	-	-	-	-	33	34
10	Whitechapel Rd/Adler St		91.7	-	-	-	-	-	46	40
11	Brick Lane/Princelet St		83.3	-	-	42	44	40	35	32
12	Buckfast St/Bethnal Green Rd		100	-	-	42	42	39	35	32
13	Squirries St/Gosset St		91.7	-	-	-	-	-	38	38

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m-3)						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
14	Warner Place/Hackney Rd		100	-	-	42	42	41	38	35
15	Parmiter St/Cambridge Heath Road		100	-	-	-	-	-	45	41
16	Paradise Row/Bethnal Green Rd		100	-	-	50	50	42	41	36
17	Finnis St/Three Colts Lane		75	-	-	35	35	35	29	31
18	Sidney St/Mile End Rd		100	-	-	47	47	46	40	37
19	Philpot St/Commercial Road		100	-	-	54	54	51	44	41
20	Dellow St/The Highway		100	-	-	<u>70</u>	<u>69</u>	59	52	49
21	Queensbridge Rd/Hackney Rd		100	-	-	-	-	-	55	35
22	Wapping Wall/Garnet St		100	-	-	34	37	34	32	30
23	Brodlove Lane		100	-	-	47	45	46	43	40
24	Jubilee Street/Commercial Rd		83.3	-	-	<u>68</u>	<u>65</u>	<u>62</u>	<u>64</u>	47

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m-3)						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
25	Cavell St/Stepney Way		100	-	-	<b>44</b>	<b>45</b>	<b>45</b>	<b>40</b>	38
26	Hannibal Rd/Mile End Rd		100	-	-	<b><u>72</u></b>	<b>50</b>	<b>50</b>	<b>44</b>	<b>42</b>
27	Roman Rd/Globe Rd		100	-	-	-	-	-	36	34
28	Bonner Road		100	-	-	39	<b>41</b>	<b>40</b>	37	35
29	Grove Rd/Old Ford Rd		91.7	-	-	<b>47</b>	<b>48</b>	<b>46</b>	<b>43</b>	<b>40</b>
30	Fieldgate Street		100	-	-	<b>53</b>	<b>48</b>	<b>42</b>	<b>46</b>	38
31	Whitechapel Market		83.3	-	-	<b><u>71</u></b>	<b><u>68</u></b>	<b><u>69</u></b>	<b><u>63</u></b>	<b>54</b>
32	Globe Rd/Mile End Rd		100	-	-	<b>55</b>	<b>54</b>	<b>52</b>	<b>48</b>	<b>42</b>
33	Stepney Green		83.3	-	-	34	34	37	39	28
34	Pitsea St/Commercial Rd		100	-	-	-	-	-	37	35
35	Narrow St Limehouse Link		91.7	-	-	-	-	-	<b><u>86</u></b>	<b><u>77</u></b>
36	Locksley St/St Paul's Way		100	-	-	31	38	36	35	32
37	Rhodeswell Rd		66.7	-	-	35	39	36	34	30

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m-3)						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
38	Ben Johnson Road		100	-	-	41	45	44	36	36
39	Harford St/Mile End Rd		100	-	-	43	41	41	42	36
40	Thoydon Rd		100	-	-	-	-	-	36	33
41	Ford Close/Roman Rd		100	-	-	41	41	40	38	34
42	Victoria Park Co-location site		100	-	-	23	24	24	22	21
43	Victoria Park Co-location site		100	-	-	23	25	23	22	21
44	Parnell Rd/Old Ford Rd		91.7	-	-	39	41	42	35	34
45	St Stephen's Rd/Tredegar Rd		100	-	-	44	47	45	56	39
46	Rhondda Grove/Mile End Rd		100	-	-	35	41	37	48	33
47	Wentworth Mews		100	-	-	50	51	46	48	41
48	Ackroyd Drive		91.7	-	-	45	44	44	38	37
49	Dod St/Burdett Rd		100	-	-	37	38	38	33	30
50	Rich Street		91.7	-	-	42	45	42	42	35

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m-3)						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
51	Watney Market		91.7	-	-	38	37	34	33	29
52	Wick Lane/Autumn St		100	-	-	44	45	42	40	37
53	Fairfield Road/Tredegar Road		91.7	-	-	52	52	50	42	43
54	Bow Rd /Glebe Terrace		100	-	-	57	49	57	60	50
55	TH Cemetery Park		100	-	-	25	26	25	23	22
56	Bow Common Lane/St Paul's Way		100	-	-	41	43	40	37	32
57	Augusta St/Girauld St		100	-	-	-	-	-	28	27
58	Dolphin Lane		100	-	-	33	36	32	29	28
59	Westferry Road/Limehouse Link jnct		100	-	-	40	39	40	37	31
60	Cascades, Westferry Road		100	-	-	44	45	41	39	36
61	Bow Rd/Alfred St		100	-	-	42	44	41	35	35
62	Mast House Terrace		100	-	-	32	35	34	29	32
63	Millwall Park		100	-	-	27	29	26	22	24

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m-3)						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
64	Limeharbour		91.7	-	-	<b>42</b>	<b>42</b>	<b>40</b>	38	37
65	Manchester Road/East Ferry Road		91.7	-	-	31	34	32	28	29
66	Millwall Park		100	-	-	27	30	29	25	22
67	Seyssel Street		100	-	-	33	34	34	30	31
68	Manchester Road/Ollife Street		83.3	-	-	29	34	33	32	34
69	Lawnhouse Close		100	-	-	<b>44</b>	<b>41</b>	<b>41</b>	34	31
70	Admirals Way		100	-	-	-	-	-	27	29
71	Toynbee St/Commercial St		100	-	-	-	-	-	<b>54</b>	<b>45</b>
72	Prestons Road/Coldharbour		91.7	-	-	<b>41</b>	39	<b>40</b>	39	38
73	John Smith Mews		100	-	-	36	38	<b>40</b>	32	31
74	Poplar High St/Cotton St		100	-	-	-	-	-	<b>64</b>	<b>71</b>
75	Hale Street		100	-	-	31	33	34	34	29
76	Chrisp Street/E India Dock Road		100	-	-	<b>51</b>	<b>48</b>	<b>49</b>	<b>45</b>	39

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m <sup>-3</sup> )						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
77	Morris/Barchester Street		100	-	-	35	39	<b>40</b>	37	31
78	Devons Road / Campbell Road		100	-	-	<b>47</b>	<b>48</b>	<b>47</b>	<b>43</b>	36
79	Hatfield Terrace/Fairfield Road		100	-	-	31	31	33	32	28
80	Wrexham Road		100	-	-	<b>43</b>	<b>41</b>	<b>40</b>	38	35
81	Bromley High Street/ St Leonards		100	-	-	37	39	38	38	34
82	Devas Street /Devons road		100	-	-	<b>47</b>	<b>50</b>	<b>48</b>	<b>45</b>	37
83	Zetland Street/A12		100	-	-	<b>66</b>	<b>63</b>	<b>62</b>	<b>63</b>	<b>52</b>
84	Blair Street (End of Street)		91.7	-	-	<b>52</b>	<b>48</b>	<b>52</b>	<b>44</b>	39
85	Portree Street		100	-	-	<b>48</b>	<b>48</b>	<b>48</b>	<b>45</b>	38
86	Newport Avenue		100	-	-	33	34	33	30	28
87	Mile End Road Corner Bancroft Rd		100	-	-	-	-	-	49	37
88	Shirbutt St o/s Holy Family School		91.7	-	-	-	-	-	28	26
89	Thames Path Storers Quay		100	-	-	24	30	29	26	26

Notes: Exceedance of the NO<sub>2</sub> annual mean AQO of 40 µg m<sup>-3</sup> are shown in **bold**.

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration (µg m <sup>-3</sup> )						
				2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>	2016 <sup>c</sup>	2017 <sup>c</sup>	2018 <sup>c</sup>	2019 <sup>c</sup>
90	Sextant Avenue		100	-	-	16	28	28	25	24

Notes: Exceedance of the NO<sub>2</sub> annual mean AQO of 40 µg m<sup>-3</sup> are shown in **bold**.

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

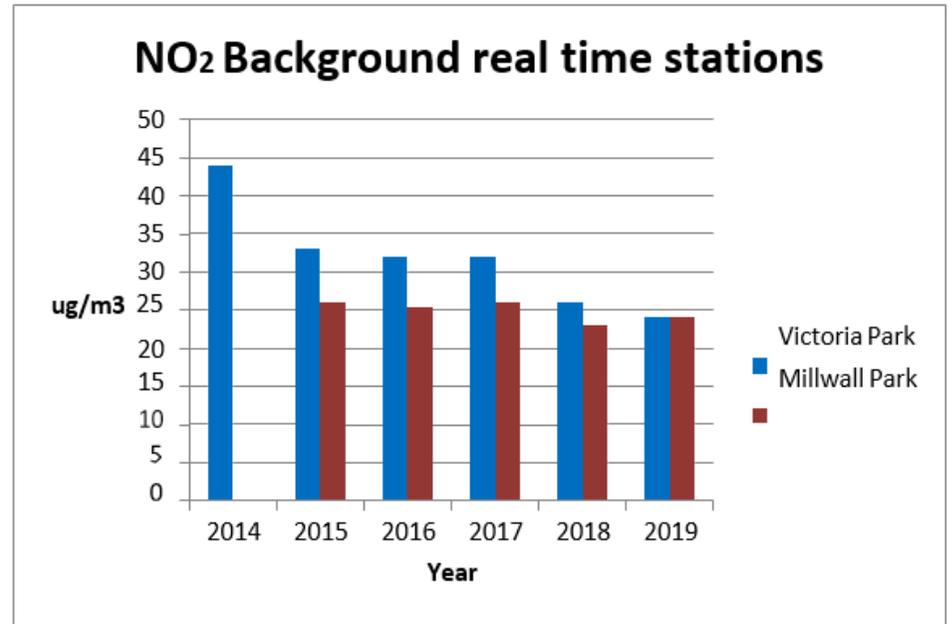
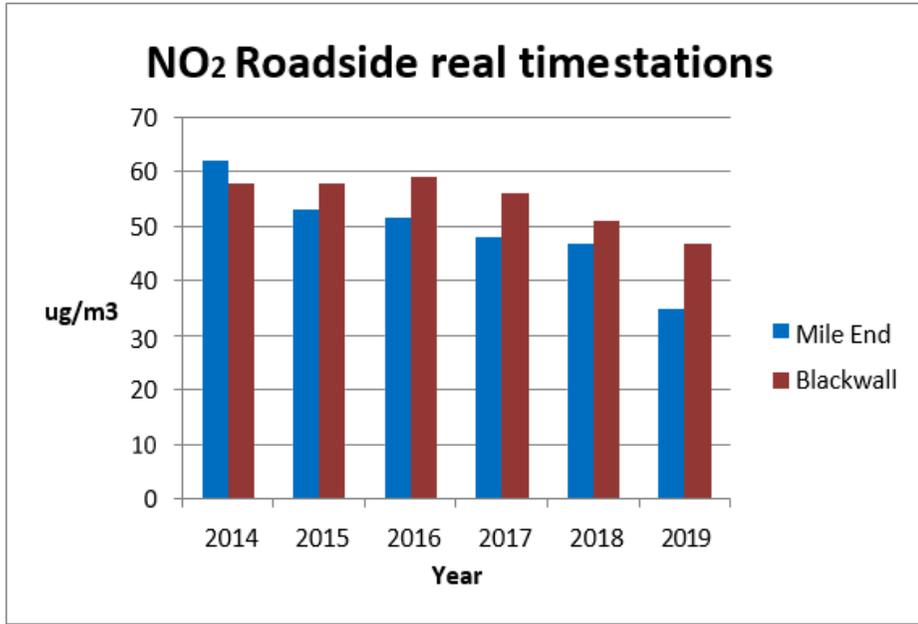
<sup>a</sup> data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

<sup>b</sup> 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%)

<sup>c</sup> Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

### Commentary

All automatic monitoring sites in 2019 demonstrated a reduction in annual mean NO<sub>2</sub> concentration from the previous years except for TH001 Millwall Park, which measured 24 µg/m<sup>3</sup>, showing a slight increase. The NO<sub>2</sub> objective is still exceeded at many roadside sites across the borough. Concentrations at background locations are relatively low and below the Annual Objective. Monthly data for all diffusion tube sites can be found in **table M** at the end of this report. Most sites are showing a downward trend.



**Commentary**

Both the roadside and background air quality monitoring stations show a decline in levels of NO<sub>2</sub>. There has been a significant reduction at the Mile End and Blackwall roadside sites compared to 2018. Month by month analysis of data suggests this may be due to the introduction of the central London ULEZ in April 2019. At the Blackwall tunnel roadside monitor, levels however remain above the National Objective level of 40 µg/m<sup>3</sup>. There was a slight increase at the Millwall Park background site.

