

**London Borough of Tower Hamlets Air Quality Annual  
Status Report for 2016**  
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This report provides a detailed overview of air quality in Tower Hamlets during 2015. 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 2016 (LLAQM.TG(16)). <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
PM <sub>10</sub>	Particulate matter less than 10 micron in diameter
PM <sub>2.5</sub>	Particulate matter less than 2.5 micron in diameter
TEB	Transport Emissions Benchmark
TfL	Transport for London

**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 mean	2020
	Target of 15% reduction in concentration at urban background locations	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

### 1.1 Locations

Table B. Details of Automatic Monitoring Sites for 2015

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
TH1	Poplar	537509	180867	Background	Y		N/A	4	NO <sub>2</sub> , PM <sub>10</sub> O <sub>3</sub>	TEOM
TH2	Mile End	535927	182221	Roadside	Y		4	3	NO <sub>2</sub> ,	N/A
TH4	Blackwall	538290	181452	Roadside	Y		3	3	NO <sub>2</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> , O <sub>3</sub>	FDMS
TH5	Victoria Park	536487	184238	Background	Y		300	2	NO <sub>2</sub> , SO <sub>2</sub> , PM <sub>10</sub>	TEOM
TH6	Millwall Park	538052	178559	Background	Y		60	1.5	NO <sub>2</sub> , PM <sub>10</sub> O <sub>3</sub>	TEOM

**Table C. Details of Non-Automatic Monitoring Sites for 2015**

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	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
2	Calvert Ave/Boundary Street	533507	182569	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
3	Bethnal Grn Rd/ Brick Lane	533860	182442	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
4	Commercial St/Calvin St	533583	182066	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
5	Whitechapel High St (KFC)	533985	181426	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
6	Mansell St	533801	180726	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
7	St Katherine's Way	533984	180373	Background	Y		N/A	2	NO <sub>2</sub>	N
8	Wapping High St/Sampson St	534444	180122	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
9	East Smithfield	533807	180658	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
10	Stepney Way/Turner Street	534621	181624	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
11	Brick Lane/Princelet St	533866	181860	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
12	Buckfast St/Bethnal	534259	182580	Roadside	Y		1-2m	2	NO <sub>2</sub>	N

	Green Rd									
13	Whitechapel Road	534579	181743	Roadside	Y		3-4m	2	NO <sub>2</sub>	N
14	Warner Place/Hackney Rd	534255	183130	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
15	St Katherines Way	533762	180730	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
16	Paradise Row/Bethnal Green Rd	534959	182757	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
17	Finnis St/Three Colts Lane	534783	182385	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
18	Sidney St/Mile End Rd	534968	181878	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
19	Philpot St/Commercial Road	534816	181321	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
20	Dellow St/The Highway	534951	180779	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
21	Tower Hill	533762	180730		Y		1-2m	2	NO <sub>2</sub>	N
22	Wapping Wall/Garnet St	535132	180337	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
23	Brodlove Lane	535598	180816	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
24	Jubilee Street/Commercial Rd	535150	181279	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
25	Cavell St/Stepney Way	534884	181667	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
26	Hannibal Rd/Mile End Rd	535392	182010	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
27	Tower Gardens	533720	180766	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
28	Bonner Road	535356	183223	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
29	Grove Rd/Old Ford Rd	535930	183385	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
30	Fieldgate Street	534232	181584	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
31	Whitechapel Market	534516	181744	Roadside	Y		1-2m	2	NO <sub>2</sub>	N

32	Globe Rd/Mile End Rd	535295	182820	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
33	Stepney Green	535545	181604	Background	Y		10m	2	NO <sub>2</sub>	N
34	Mansell Street	533821	180766	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
35	New Road	534512	181633	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
36	Locksley St/St Paul's Way	536702	181646	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
37	Rhodeswell Rd	536574	181338	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
38	Ben Johnson Road	536080	181721	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
39	Harford St/Mile End Rd	536089	182258	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
40	Tower Bridge	533763	180719	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
41	Ford Close/Roman Rd	536457	183301	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
42	Victoria Park	536494	184170	Background	Y		N/A	2	NO <sub>2</sub>	Y
43	Victoria Park	536494	184170	Background	Y		N/A	2	NO <sub>2</sub>	Y
44	Parnell Rd/Old Ford Rd	536874	183741	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
45	St Stephen's Rd/Tredegar Rd	536713	183070	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
46	Rhondda Grove/Mile End Rd	536542	182589	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
47	Wentworth Mews	536452	182454	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
48	Ackroyd Drive	536767	181771	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
49	Dod St/Burdett Rd	537026	181227	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
50	Rich Street	536937	180987	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
51	Watney Market	534938	181257	Background	Y		30m	2	NO <sub>2</sub>	N
52	Wick Lane/Autumn St	537304	183619	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
53	Fairfield Road/Tredegar Road	537159	183415	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
54	Bow Rd /Glebe Terrace	537525	182887	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
55	TH Cemetery Park	536730	182363	Background	Y		10m	2	NO <sub>2</sub>	N

56	Bow Common Lane/St Paul's Way	537248	181820	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
57	Turner Street	534619	181649	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
58	Dolphin Lane	537539	180688	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
59	Westferry Road/Limehouse Link jct	537100	180791	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
60	Cascades, Westferry Road	537115	180074	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
61	Bow Rd/Alfred St	537056	182773	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
62	Mast House Terrace	537348	178690	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
63	Millwall Park	538259	178688	Background	Y		30m	2	NO <sub>2</sub>	N
64	Limeharbour	537953	179357	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
65	Manchester Road/East Ferry Road	538033	178360	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
66	Millwall Park	538247	178689	Background	Y		30m	2	NO <sub>2</sub>	N
67	Seyssel Street	538545	178767	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
68	Manchester Road/Ollife Street	538432	179044	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
69	Lawnhouse Close	538191	179750	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
72	Prestons Road/Coldharbour	538364	180188	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
73	John Smith Mews	538742	180756	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
74	Stepney Way/Hospital	534742	181643	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
75	Hale Street	537661	180768	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
76	Chrip Street/E India Dock Road	537940	181021	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
77	Morris/Barchester Street	537731	181761	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
78	Devons Road / Campbell Road	537577	182232	Roadside	Y		1-2m	2	NO <sub>2</sub>	N

