2013 Air Quality Action Plan Progress Report for London Borough of Lewisham

In fulfillment of Part IV of the Environment Act 1995
Local Air Quality Management

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Executive Summary

The Council has a statutory duty under the provisions of the Environment Act 1995 to review and assess air quality within the Borough. This combined Air Quality Action Plan (AQAP) Progress Report summarises the results of air quality monitoring across the London Borough of Lewisham and progress with the AQAP during the 2012 calendar year.

The automatic monitoring results of Nitrogen Dioxide in the Borough for 2012 show a small decrease in the annual mean concentration, although all monitoring stations continue to exceed the national air quality objective for this pollutant. The diffusion tube results do not reflect such a clear trend.

Monitoring of Particulate Matter shows that the annual concentration has remained fairly static over the last 5 years and is below the air quality objective.

In summary, concentrations within the AQMAs still exceed the objectives for nitrogen dioxide and the AQMAs should remain. In addition, concentrations of the objectives for nitrogen dioxide are occurring alongside the B218 and B238 roads. A Detailed Assessment was carried out in 2011 and a new AQMA including these roads was to be designated in August 2013.

Concentrations at all other locations outside of the AQMAs, existing and the sixth to be declared are all below the objectives at relevant locations. Therefore there is no need to proceed to a Detailed Assessment.

Lewisham continues to make progress with the measures listed on it’s action plan. and will prepare for the submission of the 2014 Progress Report, which will complete round 5 of the review and assessment timetable.

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1 Introduction

1.1 Description of Local Authority Area

The London Borough of Lewisham is situated in southeast London. It is bordered to the west by Southwark, to the east by Greenwich and to the south by Bromley. It has a small frontage on to the River Thames in the north. It is an inner London Borough comprising a densely populated area with an estimated population in 2010 of approximately 261,600. The Borough is mostly residential with areas of employment around the main commercial centres of Lewisham, New Cross, Catford, Deptford and Sydenham. However, compared to other London boroughs, Lewisham is relatively green with approximately one fifth of the borough being open space. The Borough has a broad socio-economic range combining a mix of wealthier wards and wards with more concentrated areas of deprivation. Some of the most deprived wards are New Cross, Evelyn, Deptford and Downham. In these areas health and the quality of housing are poorer.

The main sources of air pollutants are the busy and congested roads. Only 31% of the borough workforce are employed in the borough (Lewisham Employment Land Study, 2008) with the majority travelling outside the borough to work. 69 per cent of local people commute out of Lewisham to work. The main roads that run through the Borough include the A2, A20, A21 and the South Circular (A205). There are currently 68 minor industrial processes that are regulated by the Council and one Part A installation (SELCHP) regulated by the Environment Agency.

1.2 Purpose of Progress Report

This report fulfils the requirements of the Local Air Quality Management process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where exceedences are

considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

Progress Reports are required in the intervening years between the three-yearly Updating and Screening Assessment reports. Their purpose is to maintain continuity in the Local Air Quality Management process.

They are not intended to be as detailed as Updating and Screening Assessment Reports, or to require as much effort. However, if the Progress Report identifies the risk of exceedence of an Air Quality Objective, the Local Authority (LA) should undertake a Detailed Assessment immediately, and not wait until the next round of Review and Assessment.

1.3 Air Quality Objectives

The air quality objectives applicable to LAQM **in England** are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043), and are shown in Table 1.1. This table shows the objectives in units of micrograms per cubic metre µg/m^3 (milligrammes per cubic metre, mg/m^3 for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

Table 1.1 Air Quality Objectives included in Regulations for the purpose of LAQM in England

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m^3	Running annual mean	31.12.2003
	5.00 µg/m^3	Annual mean	31.12.2010
1,3-Butadiene	2.25 µg/m^3	Running annual mean	31.12.2003
Carbon monoxide	10 mg/m^3	Running 8-hour mean	31.12.2003
Lead	0.50 µg/m^3	Annual mean	31.12.2004
	0.25 µg/m^3	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m^3 not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m^3	Annual mean	31.12.2005
Particulate Matter (PM_{10}) (gravimetric)	50 µg/m^3, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m^3	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m^3, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m^3, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m^3, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

1.4 Summary of Previous Review and Assessments

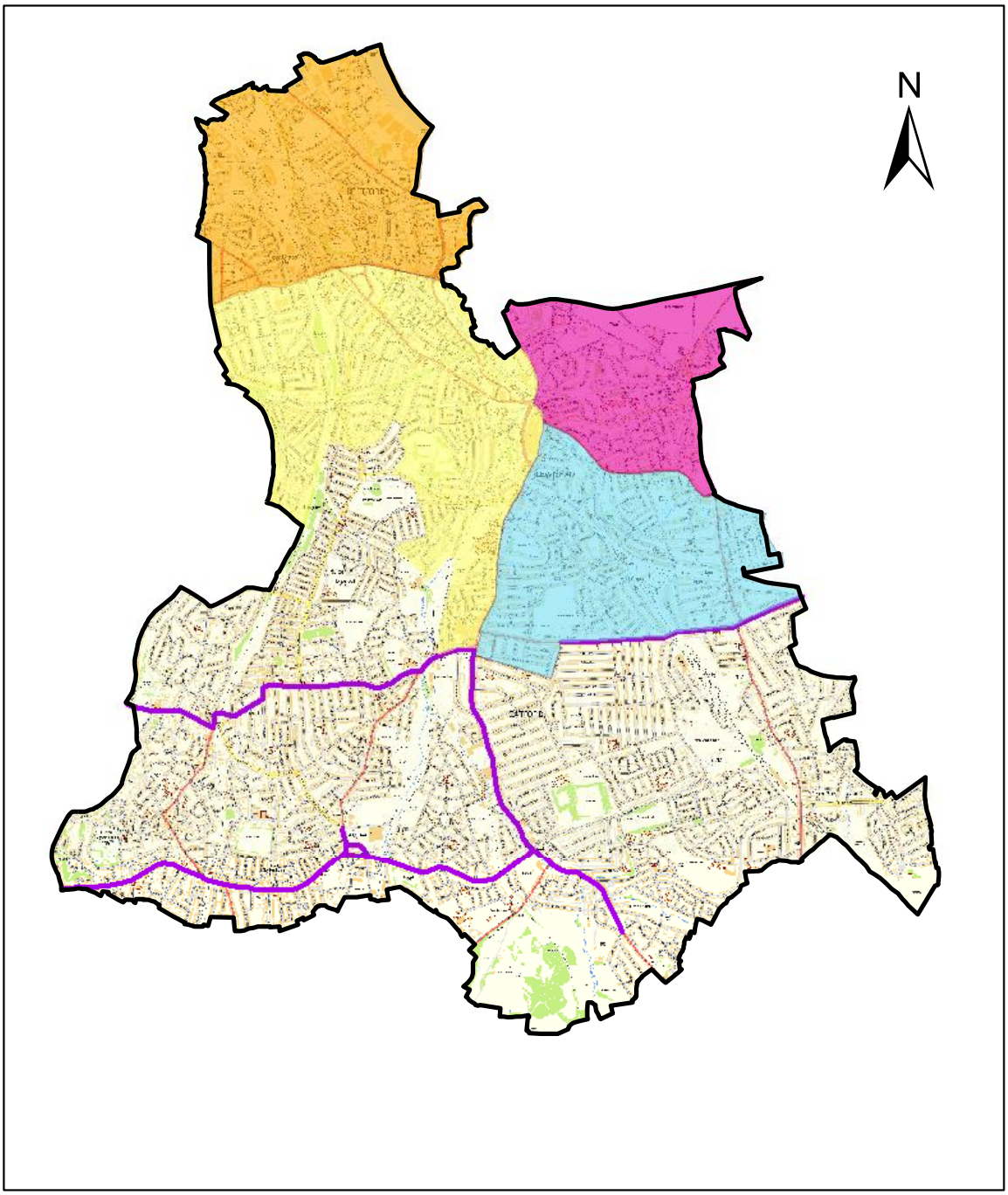
London Borough of Lewisham (the Council) undertook previous rounds of review and assessment of air quality in line with the system of Local Air Quality Management reporting requirements. From the first round, exceedences of the National Air Quality Objectives for nitrogen dioxide (NO_2) and particulates (PM_{10}) were identified. The exceedences were greatest close to busy roads demonstrating the contribution that comes from motor vehicles. Consequently, five Air Quality Management Areas (AQMAs) were declared in 2001 and these are shown in Figure 1.1 below. The AQMAs consist of four areas in the north of the borough together with a series of ribbon roads in the south.

Subsequent Review and Assessments have been carried out, the most recent of which are listed in Table 1.2 below. These reports concluded that the designation of the AQMAs should remain, although exceedences of the PM_{10} objectives have not been observed for several years. Exceedences of the objectives for NO_2 continue, however, and the potential for additional areas that fail to meet the objectives outside of the existing AQMAs was identified in 2009. Consequently, a Detailed Assessment was carried out in 2011 which used air quality modelling to determine the extent of the area of any exceedences. Of the roads considered, the modelling exercise confirmed that exceedences of both objectives for NO_2 are likely close to the B218 and B238 roads. Following public consultation, a further AQMA will now be declared. This will cover the area of modelled exceedences and beyond in order to align with boundaries of other AQMAs and major roads.

Table 1.2 List of Recent Reports submitted by London Borough of Lewisham under the system of Local Air Quality Management

Year	Report(s)
2012	Updating and Screening Assessment
2011	Detailed Assessment
2011	Progress Report
2010	Progress Report
2009	Updating and Screening Assessment
2008	Progress Report

Figure 1.1 Map of existing AQMA Boundaries



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2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

The Council undertakes automatic monitoring at four fixed sites as detailed below:

- Lewisham 1 – an urban background site located in Catford which started operating in 1996. This site monitors nitrogen dioxide, sulphur dioxide and ozone.
- Lewisham 2 – located approximately 6m from the roadside of the A2 New Cross Road. The site monitors nitrogen dioxide, sulphur dioxide, PM_{10} and $PM_{2.5}$ using FDMS.
- Lewisham 3 – classed as an industrial site, the monitor is located on the northern edge of a residential area and approximately 10m south of a strip of waste transfer sites. The site started monitoring in Feb 2010 and measures PM_{10} using a BAM.
- Lewisham 4 – a roadside site, the monitor is located approximately 7m from the A20 Loampit Vale. This is close to new high rise developments and where further development is scheduled. The site only started collecting data in July 2012 so results for 2012 are based on approximately 6 months' data. It measures nitrogen dioxide and PM_{10} using a TEOM.