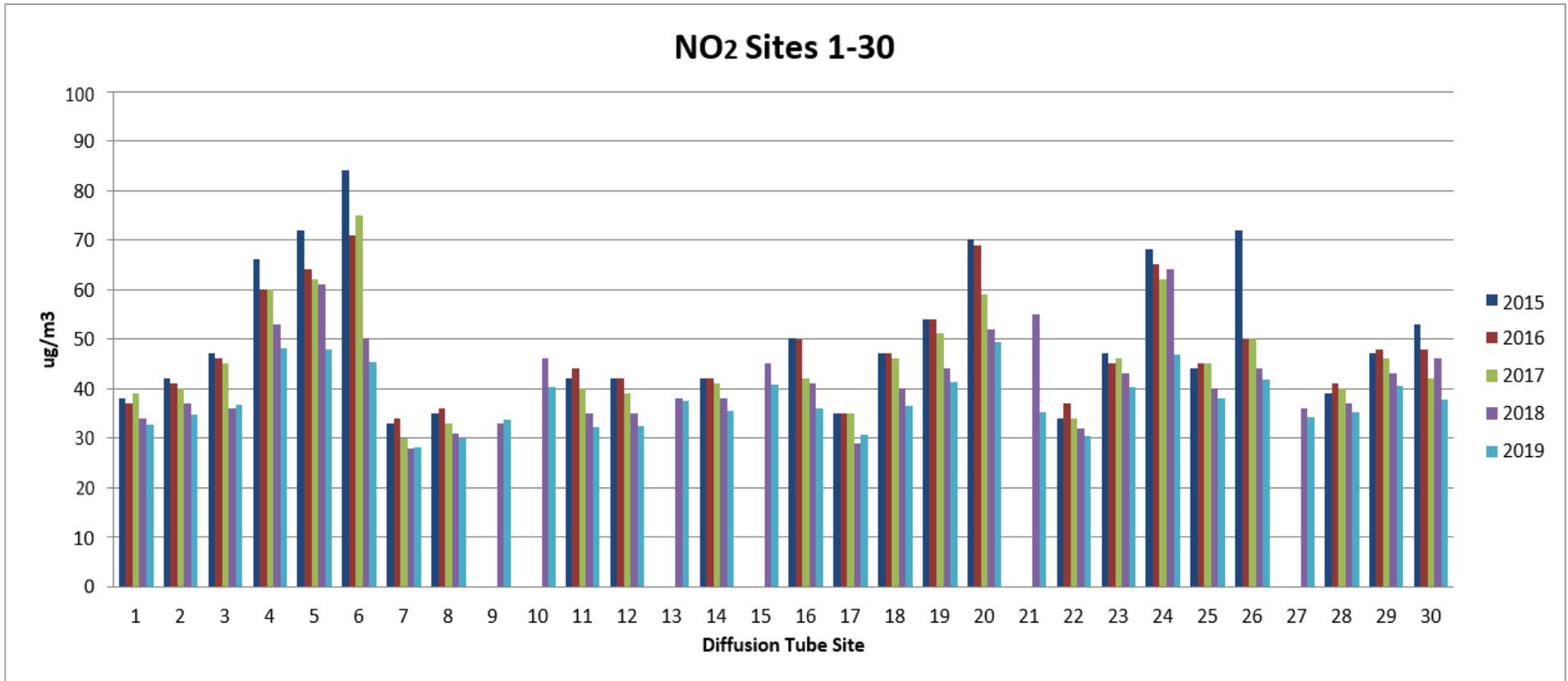


Figure 1 – The Graph shows the NO<sub>2</sub> diffusion tube monitoring concentrations at sites 1- 30 for 2015 -2019.

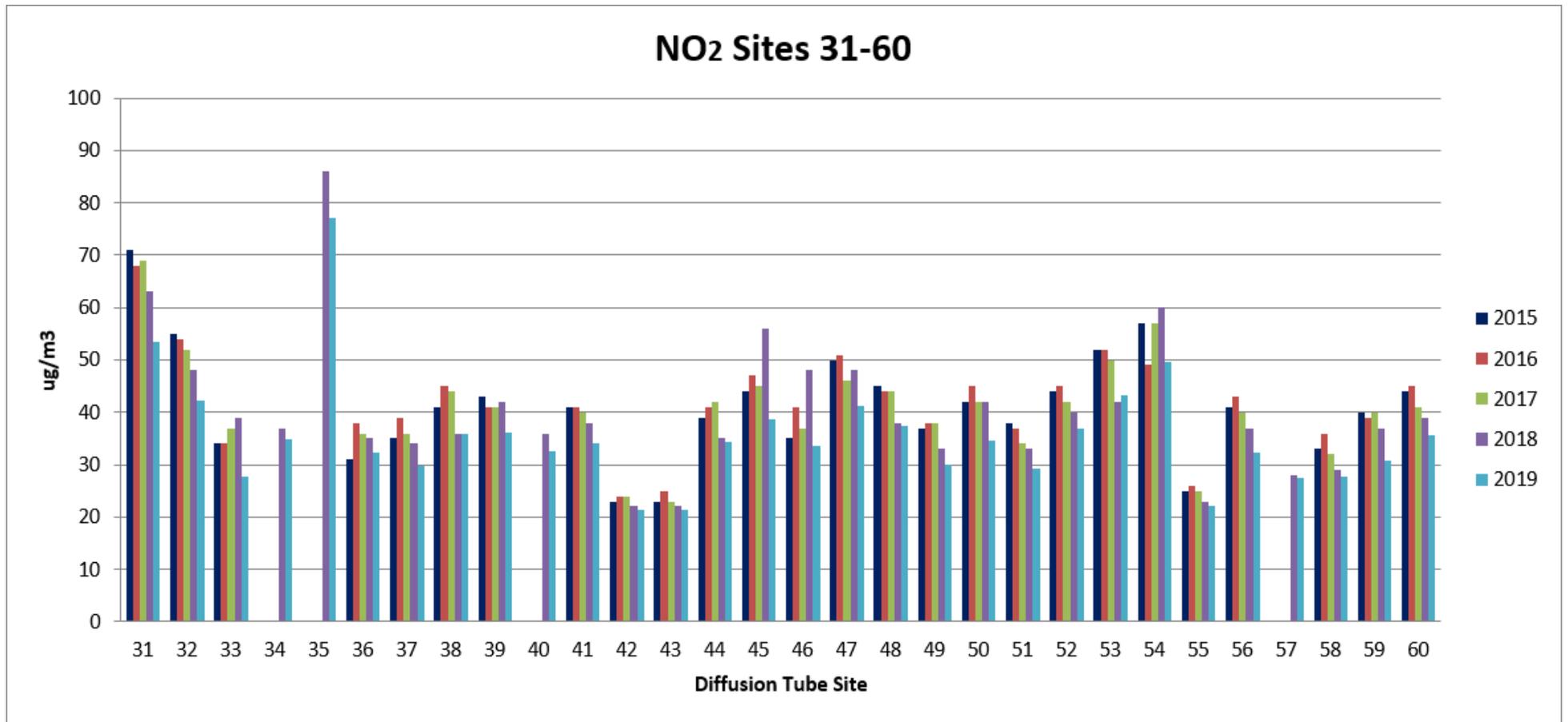


Figure 2 - The Graph shows the NO<sub>2</sub> diffusion tube monitoring concentrations at sites 31- 60 for 2015 -2019.

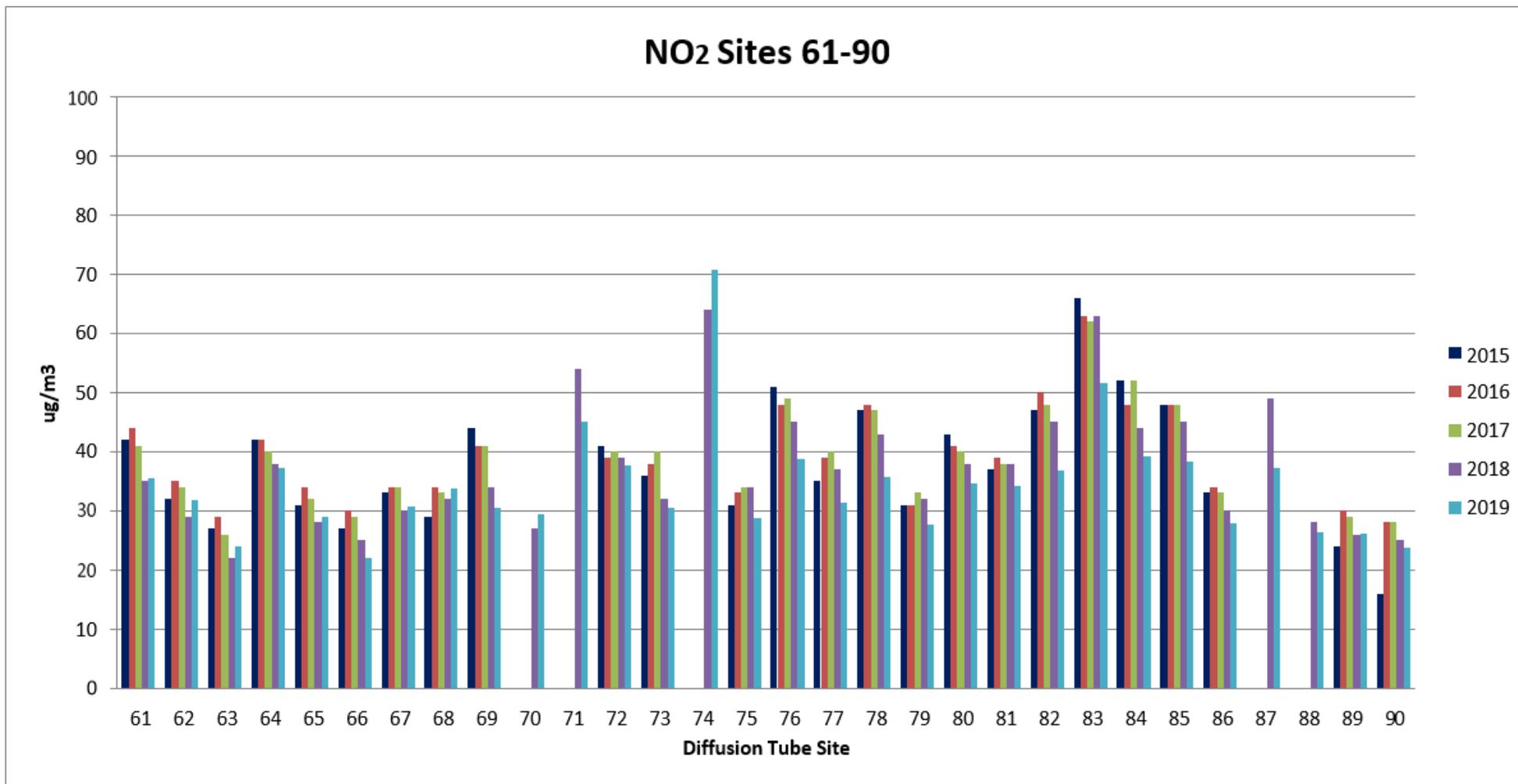


Figure 3 The Graph shows the NO2 diffusion tube monitoring concentrations at sites 61- 90 for 2015 -2019.

**Table E. NO<sub>2</sub> Automatic Monitor Results: Comparison with 1-hour MeanObjective**

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Number of Hourly Means > 200 µg m-3 2013 <sup>c</sup>	Number of Hourly Means > 200 µg m-3 2014 <sup>c</sup>	Number of Hourly Means > 200 µg m-3 2015 <sup>c</sup>	Number of Hourly Means > 200 µg m-3 2016 <sup>c</sup>	Number of Hourly Means > 200 µg m-3 2017 <sup>c</sup>	Number of Hourly Means > 200 µg m-3 2018 <sup>c</sup>	Number of Hourly Means > 200 µg m-3 2019 <sup>c</sup>
TH2 Mile End			1	1	0	0	2	0	1
TH004 Blackwall			0	0	0	9	0	0	0
TH002 Victoria Park			0	0	0	0	<b>24</b>	1	0
TH001 Millwall Park			-	-	0	0	0	0	0

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

<sup>a</sup> data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

<sup>b</sup> 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%)

<sup>c</sup> Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

**Commentary**

For 2019 the hourly objective for NO<sub>2</sub> concentrations are significantly below the permitted 18 days per year at all monitoring sites.

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

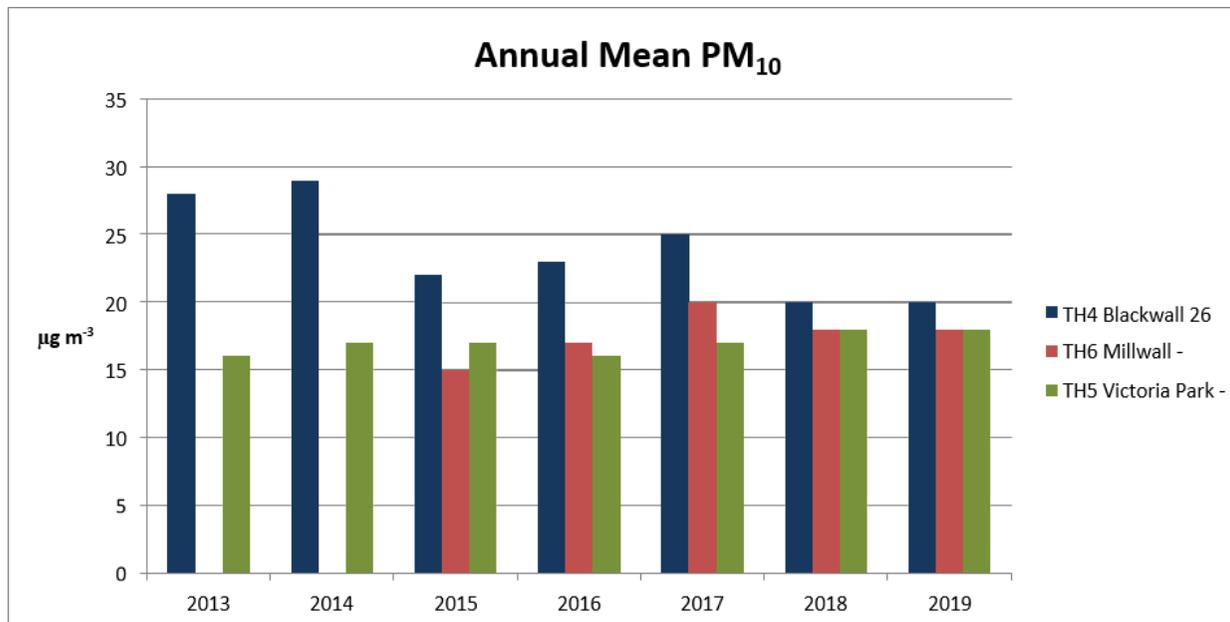
<b>Site ID</b>	<b>Valid data capture for monitoring period %<sup>a</sup></b>	<b>Valid data capture 2019 %<sup>b</sup></b>	<b>Annual Mean Concentration (µg m-3) 2013<sup>c</sup></b>	<b>Annual Mean Concentration (µg m-3) 2014<sup>c</sup></b>	<b>Annual Mean Concentration (µg m-3) 2015<sup>c</sup></b>	<b>Annual Mean Concentration (µg m-3) 2016<sup>c</sup></b>	<b>Annual Mean Concentration (µg m-3) 2017<sup>c</sup></b>	<b>Annual Mean Concentration (µg m-3) 2018<sup>c</sup></b>	<b>Annual Mean Concentration (µg m-3) 2019<sup>c</sup></b>
TH004 Blackwall	N/A	73.21	28	29	22	23	25	20	20
TH001 Millwall Park	N/A	83.40	-	-	15	17	20	18	18
TH002 Victoria Park	N/A	98.92	16	17	17	16	17	18	18

Notes: Exceedance of the PM<sub>10</sub> annual mean AQO of 40 µg m<sup>-3</sup> are shown in **bold**.