79	Hatfield Terrace/Fairfield Road	537356	183059	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
80	Wrexham Road	537581	183208	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
81	Bromley High Street/St Leonards	537868	182912	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
82	Devas Street /Devons road	537821	182332	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
83	Zetland Street/A12	538178	181747	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
84	Blair Street (End of Street)	538366	181180	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
85	Portree Street	538895	181296	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
86	Newport Avenue	538955	180872	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
87	Stepney Way	534555	181612	Roadside	Y		1-2m	2	NO <sub>2</sub>	N
89	Thames Path Storers Quay	538730	178733	Background	Y		10m	2	NO <sub>2</sub>	N
90	Sextant Avenue	538674	178887	Roadside	Y		1-2m	2	NO <sub>2</sub>	N

***Distance from monitoring site to relevant exposure –the location of the tubes complies with siting criteria for roadside and background sites. Specific measurements for each site are not available.***

### **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 (µg m<sup>-3</sup>)**

Site ID	Site type	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2015 % <sup>b</sup>	Annual Mean Concentration (µgm <sup>-3</sup> )						
				2009	2010 <sup>c</sup>	2011 <sup>c</sup>	2012 <sup>c</sup>	2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>
TH1 Poplar	Automatic	-	-	36	36	34 <sup>c</sup>	33	33	-	-
TH2 Mile End	Automatic	76.8%	100%	<b>61</b>	<b>65</b>	<b>57</b>	<b>60</b>	<b>57</b>	<b>62</b>	<b>51*</b>
TH4 Blackwall	Automatic	96.5%	100%	<b>64</b>	<b>73</b>	<b>63</b>	<b>61</b>	<b>58</b>	<b>58</b>	<b>58</b>
TH5 Victoria Park	Automatic	99%	61%	-	-	-	33	33	44 <sup>c</sup>	33 <sup>c</sup>
TH6 Millwall	Automatic	85.2%	33%	-	-	-	-	-	-	26 <sup>c</sup>

Notes: Exceedance of the NO<sub>2</sub> annual mean AQO of 40 µgm<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%

\* Data has not been fully ratified at time of writing report. Results should be treated with care and may alter following full ratification

Table D above shows the NO<sub>2</sub> concentrations at our continuous monitors for the past 7 years. Within that period one station was closed and 2 others opened. The two Roadside sites, Blackwall Tunnel and Mile End have in recent years been fairly static in their results showing no increasing or decreasing trend. This has continued for Blackwall Tunnel in 2015 with the past 3 years measuring an annual average of 58 µgm<sup>-3</sup>, however the Mile End Road site has shown a marked decrease in 2015. Unfortunately at the time of writing the report the 2015 NO<sub>2</sub> data for Mile End had not been fully ratified so this figure must be treated with caution and may alter following full ratification. The results for Victoria Park have stayed the same for the past 4 years with the

exception of 2014 (however data capture was very low this year) indicating that background concentrations in the borough are not decreasing as expected. Millwall Park station was opened towards the end of the year and showed that background concentrations are low at the south side of the Island.

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

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2015 % <sup>b</sup>	Number of Hourly Means > 200 µgm <sup>-3</sup>						
			2009 <sup>c</sup>	2010 <sup>c</sup>	2011 <sup>c</sup>	2012 <sup>c</sup>	2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>
TH1Poplar	-	-	0	0	0	0	0	-	-
TH2 Mile End			5	5	0	2	0	1	<b>0*</b>
TH4 Blackwall	96.5%	100%	2	7	0	0	0	1	0
TH5 Victoria	99%	61%	-	-	-	0	0	0	0
TH6 Millwall	85.2%	33%	-	-	-	-	-	-	0

Notes: Exceedance of the NO<sub>2</sub> short term AQO of 200 µgm<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%

\* Data has not been fully ratified at time of writing report. Results should be treated with care and may alter following full ratification

Table E shows the number of hours per year where the NO<sub>2</sub> measured at over 200 µgm<sup>-3</sup>. The results for all sites have been consistently low over the past 7 years, with 2015 having no hours exceeding 200 µgm<sup>-3</sup> at any monitoring site.

**Table F. Annual Mean PM<sub>10</sub> Automatic Monitoring Results ( $\mu\text{g m}^{-3}$ )**

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2015 % <sup>b</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ )						
			2009 <sup>c</sup>	2010 <sup>c</sup>	2011 <sup>c</sup>	2012 <sup>c</sup>	2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>
TH1 Poplar	-	-	22	22	23	22	23	-	-
TH4 Blackwall	78.7%	100%	34	29	28	26	28	29 <sup>c</sup>	22
TH5 Vic Park	97%	68%	-	-	-	18	21	22 <sup>c</sup>	19 <sup>c*</sup>
TH6 Millwall	71%	16%	-	-	-	-	-	-	15 <sup>c*</sup>

Notes: Exceedance of the PM<sub>10</sub> annual mean AQO of  $40 \mu\text{g m}^{-3}$  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%

\* Data has not been fully ratified at time of writing report. Results should be treated with care and may alter following full ratification

Table F shows the PM10 concentrations for 4 of our monitoring stations over the past 7 years. The results show that the roadside concentrations, at the Blackwall Tunnel site, have experienced a decrease over the past 7 years, with a large decrease in 2015 to  $22 \mu\text{g m}^{-3}$ , from  $29 \mu\text{g m}^{-3}$  the previous year. The background sites don't show such a trend and show reasonably stable results for the periods where data is available. Unfortunately at the time of writing the report the 2015 results from Millwall Park and Victoria Park are still yet to be fully ratified.