Details of the sites are presented in Table 2.1 and their locations are shown in Figure 2.1. All four sites are part of the London Air Quality Network (LAQN) and therefore the standards of QA/QC are similar to those of the government's AURN sites. Regular calibrations are carried out, with subsequent data ratification undertaken by ERG at King's College London. The QA/QC process for the New Cross station includes the conversion of PM_{10} data from TEOM (Tapered Element Oscillating Microbalance) analyser to gravimetric reference equivalent using the VCM (Volatile Correction Method). No conversion is required for the PM_{10} data from the Mercury Way monitoring site as the pollutant is measured using a BAM (Beta Attenuation Mass Monitor).

Figure 2.1 Map of Automatic Monitoring Sites

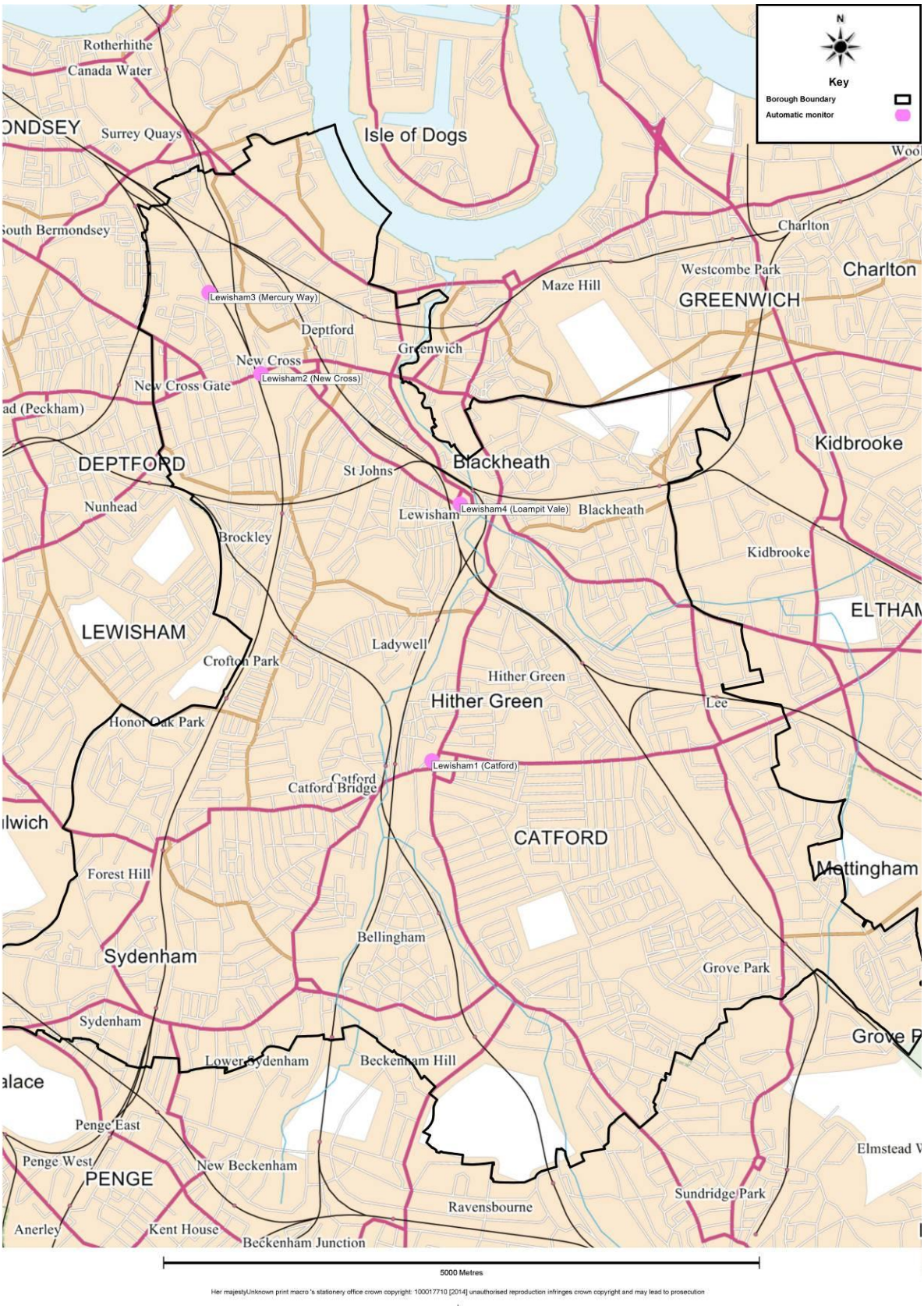


Table 2.1 Details of Automatic Monitoring Sites

Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Inlet Height (m)	Pollutants Monitored	In AQMA?	Monitoring Technique	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
Lewisham1 (Catford)	Urban background	537675	173689	3.0	NO2 SO2 O3	Y	Chemiluminescent UV fluorescence UV photometer	Y*	3m	N
Lewisham2 (New Cross)	Roadside	536241	176932	2.5m	NO2 SO2 PM10 PM2.5	Y	Chemiluminescent UV fluorescence FDMS FDMS	Y	6m	Y
Lewisham3 (Mercury Way)	Industrial	535806	177612	2m	PM10	Y	BAM	Y	2m	Y
Lewisham4 (Loampit Vale)	Roadside	537912	175838	2.5m	NO2 PM10	Y	Chemiluminescent TEOM	Y	7m	Y

* The monitor is located in a shopping precinct in which market stall holders are regularly present. Therefore, there is relevant exposure to all except the annual mean objectives.

2.1.2 Non-Automatic Monitoring Sites

In 2012, the Council carried out monitoring of NO_2 using diffusion tubes at 32 different locations. A project to involve schools in the monitoring of NO_2 using diffusion tubes finished at the end of 2011 but monitoring at 7 of the school sites was continued during 2012. One diffusion tube is used as a travel blank. Details of the locations of all diffusion tubes are provided in Table 2.2 below.

Another location is a triplicate site where the tubes are collocated with the automatic monitoring station on New Cross Road. The diffusion tubes are located within 0.5m of the inlet sampler of the chemiluminescent analyser at the continuous site. The study compared equivalent exposure periods, although some of the continuous results are provisional. The results from the study indicate that there was good overall precision for the diffusion tube monitoring and also good overall data capture for the continuous analyser. However, there was 1 month with poor precision and 1 month with poor data capture.

The diffusion tubes are supplied and analysed by Gradko International Ltd, a UKAS accredited laboratory, using a preparation method of 50% TEA in acetone. Gradko participate in the Workplace Analysis Scheme for Proficiency (WASP). In the most recent rounds for which performance data is available (R113 – R120), Gradko International achieved 100% satisfactory results in each round except R115, for which 37.5% of results were subsequently determined to be satisfactory.

The local bias adjustment factor calculated from the triplicate tubes collocated with the automatic monitoring station at New Cross is 0.79. The data used in this calculation and the results can be seen in Appendix A. In order to err on the side of caution, this factor has not been used. Instead, the diffusion tube results presented in this report have been bias adjusted using the national factor for the relevant laboratory and preparation method. This has been obtained from the National Diffusion Tube Bias Adjustment Factor Spreadsheet Version 03/13 and gives a factor of 1.01 based on 18 studies.