<sup>a</sup> data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

<sup>b</sup> 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%)

<sup>c</sup> Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%



**Commentary**

PM<sub>10</sub> at the road side monitor has shown a slow downward trend from 2015 but an increase at the two background sites. Annual mean PM<sub>10</sub> concentrations at all monitoring sites are below the National Objective of 40µg/m<sup>3</sup>.

**Table G. PM<sub>10</sub> Automatic Monitor Results: Comparison with 24-Hour Mean Objective**

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Number of Daily Means > 50 µg m <sup>-3</sup> 2013 <sup>c</sup>	Number of Daily Means > 50 µg m <sup>-3</sup> 2014 <sup>c</sup>	Number of Daily Means > 50 µg m <sup>-3</sup> 2015 <sup>c</sup>	Number of Daily Means > 50 µg m <sup>-3</sup> 2016 <sup>c</sup>	Number of Daily Means > 50 µg m <sup>-3</sup> 2017 <sup>c</sup>	Number of Daily Means > 50 µg m <sup>-3</sup> 2018 <sup>c</sup>	Number of Daily Means > 50 µg m <sup>-3</sup> 2019 <sup>c</sup>
TH004 Blackwall	n/a	73.21	24	16	8	10	10	10	8(35)
TH002 Victoria Park	n/a	98.92	0	0	2(32.36) <sup>c</sup>	3(28.6) <sup>c</sup>	2	1	7
TH001 Millwall Park	n/a	83.40	-	-	0(22.04) <sup>c</sup>	0(27.9) <sup>c</sup>	8	1	7 (30)

Notes: Exceedance of the PM<sub>10</sub> short term AQO of 50 µg m<sup>-3</sup> over the permitted 35 days per year or where the 90.4<sup>th</sup> percentile exceeds 50 µg m<sup>-3</sup> are shown in **bold**.

Where the period of valid data is less than 85% of a full year, the 90.4<sup>th</sup> percentile is shown in brackets after the number of exceedances.

<sup>a</sup> data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

<sup>b</sup> 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%)

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

### Commentary

24-hour values of PM<sub>10</sub> concentrations over 50 µg/m<sup>3</sup> are significantly below the national air quality objective level. The 2019 data suggests there has been increases in the number of daily mean values being over 50 µg/m<sup>3</sup> compared to the previous years in respect to Victoria Park (TH002) and Millwall Park (TH001). Blackwall (TH004) monitoring station showed a decline in the number of daily mean exceeding 50 µg/m<sup>3</sup> when compared to the previous years' data.

**Table H. Annual Mean PM<sub>2.5</sub> Automatic Monitoring Results ( $\mu\text{g m}^{-3}$ )**

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ ) 2013 <sup>c</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ ) 2014 <sup>c</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ ) 2015 <sup>c</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ ) 2016 <sup>c</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ ) 2017 <sup>c</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ ) 2018 <sup>c</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ ) 2019 <sup>c</sup>
TH2P Mile End		59.93	-	-	-	-	-	-	9.8
TH004 Blackwall		73.95	16	16	14	20	13	13	12.4
TH002 Victoria Park		84.85	-	-	-	-	-	-	10

Notes: Exceedance of the PM<sub>2.5</sub> annual mean AQO of  $25 \mu\text{g m}^{-3}$  are shown in **bold**.

<sup>a</sup> data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

<sup>b</sup> 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%)

<sup>c</sup> Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%

### Commentary

PM<sub>2.5</sub> concentrations at the 3 monitoring sites are below the National Air Quality Objective of  $25 \mu\text{g}/\text{m}^3$ . Two new PM<sub>2.5</sub> monitors were installed into existing monitoring site locations (TH002 Victoria Park and TH2P Mile End Road) in 2019.

## **2. Action to Improve Air Quality**

### **2.1 Air Quality Action Plan Progress**

Table J provides a brief summary of Tower Hamlet's progress against the Air Quality Action Plan, showing progress made this year. New projects commenced in 2019 are shown at the bottom of the table.

#### **Table J. Delivery of Air Quality Action Plan Measures**

Two new Particulate Matter 2.5 (PM2.5) were installed in 2019 to measure this pollutant due to the increased public health interest with respect to exposure and its effect on human health.

#### **The actions, measures and projects provided in Table J**

It is often beyond the Council's resources to quantify actual or predicted reductions in emissions and concentrations associated to each action. However each action, measure and project does have a direct or indirect positive effect in reducing emissions and population exposure to air pollution.

Measure	Action	<p style="text-align: center;"><b>Progress</b></p> <ul style="list-style-type: none"> <li>• Emissions/Concentration data</li> <li>• Benefits</li> <li>• Negative impacts / Complaints</li> </ul>	Further information
1.	Develop and implement a communications strategy for disseminating air quality information in the borough to raise awareness of the impacts of poor air quality and encourage behaviour change.	<p>Breathe Clean strategy and campaign disseminated through various PR and advertisement mediums for more than 9 months throughout 2019 via Community Information Boards, large plasma screens in town centres and street banners.</p> <p>A borough-wide air quality awareness campaign was carried out as part of a joint project with Poplar HARCA. This project had a three-pronged programme approach to reducing dangerous NO<sub>2</sub> and particulate emissions in Tower Hamlets, focussing on behaviour change initiatives which encouraged a modal shift amongst residents, visitors, businesses and industry to greener, cleaner forms of transport. The interventions consisted of:</p> <ul style="list-style-type: none"> <li>• Clean Van Commitment (CVC) – A Tower Hamlets CVC film was produced, which included engagement and workshops with two local primary schools. The film was promoted via Global Action Plan’s website as part of the national CVC campaign. The file was shared directly with the Office of Low Emision Vehicles and 200 largest UK van fleets.</li> <li>• The Breathe Clean Challenge- The objective of the Breathe Clean Challenge was to influence residents in the borough to swap polluting travel choices with sustainable ones for 26 miles worth of journeys. A mobile app (Strava) was used to support the challenge. In addition, the primary school children from the Clean Van Commitment were involved to capture additional footage for a second short film. This film supported the Breathe Clean Challenge and helped promote the actions that individuals can do to protect their health and reduce</li> </ul>	<p>LBTH has been shortlisted for the LGC Awards 2020 Environmental Services Category for work undertaken in 2019 regarding ‘Delivering Air Quality Improvements’, see <a href="https://awards.lgcplus.com/2020shortlist">https://awards.lgcplus.com/2020shortlist</a></p> <p><a href="https://www.globalactionplan.org.uk/clean-air/clean-van-commitment">https://www.globalactionplan.org.uk/clean-air/clean-van-commitment</a> 200+ students enaged, 78,013 opportunities to view film and 1,320 engagements with film. 19 signatories signed the CVC representing approximately 50,000 vansnationally.</p> <p><a href="https://www.towerhamlets.gov.uk/News_events/2019/May_2019/Take-the-Breathe-Clean-Challenge.aspx">https://www.towerhamlets.gov.uk/News_events/2019/May_2019/Take-the-Breathe-Clean-Challenge.aspx</a></p> <p>52 km walked/run, 3,122km cycled (75</p>

		<p>their contribution to air pollution. The Breathe Clean Challenge ran from 1 June until 31 July 2019.</p> <ul style="list-style-type: none"> <li>• Billboard campaign along Tower Hamlets busiest roads and bus-sheet promotion of the Breathe Clean Challenge (and broader LBTH Breathe Clean campaign).</li> </ul> <p>For Clean Air Day (20 June 2019), the children at Clara Grant primary school sang a song they had written to support the Breathe Clean campaign. It's called the Breathe Clean Blues. Also Breathe Clean Challenge fliers and marketing collateral were handed out to LBTH staff and residents.</p> <p>In March 2020 the second phase of the Breath Clean campaign was launched with a focus on anti-idling.</p>	<p>equivalent marathons completed)</p> <p>25 club members on Strava</p> <p>Estimates for 'impacts' or number of views for the following:  Buses – 628,000 impacts  Digital billboard – 822,000 impacts</p>
2	<p>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 – Air Quality officer to be consulted on JSNA.</p>	<p><b>Measure updated in 2019 ASR.</b>  JSNA specific reference to air quality published in 2016.</p>	<p><b>Measure Completed - No further action</b></p> <p>See:  <a href="https://www.towerhamlets.gov.uk/lgn/health_social_care/joint_strategic_needs_assessme/joint_strategic_needs_assessme.aspx">https://www.towerhamlets.gov.uk/lgn/health_social_care/joint_strategic_needs_assessme/joint_strategic_needs_assessme.aspx</a></p>

3.	Strengthening co-ordination with Public Health by ensuring that at least one public health specialist within the borough has air quality responsibilities outlined in their job profile.	<p>Public Health embedded into Local Air Quality.</p> <p>Three officers in Public Health including the Director of Public Health have a specific remit to work on Air Quality and they sit on all steering groups and boards that discuss air pollution.</p> <p>The Air Quality Steering Board has been integrated within the Public Health driven Health and Wellbeing Board.</p>	<b>Measure Completed - No further action</b>
4.	Director of Public Health to sign off all new Air Quality Action Plans.	<p><b>Measure updated in 2019 ASR.</b></p> <p>Air quality action plan signed off by Public Health in 2017.</p>	<b>Measure Completed - No further action</b>
5.	Support patients with heart and lung conditions by providing air quality advice to discharged patients, particularly vulnerable & those with heart/lung conditions. This would be a continuation of the 'Protecting Patient' work stream from the	<p>Public Health leading on developing a Clean Air Hospital Framework (CAHF) in partnership with LBTH Hospital Trust to support healthcare professionals to engage with children with asthma about the harm of air pollution. In 2019, Public Health commissioned Global Action Plan to work with Barts to complete the CAHF and audit how the Trust currently delivers against the AQ agenda, alongside a plan of action to take steps in the short, medium and long term. This action plan will be published in Spring 2020.</p> <p>On Clean Air Day 2019 (linked to measure #57) the NHS/Public Health undertook air quality dissemination for patients, staff and visitors in Royal London Hospital entrances to promote resources for clean air walking routes / apps and to promote staff benefits including the active travel and cycle to work schemes.</p> <p>Public Health with support from NHS colleagues promoted AirTEXT and GLA</p>	

	Barts Project.	alerts to all health related associations (GP's, Asthma Department in hospitals).													
6.	Support and Promotion of air quality awareness programmes such as AirTEXT	<p>On-going support and promotion and continuous annual subscription. AirTEXT subscription statistics below,</p> <table border="1"> <thead> <tr> <th>Tower Hamlets subscribers</th> <th>Email</th> <th>SMS</th> <th>Voicemail</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>End of 2019</td> <td>1203</td> <td>2623</td> <td>44</td> <td>3870</td> </tr> </tbody> </table> <p>296 subscribers in LBTH (November 2019)  20 new subscribers signed up (April-November 2019)  16 number of airText Tower Hamlets alert days</p> <p>Public Health Team worked with and encouraged organisations (hospitals, health centres, GP centres, schools etc.) to sign up to airTEXT and use the app alongside the respiratory conditions materials they have developed for organisations and patients.</p>	Tower Hamlets subscribers	Email	SMS	Voicemail	Total	End of 2019	1203	2623	44	3870	<p>LBTH AirTEXT  <a href="https://www.towerhamlets.gov.uk/lgn/environment_and_waste/environmental_health/pollution/air_quality/air_text_-_air_pollution_forec.aspx">https://www.towerhamlets.gov.uk/lgn/environment_and_waste/environmental_health/pollution/air_quality/air_text_-_air_pollution_forec.aspx</a></p>		
Tower Hamlets subscribers	Email	SMS	Voicemail	Total											
End of 2019	1203	2623	44	3870											
7.	Encourage schools to join the Tfl Sustainable Travel Active Responsible Safer (STARS) accredited travel planning programme by providing information on the benefits to schools and supporting the implementation of	<table border="1"> <thead> <tr> <th></th> <th>Bronze</th> <th>Silver</th> <th>Gold</th> </tr> </thead> <tbody> <tr> <td><b>TOTAL 18-19</b></td> <td>44</td> <td>7</td> <td>18</td> </tr> <tr> <td><b>TOTAL ACCREDITATION APPLICATIONS</b></td> <td>69</td> <td></td> <td></td> </tr> </tbody> </table> <p>2383 children received cycle training</p>		Bronze	Silver	Gold	<b>TOTAL 18-19</b>	44	7	18	<b>TOTAL ACCREDITATION APPLICATIONS</b>	69			
	Bronze	Silver	Gold												
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	implementation of such a programme.		
8.	Air quality at schools – Roll out the cleaner air for schools program that was previously run in 2 schools, to more schools in high pollution areas.	<b>Measure updated in 2019 ASR.</b>	<b>Measure Completed - No further action</b>
9.	Pollution Audits in schools. Support the GLA in their program to provide air quality audits in 2 primary schools.	GLA undertook audits in Alice Model Nursery School and Columbia Market Nursery School. Subsequent baseline air quality monitoring undertaken and report outlining recommendations provided from audit findings.	<b>Measure completed</b> – LBTH also looking into potential audits with 3 schools in City Fringe and CAZ.
10.	Schools anti-idling project	<ul style="list-style-type: none"> <li>• 10 Anti Idling Banners (soft vinyl type) mounted at schools and parks across the borough</li> <li>• Over 100 Anti Idling street signs (fixed solid type) mounted at schools gates, hospitals, and known/identified hotspots</li> <li>• 48 Anti Idling enforcement visits undertaken by staff, enforcement officers talking to drivers and school parents around schools</li> <li>• 4 Anti Idling events undertaken at Tower Hamlets IDEA (community) stores during 2019</li> <li>• Over 200 Idling drivers spoken to, advised and given enforcement information</li> <li>• 5 Anti Idling campaigns undertaken in school assemblies with pupils and</li> </ul>	<a href="https://www.towerhamlets.gov.uk/lgn/environment%20and%20waste/environmental%20health/pollution/air%20quality/Breathe%20the%20Clean/Anti-idling-action-days-and-volunteering.aspx">https://www.towerhamlets.gov.uk/lgn/environment and waste/environmental health/pollution/air quality/Breathe the Clean/Anti-idling-action-days-and-volunteering.aspx</a>  <a href="https://www.towerhamlets.gov.uk/lgn/environment%20and%20waste/environmental%20health/pollution/air%20quality/Breathe%20the%20Clean/Report%20engine%20idling.aspx">https://www.towerhamlets.gov.uk/lgn/environment and waste/environmental health/pollution/air quality/Breathe the Clean/Report engine idling.aspx</a>