**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 2015 % <sup>b</sup>	Number of Daily Means > 50 µg m <sup>-3</sup>						
			2009 <sup>c</sup>	2010 <sup>c</sup>	2011 <sup>c</sup>	2012 <sup>c</sup>	2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>
TH1 Poplar	-	-	5	6	16	14	4	-	-
TH4 Blackwall	79.7%	100%	<b>42</b>	18	32	24	25	16	8 (38.62)
TH5 Vic Park			-	-	-	2	5	6	2 (32.36) <sup>c*</sup>
TH6 Millwall			-	-	-	-	-	-	0 (22.04) <sup>c*</sup>

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 90.4th percentile exceeds 50 µg m<sup>-3</sup> are shown in **bold**. Where the period of valid data is less than 90% of a full year, the 90.4th 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%

Table G shows that the number of days exceeding 50 µg m<sup>-3</sup> has significantly declined at the Blackwall tunnel site from 42 in 2009 to just 8 in 2016. At the Victoria Park background site the number of days of exceedance is at the same level as when the site opened in 2012, after slightly increasing for the past 2 years. The values however remain very low.

**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 2015 % <sup>b</sup>	Annual Mean Concentration ( $\mu\text{g m}^{-3}$ )						
			2009 <sup>c</sup>	2010 <sup>c</sup>	2011 <sup>c</sup>	2012 <sup>c</sup>	2013 <sup>c</sup>	2014 <sup>c</sup>	2015 <sup>c</sup>
TH4	96%	100%	19	18.2	17.6	15.2	16.4	16.1	14.4

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%

Table H shows the annual mean concentration of PM<sub>2.5</sub> for the past 7 years at the Blackwall Tunnel monitoring site. The levels have held fairly steady over recent years showing a slight decreasing trend overall, this has continued with a reasonable decrease in PM<sub>10</sub> levels in 2015 compared to previous years.

**Table I. SO<sub>2</sub> Automatic Monitor Results for 2015: Comparison with Objectives**

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2015 % <sup>b</sup>	Number of: <sup>c</sup>		
			15-minute means > $266 \mu\text{g m}^{-3}$	1-hour mean > $350 \mu\text{g m}^{-3}$	24-hour mean > $125 \mu\text{g m}^{-3}$
TH5 Victoria	95.5%	64%	0	0	<b>0</b>

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

<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” as in Box 3.2 of TG(09) (<http://laqm.defra.gov.uk/technical-guidance/index.html?d=page=38>), if valid data capture is less than 75%

Table I shows that there have been no exceedances of the SO2 objectives.

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

**Table J. Commitment to Cleaner Air Borough Criteria**

<b>Theme</b>	<b>Criteria</b>		<b>Achieved (Y/N)</b>	<b>Evidence</b>
<b>1. Political leadership</b>	<b>1.a</b>	Pledged to become a Cleaner Air for London Borough (at cabinet level) by taking significant action to improve local air quality and signing up to specific delivery targets.	Y	<i>No evidence required</i>
	<b>1.b</b>	Provided an up-to-date Air Quality Action Plan (AQAP), fully incorporated into LIP funding and core strategies.	N	The Air Quality Action Plan is currently in the process of being reviewed and updated and will be produced .
<b>2. Taking action</b>	<b>2.a</b>	Taken decisive action to address air pollution, especially where human exposure and vulnerability (e.g. schools, older people, hospitals etc) is highest.	Y	Bart's Health Project, Cleaner Air for Schools project with our public health team.
	<b>2.b</b>	Developed plans for business engagement (including optimising deliveries and supply chain), retrofitting public buildings using the RE:FIT framework, integrating no engine idling awareness raising into the work of civil enforcement officers, (etc etc)	Y	Zero Emissions Network Business engagement project has been carried out for the past 3 years and has received funding for phase 2. We have also been awarded funding to implement a Low Emissions Neighbourhood.
	<b>2.c</b>	Integrated transport and air quality, including by improving traffic flows on borough roads to reduce stop/start conditions	Y	Our current AQAP has been incorporated into the Local Implementation Plan. We are also in the process of writing up a transport strategy for the borough and air quality considerations will be incorporated.
	<b>2.d</b>	Made additional resources available to improve local air quality, including by pooling its collective resources (s106 funding, LIPs, parking revenue, etc).	Y	LIP funding and S106 was utilised as match funding for the MAQF project.
<b>3. Leading by example</b>	<b>3.a</b>	Invested sufficient resources to complement and drive action from others	N	We are currently subject to an efficiency savings program and at present are under resourced for air quality. However air quality is now a mayoral