Figure 2.2 Map of Non-Automatic Monitoring Sites

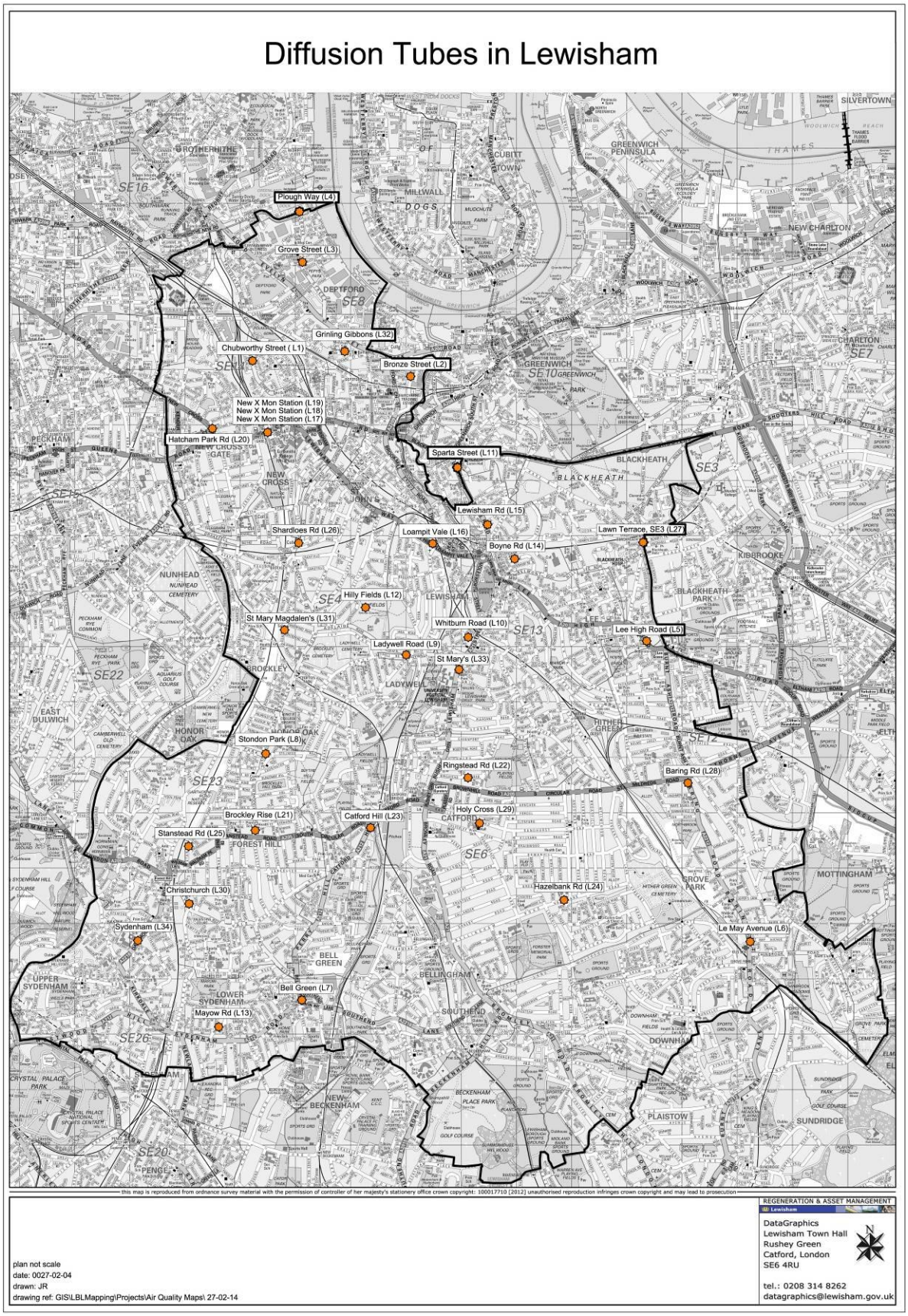


Table 2.2 Details of Non- Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
L1	Chubworthy St	UB	536109	177580	NO_2	Y	N	Y	2	N/A
L2	Bronze St	UB	537540	177439	NO_2	Y	N	Y	6	N/A
L3	Grove St	UB	536561	178471	NO_2	Y	N	Y	2	N/A
L4	Plough Way	UB	536534	178926	NO_2	Y	N	Y	2	N/A
L5	Lee High Rd	R	539678	175050	NO_2	Y	N	Y	5	Y
L6	Le May Ave	R	540615	172337	NO_2	N	N	Y	5	Y
L7	Bell Green	R	536556	171810	NO_2	Y	N	Y	3	Y
L8	Stondon Park	R	536229	174032	NO_2	N	N	Y	5	Y
L9	Ladywell Rd	R	537500	174925	NO_2	Y	N	Y	3	Y
L10	Whitburn Rd	R	538062	175085	NO_2	Y	N	Y	1	Y
L11	Sparta St	R	537965	176617	NO_2	Y	N	Y	3	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
L12	Hilly Fields	UB	537132	175353	NO_2	Y	N	N	60	N/A
L13	Mayow Rd	UB	535804	171567	NO_2	N	N	Y	5	N/A
L14	Boyne Rd	UB	538482	175792	NO_2	Y	N	Y	1	N/A
L15	Lewisham Rd	R	538237	176101	NO_2	Y	N	Y	10	Y
L16	Loampit Vale	R	537740	175930	NO_2	Y	N	N	1.5	Y
L17	New Cross Monitoring Station	R	536246	176934	NO_2	Y	Y	Y	6	Y
L18	New Cross Monitoring Station	R	536246	176934	NO_2	Y	Y	Y	6	Y
L19	New Cross Monitoring Station	R	536246	176934	NO_2	Y	Y	Y	6	Y
L20	Hatcham Park Rd	R	535746	176969	NO_2	Y	N	Y	4	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
L21	Brockley Rise	R	536133	173341	NO_2	N	N	Y	3	Y
L22	Ringstead Rd	UB	538060	173816	NO_2	Y	N	Y	0.5	N/A
L23	Catford Hill	R	537178	173365	NO_2	Y	N	N	0.5	Y
L24	Hazelbank Rd	UB	538930	172713	NO_2	N	N	Y	2	N/A
L25	Stanstead Rd	UB	535530	173198	NO_2	N	N	Y	10	N/A
L26	Shardloes Rd	R	536527	175935	NO_2	Y	N	Y	0.5	Y
L27	Lawn Terrace	UC	539645	175941	NO_2	Y	N	Y	0.5	Y
L28	Baring Rd	R	540051	173769	NO_2	Y	N	Y	0.5	Y
L29	Holy Cross, Sangley Rd	R	538165	173406	NO_2	Y	N	Y	5	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
L30	Christchurch, Perry Vale	R	535535	172679	NO_2	N	N	Y	5	Y
L31	St Mary Magdalen's, Howson Rd	UB	536399	175150	NO_2	N	N	Y	2	N/A
L32	Grinling Gibbons, Clyde St	UB	536944	177665	NO_2	Y	N	Y	2	N/A
L33	St Mary's, Lewisham High St	R	537979	174792	NO_2	Y	N	N	2	Y
L34	Sydenham, Dartmouth Rd	UB	535071	172346	NO_2	N	N	Y	5	N/A

2.2 Comparison of Monitoring Results with Air Quality Objectives

The data from the pollution monitors are set out in the sections below and the results compared to the relevant air quality objectives. Where an objective has been exceeded, the result is shown in bold type. Where an objective has been met but the result is borderline, the figure is in italics. Each of the pollutants for which monitoring data is available is considered in turn.

Nitrogen Dioxide (NO_2)

Automatic Monitoring Data

The results for the continuous sites that measure nitrogen dioxide are shown in Table 2.3 below. The results are for the years 2008 to 2012. All data is fully ratified.

Table 2.3 Results of Automatic Monitoring for NO_2: Comparison with Annual Mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2012 % [b]	Annual Mean Concentration (µg/m^3)				
					2008	2009	2010	2011	2012
Lewisham 1 (Catford)	Urban Background	Y (AQMA 3)	98	98	**53**	**57**	**55**	**51**	**50**
Lewisham 2 (New Cross)	Roadside	Y (AQMA 3)	97	97	**64**	**64**	**59**	**51**	**50**
Lewisham 4 (Loampit Vale)	Roadside	Y (AQMA 3)	95	44	n/a	n/a	n/a	n/a	**64** [c]

Exceedence of the NO_2 annual mean AQS objective of 40µg/m^3 shown in bold

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

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

[c] Mean is "annualised" as in Box 3.2 of TG(09) - See Appendix A

Figure 2.3 Trends in Annual Mean NO_2 Concentrations Measured at Automatic Monitoring Sites within LB Lewisham

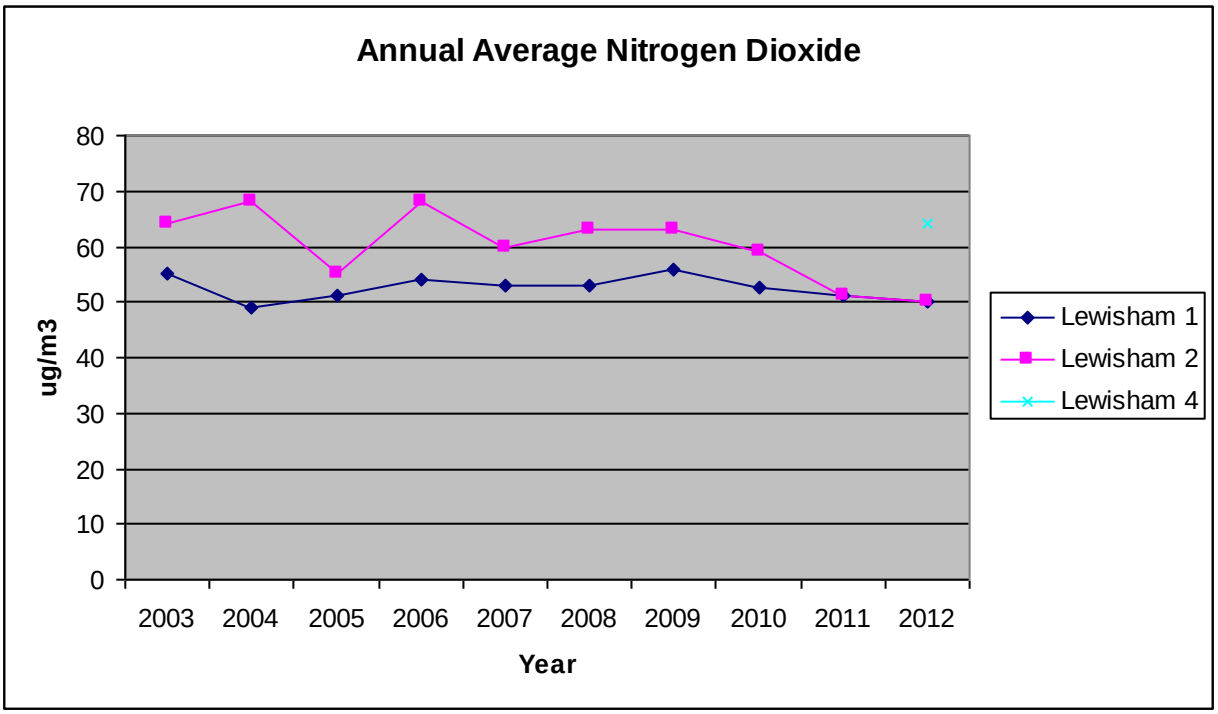


Fig 2.3 shows longer term trends at our automatic monitoring sites than shown by the data in Table 2.3. This demonstrates that, although there has been a gradual decline in annual concentrations over recent years, the longer term trend is fairly stable, particularly at the Catford site. The New Cross Road site, which is a roadside site, has now recorded the same annual average concentrations as the urban background site in Catford for the past 2 years. Although monitoring only began at the Loampit Vale site in July 2012, the intention is to maintain the site for several years so it has been included in the graph ready for future reporting.

Table 2.4 Results of Automatic Monitoring for NO_2: Comparison with 1-hour Mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2012 % [b]	Number of Hourly Means > 200µg/m^3				
					2008	2009	2010	2011	2012 [c]
Lewisham 1 (Catford)	Urban Background	Y (AQMA 3)	98	98	1	5	1	0	2
Lewisham 2 (New Cross)	Roadside	Y (AQMA 3)	97	97	5	9	0	0	0
Lewisham 4 (Loampit Vale)	Roadside	Y (AQMA 3)	95	44	n/a	n/a	n/a	n/a	16 (221.2)

In bold, exceedence of the NO_2 hourly mean AQS objective (200µg/m^3 – not to be exceeded more than 18 times per year)

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

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

[c] Data capture for full calendar year was less than 90%, so the 99.8th percentile of hourly means is shown in brackets

Diffusion Tube Monitoring Data

Table 2.5 Results of NO_2 Diffusion Tubes 2012

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjusted using National Adjustment factor of 1.01[a]
L1	Chubworthy St	R	Y	N	100	*37.8*
L2	Bronze St	UB	Y	N	92	31.0
L3	Grove St	UB	Y	N	100	*37.9*
L4	Plough Way	UB	Y	N	100	34.9
L5	Lee High Rd	R	Y	N	100	*39.0*
L6	Le May Ave	UB	N	N	100	*37.5*
L7	Bell Green	R	Y	N	100	**53.4**
L8	Stondon Park	R	N	N	100	**44.8**
L9	Ladywell Rd	R	Y	N	100	**40.6**
L10	Whitburn Rd	R	Y	N	92	**44.0**
L11	Sparta St	R	Y	N	100	**40.0**
L12	Hilly Fields	UB	Y	N	100	33.7
L13	Mayow Rd	UB	N	N	100	32.3

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjusted using National Adjustment factor of 1.01[a]
L14	Boyne Rd	UB	Y	N	100	34.5
L15	Lewisham Rd	R	Y	N	100	**44.3**
L16	Loampit Vale	R	Y	N	100	**55.0**
L17, L18 and L19	New Cross Monitoring Station	R	Y	Triplicate and Co-located	100	**59.2**[b]
L20	Hatcham Park Rd	R	Y	N	83	**45.4**
L21	Brockley Rise	R	N	N	100	**54.0**
L22	Ringstead Rd	UB	Y	N	100	34.3
L23	Catford Hill	R	Y	N	92	**56.5**
L24	Hazelbank Rd	UB	N	N	92	35.1
L25	Stanstead Rd	UB	N	N	100	28.3
L26	Shardloes Rd	R	Y	N	100	**48.0**

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2012 (%)	2012 Annual Mean Concentration (µg/m^3) - Bias Adjusted using National Adjustment factor of 1.01[a]
L27	Lawn Terrace	UC	Y	N	100	*37.3*
L28	Baring Rd	R	Y	N	100	**59.3**
L29	Holy Cross, Sangley Rd	R	Y	N	92	32.1
L30	Christchurch, Perry Vale	R	N	N	92	31.1
L31	Howson Rd	UB	N	N	92	25.4
L32	Clyde St	UB	Y	N	100	29.6
L33	St Mary's, Lewisham High St	R	Y	N	100	**51.4**
L34	Dartmouth Rd	UB	N	N	75	30.4

Exceedence of the NO_2 annual mean AQS objective of 40µg/m^3 shown in bold.