		<p>staff</p> <ul style="list-style-type: none"> <li>• 20 schools visited for anti- Idling enforcement</li> <li>• As part of the London wide idling action project, for 2019/20, 3 workshops and 1 idling action event held. 79 pupils took part in the workshops.</li> </ul>	
11.	Schools Environmental Theatre Project	<b>Measure updated in 2019 ASR</b>	<b>Measure Completed - No further action</b>
12.	Investigate and invest in new technology as it becomes available to reduce pollution levels at pollution hotspots & sensitive uses e.g. schools	12 New Aeroqual (AQY) monitoring units bought in 2019 to support Environmental Health and Highways Departments gather environmental data for LBTH projects including Liveable Streets/School Street. Units deployed to gather baseline data. Comparison will then be made with data following intervention measures.	<a href="https://www.towerhamlets.gov.uk/News_events/2019/June_2019/15-million-scheme-to-create-Liveable-Streets-across-Tower-Hamlets.aspx">https://www.towerhamlets.gov.uk/News_events/2019/June_2019/15-million-scheme-to-create-Liveable-Streets-across-Tower-Hamlets.aspx</a>  <a href="https://www.towerhamlets.gov.uk/News_events/2019/November_2019/Bus_gateway_to_open_in_Wapping.aspx">https://www.towerhamlets.gov.uk/News_events/2019/November_2019/Bus_gateway_to_open_in_Wapping.aspx</a>
13.	Citizen Science air quality monitoring project	<p>Two projects were funded by the Tower Hamlets Mayor’s Air Quality Fund</p> <p>(1) Project Title – ‘Clear the Air’ Description of project: The project provided AQ monitoring training and community organising training to LBTH residents from disadvantaged groups to bring the community together and to raise awareness of pollution and exposure. Residents put up NO<sub>2</sub> diffusion tubes to understand their exposure. Children from a local school created a video about air pollution which was launched on ‘Clean Air Day 2019’.</p> <p>(2) Project Title – ‘Air Aware at Bromley-by-Bow’ Description of project - This project engaged members of the Bromley-by-Bow community to raise awareness of air pollution, empowering them to reduce their exposure and safeguard their health while protecting the environment. By working with health practitioners at the Bromley-by-Bow Health Centre to identify patients with respiratory conditions, the project targeted those who are</p>	

		<p>most vulnerable to air pollution. A series of air pollution workshops for BBBC patients and clients using a citizen science approach were delivered.</p> <p>A small team of Clean Air Champions were recruited and trained to use NO<sub>2</sub> and particulate monitors to measure pollution in the local area. The group analysed the data, communicated their findings and co-designed effective solutions to reduce exposure. An action plan was developed to broaden the impact and share the knowledge with the wider community.</p>	
14.	Work with Residential Providers to develop and implement a strategy for disseminating air quality information to their tenants.	<b>Measure updated in 2019 ASR</b>	<b>Measure Completed - No further action</b>
15.	Use Health and Wellbeing Board to get existing and future public sector and RP partners to pledge to increase the number of, electric, hybrid, and cleaner vehicles in their fleets.	The Air Quality Partnership Board was amalgamated with the Health and Wellbeing Board in 2019.	
16.	Continue to run the 3 continuous monitoring	<p>Monitors maintained. Data available on line and separately in this report.</p> <p>Additional PM<sub>2.5</sub> monitor purchased and installed in March 2019 at Mile End</p>	New PM <sub>2.5</sub> monitor installed into Victoria Park and Mile End Road to monitor fine air particles in response

	stations, monitoring pollutants of concern to ensure air quality objectives are being met and to assess the effectiveness of local and regional policies.	Road and at Victoria Park Urban Background site– data available online.  SO2 monitor in Victoria Park closed due to compliance with regulations.	to increased awareness of health effects associated to this pollutant.  see, <a href="https://www.airqualityengland.co.uk/local-authority/?la_id=210">https://www.airqualityengland.co.uk/local-authority/?la_id=210</a>
17.	Continue to implement the NOx Diffusion Tube Monitoring network across the borough. Investigate and implement further monitoring where necessary. E.g. at schools.	Borough-wide diffusion tube monitors maintained - Data available online (see link) and separately in this report.  NOx tube raw data loaded onto council website monthly –see link	<a href="https://www.towerhamlets.gov.uk/ign/environment_and_waste/environmental_health/pollution/air_quality/Advanced_information_on_air_quality/Monitoring.aspx">https://www.towerhamlets.gov.uk/ign/environment_and_waste/environmental_health/pollution/air_quality/Advanced_information_on_air_quality/Monitoring.aspx</a>
18.	Continue to ensure that all pollution monitoring data is available to the public and the website is regularly updated with the latest available data.	On going work with Communication’s team internally to disseminate information, arrange and agree street and school signs, updates to Breathe Clean message etc.  Continuous AQ monitoring data available on our website. Monthly diffusion tube data entered onto LBTH website.	<a href="https://twitter.com/TowerHamletsNow/status/1141390759620427778">https://twitter.com/TowerHamletsNow/status/1141390759620427778</a>  <a href="https://twitter.com/TowerHamletsNow/status/1141677287894671360">https://twitter.com/TowerHamletsNow/status/1141677287894671360</a>  <a href="https://twitter.com/TowerHamletsNow/status/1141407550140747778">https://twitter.com/TowerHamletsNow/status/1141407550140747778</a>  <a href="https://twitter.com/TowerHamletsNow/status/1141407550140747778">https://twitter.com/TowerHamletsNow/status/1141407550140747778</a>

			<a href="https://twitter.com/TowerHamletsNow/status/1141647393336758275">w/status/1141647393336758275</a>  <a href="https://twitter.com/TowerHamletsNow/status/1141617284722647040">https://twitter.com/TowerHamletsNow/status/1141617284722647040</a>
19.	Fulfil the GLA's criteria to retain our Cleaner Air Borough Status each year	Cleaner Air Borough award retained in 2019.	
20.	Ensuring emissions from demolition and construction are minimised via planning applications reviews and conditions attached to planning permissions requiring Construction Environmental Management Plans, including dust mitigation and monitoring and Travel Plans encouraging sustainable travel	<p>Major planning applications reviewed by Environmental Health Department in respect to air pollution and air quality.</p> <p>Agreed planning conditions with planning department regarding demolition and construction, Environmental Management Plans, dust risk assessments and mitigation.</p> <p><u>Adopted Policy:</u> Local Plan 2013: DM9 (Improving Air Quality)/ Requires an Air Quality Assessment to demonstrate how it will prevent and reduce air pollution during construction and demolition.</p> <p>New Local Plan: D.ES2 (Air Quality). Development is required to meet or exceed air quality neutral and consider impacts of pollution during construction and operation of the Proposed Development.</p> <p>New Local Plan: D.TR4 (Sustainable Delivery and Servicing). Development that generates a significant number of vehicle trips for goods or materials during its construction and/or operational phases is required to demonstrate sustainable transport)</p>	<p>Previous Core Strategy  <a href="https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/Core-Strategy-and-MDD/Core-Strategy-low-resolution.pdf">https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/Core-Strategy-and-MDD/Core-Strategy-low-resolution.pdf</a></p> <p>New Local Plan  <a href="https://www.towerhamlets.gov.uk/ign/planning_and_building_control/planning_policy_guidance/Local_plan/local_plan.aspx">https://www.towerhamlets.gov.uk/ign/planning_and_building_control/planning_policy_guidance/Local_plan/local_plan.aspx</a></p> <p>See details on table k of this report</p>

	for site workers	<p>New Local Plan: S.TR1 (Sustainable Travel). Travel choice (including connectivity and affordability) and sustainable travel will be improved within the borough and to other parts of London, and beyond. Development will therefore be expected to prioritise the needs of pedestrians and cyclists as well as access to public transport, including river transport, before vehicular modes of transport.</p> <p>New Local Plan Policy D.TR2 (Impacts on the Transport Network) Major development and any development that is likely to have a significant impact on the transport network will be required to submit a transport assessment or transport statement as part of the planning application.</p>	
21.	Ensuring all major developments adhere to the GLA's Non Road Mobile Machinery Low Emission Zone. I.e. All NRMM used on site must meet the emissions standards stated in the GLA's Control of Dust and Emissions during Demolition and Construction SPG 2014 (or subsequent	<p>All major developments given planning conditions for NRMM information to be submitted.</p> <p>New Local Plan: D.SG4 (Planning and Construction of a New Development), require construction to comply with NRMM low emission zone requirements and minimize air quality and dust pollution.</p>	<p>On going</p> <p>LBTH is part of the MAQF funded pan London NRMM enforcement project led by LB Merton. LBTH officers contribute to the scheme by providing regular site information. For 2019/20, 27 audits were carried in Tower Hamlets. All site found to be compliant with the LEZ requirement.</p>

	updated guidance)		
22.	Ensuring Combined Heat and Power (CHP) and biomass air quality policies are met at all developments proposing to utilise CHP, including the NOx emission limits for heating plant as stated in the GLA's Sustainable Design and Construction SPG (or subsequent updated guidance).	Comments provided on major planning applications as required by GLA SPG on Sustainable Design and Construction	See details on table k of this report
23.	Ensuring new developments have suitable energy efficiency measures installed to reduce the demand for onsite heat generation from boilers & CHP's.	Suitable energy efficiency measures installed into new developments via Local plan Policy D.ES7 (A Zero Carbon Borough) conforming to regional policy	<a href="https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/TH_Local_Plan_2031_accessibility_checked.pdf">https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/TH_Local_Plan_2031_accessibility_checked.pdf</a>

		<p>Development is required to meet the carbon dioxide emission reduction standards as set out below.</p> <table border="1"> <thead> <tr> <th colspan="2">Residential development</th> </tr> <tr> <th>Year</th> <th>Improvement on the 2013 building regulations</th> </tr> </thead> <tbody> <tr> <td>2016-2031</td> <td>Zero carbon (to be achieved through a minimum 45% reduction in regulated carbon dioxide emissions on-site and the remaining regulated carbon dioxide emissions to 100% - to be off-set through a cash in lieu contribution)</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="2">Non-residential development</th> </tr> <tr> <th>Year</th> <th>Improvement on the 2013 building regulations</th> </tr> </thead> <tbody> <tr> <td>2016-2019</td> <td>45% regulated carbon dioxide emissions reduction</td> </tr> <tr> <td>2019-2031</td> <td>Zero carbon (to be achieved through a minimum 45% reduction in regulated carbon dioxide emissions and the remaining regulated carbon dioxide emissions to 100% - to be off-set through a cash in lieu contribution)</td> </tr> </tbody> </table>	Residential development		Year	Improvement on the 2013 building regulations	2016-2031	Zero carbon (to be achieved through a minimum 45% reduction in regulated carbon dioxide emissions on-site and the remaining regulated carbon dioxide emissions to 100% - to be off-set through a cash in lieu contribution)	Non-residential development		Year	Improvement on the 2013 building regulations	2016-2019	45% regulated carbon dioxide emissions reduction	2019-2031	Zero carbon (to be achieved through a minimum 45% reduction in regulated carbon dioxide emissions and the remaining regulated carbon dioxide emissions to 100% - to be off-set through a cash in lieu contribution)	
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24	Ensuring Air Quality Neutral policies are complied with at all developments and exceeded (improved) where possible. Ensure all larger developments (as defined by the GLA) will be air quality neutral	<p>Air quality neutral policies adopted. Compliance checked at planning application stage for every major development proposal.</p> <p>New Local Plan: D.ES2 (Air Quality). Development is required to meet or exceed air quality neutral and consider impacts of pollution during construction and operation of the Proposed Development.</p>	<p>New Local Plan  <a href="https://www.towerhamlets.gov.uk/lgn/planning_and_building_control/planning_policy_guidance/Local_plan/local_plan.aspx">https://www.towerhamlets.gov.uk/lgn/planning_and_building_control/planning_policy_guidance/Local_plan/local_plan.aspx</a></p>														
25.	Reduce the use of private cars by residents by	Local Plan policy D.TR3 sets out a permit-free policy for new developments, encourages priority for cycle parking over car parking, and sets parking standards that minimise the amount of car parking spaces allowed in most parts	<p>New Local Plan  <a href="https://www.towerhamlets.gov.uk/lgn/planning_and_building_control/planning_policy_guidance/Local_plan/local_plan.aspx">https://www.towerhamlets.gov.uk/lgn/planning_and_building_control/planning_policy_guidance/Local_plan/local_plan.aspx</a></p>														

	encouraging car free developments and limiting number of parking spaces in new developments.	of the borough. At most, a 3+ bedroom house in an area of PTAL 1-2 would be allowed 0.5 parking spaces – all other developments would be allowed fewer spaces than this.	<a href="#">ning_policy_guidance/Local_plan/local_plan.aspx</a>
26.	Ensure the layout of new developments considers air quality impacts, for example considering the locations of buildings with different proposed uses and locating the most sensitive use units in the least polluted areas	All relevant major planning applications reviewed and assessed for compliance to the National Air Quality Strategy and the AQ objectives.	On-going