				priority so resources will be reassessed
	<b>3.b</b>	Maintained an appropriate monitoring network so that air quality impacts within the borough can be properly understood	Y	All continuous monitoring stations and NOx tube network have been maintained.
	<b>3.c</b>	Reduced emissions from council operations, including from buildings, vehicles and all activities.	Y	We address emissions from council operations through the carbon management plan which by inference addresses NOx and PM10 emissions. Specific measures will be incorporated into the new AQAP to be published in the winter.
	<b>3.d</b>	Adopted a procurement code which reduces emissions from its own and its suppliers activities, including from buildings and vehicles operated by and on their behalf (e.g. rubbish trucks).	Y	Sustainability is incorporated into our procurement policy at present but this will be subject to review. Concrete data will be available as part of the new action plan reporting.
<b>4. Using the planning system</b>	<b>4.a</b>	Fully implemented the Mayor's policies relating to air quality neutral, combined heat and power and biomass.	Y	All planning apps for major developments are checked for Air Quality Neutral Assessments to ensure they meet the requirements.
	<b>4.b</b>	Collected s106 from new developments to ensure air quality neutral development, <i>where possible</i>	Y	This is assessed on a case by case basis and we have secured 106 funding where developments were found to work against out AQAP for example Goodman's Fields where we secured electric car charging points for residents and funding towards air quality monitoring.
	<b>4.c</b>	Provided additional enforcement of construction and demolition guidance, with regular checks on medium and high risk building sites.	N	We do not currently have resources to carry out regular checks on building sites.
<b>5. Integrating air quality into the public health system</b>	<b>5</b>	Included air quality in the borough's Health and Wellbeing Strategy and/or the Joint Strategic Needs Assessment	Y	Air Quality is incorporated into our Health and Wellbeing Strategy as an indicator.
<b>6. Informing the public</b>	<b>6.a</b>	Raised awareness about air quality locally	Y	AirText promotion, Diffusion tube results available on the website, tweets to alert residents of moderate/high pollution days. Currently working on a website for the Zen project. Planning on an air quality information campaign in our council community facing centres.

## 2.1 Air Quality Action Plan Progress

Table K provides a brief summary of London Borough of Tower Hamlets' progress against the Air Quality Action Plan, showing progress made this year. New projects which commenced in 2015 are shown at the bottom of the table.

**Table K. Delivery of Air Quality Action Plan Measures**

Measure	Action	Progress	Further information
		<ul style="list-style-type: none"> <li>• Emissions/Concentration data</li> <li>• Benefits</li> <li>• Negative impacts / Complaints</li> </ul>	
	<b>Air Quality Monitoring</b>		
2	Identify pollution trends and areas of high air pollution, prioritise and bring to the attention of targeted individuals and organisations.	This is being done by annual completion of the review and assessment reports submitted to Defra and now to the GLA. The reports are published on our website.	
3	Provide information to Defra and the GLA for research purposes	These data are reported to Defra/ GLA as part of the R&A process and made available on the London Air Quality Network website	See <a href="http://www.londonair.org.uk/">http://www.londonair.org.uk/</a>
5	Continue to manage the Council's air pollution-monitoring network.	The Council is maintaining its permanent continuous sites, with one discontinued site being relocated and restarted in 2015. We now have 4 stations operational. We are also maintaining the 90 non-continuous sites to assess pollutant concentrations across the Borough.	
	<b>Planning and Policy Control</b>		
13	Current policies that refer to air quality in the UDP will be formally reviewed. The UDP will in future take full account of the Air Quality Action Plan in prioritising land use and	We are currently undergoing a review of the local plan and the air quality policies are being strengthened and embedded in other policy areas. The UDP has now	

	review the use of planning control mechanisms available to the Council to achieve sustainable development.	been replaced by a Local Development Framework.	
14	Use GIS air quality information to prioritise areas for planning control.	We will use the air quality focus areas, determined by GIS mapping of air quality data for planning. We have produced interpolated surface maps of air quality data using GIS.	
	<b>Physical Traffic Management: Speed and Flow</b>		
17	Introduction of 20mph zone schemes and traffic calming measures such as speed cushions in the 6 worst accident zones in the Borough.	Whole borough 20mph limit imposed (excluding tfl roads)	
	<b>Routing Traffic and Road Hierarchy</b>		
19	To work closely with the Mayor and the GLA to review London's road hierarchy and provide comprehensive and accurate local information.	The project is no longer relevant	
20	To ensure that Planning Officers are fully updated with road hierarchy information for the review and development of the UDP.	The project is no longer relevant	
21	Work together with Planning Services and the Environmental Health, Environmental Protection Division to review land use along Local Distributor Roads having regard to levels of air pollution and use of planning controls to improve traffic flow.	This is currently being achieved through the Local Plan process. The local distributor roads may no longer apply.	
	<b>Parking Management and Control</b>		
28	Regularly review parking fees and charges and increase levels where necessary to deter unnecessary car use.	The Parking fees and charges are reviewed annually. Cabinet meeting to be held in the near future re parking fees.	
	<b>Encourage Local Cycling and Walking</b>		
33	Continue to promote the use of and improve the facilities around the borough for cycling.	The council supported TFL with the upgrading of Cycle Super Highway 2 that runs through the borough.	
34	Liaise with cycling groups and schools	Bike-it program run in 40 schools across the borough last year	
36	Improve road safety for cyclists.	The cycle superhighway upgrade has segregated the lanes and improved safety for cyclists at several junctions.	
37	Encourage walking. Devise and implement a walking strategy for the borough.	Ongoing implementation of the councils 'Walking Connections 2011-2012' plan.	
	<b>Partnerships and Travel Plans (Workplace and Schools)</b>		
38	To produce a council Travel Plan.	A council travel plan has been produced.	
39	Implement the Safe Routes to School scheme and produce borough wide safer routes to school strategy	TH has a School Travel Plan officer to help schools develop travel plans and safer routes to school.	
40	Promote the development of sustainable transport schemes while achieving local regeneration	The council is currently drawing up its transport strategy and sustainable transport will be incorporated within the strategy.	