Where the annual mean > 60µg/m^3, indicating a potential exceedence of the NO_2 hourly mean AQS objective, the result is underlined.

[a] As set out in 2.1.2, Lewisham considers it more appropriate to use the National Bias Adjustment Factor of 1.01

[b] This figure is the mean concentration of 3 tubes that are located together. The full results are included in Appendix B

Table 2.6 Results of NO_2 Diffusion Tubes (2008 to 2012)

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2008 (Bias Adjustment Factor = 0.94)	2009 (Bias Adjustment Factor = 0.97)	2010 (Bias Adjustment Factor = 1.03)	2011 (Bias Adjustment Factor = 0.94)	2012 (Bias Adjustment Factor = 1.01)
L1	R		--	--	--	36.4	37.8
L2	UB		--	--	--	29.7	31.0
L3	UB		--	--	--	34.7	37.9
L4	UB		--	--	--	37.2	34.9
L5	R		--	--	--	36.6	39.0
L6	UB		--	--	--	35.9	37.5
L7	R		--	--	--	**48.3**	**53.4**
L8	R		--	--	--	**44.5**	**44.8**
L9	R		--	--	--	39.9	**40.6**
L10	R		--	--	--	**43.2**	**44.0**
L11	R		--	--	--	**44.9**	**40.0**
L12	UB		--	--	--	30.7	33.7
L13	UB		--	--	34.9	29.7	32.3
L14	UB		34.5	35.0	33.3	33.5	34.5
L15	R		**44.9**	**48.2**	**47.8**	**43.6**	**44.3**
L16	R		**57.3**	**58.2**	**61.3**	**48.7**	**55.0**
L17, L18 & L19	R		**65.2**	**69.3**	**75.2**	**75.4**	**59.2**
L20	R		--	--	**54.1**	**42.4**	**45.4**
L21	R		**55.2**	**55.4**	**60.9**	**52.6**	**54.0**
L22	UB		34.4	37.2	33.1	35.4	34.3
L23	R		**53.7**	**56.0**	**56.1**	**54.0**	**56.5**
L24	UB		--	30.2	33.4	29.0	35.1
L25	UB		--	26.6	30.8	28.3	28.3

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2008 (Bias Adjustment Factor = 0.94)	2009 (Bias Adjustment Factor = 0.97)	2010 (Bias Adjustment Factor = 1.03)	2011 (Bias Adjustment Factor = 0.94)	2012 (Bias Adjustment Factor = 1.01)
L26	R		--	**58.8**	**53.8**	**49.7**	**48.0**
L27	UC		--	39.6	38.5	34.6	37.3
L28	R		--	**48.1**	**60.7**	**51.9**	**59.3**
L29	R		--	30.7	35.1	29.9	32.1
L30	R		--	30.3	33.0	27.8	31.1
L31	UB		--	28.1	30.7	23.2	25.4
L32	UB		--	32.3	35.3	29.7	29.6
L33	R		--	**59.5**	**54.7**	**47.1**	**51.4**
L34	UB		--	35.0 [a]	32.7	27.6	30.4

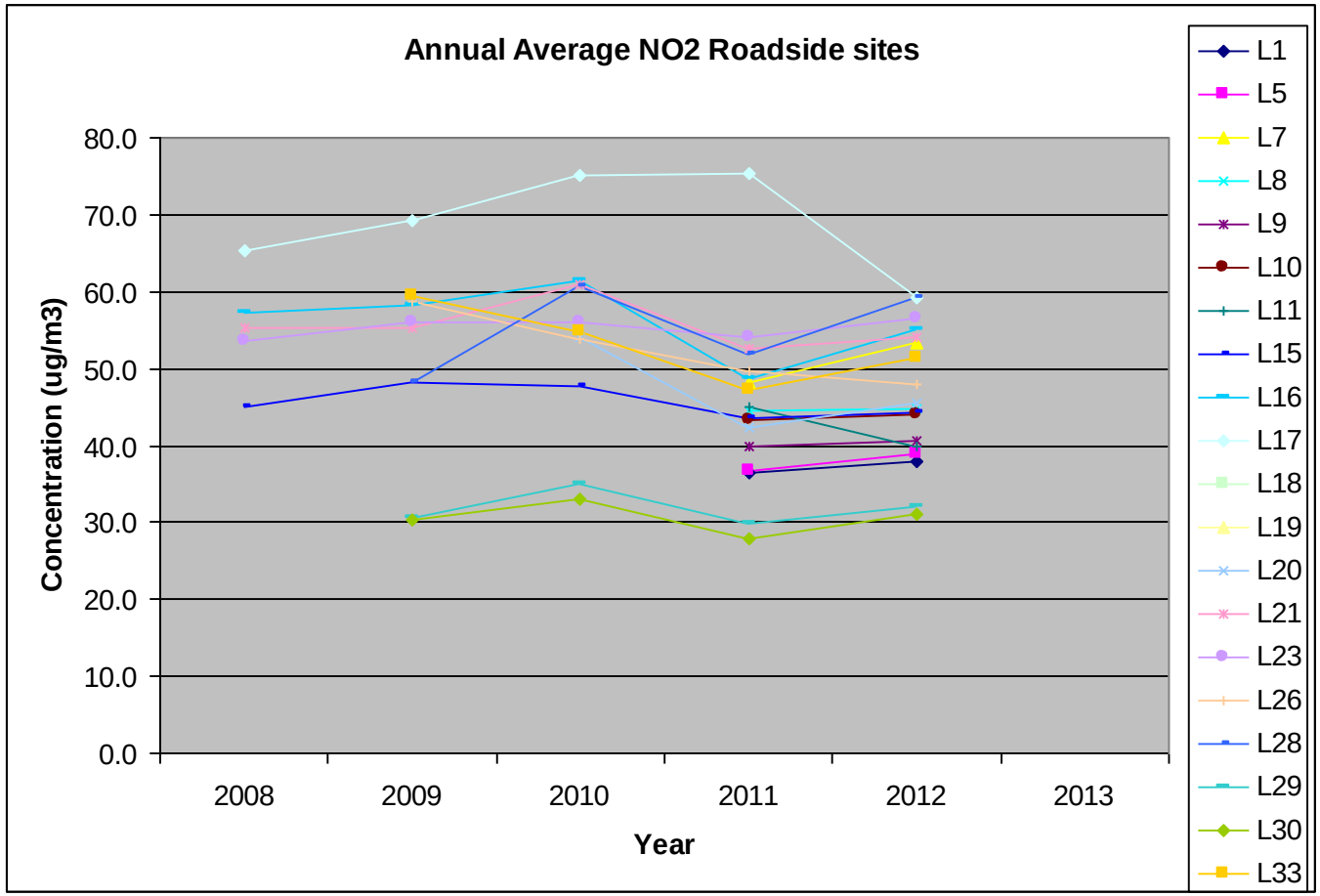
[a] Mean has been "annualised" using formula in Box 3.2 of TG(09) as data collection started in July 2009.

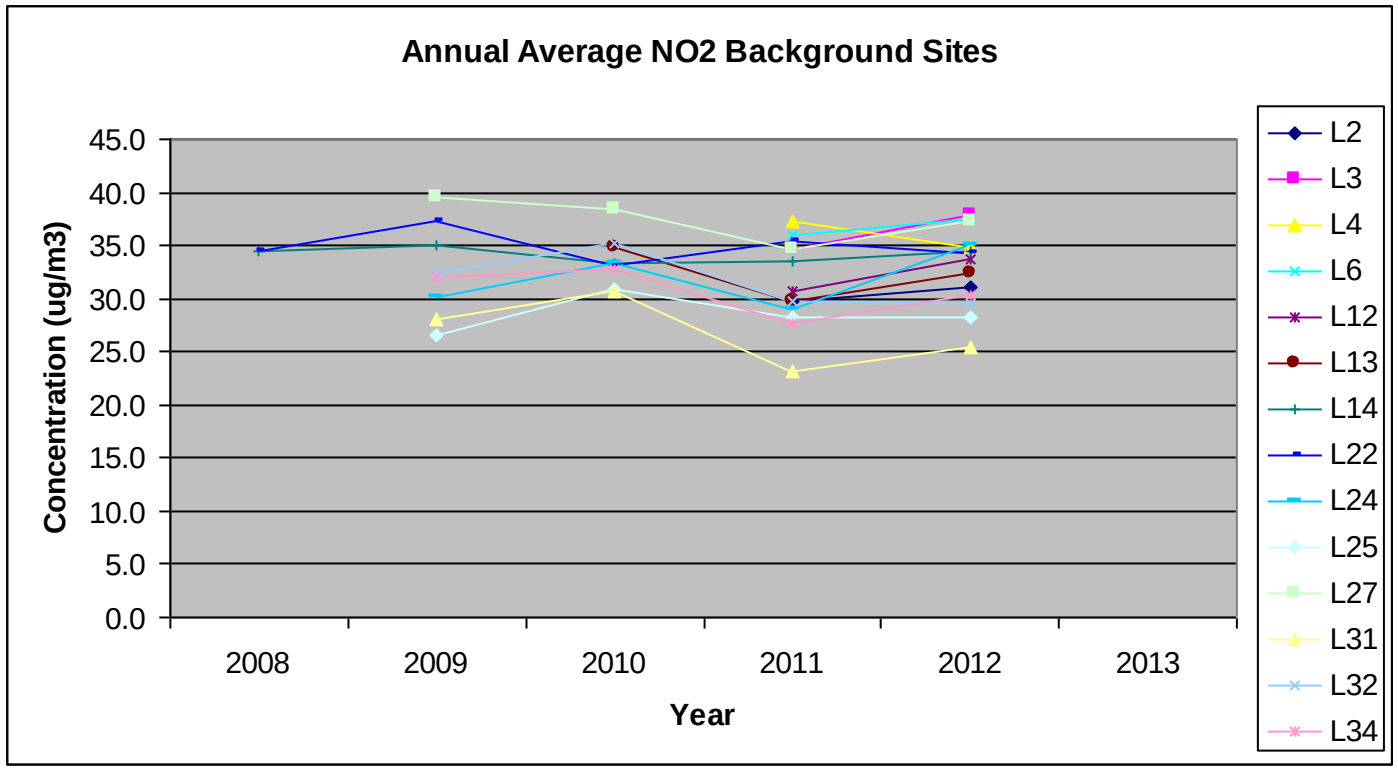
Exceedences of the NO_2 annual mean AQS objective of 40µg/m^3 are shown in bold.