27.	Ensuring adequate, appropriate, and well located green space and infrastructure, including for walking and cycling, is included in new developments with the Green Grid Strategy promoted and adhered to in all major planning applications and master planning to provide low emissions routes for walking and cycling.	<p>The Green Grid Strategy, formed part of evidence base for the new Local Plan. An SPD is currently being drafted to clarify the role and responsibilities towards the Green Grid within planning.</p> <p>The Green Grid Strategy identifies opportunities to improve connectivity between open spaces and community facilities to create a grid of walking routes and associated green infrastructure which provides a healthy and attractive environment for users. Strategic elements or projects for the Green Grid will be delivered through the Community Infrastructure Levy, including the healthy streets projects.</p> <p>Public Health has ownership of the GG Strategy (2017). Any major development located within the green grid demarcated zone will need to contribute to the green grid.</p> <p>LBTH Local Plan: D.OWS3 (Open Space and Green Grid Networks) Strategic development should contribute to the delivery of new publicly accessible open space on-site.</p> <p>Policy S.TR1 requires new development to prioritise the needs of pedestrians and cyclists ahead of motor vehicles.</p>	<p>Green Grid Strategy  <a href="https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/Green_Grid_Update_2017.pdf">https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/Green_Grid_Update_2017.pdf</a></p> <p>Green Grid Strategy for City Fringe and other areas  <a href="https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/Green_Grid_Update_Appendices_2017.pdf">https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/Green_Grid_Update_Appendices_2017.pdf</a></p> <p><a href="https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/TH_Local_Plan_2031_accessibility_checked.pdf">https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/TH_Local_Plan_2031_accessibility_checked.pdf</a></p>
28.	Encourage new developments to install alternative mass waste collection systems, such as ENVAC, to	Local Plan Policy D.MW3 requires major new residential developments to incorporate high quality mass waste collection systems that do not include traditional methods of storage and collection. LBTH 'Waste Supplementary Planning Document' (2019 draft, in progress) will provide some practical guidance on how to implement policy.	Local Plan Policy D.MW3: Waste collection facilities in new development  Page 131 - <a href="https://www.towerhamlets.gov.uk/Documents/Planning-and-building-">https://www.towerhamlets.gov.uk/Documents/Planning-and-building-</a>

	reduce collection vehicle emissions.		<a href="#">control/Strategic-Planning/Local-Plan/Submission_2018/Local_Plan_tracked_change_version_pre_post_submission_modifications.pdf</a>
29.	Ensuring that the whole borough Smoke Control Zones is fully publicised and enforced.	Full details available online at LBTH website. Regulatory controls in place and investigated/enforced reactively through complaint investigation.	<b>Ongoing</b> <a href="https://www.towerhamlets.gov.uk/Ign/environment_and_waste/environmental_health/pollution/air_quality/Air_pollution/Smoke_control.aspx">https://www.towerhamlets.gov.uk/Ign/environment_and_waste/environmental_health/pollution/air_quality/Air_pollution/Smoke_control.aspx</a>
30.	Implement a Domestic boiler refit project using the GLA's RE:FIT energy efficiency retrofit programme.	Phase I (2018-2019) – 70 properties fitted	
31.	Implement a Schools Carbon Emissions Reduction Programme providing funding towards boiler replacement and insulation schemes in schools.	Schools Carbon Emissions Reduction Programme. Phase I (2018 – 2019) <ul style="list-style-type: none"> <li>in 2019: 9 schools received grants for energy efficiency measures, namely; Olga Primary, Osmani Primary, Cubitt Town Infants, Cubitt Town Juniors, Lansbury Lawrence, Lawdale Juniors, Wellington Primary, Oaklands, Arnhem Wharf</li> </ul>	
32.	Implement a Carbon Emissions Reduction	<ul style="list-style-type: none"> <li>LBTH Climate Emergency declared in March 2019</li> <li>Draft Zero Carbon Roadmap completed</li> </ul>	LBTH Carbon Reduction commitments and reporting information at <a href="https://www.towerhamlets.gov.uk/Ign">https://www.towerhamlets.gov.uk/Ign</a>

	Programme for council properties including boiler replacements and insulation projects.		<a href="/environment_and_waste/Sustainability/carbon_reduction.aspx">/environment_and_waste/Sustainability/carbon_reduction.aspx</a>  Zero Carbon Roadmap <a href="https://www.towerhamlets.gov.uk/Documents/Environmental-protection/Monitoring/LBTH-GREENHOUSE-GAS-REPORT-2018-2019.pdf">https://www.towerhamlets.gov.uk/Documents/Environmental-protection/Monitoring/LBTH-GREENHOUSE-GAS-REPORT-2018-2019.pdf</a>
33.	Enderby Wharf – Ensure a thorough and robust evaluation of the Environmental statement, that methodologies used comply with current guidance and that the project will not lead to any significant adverse air quality impacts in the borough.	<b>Measure updated in 2019 ASR.</b> Application for cruise terminal now withdrawn by developers.	<b>Measure Completed - No further action</b>
34.	Ensure applications for new developments in neighbouring boroughs that have the potential to have impacts in Tower Hamlets	Relevant applications in neighbouring boroughs (& LLDC planning area) reviewed and appropriate comments made where relevant.	On-going

	are reviewed for air quality impacts and that no development will lead to any significant adverse air quality impacts in the borough.		
35.	Lead by example by ensuring the councils new Civic Centre is a best practice example of a sustainable and low emissions development in regards to air pollution and CO2 with both air quality neutral and carbon zero policies being met.	<p>New council building planning application PA/17/02825/A1 approved, with conditions securing environmental information on:</p> <ul style="list-style-type: none"> <li>• Construction Environmental Management Plan (CEMP)</li> <li>• Full Travel Plan (to be approved in consultation with TfL)</li> <li>• BREEAM excellent target as a minimum, BREEAM outstanding to be targeted wherever possible</li> <li>• Demolition and Construction Dust monitoring procedure and reporting</li> </ul> <p>Approved details submitted with application;</p> <ul style="list-style-type: none"> <li>• AQ impact assessment submitted and approved, including AQ neutral assessment</li> <li>• Sustainability (carbon) and energy statement approved</li> <li>• Construction Logistics Plan approved</li> <li>• Transport Assessment approved</li> </ul>	<p>New LBTH offices due to open 2021.</p> <p><b>Measure Completed - No further action</b></p>
36.	Improve the energy efficiency of John Onslow House as part of the upcoming refurbishment with the aim of becoming carbon zero and any new boilers to be ultra-low NOx.	<b>Measure updated in 2019 ASR</b>	<b>Measure Completed - No further action</b>

37.	Ensure developments that will increase river traffic, in the operational phase of development, are thoroughly assessed for potential air quality impacts and will not have a significant negative impact on air quality.	Planning applications which may have an impact on air pollution on/from the River will be reviewed. Apart from Enderby Wharf planning application (see action #33), none noted to date. There are no known inter-borough applications in near future which have been identified.	
38.	Ensure the Tideway Tunnel infrastructure project is sustainably delivered with the Construction Code of Practice adhered to and effective emissions mitigation in place during construction & operational phases.	LBTH did not attend forum meetings in 2019 as it was deemed unnecessary - no reported/complaints of air quality issues; CoCP is still maintained and air quality/dust is monitored during construction. Environmental Health reviews the AQ monitoring data. Monitoring results provided for Thames Tideway Tunnel are significantly below actionable levels. Testing and commissioning of tunnel due 2022.	On going.
39.	Silvertown Tunnel – Ensure a thorough and	Development Consent Order granted May 2018. Contact has been made with TfL to ensure robust monitoring scheme is in place to assess background levels on borough roads prior to opening	

	<p>robust evaluation of the Environmental statement, that methodologies used comply with current guidance and that the project, during both the construction and operational phases, will not lead to any significant adverse air quality impacts in the borough and that adequate mitigation is provided for any potential impacts. Ensure traffic modelling on which the air quality statements are robust.</p>		
40.	<p>Ensure that all future major infrastructure projects are adequately reviewed and assessed through</p>	<p>No new major infrastructure projects received other than those specifically assessed in the action plan (Enderby Wharf, Thames Tideway Tunnel).</p>	<p>On going.</p>

	the planning process to ensure impacts on air quality are minimised.		
41.	Ensure that Procurement policies to include a requirement for suppliers with large fleets to have attained, silver as a minimum or gold as a preference, Fleet Operator Recognition Scheme (FORS) accreditation or equivalent.	Procurement are considering a requirement that contracts involving 10 or more vehicles operating in LBTH should include a requirement that the contractor (and any sub-contractors) be required to obtain FORS Silver for that contract.	
42.	Investigate updating Procurement policies to ensure sustainable logistical measures are implemented (and include requirements for preferentially scoring bidders based on their	Procurement has hired external contractors to review all procurement actions to improve sustainability. The outcome of the sustainability study will be incorporated into procurement policies from 2020.	

	sustainability criteria).		
43.	Investigate re-organisation of freight to support consolidation (or micro-consolidation) of deliveries, by setting up or participating in new logistics facilities, and/or requiring that council suppliers participate in these.	Tower Hamlets were awarded £350,000 from the GLA 2019 BLEN to implement a consolidation centre for businesses and market trader's located in Whitechapel (just to the east of the 'City Fringe'). This is being investigated in collaboration with market traders, local and small businesses reliant upon vehicles. Electric vehicle charging point installations being considered within site.	
44.	Investigate implementing a local Eco Stars Fleet Recognition Scheme for Tower Hamlets.	Investigation of Ecostars scheme completed however not being considered further due to alignment with fleet services - to be replaced with very similar, Fleet Operator Recognition Scheme (FORS) (linked to action #45)	
45.	Join a recognised appropriate driver award scheme, e.g. Fleet Operator Recognition Scheme (FORS) or Van Excellence & achieve certification.	Investigated suitable accreditation scheme for the management of vehicles operated by internal services. Developed an internal report on the findings of the investigation in 2019 leading to feasibility of schemes.	
46.	Increasing the	Council vehicle fleet was outsourced to external contractors, now brought back	Plans to install 10 charging points at

	number of, electric, hybrid, and cleaner vehicles in the boroughs' fleet.	in house (Council Fleet Operations) in March 2020. Procurement approved (in 2019) for over 270 vehicles to be purchased/leased back in house. 10 Hybrid Vehicles were also purchased.  Fleet depot is to house many fleet vehicles overnight and is being investigated regarding feasibility for Electric Vehicles including EV charging points wherever practicable.	Blackwall delayed due to concerns with the range of some EV vehicles, with ranges being far shorter than the quoted range. However after budget pressures are considered, we should be able to have a small number of EVs in the fleet.
47.	Accelerate uptake of new Euro VI vehicles in borough fleet, ending the purchase of diesel vehicles where feasible.	The waste service has come in house which has seen the Council's fleet increase considerably. With the waste fleet over seventy vehicles have been brought in which are Euro VI diesel powered with technology fitted to encourage fuel efficient driving. There are still 5 vehicles in the waste fleet currently which are not Euro VI but are under review.	Fleet procurement for cars and vans has been delayed by the Covid -19, however we are on track to replace the entire Council's fleet with Euro VI diesel or hybrid petrol cars over the next three months.  We are aiming by the end of the year to have replaced majority of the Council's bus fleet with new Euro VI examples, with five remaining examples being removed or replaced from the fleet by Autumn 2021.  The van and bus fleet will be procured on a three year lease, with the aim of subsequently leased vehicles where possible will be powered by battery electric or alternative fuels.
48.	Real-time Telematics monitoring of fleet driver behaviour and subsequent driver training.	35 new Refuse Collection Vehicles procured with telematics.	CMS Supatrak Vehicle Telematics being installed into all Refuse Collection Vehicles April 2020. <a href="https://www.supatrak.com/driver-eco-coaching/">https://www.supatrak.com/driver-eco-coaching/</a> <a href="https://www.supatrak.com/driver-behaviour/">https://www.supatrak.com/driver-behaviour/</a>

49.	Utilise round optimisation for council fleet to reduce vehicle miles.	Report completed detailing an action plan to make best use of passenger service vehicles utilising round optimisation. Report with divisional director for review.	
50.	Procure a cargo bike for regular delivery of literature to councillors.	<b>Measure updated in 2019 ASR</b>	<b>Measure Completed - No further action</b>
51.	Project 2020: use the procurement process to ensure all waste & Recycling collection vehicles in the new contract are as low emission as possible by prioritising tenders with the highest proportion of low emission vehicles.	New recycling collection vehicles purchased in 2019 are all Euro VI.	
52.	Project 2020: utilise round optimisation to reduce vehicle mileage for waste collections.	Round optimisation fleet movements for Refuse Collection Vehicles reviewed annually or whenever the service changes. Reduced mileage always sought by operations to save on fuel and services which directly influences fuel use.	
53.	Reduce 'Grey Fleet' impacts by	Staff essential car user eligibility reviewed under terms and condition review. Due to commence in 2020.	<b>Measure Completed - No further action</b>

	reviewing staff parking permits to reduce number or allocate shared team permits rather than individual.		
54.	Investigate installing Green Infrastructure, such as green walls, green screens or living roofs at schools/residential developments in polluted areas. Linking in with the Green Grid and Open Spaces Strategy.	<p>In February 2019, Marner Primary School in Bromley-by-Bow was awarded £30,000 from the (GLA) Mayor’s Community Green Space fund to install a range of green measures to reduce emissions from the A12 and nearby Devas Street. The school is one of London’s most polluted primary schools and was one of 50 assessed last year as part of the Mayor’s AQ audits programme. The school will install ‘green screens’ of climbing plants, such as ivy, to create a ‘barrier’ wall between the playground and Devas Street. Further trees and hedgerows will be planted along the school perimeter, and a ‘green gateway’ will be created at the main entrance to encourage children to walk through a tunnel of evergreen plants.</p> <p>Jolly’s Green Community Tree Planting installed a perimeter of planting alongside the A12.</p> <p>LBTH Public Realm Department planted 2961 trees in the Borough during 2019.</p> <p>Planning obligations are sought from developments adjacent to the Green Grid to tie-in to the strategic links. Developments will be required to deliver improvements on the part of the site adjacent to the Green Grid route. If this is not possible then a financial contribution will be required</p> <p>Funding provided from the Mayor of Tower Hamlets Air Quality fund for green screens at two schools: Woolmore and Shapla primary.</p>	<p><a href="https://www.london.gov.uk/press-releases/mayoral/mayors-green-fund-helps-schools-fight-toxic-air-0">https://www.london.gov.uk/press-releases/mayoral/mayors-green-fund-helps-schools-fight-toxic-air-0</a></p> <p><a href="https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/greener-city-fund/greener-city-map">https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/greener-city-fund/greener-city-map</a></p> <p>P138 and P145 Local Plan, Network of Open Space Policy, and Green Grid Network policy:  <a href="https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/TH_Local_Plan_2031_accessibility_checked.pdf">https://www.towerhamlets.gov.uk/Documents/Planning-and-building-control/Strategic-Planning/Local-Plan/TH_Local_Plan_2031_accessibility_checked.pdf</a></p>
55.	Low Emission Neighbourhoods	L.E.Ns replaced with Liveable Street programme.	<a href="https://www.towerhamlets.gov.uk/ign/community_and_living/Liveable_Street">https://www.towerhamlets.gov.uk/ign/community_and_living/Liveable_Street</a>