	<b>Urban Traffic Control System (UTCS)</b>		
46	Continue with the monitoring and review of traffic signals to optimise signal timings to achieve the best balance for traffic flow and pedestrians.	TH works in conjunction with TfL to meet its LIP policies of reducing congestion.	
	<b>Reallocated Road Space</b>		
48	Review the introduction of further bus lanes and cycle lanes across the borough, prioritising review of areas where air quality is highest.	Bus lanes and cycle lanes are prioritised according to strategic network plans and congestion hotspots. This will be done in consultation with TfL.	
	<b>Public Transport Initiatives - Bus</b>		
50	Work with other boroughs to implement schemes to improve traffic flow on TfL roads	We will look into this for future schemes that may come now under the new mayor for example the expanded ULEZ.	
	<b>Public Transport initiatives – Rail, Underground and DLR</b>		
51	Support, encourage and facilitate public transport infrastructure projects to provide a cost effective and attractive alternative to the car.	Crossrail – we have a cabinet decision to support Crossrail and worked in collaboration with them to deliver the project in an environmentally sustainable manner. The project is on schedule and we will continue to support the delivery of it.	
	<b>Maritime, ports and waterways.</b>		
54	To support and encourage an increase in the use of the River Thames as a freight corridor for tower Hamlets and the centre of London.	This is ongoing as per LBTH Transport Strategy and in conjunction with TfL. We also secure this through planning conditions and are being dealt with through the local plan review which is currently underway.	
55	To actively support the movement of freight in and out of the Borough by water.	This is encouraged / supported where appropriate via the planning process. We are currently revising the Transport Strategy and this will be incorporated.	
56	To work closely with TfL to identify options for increasing the use of waterways that run through the Borough.	This is encouraged / supported where appropriate via the planning process. We are currently revising the Transport Strategy and this will be incorporated.	
	<b>Air Transport Infrastructure</b>		
57	In the event of Stansted Airport being expanded the Council will lobby for a substantial increase in rail infrastructure along the Lea Valley to accommodate airport traffic and the objective of achieving a metro-frequency for local services. In addition, a direct service would be required from Stratford, for connections to Canary Wharf, to cater for airport passengers and airport employees alike and to complement the Channel Tunnel Rail Link and CrossRail.	We're not aware of any current plans to expand Stanstead Airport, however we will support the improvement of transport infrastructure where needed.	
60	The Council supports the opportunities afforded by a heavy rail link between Heathrow and east-London from CrossRail with interchanges at Whitechapel, and the Isle of Dogs.	Running to schedule and due for completion in 2017, we commented on the Whitechapel Masterplan with regards to air quality.	
	<b>Fleet Management and Clean Fuels</b>		
64	Maximise the potential from grant schemes to reduce the financial burden of introducing and using cleaner vehicles	We have not identified any funding streams for this in the past 2 years since the last action plan progress	

	and technology.	report.	
	<b>Domestic and Commercial Energy and Heating</b>		
65	Encourage, support and develop Combined Heat and Power Schemes.	We are reviewing this in conjunction with the Carbon Management Plan and the Local Plan review.	
66	Work towards reducing fuel poverty across the Borough through the implementation of the Affordable Warmth Strategy.	This is being implemented through our Fuel Poverty Strategy and Action Plan.	
67	Review the use of GIS to target action in areas of poorest air quality.	Ongoing, we produce GIS maps to identify areas of poor air quality to guide policy and target projects.	
68	Support and promote the replacement and of more efficient domestic boilers.	This is being addressed by planning and through the refurbishment of social housing stock.	
70	Encourage, support and develop initiatives, which promote the uptake of new alternative sources of energy	Through the planning process new developments must show they have investigated using renewable sources of energy and ensure they are installed where possible	
	<b>Industrial Sources</b>		
71	Inspect all industrial processes bi-annually and dust producing industry quarterly.	All EPR installations are inspected in line with the Defra schedules.	
73	Provide a rapid response to dust complaints arising from Authorised Industry.	We provide a reactive service to inspect dust complaints from permitted installations.	
74	Review Authorisations to operate, progressing upgrading programmes as a priority.	Permits are reviewed in line with the Env Permitting Regs	
	<b>Construction</b>		
75	Incorporate the Council's Code of Construction Practice into the UDP, supplementary guidance, section 106 agreements, standard conditions and information for Planning Applications consent in respect of major developments.	We continue to implement the councils COCP through the planning process and under environmental health work	
76	Meet monthly with major developers, having submitted Environmental Impact Assessments at the planning stage, to review and assess dust control measures.	This is done by the submission and agreement of Environmental management Plans or CoCPs, via the planning process. Dust monitoring is undertaken for large construction sites.	
	<b>Mayors Air Quality Fund Projects</b>		
80	ZEN Project	Progress so far: 256 business registered IN LBTH 107 emission reducing measures delivered in LBTH New Website still under development 933 Twitter followers 32 ZEN Membership Card Partners Won two air quality awards. awards	
81	Barts Health Project	Project now completed	Full project report available on the GAP website.
82	Tower Bridge Anti Idling Project	Project due for completion in the Autumn.	

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

**No planning update available this year.**

**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**

All Monitoring stations are regularly calibrated on a fortnightly basis by Environmental Research Group at King's College London. All sites are independently audited twice a year and serviced following audits.

Millwall Park monitoring site was only installed in August 2015 so we have limited data from this station for this review.

Victoria Park monitoring station was closed in 2014 due to being relocated in the park and reopened in May 2015. Results should still be comparable to previous years despite the relocation as the station is still an equally considerable distance from a road or any other sources.

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

VCM has been used to correct TEOM data.