Where the annual mean > 60µg/m^3, indicating a potential exceedence of the NO_2 hourly mean AQS objective, the result is underlined.

Figures 2.4a and 2.4b Trends in Annual Mean Nitrogen Dioxide Concentrations Measured at Diffusion Tube Monitoring Sites

The following charts show trends in NO_2 annual mean results over the past years. For the sake of clarity, these are separated into roadside and urban background sites.





These graphs show that, in general, there has been little change in annual average concentrations of NO_2 over the years. There are fluctuations from year to year and a very slight downward trend is discernible at most, but not all, sites. However, 2012 saw a distinct reduction in the concentrations recorded at the triplicate site (L17-L19) collocated with the automatic monitoring station in New Cross Road. The tubes were repositioned during the year from one side of the monitoring enclosure to another although at the same distance from the kerb. Since being relocated, the diffusion tube results have shown a closer correlation with the data from the automatic monitor and it is, therefore, believed that both accuracy and precision have improved in the tubes' new positions. There was a slight increase in the annual averages of nitrogen dioxide recorded at most sites across the borough in 2012 compared to 2011. As

this was a trend seen at most sites, it was considered whether the increases were attributable to the meteorological conditions rather than specific changes in local emissions. Although only slight increases were recorded, It is concerning as gradual decreases have been predicted and indicates that further action is necessary to meet the objectives for this particular pollutant.

It is important to keep in mind that the uncertainty for a measurement using diffusion tubes that have been bias adjusted is +/- 20% whereas uncertainty for a chemiluminescent analyser is expected to be of the order +/- 10%. The continuous monitors allow more detail to be collected on the state of air quality in Lewisham.

2.2.1 Particulate Matter (PM_{10})

Table 2.7 Results of Automatic Monitoring for PM_{10}: Comparison with Annual Mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2012 % [b]	Confirm Gravimetric Equivalent (Y or N/A)	Annual Mean Concentration (µg/m^3)				
						2008	2009	2010	2011	2012
Lewisham 2 (New Cross)	Roadside	Y	56	56	Y	25	25	25	26	26[c]
Lewisham 3 (Mercury Way)	Industrial	Y	94	94	Y	n/a	n/a	23	23	22
Lewisham 4 (Loampit Vale)	Roadside	Y	98	46	Y	n/a	n/a	n/a	n/a	24.3[d]

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

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

[c] Loss of data during summer months resulted in only 56% data capture so figure is based on available data

[d] Monitoring began in July so mean has been "annualised" as in Box 3.2 of TG(09) (http://laqm.defra.gov.uk/technical-guidance/index.html?d=page=38)

Table 2.8 Results of Automatic Monitoring for PM_{10}: Comparison with 24-hour Mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2012 % [b]	Confirm Gravimetric Equivalent (Y or N/A)	Number of Daily Means > 50µg/m^3				
						2008	2009	2010	2011	2012
Lewisham 2 (New Cross)	Roadside	Y	56	56	Y	16	12	6	19	15 [c] (47.0)
Lewisham 3 (Mercury Way)	Industrial	Y	94	94	Y	n/a	n/a	4 [c] (39)	22	20
Lewisham 4 (Loampit Vale)	Roadside	Y	98	46	Y	n/a	n/a	n/a	n/a	3 [c] (35.9)

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

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

[c] as data capture for full calendar year was less than 90%, the 90.4th percentile of 24-hour means is shown in brackets

Monitoring of PM10 has been carried out at Lewisham 2 (New Cross) for several years whereas the other two sites where PM10 is monitored within the borough are relatively new sites. Therefore, it is not possible to identify longer term trends at these two sites. The data from Lewisham 2 (New Cross) shows that the annual mean concentrations have remained fairly static over the past 5 years. Although the figure for 2012 is based on only 56% data capture, it shows that the results are largely unchanged from the previous year which is consistent with the nearby Lewisham 3 monitor. The number of daily means exceeding 50 µg/m^3 had been falling until 2011. Although there were fewer exceedences in 2012 than the previous year, the number is still higher than pre-2011.

The objectives are being met at all sites. However, as there is no safe level for particulate matter, we would want to see a gradual decline in concentrations so the fact that the levels remain largely unchanged is a cause for concern. While both the annual mean and

24-hour mean AQS objectives have been achieved at all sites in recent years, owing to the health impacts from exposure to particulates, efforts need to continue to reduce concentrations throughout the borough.

2.2.2 Sulphur Dioxide (SO_2)

Monitoring of SO2 has been carried out at Lewisham 1 (Catford) and Lewisham 2 (New Cross) for many years. The results detailed in Table 2.9 show that concentrations continue to remain at very low levels at both sites and that all AQS objectives for this pollutant are being met. Although data capture was below 90% at both sites, the relevant percentiles have been included and these give a strong indication that concentrations are low throughout the year.

Table 2.9 Results of Automatic Monitoring for SO_2: Comparison with Objectives

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2012 % [b]	Number of: [c]		
					15-minute Means > 266µg/m^3	1-hour Means > 350µg/m^3	24-hour Means > 125µg/m^3
Lewisham 1 (Catford)	Urban background	Y	81	81	0 (26)	0 (18)	0 (9)
Lewisham 2 (New Cross)	Roadside	Y	86	86	0 (26)	0 (19.6)	0 (10.6)

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

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

[c] as data capture for full calendar year was less than 90%, the relevant percentile has been included in brackets (in µg/m^3): 15-min mean = 99.9th ; 1-hour mean = 99.7th ; 24-hour mean = 99.2th percentile

2.2.3 $PM_{2.5}$

The EU Limit Value and target for $PM_{2.5}$ is set at 25µg/m^3 measured as an annual mean to be met by 2015 with a further indicative limit value of 20 µg/m^3 to be achieved by 2020. The UK Air Quality Strategy has also set an exposure reduction objective, which in this case is a 15% reduction between 2010 and 2020. However, objectives for $PM_{2.5}$ have not yet been included in the system of Local Air Quality Management for England.

An FDMS $PM_{2.5}$ monitor was installed in Lewisham 2 (New Cross) in April 2012. However, this was causing the monitoring enclosure to overheat so it had to be switched off until new air conditioning could be installed. Therefore, data capture for the year was only 34%. The average daily mean for the period 12 April – 31 July 2012 for which data is available at the New Cross site is 11.74µg/m^3. After annualising using data from background sites in London, this gives an annual average for New Cross of 13.03µg/m^3. Therefore, this is significantly lower than the EU Limit Value for 2015 and the indicative limit value for 2020.

2.2.4 Ozone

The UK Air Quality Strategy sets an 8-hour mean objective for O_3 of no more than 10 exceedences of 100µg/m^3. The table below shows data from the Lewisham 1 (Catford) site for O3 over recent years. As can be seen, the national objective has been met at this site for all years. However, 2012 was the first year since 2008 to have any 8-hour means above the 100µg/m^3 threshold.

Table 2.10 Results of Automatic Monitoring for O_3: Comparison with 8-hour Mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2012 % [b]	Number of 8-hour Rolling Means > 100µg/m^3				
					2008	2009	2010	2011	2012
Lewisham 1 (Catford)	Urban background	Y	99	99	6	0	0	0	3

2.2.5 Summary of Compliance with AQS Objectives

London Borough of Lewisham has examined the results from monitoring in the borough.

Concentrations within the AQMAs still exceed the objectives for nitrogen dioxide and the AQMAs should remain. In addition, concentrations of the objectives for nitrogen dioxide are occurring alongside the B218 and B238 roads. A Detailed Assessment was carried out in 2011 and a new AQMA including these roads will be designated in August 2013.

Concentrations at all other locations outside of the AQMAs are all below the objectives at relevant locations. The objectives for all other pollutants are being met. Therefore there is no need to proceed to a Detailed Assessment.

3 New Local Developments

3.1 Road Traffic Sources

There have been no changes to road layouts, junctions nor new bus or coach stations since the Updating and Screening Assessment 2012 was produced. Changes to the road layout around Lewisham bus and DLR station known as Lewisham Gateway were proposed several years ago and some initial demolition took place. However, work has not yet commenced although the plans to redevelop the area have progressed significantly during the past 12 months. In addition to the changes to the road layout, there is a large scale residential development with a new Council leisure centre that has recently been completed immediately adjacent with further developments in this area also proposed. This has the potential to create a street canyon effect. Although there is the potential for the concentration of developments in the area to affect traffic flows, traffic count data for 2012 shows that the number of cars and total number of motor vehicles has continued to decline along this section of the A20.

3.2 Other Transport Sources

There are no new airports, shipping ports nor locations where diesel or steam trains are regularly stationary or with a large number of diesel locomotive movements since the Updating and Screening Assessment was published in 2012.

3.3 Industrial Sources

London Borough of Lewisham confirms that there are no new or proposed industrial installations for which an air quality assessment has been submitted and for which planning approval has been granted within its area or nearby in a neighbouring authority. Neither have been there any existing installations where emissions have increased substantially nor any significantly changed installations where no air quality assessment was submitted previously.