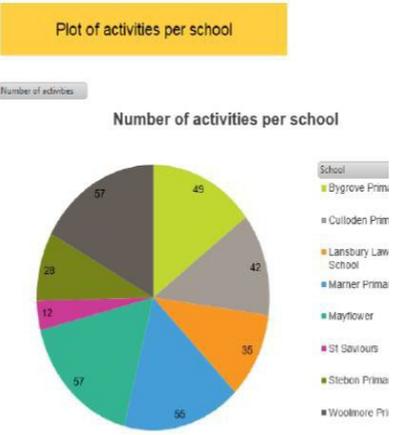
	(LENs) – implement the City Fringe LEN in partnership with Hackney and Islington.	<p>LBTH consulted residents and businesses about proposals for Liveable Streets in Bethnal Green/City Fringe based on several months of community engagement. The majority of residents and traders who took part in the consultation backed plans to reduce through-traffic using local roads and encourage walking, cycling and the use of public transport. Consultation undertaken and ended in 2019. Implementation to begin in 2020. Baseline air quality monitoring undertaken.</p> <p>Seventeen areas across the borough have been identified for Liveable Streets development. These areas have been chosen as they have not received recent substantial funding and improvements. The areas cover approximately 60 per cent of the borough including areas around the City Fringe.</p>	<p><a href="#">ets.aspx</a></p> <p>Here are the <b>final designs</b> and consultation results for Bethnal Green (<a href="https://www.pclconsult.co.uk/liveablestreetsbethnalgreen/consultation">https://www.pclconsult.co.uk/liveablestreetsbethnalgreen/consultation</a>)</p>
56.	Engagement with businesses – Continuation of the ZEN Project engaging businesses with advice and grants to enable them to reduce their air quality impact.	<ul style="list-style-type: none"> <li>- Continuation of the tri borough (Hackney, Tower Hamlets, Islington) project for further 3 years following successfully securing funds from the MAQF in June 2019. ZEN3 started autumn 2019 and will include Whitechapel and Canary Wharf.</li> <li>- ZEN project workshop was on 28 Nov. ZEN annual network event was on 4 Dec, attended by approximately 150 local businesses.</li> <li>- Business member recruitment has been contracted to an external supplier for a limited period to recruit 100 businesses, focusing on Whitechapel.</li> <li>- 2019 figures of new business and residents signed up to ZEN, include</li> <li>- 73 total members recruited in Tower Hamlets in 2019/20</li> <li>- 20 measures completed</li> <li>- 2 grants awarded</li> </ul>	<p><a href="https://www.towerhamlets.gov.uk/lgn/environment_and_waste/environmental_health/pollution/air_quality/Air_quality_information_and_campaigns/What_are_we_doing/Zero_Emissions_Network.aspx">https://www.towerhamlets.gov.uk/lgn/environment_and_waste/environmental_health/pollution/air_quality/Air_quality_information_and_campaigns/What_are_we_doing/Zero_Emissions_Network.aspx</a></p> <p><a href="https://zeroemissionsnetwork.com/">https://zeroemissionsnetwork.com/</a></p>
57.	Discouraging unnecessary idling by taxis, coaches and other vehicles. Anti –	<p>Joint anti-idling promotion at Royal London Hospital on Clean Air Day 2019, 20 June, with Barts NHS Trust and Cool World Consulting as part of a LBTH Mayors Air Quality funded project. Advice given on reducing pollution. Several Anti-Idling signs erected around the hospital. Communication on this disseminated via WeShare, Twitter, patient support letter and RLH site newsletter.</p>	<p><a href="https://www.towerhamlets.gov.uk/lgn/environment_and_waste/environmental_health/pollution/air_quality/Breathe_the_Clean/Anti-idling-action-days-and-volunteering.aspx">https://www.towerhamlets.gov.uk/lgn/environment_and_waste/environmental_health/pollution/air_quality/Breathe_the_Clean/Anti-idling-action-days-and-volunteering.aspx</a></p>

	Idling engagement project focusing on air pollution hotspots and high risk locations such as hospitals and schools.	<p>LBTH awarded MAQF funds in June 2019 for Pan-London Idling project, led by City of London.</p> <ul style="list-style-type: none"> <li>• 48 separate enforcement visits undertaken by Environmental Health Officers in 2019 at varying locations across borough in response to public information/reporting (e.g., schools, colleges, retail areas etc)</li> <li>• Over 200 drivers spoken to after they have been identified to be idling, advice given and enforcement regulations explained to drivers.</li> </ul>	<p><a href="https://www.towerhamlets.gov.uk/lgn/environment%20and%20waste/environmental%20health/pollution/air%20quality/Breathe%20the%20Clean/Report%20engine%20idling.aspx">https://www.towerhamlets.gov.uk/lgn/environment and waste/environmental health/pollution/air quality/Breathe the Clean/Report engine idling.aspx</a></p> <p><a href="#">Also refer to action # 10</a></p>
58.	Enforce anti-idling regulations by becoming a designated authority to issue Fixed Penalty Notices to idling drivers.	<p>Fixed Penalty Notices enforcement mechanism now operational since 2018 for idling vehicles. Adopted powers to issue FPN's for idling, under the Road Traffic Regulations 2002.</p> <p>Enforcement visits undertaken by Council staff weekly in 2019. Refer to action#57.</p>	<p><b>Measure Completed - No further action</b></p> <p><b>Info -</b></p> <p><a href="https://www.towerhamlets.gov.uk/lgn/environment%20and%20waste/environmental%20health/pollution/air%20quality/Air%20quality%20information%20and%20campaigns/What%20are%20we%20doing/Anti%20idling.aspx">https://www.towerhamlets.gov.uk/lgn/environment and waste/environmental health/pollution/air quality/Air quality information and campaigns/What are we doing/Anti idling.aspx</a></p>
59.	Increasing the proportion of electric, hydrogen and ultra-low emission vehicles in Car Clubs.	<p>The council signed the Clean Van Commitment to move to zero-emission vehicles by 2028.</p> <p>LBTH launched the Electric Vehicle Charging Point Delivery Plan in 2019.</p> <p>Two E-car clubs available in LBTH.</p>	<p><a href="https://www.towerhamlets.gov.uk/News%20events/2019/November%202019/Award%20wins%20for%20council%20funded%20air%20quality%20projects.aspx">https://www.towerhamlets.gov.uk/News events/2019/November 2019/Award wins for council funded air quality projects.aspx</a></p> <p><a href="https://democracy.towerhamlets.gov.uk/mgConvert2PDF.aspx?ID=112327">https://democracy.towerhamlets.gov.uk/mgConvert2PDF.aspx?ID=112327</a></p> <p><a href="https://ecarclub.co.uk/locations/east-london/">https://ecarclub.co.uk/locations/east-london/</a></p>
60.	Review parking permit fee banding to encourage lower emission vehicle	<p>Review of parking permits completed; now includes banding which has lowest parking fee for low emissions vehicles and also greatest fee chargeable for diesel vehicles:</p>	<p><b>Measure Completed - No further action</b></p>

	choice or add an additional diesel surcharge to existing permit fees.	<ul style="list-style-type: none"> <li>Discount on Electric Vehicles introduced in April 2019</li> <li>Levy on Diesel vehicles introduced in October 2019</li> </ul> <p>Review of parking permits completed on annual basis.</p>	
61.	Installation of residential electric charge points.	Zero residential EV charging points added in 2019 however liveable streets programme has identified (through consultation of liveable streets with public) a number of places where on street public charging points are desired. 100 planned for installation in 2020, partly in line with Liveable Streets programme. Planning work undertaken in 2019 for these installations.	<a href="https://www.towerhamlets.gov.uk/News_events/2019/June_2019/15-million-scheme-to-create-Liveable-Streets-across-Tower-Hamlets.aspx">https://www.towerhamlets.gov.uk/News_events/2019/June_2019/15-million-scheme-to-create-Liveable-Streets-across-Tower-Hamlets.aspx</a>
62.	Installation of rapid chargers to help enable the take up of electric taxis, cabs and commercial vehicles (in partnership with TfL and/or OLEV)	2 rapid EV chargers installed in 2019 in collaboration with TfL, locations provided.	<a href="https://www.google.com/maps/place/Polar+Network+Charging+Station/@51.5198044,-0.0313028,19.83z/data=!4m13!1m7!3m6!1s0x48761cd7dd2392fd:0xd0bc01cd341df199!2sMile+End,+London!3b1!8m2!3d51.5235453!4d-0.0330122!3m4!1s0x48761d33dccb34d:0x6b0873c48902b28c!8m2!3d51.519634!4d-0.0310432">https://www.google.com/maps/place/Polar+Network+Charging+Station/@51.5198044,-0.0313028,19.83z/data=!4m13!1m7!3m6!1s0x48761cd7dd2392fd:0xd0bc01cd341df199!2sMile+End,+London!3b1!8m2!3d51.5235453!4d-0.0330122!3m4!1s0x48761d33dccb34d:0x6b0873c48902b28c!8m2!3d51.519634!4d-0.0310432</a>  <a href="https://www.google.com/maps/place/Polar+Network+Charging+Station/@51.5121904,-0.0137133,48m/data=!3m1!1e3!4m8!1m2!2m1!1spolar+charging+network!3m4!1s0x0:0x5092fba0161a8e9c!8m2!3d51.5122435!4d-0.013627">https://www.google.com/maps/place/Polar+Network+Charging+Station/@51.5121904,-0.0137133,48m/data=!3m1!1e3!4m8!1m2!2m1!1spolar+charging+network!3m4!1s0x0:0x5092fba0161a8e9c!8m2!3d51.5122435!4d-0.013627</a>
63.	Investigate reprioritisation of road space to smooth traffic flow, reduce	<ul style="list-style-type: none"> <li>LBTH supported the GLA Mayor's 'Car Free Day 2019' (22-09-19) with multiple road closures around the Tower Hill/Aldgate areas.</li> <li>Reprioritisation of road space also considered and detailed within action #55, Low Emission Neighbourhoods.</li> </ul>	<ul style="list-style-type: none"> <li><a href="https://www.london.gov.uk/sites/default/files/car_free_day_borough_map_170919.pdf">https://www.london.gov.uk/sites/default/files/car_free_day_borough_map_170919.pdf</a></li> <li>See, Action #55</li> </ul>

	<p>congestion, improve bus journey times, cycling and pedestrian experience, and reduce emissions caused by congested traffic</p>	<ul style="list-style-type: none"> <li>• On 24<sup>th</sup> June 2019 LBTH supported the road closure and street festival at St Paul's Way, E3, which was community led.</li> <li>• A bus gateway was introduced in Wapping In November 2019 to protect residents from peak rush hour traffic flow issues. Traffic restricted on weekdays from 5.30am to 10.30am and from 4pm to 7pm between certain junctions. Only buses and bicycles are permitted to pass through during those hours. Automatic number plate recognition (ANPR) cameras enforcing restrictions. The gateway is aimed at improving air pollution and safety, reducing noise and for residents.</li> <li>• LBTH transformed the Poplar HARCA-owned road, Masjid Lane, into a car-free zone for the afternoon of the 12 July 2019 with Sustrans</li> <li>• School Streets worked on since May 2019, to be delivered up to September 2020 include the following schools;</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="https://www.londoncouncils.gov.uk/node/29029">https://www.londoncouncils.gov.uk/node/29029</a></li> <li>• <a href="https://www.towerhamlets.gov.uk/News_events/2019/November_2019/Bus_gateway_to_open_in_Wapping.aspx">https://www.towerhamlets.gov.uk/News_events/2019/November_2019/Bus_gateway_to_open_in_Wapping.aspx</a></li> <li>• Before the Wapping Gate was installed, hourly values of PM2.5 ranged between 2.5 µ/m<sup>3</sup> and 9 µ/m<sup>3</sup>. After the gate was installed; PM2.5 values ranged between 0.8 µ/m<sup>3</sup> and 4.9 µ/m<sup>3</sup>.</li> <li>• <a href="https://www.sustrans.org.uk/our-blog/news/2019/july/sustrans-works-with-partners-to-clean-up-air-in-tower-hamlets/">https://www.sustrans.org.uk/our-blog/news/2019/july/sustrans-works-with-partners-to-clean-up-air-in-tower-hamlets/</a></li> </ul>
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64.	Continue to provide/ ensure provisions of infrastructure to support walking and cycling including on street residential secure parking lockers, cycle routes, cycle permeability schemes, traffic management area	<ul style="list-style-type: none"> <li>• Tower Hamlets, with Sustrans, undertook a Students Schools Event on 06/03/2019 to promote sustainable travel.</li> <li>• Sustrans, with TfL, undertook 'Bike It Plus' which develops and delivers tailor-made activity programmes to develop cycling skills. It also helped families change the typical school run (by car) to an activity based commute (scoot, walk or cycle).</li> <li>• Sustrans award ceremony October 2019: Two Sustrans projects funded by LBTH Mayor's air quality fund won awards.</li> <li>• In June 2019, Sustrans, with LBTH and Poplar HARCA, undertook 'Bike It Plus' at St Paul's Way Primary School. Results = 15% increase in active travel, 16% decrease in pupils commuting by car, 7% increase incycling</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="https://www.towerhamlets.gov.uk/News_events/2019/November_2019/Award_wins_for_council_funded_air_quality_projects.aspx">https://www.towerhamlets.gov.uk/News_events/2019/November_2019/Award_wins_for_council_funded_air_quality_projects.aspx</a></li> </ul>																			