### **A.2 Diffusion Tube Quality Assurance / Quality Control**

- Laboratory used for tube analysis: Environmental Scientifics Group, Southmead Ind Est, Didcot, Oxon, OX11 7HP
- Preparation method used: 50%TEA, 50% Acetone
- I can confirm that the lab follows the procedures set out in the Practical Guidance
- 76% Good Precision/ 24% poor precision. WASP Results 100%
- Bias adjustment factor used : 0.79
- We have not carried out a colocation study.
- Bias adjustment factor used on tubes : 0.79
- Bias adjustment figure from Defra National Bias Adjustment Spreadsheet

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

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

**Table M. Short-Term to Long-Term Monitoring Data Adjustment – Victoria Park NO<sub>2</sub>**

<b>Site</b>	<b>Site Type</b>	<b>Annual Mean (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Period Mean (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Ratio</b>
City of London – St Johns Cass School	Background	41.78	38.14	1.0955

Site	Site Type	Annual Mean ( $\mu\text{g}/\text{m}^3$ )	Period Mean ( $\mu\text{g}/\text{m}^3$ )	Ratio
Southwark – Elephant and Castle	Background	40.85	37.11	1.1009
<b>Average</b>				1.098

**Table N. Short-Term to Long-Term Monitoring Data Adjustment – Millwall Park NO2**

Site	Site Type	Annual Mean ( $\mu\text{g}/\text{m}^3$ )	Period Mean ( $\mu\text{g}/\text{m}^3$ )	Ratio
City of London – St Johns Cass School	Background	41.78	39.70	1.0523
Southwark – Elephant and Castle	Background	40.85	36.50	1.1191
<b>Average</b>				1.0857

**Table O. Short-Term to Long-Term Monitoring Data Adjustment – Victoria Park PM10**

Site	Site Type	Annual Mean ( $\mu\text{g}/\text{m}^3$ )	Period Mean ( $\mu\text{g}/\text{m}^3$ )	Ratio
City of London – St Johns Cass School	Background	22.8	23.41	1.03
Greenwich- Eltham	Background	16.87	16.23	0.97
<b>Average</b>				1.0

**Appendix B Full Monthly Diffusion Tube Results for 2015**

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

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2015 % <sup>b</sup>	Annual Mean NO <sub>2</sub>													Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
			Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec			
1	Colombia Rd/Gossett Street	58.3	-	-	-	-	35.5	Missing	38.1	43	49.9	48.5	58.7	42.4	48.68	38.46	
2	Calvert Ave/Boundary Street	66.7	-	-	-	-	47.8	39.8	49.4	47.8	44.3	52.7	60.2	50.9	53.29	<b>42.10</b>	
3	Bethnal Green Rd/Brick Lane	66.7	-	-	-	-	56.2	56.0	61.0	57.2	49.1	56.4	62.1	40.5	59.47	<b>46.98</b>	
4	Commercial St/Calvin St	50	-	-	-	-	missing	80.4	64.6	Missing	86.7	103.2	78.5	67.4	83.82	<b>66.22</b>	
5	Whitechapel High St (KFC)	66.7	-	-	-	-	80.8	80.3	95.0	78.3	87.7	72.2	105.1	74.8	91.44	<b>72.24</b>	
6	Mansell St	58.3	-	-	-	-	Missing	97.5	94.2	88.7	98.6	104.7	109.2	97.1	106.06	<b>83.79</b>	
7	St Katherine's Way	66.7	-	-	-	-	40.4	34.9	32.0	32.5	43.9	46	50	34.1	42.56	33.62	
8	Wapping High St/Sampson St	66.7	-	-	-	-	37.8	35.1	36.3	35.9	45.2	53.2	45.9	36.8	44.24	34.95	
9	East Smithfield	83.3	-	-	122.1	102.2	99.5	113.4	106.3	103.1	99.2	108.2	126.2	120	116.07	<b>91.70</b>	
10	Stepney Way/Turner Street	83.3	-	-	53.3	42.7	38.2	37.8	30.5	37.7	51.9	56.1	52.7	47.7	47.33	37.39	

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2015 % <sup>b</sup>	Annual Mean NO <sub>2</sub>													Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
			Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec			
11	Brick Lane/Princelet St	58.3	-	-	-	-	Missing	42.5	44.8	46	58.9	60	49.3	48.2	53.75	<b>42.47</b>	
12	Buckfast St/Bethnal Green Rd	66.7	-	-	-	-	44.7	48.1	44.1	44.2	57	52.6	59.8	45.5	53.71	<b>42.43</b>	
13	Whitechapel Road	83.3	-	-	64.5	64.2	44.8	46.2	40.5	36.5	64.5	72.1	50.7	43.6	55.66	<b>43.97</b>	
14	Warner Place/Hackney Rd	58.3	-	-	-	-	44.3	45.6	Missing	44.5	56.2	51.3	56.7	52.6	53.18	<b>42.01</b>	
15	St Katherines Way	83.3	-	-	53.2	60	45.4	49.4	39.6	54.4	64.5	72.7	57.4	51.2	57.79	<b>45.66</b>	
16	Paradise Row/Bethnal Green Rd	58.3	-	-	-	-	45.2	54.6	51.6	58.6	53.7	62.6	72.8	Missing	62.83	<b>49.64</b>	
17	Finnis St/Three Colts Lane	58.3	-	-	-	-	34.2	31.5	35.2	36.6	44.7	52.1	50.3	split cap	44.80	35.40	
18	Sidney St/Mile End Rd	58.3	-	-	-	-	Missing	42.8	54.4	53.6	53.3	63.3	70	53.7	60.12	<b>47.49</b>	
19	Philpot St/Commercial Road	66.7	-	-	-	-	60.7	44.9	65.3	52.2	69.3	79.3	75.9	59.1	68.72	<b>54.29</b>	
20	Dellow St/The Highway	66.7	-	-	-	-	87.0	74.2	83.0	72.2	72.7	67.9	97.3	88.9	87.23	<b>68.91</b>	
21	Tower Hill	75	-	-	97.3	90	missing	86.1	73.3	92.1	98.4	118.3	78.5	51.4	91.19	<b>72.04</b>	
22	Wapping Wall/Garnet St	58.3	-	-	-	-	40.1	34.6	34.0	35.4	50.4	Missing	42.5	36.8	42.71	33.74	
23	Brodlove Lane	66.7	-	-	-	-	54.4	54.0	55.5	49.7	57.6	55.4	62.2	50.4	59.57	<b>47.06</b>	
24	Jubilee Street/Commercial Rd	33.3	-	-	-	-	64.5	Missing	Missing	67.1	84.2	96.6	Missing	Missing	86.38	<b>68.24</b>	