3.4 Commercial and Domestic Sources

No new applications for large-scale, individual biomass combustion plant installations were received during 2012-13. However, some developments, for which approval had previously been granted, were completed. These included Loampit Vale/Glass Mill Leisure Centre, Tidemill Academy and Deptford Green School. There is no area of the borough where the concentration of biomass combustion sources is likely to significantly affect air quality concentrations. The concentration is unlikely to intensify as it has been observed that developments which had previously sought approval for a biomass boiler, have since altered their proposals and moved away from biomass as a source of energy.

The borough is a Smoke Control Area and there are no known areas where domestic solid fuel burning is considered to be relevant.

3.5 New Developments with Fugitive or Uncontrolled Sources

There are no landfill sites nor quarries within the borough of Lewisham. There are no known unmade haulage roads on industrial sites of any significance.

There have been no new waste transfer stations since the last Updating and Screening Assessment. There are a number of waste transfer stations within the borough and some of these have previously been identified as the source of fugitive emissions. However, since the last Updating and Screening Assessment, there have been some changes which should result in improvements to air quality such as the closure of a waste transfer station, relocation of a waste transfer station to new premises and a change in waste streams being handled.

London Borough of Lewisham confirms that there are no new or newly identified local developments which may have an impact on air quality within the Local Authority area. However, there have been changes to the waste transfer stations within the borough which are likely to have positive impacts for air quality.

London Borough of Lewisham confirms that all the following have been considered:

- **Road traffic sources**
- **Other transport sources**
- **Industrial sources**
- **Commercial and domestic sources**
- **New developments with fugitive or uncontrolled sources.**

4 Planning Applications

Table 4.1
Air Quality Assessments reviewed 2012

Address and planning reference	Outcome
180 Brockley Road DC/12/80369/X	Planning condition regarding mechanical ventilation
Faircharm Trading Estate, Creekside, London, SE8 3DX DC/12/82000/X	Planning conditions for CHP-requirement for details of mitigation of emissions to air 20% car parking spaces Electric Vehicle Charging Points
72-82 Geoffrey Road, London, SE4 1NT. DC/12/79751/FT	Details of dust pollution mitigation-reviewed
Kender Triangle, Queens Road, London, SE14 DC/12/79828/X	Restriction on where air drawn for ventilation systems. Construction management plan
Marine Wharf West, Plough Way, London, SE16 7UE DC/12/81492/FT	Further details on the proposed CHP required prior to commencement of development
1-13 Lewisham High Street, London, SE13 5AF DC/11/78800/X	Conditions applied regarding Mechanical ventilation and environmental management plan.
Sherwood Court, Thurston Road, London, SE13 7SD DC/12/80762/X	Air quality assessment submitted and reviewed, condition recommended regarding construction phase.
Sydenham School, Dartmouth Road, London, SE26 4RD DC/12/80654/X	Construction management plan required
Unit 1 Stockholm Road SE16 3LP DC/12/80047	Condition applied for dust filtration system to control dust and odour pollution.

5 Air Quality Planning Policies

In January 2011, London Borough of Lewisham published a Supplementary Planning Document on Planning Obligations. The document, which can be accessed on the Council website,
http://www.lewisham.gov.uk/myservices/planning/policy/Documents/PlanningObligationSPD.pdf
serves to make the process of determining suitable planning obligations clear and transparent.

On 28 September 2012, London Borough of Lewisham submitted its Local Plan for Lewisham Town Centre to the Secretary of State. An independent planning inspector was appointed to examine the plan and determine whether or not it was sound. The process of examination and subsequent modifications is still ongoing.

London Borough of Lewisham have also been preparing a Local Plan for Catford Town Centre and a Development Management Local Plan which will be consulted on in 2013-14.

6 Local Transport Plans and Strategies

The Local Implementation Plan for the London Borough of Lewisham was published in April 2011. This is a statutory document which supports the delivery of the Mayor's Transport Strategy and enables the borough to plan strategically for transport taking into account future needs. The current LIP covers the period up to 2031.

7 Climate Change Strategies

A Carbon Reduction and Climate Changes Strategy for the London Borough of Lewisham was published in July 2008. The document is publicly available and can be viewed on the Council website.

8 Implementation of Action Plans

Table 8.1 Action Plan Progress

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
1	Support for and promotion of the implementation of the London Low Emission Zone	Make information on the LEZ publicly available and to promote the extension of the LEZ to include a wider range of vehicles.	GLA	Adoption of a London-wide LEZ; Categories of vehicle to which standards apply.	High	The whole of LB Lewisham is within the LEZ. Phases I, II and III have been introduced.	Information on the London LEZ is available via a link on the Council website.	Enforcement of the LEZ is ongoing.	TfL estimates that including larger vans and minibuses in the LEZ in January 2012 will reduce emissions of Particulate Matter (PM) by around 80 tonnes and emissions of Oxides of Nitrogen (NOX) by around 1,200 tonnes by 2015.
2	Vehicle Emissions Testing	To educate drivers about emissions from their vehicles and ensure that	LBL	% of vehicles failing to meet the MOT	Low	Voluntary Vehicle Emissions Testing Days	A further Vehicle Emissions Testing Day was carried out in March	Voluntary Vehicle Emissions Testing will be	Owing to weather conditions, limited testing

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
		vehicles meet emissions standards.		emission standards during testing.		were carried out in March & September 2011	2013. The theme of the day was expanded to cover sustainable transport to generate additional interest.	carried out on when funding permits.	was carried out during the event in 2013. However, it was an opportunity to engage the public and distribute information.
3	Measures to Address Idling Engines	Discourage Engine Idling through information and education.	LBL	No. of Complaints about idling engines validated; No. of signs advising drivers to switch off engines erected.	V Low	Logging and mapping of complaints now being carried out.	System for reporting incidents of engine idling introduced on Council webpage. Complaints are recorded and location considered for advisory signage to be erected.	Ongoing	The impacts will depend on reporting and responses to education. Emission reductions will tend to be localised.
4	Encourage Cleaner Technology/Alternative Fuels in Council Fleet	Increase number of Council and Contractors' Vehicles that use cleaner technology/alternative fuels; Provision of alternative refuelling locations; Driver training.	LBL	Number of fleet vehicles using different types of cleaner technology; Fleet fuel consumption; Reduction in emissions of	Medium	All Council fleet meets Euro V standards. 40 vehicles use LPG. 5% biodiesel used across the whole fleet. By end March 2012,	At end March 2013, the fleet included 10 electric hybrid vehicles and 2 Toyota IQ low emission vehicles. Trials of electric vehicles (Nissan Leaf) have been carried out. The	Ongoing. A further electric vehicle charging point is to be installed in 2013-14.	NI194 no longer used to monitor PM10 and NOx emissions from Council's own fleet. However, Carbon emissions continue to be

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
				NOx and PM_{10} from Council's fleet; Number of alternative refuelling points available.		10 combustion engine cars and 1 diesel engine refuse truck had been replaced with electric Hybrid vehicles. Sainsbury's has 2 EVCPs at their Sydenham site while LPG available at one local Shell service station.	fleet is regularly being reviewed to identify need and where a switch to electric/hybrid can be made. LBL is a member of Source London and has 10 publicly accessible, twin electric vehicle charging points installed including 3 on-street.		monitored and are being used as a marker.
5	Encourage Cleaner Technology/Alternative Fuels in Public Transport	To support TfL initiatives aimed at making public transport within LBL cleaner.	TfL / LBL	Buses operating within LBL that use cleaner technology / alternative fuels; PTAL map of borough	Medium	TfL responsible for co-ordinating public transport within the borough.	TfL have embarked on a programme to reduce emissions from its bus fleet through retrofitting and replacement. A study undertaken to identify and prioritise suitable bus routes to start the programme considered routes	Ongoing	TfL aim to achieve a 20% reduction in NOx emissions from its fleet by 2015 based on a 2012 baseline.

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
							47 and 172 which run through the borough.		
9	Encourage and Promote the Use of Travel Plans	LBL to have Travel Plan in place and regularly review it. Promote the adoption of Travel Plans among major employers within the borough.	LBL	Results from Lewisham Council's Staff Travel Survey. Number of local businesses with Travel Plans in place. % of schools with School Travel Plan in place.	Low		The percentage of schools with a School Travel Plan is 78 out of 97 schools. (80.4%).		
10	Promote and publicise improvements to public transport.	Provision of information to LBL residents about public transport improvements.	LBL	Trends in modal shifts within LBL – Proportion of journeys made by public transport.	Low to Medium	Public Transport infrastructure in Lewisham as of March 2013 was: 20 main line stations (6 of which provide interchanges with the London Overground network), 3	In June 2011, the Evening Standard reported that passenger numbers on the East London Line had doubled within a year of its opening. Owing to high passenger demand, works have been ongoing on the		Fares for public transport were increased in January 2012, averaging a 5.6% rise but up to 8% on some services. These fare increases may deter public transport use.

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
						DLR stations, 42 bus routes and 1 designated wharf. London Borough of Lewisham produced a handy pocket guide to public transport in the borough which has been given out to residents at events.	London Overground Capacity Improvement Programme to increase the capacity on the trains. LBL continued to play a pivotal role in keeping residents informed about the nature of these works and to raise awareness of the future benefits.		
11	Promotion of Walking	Encourage walking instead of use of motor vehicles and make access to services easier on foot	LBL	Trends in modal shifts within LBL – Proportion of journeys made on foot; Traffic on Walkit.com for routes in LBL area.	Low	Walking Map and Walking Strategy produced. Lewisham borough is covered by Walkit.com, links to the site are on the Council website and it	LB Lewisham has begun a programme to roll out Legible London way-finder signage in the borough. A mixture of monoliths and miniliths were installed in Blackheath,		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
						has been widely promoted. Printed information on local walks available and organised walks for leisure are promoted on the Council webpage.	Lewisham and Sydenham. 50% schools participated in Walk once a week (WOW) and a further 20% completed walk to school month.		
12	Promotion of Cycling	Encourage cycling instead of use of motor vehicles through improvements to infrastructure and security.	LBL / TfL	Trends in modal shifts within LBL – Proportion of journeys made by bike; No. Of people receiving cycle training; No. Of Council staff taking up Bike Loan Scheme.	Low	Maps of cycle routes and cycle parking facilities available on Council website. National Route 21 runs through the borough.	LB Lewisham has been involved in ongoing discussions on the extent of Cycle Superhighway 5 to ensure that maximum benefits for cyclists are secured. A new cycle loan scheme introduced to encourage people who are new to cycling or have reservations to		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
							trial a bike for 1 month. LB Lewisham have been working with Sky Ride Local to promote cycle rides within and around the borough. Free cycle training provided to children and adults. Bike doctor sessions held at several events. 1000 year 6 children on average a year do bike ability to level 2. Roughly 500 adults have taken a 2 hour lesson		
13	Management of Parking	To ensure that parking provisions are appropriate to	LBL / TfL	Changes to Controlled Parking	Low - Medium	There were 19 Controlled Parking	Parking Policy Review conducted to re-		Management of Parking is a balance