	reviews.	<p>and 12% in pupils scooting over the baseline. The number of pupils commuting <b>dropped from 857 to 547</b>. The number of pupils travelling actively <b>increased from 2095 to 2561</b>.</p> <ul style="list-style-type: none"> <li>• Stebon Primary school undertook cycling in PE classes for year 2 pupils in 2019. Poplar Harca are working on making the school road a ‘school street’.</li> <li>• Bygrove Primary ran cycling sessions throughout their healthy living week for parents and all Key Stage 2 pupils.</li> <li>• Woolmore Primary ran cycle skills session for Year 3 pupils, and a ‘Bike Science’ lesson to learn more about how bikes work.</li> <li>• 17 Tower Hamlets schools took part in Sustrans’ ‘The Big Pedal’; a two week challenge where schools compete to achieve the highest percentage of pupils walking, cycling and scooting to school.</li> <li>• Stebon, Bygrove and Woolmore Schools ran the Healthy Travel Card incentive: A marked increase was noted in active travel in all schools involved.</li> <li>• Summer holiday break, ‘Play Street’ event on Masjid Lane, used to demonstrate what a school street is like.</li> <li>• BikeWorks, a cycling instructor programme, undertaken at Stebon and St Pauls Primary schools</li> <li>• Marner Primary school undertook a six-week ‘Bike Works’ cycle course for parents.</li> <li>• Total 2019 figures from Sustrans: 335 activities undertaken, 33121 pupils engaged, 788 Staff engaged, 7756 Parents engaged</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="https://www.towerhamlets.gov.uk/lgn/transport_and_streets/cycling/cycle_training.aspx">https://www.towerhamlets.gov.uk/lgn/transport_and_streets/cycling/cycle_training.aspx</a></li> </ul> <p>Plot of activities per school</p>  <table border="1"> <thead> <tr> <th>School</th> <th>Number of activities</th> </tr> </thead> <tbody> <tr> <td>Bygrove Primary</td> <td>49</td> </tr> <tr> <td>Culloden Primary School</td> <td>42</td> </tr> <tr> <td>Lansbury Law School</td> <td>35</td> </tr> <tr> <td>Marner Primary School</td> <td>55</td> </tr> <tr> <td>Mayflower</td> <td>57</td> </tr> <tr> <td>St Saviours</td> <td>12</td> </tr> <tr> <td>Stebon Primary School</td> <td>28</td> </tr> <tr> <td>Woolmore Primary School</td> <td>57</td> </tr> <tr> <td>Grand Total</td> <td>336</td> </tr> </tbody> </table>	School	Number of activities	Bygrove Primary	49	Culloden Primary School	42	Lansbury Law School	35	Marner Primary School	55	Mayflower	57	St Saviours	12	Stebon Primary School	28	Woolmore Primary School	57	Grand Total	336
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65.	Reduce traffic in the borough through the development of a	Internal Transport Strategy workshop undertaken in January 2019, integrating Environmental Health, Transport, Highways and Public Health. Specific outcome and priority of the Transport Strategy is to <i>Improve air quality and make our surroundings quieter, more inviting and more appealing</i> .	LBTH’s Transport Strategy was published following internal/external public consultation, see <a href="https://www.towerhamlets.gov.uk/lgn">https://www.towerhamlets.gov.uk/lgn</a>																				

	new Local Implementation Plan in line with the Mayors Transport Strategy.		<a href="/council_and_democracy/consultations/past_consultations/Transport_Strategy_2019_2041.aspx">/council_and_democracy/consultations/past_consultations/Transport Strategy 2019 2041.aspx</a>
66.	Continue to encourage staff sustainable travel by providing Dr Bike services and staff subscriptions to the TFL cycle hire scheme for site visits. Annual update of the Staff Travel Plan to ensure it remains relevant and proactive.	<ul style="list-style-type: none"> <li>• Anyone who works, studies or lives in Tower Hamlets can take advantage of the free adult cycle training scheme. Family cycle training sessions are also available. Fully funded training undertaken by Dr Bike.</li> <li>• Approximately 750-800 adults received cycle provision training through Dr. Bike cycling services in financial year 2019-2020.</li> <li>• Approx. 30 members of staff had their bike fixed by Dr.Bike in 2019 calendar year</li> <li>• 5088 cycle journeys undertaken in 2019 by LBTH staff using staff Santander Cycle Hire corporate membership (an increase from 4825 in 2018)</li> </ul>	<a href="https://www.bikeworks.org.uk/bikeability-in-tower-hamlets">https://www.bikeworks.org.uk/bikeability-in-tower-hamlets</a>
67.	Push for Tower Hamlets to be included in the ULEZ through partaking in the TFL Consultation process.	LBTH contributed to ULEZ consultations. ULEZ will include all of LBTH when it is extended to North Circular in October 2021.	<b>Measure Completed - No further action</b>
68.	Ensure responses to all government and regional consultations focus on reducing or eliminating	AQ consultation comments provided in 2019 in response to: <ul style="list-style-type: none"> <li>• London Local Air Quality Management Framework(LLAQM)</li> <li>• LLAQM Borough Air Quality Action Matrix</li> <li>• Draft Environment Bill, and</li> <li>• Emissions Reduction (Local Authorities in London) Bill (City of London sponsored Bill).</li> </ul>	On-going. Responses to consultations undertaken where relevant

	emissions of Local air pollutants and CO2.		
69.	Lobby and work with TFL to reduce emissions from buses in the borough. e.g. through green bus corridors. Work with other statutory Services to reduce emissions – LFB, NHS etc.	<b>Action updated in 2019. No further progress since.</b>	
70.	Lobby and work with TFL to reduce emissions from TfL controlled roads e.g. through reprioritisation of road space.	Under Review	
71.	Lobby the GLA to strengthen their Air Quality Neutral Policy and lower the CHP emission limits in current guidance.	<b>Measure updated in 2019 ASR.</b> New Draft Environment Strategy and Draft London Plan seeks to have largest developments required to be air quality positive. Further guidance awaited from the GLA following adoption of the new London Plan	<b>Measure Completed - No further Action</b>
72.	Delivery of the Tower Hamlets Mayor's Air	Second tranche of funding was released in 2019. 40 applications received. 13 approved: 1. East End Homes - Swapping to battery operated gardening equipment	

	Quality fund over 2018/19 and 2019/20	<p>2. Coffe Afrique - Promoting AQ awareness through school assemblies and community events.</p> <p>3. Women’s Environmental Network - Running participatory workshops and forum events focusing on raising awareness among women. Aiming to develop a toolkit for future replication</p> <p>4. Citizens UK - Engage with locals to ascertain barriers to behaviour change; teach people how to engage with the LA to report and improve AQ</p> <p>5. Bromley-by-Bow Centre - Target vulnerable people through links to the health centre. Recruit AQ champions, teach them how to monitor NOX and PM and develop a strategy based on findings</p> <p>6. Trees for Cities - Planting trees and greenscreens</p> <p>7. Barts Health - An anti-idling campaign focused on ambulance drivers and minicabs</p> <p>8. Shapla Primary School - Installing a green wall around ShaplaPrimary</p> <p>9. Barts Health - Training health professionals to teach their patients about air pollution and how to reduce their emissions andexposure</p> <p>10. Poplar HARCA - Purchasing cargo bikes for Poplar Works fashion hub</p> <p>11. Sustrans - Promoting sustainable transport at four schools on the cityfringe</p> <p>12. CWC Environmental - Low pollution walking maps for Bow Schools</p> <p>13. St Paul's Way Primary School -Promote modal shift at St Paul's Way Trust School</p>	
73.	The Mayor of Tower Hamlets to hold a meeting with The Royal Borough of Greenwich and Greater London Authority to discuss reducing the environmental	<p><b>Measure updated in 2019 ASR.</b></p> <p>Meeting held. Liaison between officers of LBTH &amp; RBG to control pollution. Shore side power not feasible. Application for cruise terminal withdrawn by developers. Action deemed to be successful as proposal is now not going ahead as planned.</p>	<b>Measure Completed - No further Action</b>

	<p>impact of the proposed Enderby Wharf cruise terminal.</p> <p>Lobby for shore-side power to be provided for the ships.</p>		
74.	<p>Work with the Canal &amp; River Trust, the GLA and other Boroughs with canals to devise a plan to best tackle issues with emissions from canal boats. Enforcement action to be taken where necessary.</p>	<p>Tower Hamlets initiated a canal engagement meeting involving boroughs with inland navigable waterways and the Canal &amp; River Trust about the need for a cohesive London-wide engagement campaign focused on sustainability and air quality on the canals.</p> <p>Further meeting to discuss a strategy planned in 2020.</p> <p>In addition officers from the Environmental Health &amp; Trading Standards service undertook 2 engagement visits with boat owners:</p> <p>26/11/19: spoke to 11 boat owners – Regents Canal near Copperfield Rd for ½ mile and handed out “Tower Hamlets Better Boating Guide”</p> <p>11/12/1: spoke to 8 boat owners – Hertford Union near Old Ford Road and handed out “Tower Hamlets Better Boating Guide”</p>	
75.	<p>Support the Port London Authority in the development and implementation of their Air Quality</p>	<p><b>Measure updated in 2019 ASR</b></p>	<p><b>Measure Completed - No further action</b></p>

	Strategy for the River Thames.		
76.	Support the GLA in Lobbying national Government to provide new powers and improved coordination for river and maritime vessels, including having a single regulatory authority for the Thames and London tributaries and introduce minimum emissions standards	<b>Measure updated in 2019 ASR</b>	<b>Measure Completed - No further action</b>

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

*This section is mandatory.*

*For the questions relating to Planning Applications it simply requires totals of the numbers of conditions that have been formally recommended for incoming Planning Applications. No further detail is required and it is not necessary to provide any detail on whether the application was accepted or whether the development has commenced. However, For NRMM, in addition to including information on the number of Planning conditions, please also include basic enforcement information, as per the example below.*

**Table K. Planning requirements met by planning applications in Tower Hamlets in 2019**

<b>Condition</b>	<b>Number</b> <i>Please complete all fields in this column with the total numbers</i>
Number of planning applications where an air quality impact assessment was reviewed for air quality impacts	48
Number of planning applications required to monitor for construction dust	<u>43</u>
Number of CHPs/Biomass boilers refused on air quality grounds	<u>1</u>
Number of CHPs/Biomass boilers subject to GLA emissions limits and/or other restrictions to reduce emissions	<u>4</u>
Number of developments required to install Ultra-Low NO <sub>x</sub> boilers	
Number of developments where an AQ Neutral building and/or transport assessments undertaken	<u>35</u>
Number of developments where the AQ Neutral building and/or transport assessments not meeting the benchmark and so required to include additional mitigation	<u>5</u>
Number of planning applications with S106 agreements including other requirements to improve air quality	<u>1</u>
Number of planning applications with CIL payments that include a contribution to improve air quality	<u>0</u>
<b>NRMM: Central Activity Zone and Canary Wharf</b> 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 <a href="http://www.nrmm.london">www.nrmm.london</a> and that all NRMM used on-site is compliant with Stage IIIB of the Directive and/or exemptions to the policy.	4 13  Being done as part of Pan London project operated by LB Merton

<p><b>NRMM: Greater London (excluding Central Activity Zone and Canary Wharf)</b></p> <p>Number of conditions related to NRMM included.</p> <p>Number of developments registered and compliant.</p> <p>Please include confirmation that you have checked that the development has been registered at <a href="http://www.nrmm.london">www.nrmm.london</a> and that all NRMM used on-site is compliant with Stage IIIA of the Directive and/or exemptions to the policy.</p>	<p>29</p> <p>14</p> <p>Being done as part of Pan London project operated by LB Merton</p>
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All major planning applications are referred to the Pollution Team for comment. Each application is individually reviewed to ensure that the GLA SPGs on Sustainable Design and Construction as well as the Control of Dust and Emissions from Demolition and Construction Sites. Where there is compliance issues, Pollution Officers recommend either further information be obtained from the applicant or relevant conditions recommended. It is at the discretion of the Development Control Team/Planning Committee as to what action is taken on recommendations made by the Pollution Team.

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

No new sources identified

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

### ***A.1 Automatic Monitoring Sites***

Calibrations at Tower Hamlets Roadside, Millwall Park and Victoria Park are undertaken by Ricardo Energy and Environment. Millwall Park and Victoria Park are both urban background sites so they calibrated every 4 weeks. Tower Hamlets Roadside is calibrated every 2 weeks. All sites are provided with ISO 17025 QC audits by Ricardo Energy and Environment every 6 months.

Note: the Blackwall site is operated by Transport for London, not LBTH

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

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

### ***A.1 Diffusion Tube Quality Assurance / Quality Control***

- Lab supplying and analysing the tubes:

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

- *Preparation method used*

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

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

The samples have been analysed in accordance with SOCOTEC's standard operating procedure ANU/SOP/1015 Issue 1. This method meets the guidelines set out in DEFRA's 'Diffusion Tubes For Ambient NO<sub>2</sub> Monitoring: Practical Guidance.'

- *Results of laboratory precision results:*

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

- *Bias adjustment factor*

A bias adjustment factor of 0.75 was used. This was derived from DEFRA spreadsheet version number 03/19 for LBTH's contractor's lab.

### **Factor from Local Co-location Studies (if available)**

Local co-location bias adjustment was not used

## A.2 Adjustments to the Ratified Monitoring Data

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

**Table L. Short-Term to Long-Term Monitoring Data Adjustment (for PM<sub>2.5</sub> only)**

Site	Site Type	Annual Mean (µg/m <sup>3</sup> )	Period Mean (µg/m <sup>3</sup> )	Ratio
Waltham Forest Dawlish Rd (Site I.D: WL1, LAQN site)	Urban Background	12	11.6	1.03
Victoria Park TH002	Urban Background	10	9.6	1.04
<b>Average</b>				1.04

**Appendix B Full Monthly Diffusion Tube Results for 2019**

**Table M. NO<sub>2</sub> Diffusion Tube Results**

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean NO <sub>2</sub> Jan	Annual Mean NO <sub>2</sub> Feb	Annual Mean NO <sub>2</sub> March	Annual Mean NO <sub>2</sub> Apr	Annual Mean NO <sub>2</sub> May	Annual Mean NO <sub>2</sub> June	Annual Mean NO <sub>2</sub> Jul	Annual Mean NO <sub>2</sub> Aug	Annual Mean NO <sub>2</sub> Sept	Annual Mean NO <sub>2</sub> Oct	Annual Mean NO <sub>2</sub> Nov	Annual Mean NO <sub>2</sub> Dec	Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
1	100	100	54.9	55.6	46.7	38.2	36.9	31.6	33.2	36.9	40.8	40.1	56.8	52.1	43.7	32.7
2	91.7	91.7	Missing	59.2	48.5	40.5	35.8	37.1	39.8	44.4	42.8	47.6	53.9	58.7	46.2	34.7
3	100	100	52.4	65.7	52.7	40.5	47.5	34.9	38.6	46.3	43.3	48.1	55.8	59.5	48.8	36.6
4	100	100	72	71.8	65.8	71	68.9	53	52.8	52.2	56	61.2	75.9	66.9	64.0	<b>48.0</b>
5	100	100	57.3	80.9	77.8	60.5	59.1	55.4	53.8	58.3	61.3	61.3	71.3	68.5	63.8	<b>47.8</b>
6	100	100	59.5	73.8	67.7	54.2	53	47.7	51.3	57.1	60.2	62.5	68.5	69.7	60.4	<b>45.3</b>
7	100	100	47.1	46.2	38.6	37	28.2	26.8	26.1	31.4	33.2	38.3	51.8	47	37.6	28.2
8	100	100	48.5	49.7	40	38.5	29.2	27.6	30.5	34.8	34.8	39.8	54	49.6	39.8	29.8
9	100	100	59.7	53.4	51.2	41.1	44	31.1	31.9	39.2	37.7	40.3	54.6	55.5	45.0	33.7
10	91.7	91.7	59.6	70.4	54.6	53.9	57.4	Missing	39.9	43.3	51.3	46.7	54.3	60.1	53.8	<b>40.3</b>
11	83.3	83.3	Missing	57.7	Missing	41.2	35	32.2	31	33.8	37.3	45	61.3	54.4	42.9	32.2
12	100	100	52.6	51.5	47.8	38.4	37.3	31.4	33.9	37.3	38	42	58	51.4	43.3	32.5
13	91.7	91.7	55.8	57.7	47.7	52	42.3	40.4	41.3	Missing	44.9	49	62.6	57.1	50.1	37.6
14	100	100	45.6	58.5	50.6	40.3	35.2	36.2	37.5	43.7	45	47.8	61.3	65.4	47.3	35.4
15	100	100	70.7	65.2	53.6	54.2	50.3	40.1	42.6	45.1	48	54.4	73.4	56.3	54.5	<b>40.9</b>
16	100	100	51.5	61	51.5	47.9	41.3	39.8	37.7	42.9	42.4	47.5	55.5	57.2	48.0	36.0
17	75	75	47.6	51.9	Missing	Missing	Missing	29.7	30.6	32.2	35.3	40.4	55.7	44.4	40.9	30.7