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2015 % <sup>b</sup>	Annual Mean NO <sub>2</sub>													Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
			Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec			
25	Cavell St/Stepney Way	66.6	-	-	-	-	46.4	50.5	40.9	45.7	48.3	58.2	70.3	58.4	56.79	<b>44.86</b>	
26	Hannibal Rd/Mile End Rd	41.7	-	-	-	-	74.7	55.1	87.7	42.2	Missing	Missing	136.9	Roadworks	90.58	<b>71.56</b>	
27	Tower Gardens	83.3	-	-	114.2	103.7	90.5	101.9	85.9	108.8	163.0	136.3	117.2	97.2	118.02	<b>93.24</b>	
28	Bonner Road	58.3	-	-	-	-	Missing	41.6	45.3	42.3	52.6	57.7	46.9	37.6	49.80	39.34	
29	Grove Rd/Old Ford Rd	66.7	-	-	-	-	44.1	46.9	48.1	51.6	58.5	64.2	68.8	56.9	59.55	<b>47.05</b>	
30	Fieldgate Street	58.3	-	-	-	-	62.7	72.0	56.2	Missing	70.9	67.1	56.6	55.7	66.81	<b>52.78</b>	
31	Whitechapel Market	50	-	-	-	-	72.7	74.2	62.0	87.1	Missing	Missing	100.6	87.9	89.79	<b>70.94</b>	
32	Globe Rd/Mile End Rd	58.3	-	-	-	-	65.5	60.3	Missing	50	71.9	77.5	69.7	67.6	70.04	<b>55.33</b>	
33	Stepney Green	41.7	-	-	-	-	29.4	Missing	Missing	Missing	42.5	48.6	52.2	37.1	42.97	33.94	
34	Mansell Street	66.7	-	-	98.4	missing	72.5	73	missing	75.1	76.9	80.2	81.0	70.2	82.33	<b>65.04</b>	
35	New Road	83.3	-	-	80.4	70.4	69.7	76.6	55.1	62.1	75.6	82.9	95.8	70.3	77.95	<b>61.58</b>	
36	Locksley St/St Paul's Way	50	-	-	-	-	33.2	19.7	23.5	41.9	56.3	Missing	Missing	35.7	39.05	30.85	
37	Rhodeswell Rd	66.7	-	-	-	-	32.7	31.8	28.8	45.3	47.2	57.1	44.2	40.7	44.46	35.12	
38	Ben Johnson Road	41.7	-	-	-	-	40.8	Missing	41.0	48.4	Missing	Missing	61.4	43.2	52.03	<b>41.11</b>	
39	Harford St/Mile End Rd	66.7	-	-	-	-	41.0	39.1	38.9	52.5	65.9	65.3	54.5	41.6	54.09	<b>42.73</b>	
40	Tower Gardens	75	-	-	88.7	95.4	67.9	missing	86.1	84.6	82.1	97.0	76.5	77.4	87.91	<b>69.45</b>	
41	Ford Close/Roman Rd	66.7	-	-	-	-	41.6	43.2	38.8	39.9	63.1	68.4	50.8	36.7	51.88	<b>40.98</b>	

Site ID	Valid data capture for monitoring period % <sup>a</sup>	Valid data capture 2015 % <sup>b</sup>	Annual Mean NO <sub>2</sub>													
			Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual mean – raw data <sup>c</sup>	Annual mean – bias adjusted <sup>c</sup>
42	Victoria Park	41.7	-	-	-	-	19.2	tube broken	18.8	27.8	30	34.4	Missing	Missing	29.24	23.10
43	Victoria Park	16.7	-	-	-	-	21.5	Missing	Missing	25.9	Missing	Missing	Missing	Missing	28.91	22.84
44	Parnell Rd/Old Ford Rd	58.3	-	-	-	-	35.6	39.2	38.6	Missing	52.7	57.9	56.9	48.6	49.90	39.42
45	St Stephen's Rd/Tredeggar Rd	66.7	-	-	-	-	31.8	44.1	51.3	41.7	63.8	70.6	57.1	45.6	55.06	<b>43.50</b>
46	Rhondda Grove/Mile End Rd	58.3	-	-	-	-	Missing	26.9	47.3	38.8	36	46.9	46.2	45.8	44.25	34.96
47	Wentworth Mews	66.7	-	-	-	-	41.3	55.4	57.0	53.8	73.7	79.1	51.4	55	63.30	<b>50.00</b>
48	Ackroyd Drive	66.7	-	-	-	-	47.7	47.6	51.5	43.3	57	64.2	55.9	51.8	56.83	<b>44.89</b>
49	Dod St/Burdett Rd	58.3	-	-	-	-	Missing	34.0	44.5	36.7	51.1	47	45.2	46	46.81	36.98
50	Rich Street	58.3	-	-	-	-	Missing	45.9	49.9	39.3	55.3	60.2	51	40.2	52.54	<b>41.51</b>
51	Watney Market	58.3	-	-	-	-	40.7	32.4	39.7	39.9	50.9	54.9	Missing	43.7	47.57	37.58
52	Wick Lane/Autumn St	66.7	-	-	-	-	41.8	44.2	57.6	45.1	58.9	52.7	53.3	53.2	55.17	<b>43.59</b>
53	Fairfield Road/Tredeggar Road	58.3	-	-	-	-	39.7	Missing	68.1	57.7	68.7	74.9	63.6	53.1	65.57	<b>51.80</b>
54	Bow Rd /Glebe Terrace	58.3	-	-	-	-	66.5	67.0	79.8	72.7	83.2	92.3	76.2	Missing	84.65	<b>66.87</b>
55	TH Cemetery Park	66.7	-	-	-	-	24.0	27.7	30.7	23.8	31.3	37.4	33.5	26.3	54.27	<b>42.88</b>
56	Bow Common Lane/St Paul's Way	50	-	-	-	-	50.3	46.3	39.0	41.2	Missing	Missing	58	45.8	52.00	<b>41.08</b>