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
		the nature of the area through designation of zones and enforcement.		Zones implemented; No. of consultations on parking restrictions undertaken; No. of members of Streetcar.		Zones in place at end of 2012. The times of the controls are varied but all information is provided on the Council website.	examine parking restrictions within the borough and how parking demand can be better managed. Total number of car club bays in March 2013 was 64.		between discouraging car use and providing adequate facilities where required. We will aim to monitor the impacts on air quality from introducing further parking controls.
14	Speed Management	To manage speed in a way that promotes a smoother flow of traffic while ensuring road safety.	LBL / TfL	Number of 20mph zones implemented; methods used to manage speed; Average speed measures.	Low	64% of the Borough's roads (not inc. TLRN) had speed management measures in place by March 2013.	The total of Borough's roads (not inc. TLRN) with speed management is 65.8%.		
16	Reduce Emissions from New Developments	Using the planning system to ensure that emissions from new developments are minimised	LBL	No. of major applications approved that are to be car-free; No. of new developments required to	Medium	All planning applications proposing a biomass boiler are required to produce an Air Quality	As set out in section 3.4, the number of applications for new biomass boilers reduced to 0 in the last financial year.		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
				provide car club schemes and/or electric vehicle charging points; No. of biomass boilers approved;		Assessment.	Out of the major and large residential developments that were completed six of those sites were car free developments. This was an improvement on the previous year by one. The number of electric charging points in the borough remained at 14. An update was not available for 12/13 but the annual planning monitoring report for 11/12 recorded that 48 carclub spaces were secured across 14 developments and there were		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
							2,695 units with free membership.		
17	Reduce Emissions from Commercial Construction Sites	To ensure that construction sites manage emissions and comply with the Clean Air Act 1993.	LBL	Major developments adopting mitigation measures from London Councils Code of Construction Practice. No. of dark smoke complaints received and investigated.	Low – Medium	For larger developments, applicants are requested to conduct an Air Pollution Risk Assessment according to IAQM guidance. Developers are required to refer to the London Councils Code of Construction Practice which is available on Council website. Appropriate mitigation measures are secured for the development.	The guidance and advice for developers available on the Council website has been reviewed. LB Lewisham have been undertaking a review of its own guidance for minimising emissions from construction and demolition.		The impacts will be greater in the immediate vicinity of construction sites and will primarily deliver improvements to PM concentrations

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
18	Reduce Emissions from Domestic Buildings	To ensure that domestic properties are complying with the Clean Air Act 1993 and to discourage domestic properties from having bonfires. Also to work with carbon reduction strategies where there are simultaneous benefits for ambient air quality.	LBL	No. of complaints about unauthorised fuel use received and investigated. No. of complaints about domestic bonfires received and investigated.	V. Low	System for reporting air pollution issues made available on the Council website. A system of monitoring and recording of complaints put in place.	Complaints received and investigated about unauthorised fuel use. Advice given and cases resolved. Links providing information on authorised fuels and exempt appliances available on Council webpage.		
19	Control the Release of Emissions from Industrial and Commercial Premises	Ensure that all industrial installations falling under LAPPC / IPPC regime are regulated and inspected.	LBL / EA	No. of installations requiring authorisation; No. of installations inspected; Enforcement action taken or required against industrial installations.	Low		68 installations were permitted under the EPR at end Mar 2013. 30 installations were inspected during the year. 6 Variation Notices and 1 Suspension Notice were served. 1 new application received and permit produced.		
20	Assess Air Quality Levels and Increase Awareness of Air	Monitor air quality levels within the borough, analyse	LBL	No. of pollution monitors	Low	Automatic monitoring stations	New automatic monitoring station installed on A20		Although the emission reductions

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
	Quality Issues	trends and disseminate information to the public.		operating within LBL; Trends in air quality; Exceedences of Air Quality Objectives; No. of awareness-raising / educational campaigns undertaken.		operating in New Cross, Catford and Mercury Way. Diffusion tubes located in 32 different locations including one triplicate collocated with the automatic monitor at New Cross.	near Lewisham centre to measure PM10 and NOx (10/07/12). Existing monitoring station on A2, New Cross Road upgraded to now include FDMS PM10 and PM2.5 monitors. (11/04/12) Participation at various events to raise awareness of air quality and disseminate information.		from this measure are relatively low, this action is very important for measuring effectiveness of other actions as well as for education and awareness raising.
21	Implement Procurement Measures to Reduce Overall Pollution Levels	To ensure that Council's own procurement has the least possible impact on air quality by having an established policy in place.	LBL		Low	A revised version of the Council's Green Procurement Guide was published in July 2008 and is available on the Council website. http://www.lewisham.gov.uk/NR/r	Lewisham Council received the Indirect Engager Special Award for its groundbreaking work in assessing its carbon footprint across the supply chain and encouraging suppliers to reduce emissions.		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
						donlyres/44EF75C5-E537-4DD0-ADF8-EFA36DF97C50/0/GuideToGreenProcurementAprilSmall.pdf			

9 Conclusions and Proposed Actions

9.1 Conclusions from New Monitoring Data

Monitoring within the Borough confirmed that the annual mean nitrogen dioxide objective continues to be widely exceeded at roadside at roadside locations. The council monitors at three sites continuously and 32 locations across the Borough using diffusion tubes. The continuous monitors at an urban background and roadside sites exceeded the annual mean objective. 14 of the 32 diffusion tube locations exceeded the annual mean objective, these sites were all roadside sites, no tubes exceeded an annual mean of 60 µg m-3.

Monitored NO_2 concentrations are consistent with the currently declared AQMAs and proposed extension due to the findings of 2011 Detailed Assessment.

Monitored PM_{10} concentrations in Lewisham are below the air quality objectives. However the AQMAs for PM_{10} are retained as a precautionary measure due to the significant number of exceedences of the 24-hour mean concentrations and monitoring results from a neighbouring borough.

9.2 Conclusions relating to New Local Developments

The Council has assessed the likely impacts of local developments for road transport, other transport, industrial processes, commercial and domestic sources and fugitive and uncontrolled emissions. The assessment of sources did not identify the requirement to proceed to a Detailed Assessment.

9.3 Other Conclusions

Sustained progress has been made with the Air Quality Action Plan, this has included the installation of 10 Electric Vehicle charging points, which were accepted onto the Source London Scheme. This measure has supported uptake of electric vehicles by residents.

9.4 Proposed Actions

The London Borough of Lewisham will retain the current AQMAs in their entirety. A Detailed Assessment was carried out in 2011 and a sixth AQMA will be designated in August 2013. The next course of action will be to submit a 2014 Air Quality Progress Report.

10 References

Defra, 2012 WASP- Annual performance Criteria for NO2 Diffusion Tubes used in local Air Quality Management Area (LAQM), onwards and Summary of Laboratory Performance in Rounds 112-119 available at **http://laqm.defra.gov.uk/documents/LAQM-WASP-Rounds-112-119-(January-2011--December-2012)-NO2-report.pdf**

London Borough of Lewisham, Lewisham Employment Land Study (2008) available at **http://www.lewisham.gov.uk/myservices/planning/policy/Documents/LewishamEmploymentLandStudy2009.pdf**

Technical Guidance LAQM.TG(09) published by DEFRA (Department for Environment, Food and Rural Affairs)

The London Air Quality Network website at **http://www.londonair.org.uk**

The Review and Assessment Helpdesk website at **http://www.uwe.ac.uk/laqm/review/**

The UK National Air Quality Information Archive website at **http://www.airquality.co.uk**

Appendices

Appendix A: QA:QC Data

Diffusion Tube Bias Adjustment Factors

This is discussed in section 2.1.2 but the data used is included for completeness below. Tubes are provided and analyzed by Gradko, 50% TEA in acetone and bias adjustment was 1:01 based on 18 studies as per version 03/13.

Table A1: Data used in calculating the Local Bias Adjustment Factor for 2012

Diffusion Tube Bias Adjustment Factors 03/13 Issue of the Spreadsheet				
			New (03/13) Factor	
Laboratory	Method	Year	No. of Studies	Factor
Aberdeen Scientific Services	20% TEA in water	2012	1	0.83
Edinburgh Scientific Services	50% TEA in acetone	2012	1	0.86
ESG Didcot	20% TEA in water	2012	2	0.69
ESG Didcot	50% TEA in acetone	2012	26	0.79
ESG Glasgow	20% TEA in water	2012	1	0.71
ESG Glasgow	50% TEA in acetone	2012	5	0.84
Exova	20% TEA in water	2012	1	0.89
Glasgow Scientific Services	20% TEA in water	2012	10	0.95
Gradko	20% TEA in water	2012	27	0.97
Gradko	50% TEA in acetone	2012	18	1.01
Kent Scientific Services	20% TEA in water	2012	1	0.82
Kirklees Council	50% TEA in acetone	2012	5	0.80

Lambeth Scientific Services	50% TEA in acetone	2012	2	0.91
Milton Keynes Council	20% TEA in water	2012	1	0.81
Northampton BC	20% TEA in water	2012	3	0.75
Somerset County Council	20% TEA in water	2012	2	0.95
South Yorkshire Air Quality Samplers	50% TEA in acetone	2012	3	0.80
Staffordshire Scientific Services	20% TEA in water	2012	13	0.86
Tayside Scientific Services	20% TEA in water	2012	1	0.90
West Yorkshire Analytical Services	50% TEA in acetone	2012	10	0.79
		Number of Studies Included	**133**	

Factor from Local Co-location Studies

Comparison of automatic monitoring data with triplicate diffusion tube data

Table A2: 2012 Diffusion Tube Collocation Data (Lewisham 2)