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean NO2 Jan	Annual Mean NO2 Feb	Annual Mean NO2 March	Annual Mean NO2 Apr	Annual Mean NO2 May	Annual Mean NO2 June	Annual Mean NO2 Jul	Annual Mean NO2 Aug	Annual Mean NO2 Sept	Annual Mean NO2 Oct	Annual Mean NO2 Nov	Annual Mean NO2 Dec	Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
18	100	100	63.2	43.7	56.8	45.2	44	38.2	40.7	40	36.9	50.9	68	56.5	48.7	36.5
19	100	100	65.3	61	53.8	51.8	43.4	38.5	48.7	52.3	51.8	56.1	74.8	63.9	55.1	<b>41.3</b>
20	100	100	70.1	86.9	75.7	57.6	54.6	58.9	58.6	65.1	59.2	65.2	74	65.3	65.9	<b>49.5</b>
21	100	100	59.3	56.7	50.7	46.8	36.6	34.6	37.1	41.5	41.8	45.2	59.3	54.6	47.0	35.3
22	100	100	51.3	46.9	43.1	44.2	31.3	29	29.2	31.5	37.4	41.1	57.6	42.6	40.4	30.3
23	100	100	66.2	66	56.8	45.8	47.3	44.6	49.3	54.4	48.2	47.9	62.8	54.4	53.6	<b>40.2</b>
24	83.3	83.3	64.1	53.9	66.9	72.3	63.5	59.1	61.8	57.5	61.7	65.1	missing	missing	62.6	<b>46.9</b>
25	100	100	52	61.5	52.1	45.7	40.7	40.3	38.2	48.1	46.3	54	64.4	64.5	50.7	38.0
26	100	100	69.6	65.2	61.3	41.6	68.3	42.3	45.5	51	51	52.8	58.8	60.1	55.6	<b>41.7</b>
27	100	100	52.9	56.2	43.9	48.5	42.3	34.1	32.7	37.7	43.2	46	63	45.6	45.5	34.1
28	100	100	56.2	55	46.3	43.5	41.2	39.9	42	40.7	44	44.4	62.4	47.4	46.9	35.2
29	91.7	91.7	55.6	68.2	53.5	49.2	48	45.4	50.1	45.7	52.4	missing	68.4	57.3	54.0	<b>40.5</b>
30	100	100	58.5	51.3	50.9	66.2	42.4	42.8	38.4	41.1	45.8	50	62.8	52.2	50.2	37.7
31	83.3	83.3	Missing	86.7	84	66.5	67.2	63.6	62.6	63.5	69	69.8	80.5	missing	71.3	<b>53.5</b>
32	100	100	63.6	68.4	58.3	58.2	54.3	50.6	50.3	48	52.7	54.2	64.7	53.1	56.4	<b>42.3</b>
33	83.3	83.3	45.7	Missing	40.4	34.7	Missing	22.7	25.9	29.3	31.9	40	57.2	42.7	37.1	27.8
34	100	100	61.5	52.4	52.3	47.1	42.2	37.8	32.4	41.8	41.2	43.3	62.3	41.9	46.4	34.8
35	91.7	91.7	116.9	Missing	111.8	114	100	100	99.6	90.1	99.6	93.8	114.7	90.1	102.8	<b>77.1</b>
36	100	100	51.9	53.7	43.7	49.5	34.5	33.9	30	33.9	37.7	40.9	60.7	46.9	43.1	32.3
37	66.7	66.7	45.6	49.4	43	42.7	34.5	32.7	Missing	Missing	Missing	missing	57.4	41.6	39.6	29.7
38	100	100	61.1	48.3	50.2	50.6	40.2	39.3	35.4	34.7	46.4	46.8	70.1	49.5	47.7	35.8
39	100	100	55.1	55.7	47.9	56.5	42.7	39.7	37.6	38.8	44.8	43.7	66.1	49.2	48.2	36.1
40	100	100	39.9	56.8	46.1	41.6	39	31.4	36.2	38.2	38	44.5	57.9	50.9	43.4	32.5

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean NO2 Jan	Annual Mean NO2 Feb	Annual Mean NO2 March	Annual Mean NO2 Apr	Annual Mean NO2 May	Annual Mean NO2 June	Annual Mean NO2 Jul	Annual Mean NO2 Aug	Annual Mean NO2 Sept	Annual Mean NO2 Oct	Annual Mean NO2 Nov	Annual Mean NO2 Dec	Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
41	100	100	54.9	54.6	44.7	53.9	40	38.1	37.5	32.7	39.7	47.1	61.3	39.5	45.3	34.0
42	100	100	33.9	40.3	28.1	28.2	24.3	19.4	17.7	18.2	25.4	30.2	44.5	33.2	28.6	21.5
43	100	100	32.4	37.7	28.1	27.2	22.2	19.6	19.7	22.5	26.7	29.7	45.2	31.1	28.5	21.4
44	91.7	91.7	57.1	56.3	40.5	44.3	40.8	38.6	39	40	Missing	48.9	65.6	31	45.6	34.2
45	100	100	59.7	59.1	51	54.9	44.9	43.1	40.6	42.8	46	53	67.8	55.6	51.5	38.7
46	100	100	60.2	59.7	45.6	45	36	34.6	34.5	36.4	41.8	43.3	63.4	35.1	44.6	33.5
47	100	100	62	65.4	53.7	55.9	51.1	50	46.7	44.8	56	50.8	79.2	43.9	55.0	<b>41.2</b>
48	91.7	91.7	58.8	65	53.4	47.6	43.8	39.5	46.1	52.8	50.4	50.2	missing	40.2	49.8	37.4
49	100	100	52.8	50.8	41.1	34.5	27.7	31.5	31.4	35.4	34	41.3	67.6	32.8	40.1	30.1
50	91.7	91.7	55.5	51	Missing	50	41.8	39.5	41.7	46.6	44.6	47.9	64.5	24.2	46.1	34.6
51	91.7	91.7	32.2	50.4	42.2	41.8	32	28.9	31.2	37.5	37.7	missing	58.2	36.5	39.0	29.2
52	100	100	58.8	58.3	49.9	50.9	44.3	42.2	42	44.8	46	52.1	68.5	30.6	49.0	36.8
53	91.7	91.7	57.2	65.8	64.2	73.1	55.1	52.9	51.5	49.1	Missing	54.1	69.7	40.3	57.5	<b>43.2</b>
54	100	100	77.6	83.3	72.7	77.4	54.2	58.8	61.4	58	54.8	54.5	85.3	55.5	66.1	<b>49.6</b>
55	100	100	41.3	37	33.6	29.9	22.1	22.1	20.8	24.1	26.3	28.4	42.9	27.5	29.7	22.3
56	100	100	55.7	46.1	43.4	43.1	38.5	37.4	38.3	42.2	40.3	40.1	60.3	32	43.1	32.3
57	100	100	50.8	45.7	38	36.1	26.5	24.6	23.9	29.3	33.9	39	60.3	30.8	36.6	27.4
58	100	100	52.2	46.7	43.5	34.9	25.4	26.3	29.4	35.5	30.6	38.8	54.6	24.8	36.9	27.7
59	100	100	31.5	55.6	49.9	2.3	37.2	38.4	37.8	38.3	41.6	47	65.6	46.5	41.0	30.7
60	100	100	37.2	61.3	53.6	38.3	40.9	41.7	43.9	49	49	47.5	61.8	46.5	47.6	35.7
61	100	100	55.6	63.5	54	45.6	33.8	36.9	36.1	44.4	40.2	47.2	64.8	45	47.3	35.4
62	100	100	50	51	44.2	41.8	30.2	34.4	34.9	37.9	41.2	46.1	59.4	36.1	42.3	31.7
63	100	100	40.2	38.6	31.3	29.1	21.7	22	23.1	29.1	29.6	32.6	48.4	39.3	32.1	24.1

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean NO2 Jan	Annual Mean NO2 Feb	Annual Mean NO2 March	Annual Mean NO2 Apr	Annual Mean NO2 May	Annual Mean NO2 June	Annual Mean NO2 Jul	Annual Mean NO2 Aug	Annual Mean NO2 Sept	Annual Mean NO2 Oct	Annual Mean NO2 Nov	Annual Mean NO2 Dec	Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
64	91.7	91.7	56.1	51.4	47.6	52.7	40.4	41.9	40.2	Missing	34.2	57.3	77.8	46.4	49.6	37.2
65	91.7	91.7	45.4	46.2	47.7	35.5	29.5	30.3	29.5	Missing	37	39.2	59.9	26.1	38.8	29.1
66	100	100	44.5	34.2	40.9	31.6	16.9	20	18.9	21.8	26.4	29.2	42.6	24.6	29.3	22.0
67	100	100	51.1	44.2	43.8	43.1	32.3	33.1	31.5	36.1	38.8	43.9	59.2	35.5	41.1	30.8
68	83.3	83.3	50.5	48.1	40.8	49.1	35.9	37.6	36.6	Missing	Missing	48.4	65.1	36.7	44.9	33.7
69	100	100	49.9	52.2	45.5	40.7	31.3	32.2	31.8	37.2	42.7	40.1	59.8	25.5	40.7	30.6
70	100	100	44.5	47.6	39.8	34.9	26.6	29.5	27.6	30.2	57.1	40.5	58.5	34.4	39.3	29.5
71	100	100	73.1	76	69.5	52.8	54.3	49.1	47.9	51.5	57.2	64.4	76.6	49.1	60.1	<b>45.1</b>
72	91.7	91.7	59.6	55.1	51.2	54	44.1	44.2	44.5	43.4	47.4	missing	71	38.2	50.2	37.7
73	100	100	55.7	47.4	45.6	39.3	31.6	29.8	34.8	35.9	37.4	39.5	58.1	33.5	40.7	30.5
74	100	100	97.4	104.9	92.2	89.3	82.9	89.5	94.5	100.4	98.8	105.9	109.9	68.3	94.5	<b>70.9</b>
75	100	100	48.6	49.2	41.2	39.7	27.8	29.2	27.6	31.8	35.6	40.8	56.9	29.9	38.2	28.6
76	100	100	62.7	68.2	57.2	54.1	40	43.7	44.4	45.4	51.5	53	74.7	24.7	51.6	38.7
77	100	100	51.9	55.5	47.9	41.3	33.7	33.5	34.5	35.2	38.6	45.1	60	23.2	41.7	31.3
78	100	100	49	58.7	53.5	53.2	38.4	44	42.3	36.6	47.9	46.3	71.6	31.4	47.7	35.8
79	100	100	43.8	46.7	39.5	37.2	28.6	29.3	26	26.6	34.7	37.7	55.9	37.4	37.0	27.7
80	100	100	50.7	51.4	46.5	51.4	39.5	40.2	38.6	33.3	45.6	46.8	67.1	43.8	46.2	34.7
81	100	100	52.2	56.2	48.4	43.4	34.3	39.4	38.4	37.9	46.4	47.2	70.5	32.7	45.6	34.2
82	100	100	59.7	57.6	58.1	46.7	42	45.2	42.6	40.8	49.3	53.8	67.3	27.4	49.2	36.9
83	100	100	68.4	59.4	75.9	80.2	60.4	73	66	65.8	71.8	72.5	94.1	38.6	68.8	<b>51.6</b>
84	91.7	91.7	Missing	74.6	60.8	35	42.4	46.4	44.2	57	56.8	61.6	61.2	35.2	52.3	39.2
85	100	100	62.6	62.9	53.4	47.8	34.1	45.9	40.7	50.4	51.1	56.6	73.4	33.6	51.0	38.3
86	100	100	51	39.4	41.7	34.1	28.3	29.8	28.3	31.3	36.3	38.7	57.4	29	37.1	27.8

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2019 % <sup>b</sup>	Annual Mean NO2 Jan	Annual Mean NO2 Feb	Annual Mean NO2 March	Annual Mean NO2 Apr	Annual Mean NO2 May	Annual Mean NO2 June	Annual Mean NO2 Jul	Annual Mean NO2 Aug	Annual Mean NO2 Sept	Annual Mean NO2 Oct	Annual Mean NO2 Nov	Annual Mean NO2 Dec	Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
87	100	100	72.3	52.7	62.8	47.2	46.2	43.2	41.9	40.9	47	47.5	62	30.6	49.5	37.1
88	91.7	91.7	43.8	43.7	36.7	35.2	24.8	27.4	22.3	29	32.2	38.2	52.2	missing	35.0	26.3
89	100	100	48.8	48.7	39.2	35.1	25.7	27.8	25.2	27.9	28.5	39.3	50.3	22	34.9	26.2
90	100	100	37.3	41.8	32.6	36.1	22	23.7	22.3	26.8	30.6	34.7	49.7	21.1	31.6	23.7

Exceedance of the NO<sub>2</sub> annual mean AQO of 40 µg m<sup>-3</sup> are shown in **bold**.

<sup>a</sup> Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

<sup>b</sup> 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%)

<sup>c</sup> Means should be “annualised” in accordance with LLAQM Technical Guidance, if valid data capture is less than 75%