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			Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec			
57	Turner Street	83.3	-	-	48	49.3	36	32.8	35.8	41.6	40.7	57.6	54.1	43.9	46.40	36.66	
58	Dolphin Lane	66.7	-	-	-	-	35.9	32.8	33.0	38.6	38.5	39	52.4	40.3	42.11	33.27	
59	Westferry Road/Limehouse Link jct	41.7	-	-	-	-	44.4	45.7	41.0	Missing	Missing	Missing	56.4	45.4	50.35	39.78	
60	Cascades, Westferry Road	58.3	-	-	-	-	41.6	Missing	43.6	51.6	54.7	58.5	59.7	52.3	55.75	<b>44.04</b>	
61	Bow Rd/Alfred St	66.7	-	-	-	-	35.8	39.8	43.3	46.5	46.4	52.7	71.2	57.7	53.35	<b>42.15</b>	
62	Mast House Terrace	66.7	-	-	-	-	31.6	30.7	33.1	38.5	38.8	46.7	40.5	35.7	40.09	31.67	
63	Millwall Park	58.3	-	-	-	-	25.6	Missing	24.8	31.1	31.5	37	36.6	38.2	34.62	27.35	
64	Limeharbour	58.3	-	-	-	-	39.8	40.7	Missing	49.5	55.2	69.3	54	38.8	52.59	<b>41.55</b>	
65	Manchester Road/East Ferry Road	58.3	-	-	-	-	Missing	31.6	30.4	39.6	40.8	48.5	29.1	32.6	38.83	30.67	
66	Millwall Park	41.7	-	-	-	-	Missing	missing	Missing	30.8	33	35.7	32.3	33.7	34.56	27.30	
67	Seyssel Street	58.3	-	-	-	-	Missing	33.1	32.1	40.7	43.9	49.5	33.6	35.2	41.21	32.56	
68	Manchester Road/Ollife Street	58.3	-	-	-	-	31.0	35.0	33.8	Missing	32	47.7	30.3	29.6	36.25	28.64	
69	Lawnhouse Close	50	-	-	-	-	41.0	40.7	Missing	36.1	53.3	57.8	Missing	80.8	56.11	<b>44.32</b>	
72	Prestons Road/Coldharbour	58.3	-	-	-	-	-	43.2	46.5	54	50.2	52.2	48.6	42.8	51.88	<b>40.98</b>	

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			Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec			
73	John Smith Mews	66.7	-	-	-	-	40.4	37.0	37.4	41.3	44.3	44.6	53.5	33.1	44.97	35.53	
74	Stepney Way/Hospital	83.3	-	-	53.7	41.4	36.7	37.2	36.3	42.8	53.0	56.3	49.4	45.8	47.75	37.72	
75	Hale Street	58.3	-	-	-	-	32.1	Missing	31.3	32.8	40.2	46.5	37.5	37.4	39.70	31.36	
76	Chrip Street/E India Dock Road	66.7	-	-	-	-	58.9	47.3	54.4	70.3	64.6	57.2	62.4	60.8	64.54	<b>50.99</b>	
77	Morris/Barchester Street	50	-	-	-	-	36.4	31.7	37.5	45.2	Missing	Missing	48.1	40.2	44.31	35.01	
78	Devons Road / Campbell Road	66.7	-	-	-	-	52.8	49.2	52.4	52.7	63.2	61.4	58.2	53.1	60.08	<b>47.46</b>	
79	Hatfield Terrace/Fairfield Road	58.3	-	-	-	-	29.0	32.3	21.8	Missing	45.7	48.1	39.6	38.9	38.67	30.55	
80	Wrexham Road	50	-	-	-	-	39.8	Missing	40.7	49	66.9	64.8	broken	39.8	55.03	<b>43.48</b>	
81	Bromley High Street/ St Leonards	58.3	-	-	-	-	-	33.4	35.4	34.5	52.2	60.8	48.1	38.6	46.58	36.79	
82	Devas Street /Devons road	58.3	-	-	-	-	-	42.6	49.3	55.3	65.5	64.8	67.3	43.1	59.63	<b>47.10</b>	
83	Zetland Street/A12	66.7	-	-	-	-	62.8	76.2	68.9	85.9	96.6	103	63.1	62	83.88	<b>66.27</b>	
84	Blair Street (End of Street)	58.3	-	-	-	-	56.7	47.8	Missing	59.5	60.7	61	74.2	75	65.86	<b>52.03</b>	
85	Portree Street	66.7	-	-	-	-	41.8	44.3	52.9	56.7	63	62.3	63.1	62.6	60.58	<b>47.86</b>	
86	Newport Avenue	66.7	-	-	-	-	38.2	29.1	35.4	30	47.5	46.2	45.8	31.5	41.19	32.54	

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			Jan	Feb	March	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec			
87	Stepney Way	75	-	-	58.7	44.4	43	39	40.6	Missing	54.7	54.2	59.4	61.1	52.24	<b>41.27</b>	
89	Thames Path Storers Quay	8.3	-	-	-	-	-	-	-	-	-	-	-	30.7	30.09	23.77	
90	Sextant Avenue	8.3	-	-	-	-	-	-	-	-	-	-	-	20.8	20.38	16.10	

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%

**All tubes have been annualised**