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements										Automatic Method		Data Quality Check	
Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 μgm^{-3}	Tube 2 μgm^{-3}	Tube 3 μgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean	Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
1	05/01/2012	03/02/2012	78.1	78.6	100.1	86	12.6	15	31.2	69.4	100.0	Good	Good
2	03/02/2012	01/03/2012	83.0	83.9	77.8	82	3.3	4	8.1	71.5	88.0	Good	Good
3	01/03/2012	30/03/2012	66.7	62.8	66.8	65	2.3	3	5.6	56.6	97.1	Good	Good
4	30/03/2012	27/04/2012	59.2	46.5	50.2	52	6.5	13	16.2	40.2	99.9	Good	Good
5	27/04/2012	31/05/2012	53.7	59.6	60.7	58	3.8	6	9.3	40.1	98.9	Good	Good
6	31/05/2012	28/06/2012		43.5	46.9	45	2.3	5	21.1	27.8	100.0	Good	Good
7	28/06/2012	01/08/2012	44.8	47.2	42.8	45	2.2	5	5.4	28.6	100.0	Good	Good
8	01/08/2012	31/08/2012	39.4	40.4	42.7	41	1.7	4	4.2	27.5	75.9	Good	Good
9	31/08/2012	28/09/2012	45.3	46.1	50.8	47	3.0	6	7.3	44.2	51.8	Good	Poor Data Capture
10	28/09/2012	02/11/2012	53.2	50.9	98.7	68	26.9	40	66.9	49.3	100.0	Poor Precision	Good
11	02/11/2012	28/11/2012	52.0	48.4	49.4	50	1.9	4	4.7	49.0	99.8	Good	Good
12	28/11/2012	04/01/2013	61.0	57.9	63.9	61	3.0	5	7.5	51.0	99.1	Good	Good
13													
										Overall survey -->		Good precision	Good Overall DC

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

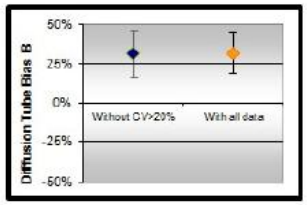
(Check average CV & DC from Accuracy calculations)

Site Name/ ID:	Lewisham – New Cross (LW2)

Precision: 11 out of 12 periods have a CV smaller than 20%

Accuracy (with 95% confidence interval) without periods with CV larger than 20%	
Bias calculated using 10 periods of data	
Bias factor A	0.79 (0.71 - 0.89)
Bias B	27% (12% - 41%)
Diffusion Tubes Mean:	58 μgm^{-3}
Mean CV (Precision):	6
Automatic Mean:	46 μgm^{-3}
Data Capture for periods used:	96%
Adjusted Tubes Mean:	46 (41 - 52) μgm^{-3}

Accuracy (with 95% confidence interval) WITH ALL DATA	
Bias calculated using 11 periods of data	
Bias factor A	0.78 (0.71 - 0.87)
Bias B	28% (14% - 41%)
Diffusion Tubes Mean:	59 μgm^{-3}
Mean CV (Precision):	9
Automatic Mean:	46 μgm^{-3}
Data Capture for periods used:	96%
Adjusted Tubes Mean:	46 (42 - 52) μgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

Discussion of Choice of Factor to Use

The choice of which bias factor to use is not straightforward; hence the two factors (local and default) are reported above to provide context . Box 3.3 of the TG 09 guidance provides some suggestions as to which factor might be most appropriate. In this instance, there are reasons for using either. However, as a precautionary approach is to be adopted, the results using the national factor have been utilised when comparing to the National Objectives.

PM Monitoring Adjustment

PM is measured at Lewisham 2 using a TEOM and at Lewisham 3 using a BAM. ERG King's College have developed a correction factor for PM data obtained using a TEOM known as the Volatile Correction Model and this has been applied to the data reported here from Lewisham 2. Details of the Volatile Correction Model are provided in TG (09).

Short-term to Long-term Data adjustment

Data used in calculating Annual mean NO_2 for Lewisham Loampit Vale following Box 3.2 in TG(09)

Long term site	Annual mean 2012 (Am)	Period mean 2012 (Pm)	Ratio (Am/Pm)
Lewisham Catford	50	49.4	1.01
City of London, Sir John Cass School	47	45	1.04
Tower Hamlets, Poplar	33	34	0.97
		Average (R_a)	1.01

Measured mean concentration, M for Lewisham Loampit Vale (10/7/12 – 31/12/12) = 63.61µg/m^3

M x R_a = 63.61 x 1.01 = 64.19 µg/m^3

Appendix B: Monthly Unbiased NO_2 Diffusion Tube Results ($\mu g/m^3$)

Tube Code	Address	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Annual Average (Without bias adjustment)
L1	Chubworthy Street	42.93	47.42	47.44	31.72	26.70	29.97	31.95	30.28	38.83	36.6	43.9	41.6	37.45
L2	Bronze Street	38.04	36.40	44.15	24.91		20.32	23.51	15.28	27.71	30.5	36.9	39.8	30.68
L3	Grove Street	47.09	42.96	51.96	36.13	26.04	25.51	29.17	28.94	37.79	37.1	41.1	46.0	37.49
L4	Plough Way	43.05	42.32	52.87	29.35	22.47	24.83	24.64	23.24	30.56	35.5	39.8	46.0	34.56
L5	Lee High Road	48.36	42.01	50.57	33.03	42.50	33.71	28.50	27.97	34.78	39.6	40.2	42.7	38.66
L6	Le May Avenue	41.46	40.38	44.64	32.42	31.37	28.43	31.56	32.34	36.85	36.7	44.0	45.9	37.17
L7	Bell Green	58.10	53.38	55.26	53.47	43.82	46.75	46.79	51.70	52.78	58.1	56.9	57.0	**52.83**
L8	Stondon Park	49.43	41.84	56.66	39.35	44.44	37.83	42.11	40.98	39.68	46.5	45.6	47.5	**44.32**
L9	Ladywell Road	45.75	41.43	58.39	39.94	42.05	30.44	33.15	30.15	35.76	44.7	38.2	42.2	**40.17**
L10	Whitburn Road	49.03	45.32	55.92		40.51	34.92	37.97	31.21	37.02	51.0	49.2	47.1	**43.56**
L11	Sparta Street	53.55	47.97	57.11	37.88	38.32	31.12	30.14	30.87	33.83	40.2	35.9	38.8	39.65
L12	Hilly Fields	44.02	38.72	43.45	32.68	24.21	20.19	25.02	23.76	27.35	33.1	41.0	46.9	33.37
L13	Mayow Rd	37.19	38.72	42.60	28.46	26.93	21.22	22.99	22.67	26.02	32.6	42.0	42.5	31.99
L14	Boyne Rd	43.51	39.36	47.67	30.44	27.51	23.56	23.54	23.63	30.01	33.8	38.8	47.5	34.11
L15	Lewisham Rd	46.55	44.34	50.73	38.37	36.80	38.13	38.98	42.08	39.21	47.9	49.8	53.2	**43.83**
L16	Loampit Vale	57.96	58.99	78.12	51.86	57.89	45.32	47.36	44.55	46.17	55.3	52.3	57.2	**54.41**
L17	New Cross Monitoring Station	78.08	83.00	66.67	59.19	53.68		44.80	39.42	45.35	53.2	52.0	61.0	**57.85**
L18	New Cross Monitoring Station	78.56	83.89	62.82	46.49	59.61	43.54	47.16	40.40	46.13	50.9	48.4	57.9	**55.49**
L19	New Cross Monitoring Station	100.08	77.82	66.79	50.17	60.65	46.86	42.85	42.72	50.80	98.7	49.4	63.9	**62.56**
L20	Hatcham Park Rd	57.06	49.26		44.45	34.20	37.23	41.09	43.24	44.65	45.7	52.3		**44.92**
L21	Brockley Rise	68.15	56.69	60.04	46.64	45.59	37.78	51.95	48.77	57.54	52.2	51.3	65.3	**53.49**
L22	Ringstead Rd	49.20	41.25	42.43	32.83	25.54	21.76	24.30	27.11	27.70	33.7	38.7	43.1	33.97
L23	Catford Hill	54.56		63.49	54.78	54.88	53.22	49.97	53.06	46.15	63.2	60.1	61.8	**55.93**
L24	Hazelbank Rd	45.77	43.22	42.94	33.74	31.65	23.46	21.34	20.59	30.75		42.3	47.0	34.80

L25	Stanstead Rd	35.56	30.50	36.88	26.20	21.58	19.38	23.06	21.35	22.74	30.8	31.0	36.9	28.00
L26	Shardloes Rd	54.76	51.93	56.88	48.50	38.02	38.30	44.49	43.25	41.41	47.7	53.8	51.0	**47.50**
L27	Lawn Terrace	39.97	41.22	51.52	35.16	31.31	29.06	32.36	33.24	31.43	35.6	41.5	41.2	36.96
L28	Baring Rd	68.89	66.85	72.01	60.08	56.33	51.55	46.16	47.33	56.04	57.5	60.0	61.9	**58.72**
L29	Holy Cross	41.28	43.88	47.45	23.97	16.83		20.98	18.97	25.74	33.1	38.6	39.0	31.80
L30	Christchurch	37.46	37.50		31.09	24.83	21.90	23.26	21.00	20.34	31.6	44.8	45.4	30.83
L31	St Mary Magdalen's	37.02	32.03	40.76	19.06	10.52	14.55	15.53	17.43	19.24		35.3	35.1	25.14
L32	Grinling Gibbons	38.89	30.97	45.40	25.72	20.06	19.99	20.65	19.97	25.74	30.9	36.9	36.9	29.34
L33	St Mary's	65.62	60.02	56.87	41.83	34.23	41.57	39.68	41.07	45.97	60.6	55.7	67.4	**50.89**
L34	Sydenham	36.67	35.89	41.40	24.29	26.96		22.20	25.20	23.52		34.9		30.11
L35	Blank	1.19	0.04	0.24	0.53	0.44	0.31	0.27	0.52	0.39	0.40	0.69	0.12	0.43

Appendix C: List of Part B Processes within London Borough of Lewisham

Company/Name of Process	Address	Type of Process
Tesco Grove Park Service Station	340, Baring Road, SE12 0DU	PG1/14 – Petrol Station
Tesco Express	86, London Road, SE23	PG1/14 – Petrol Station
BP Petrol Station	411, Bromley Road, BR1 4PJ	PG1/14 – Petrol Station
BP Connect	Lee High Road, SE13 5PQ	PG1/14 – Petrol Station
Foxberry Service Station	242-246, Brockley Road, SE4 2SU	PG1/14 – Petrol Station
Tesco Express	290 Lewisham Road	PG1/14 – Petrol Station
Tesco Petrol Filling Station	97-99, Loampit Vale, SE13 7TG	PG1/14 – Petrol Station
Sainsburys Petrol Filling Station	263, New Cross Road	PG1/14 – Petrol Station
Sainsburys Sydenham	Bell Green, Southend Lane, SE26 4PU	PG1/14 – Petrol Station
Shell	351-367, Lewisham High street	PG1/14 – Petrol Station
Shell	163-165, Stanstead Road	PG1/14 – Petrol Station
Shell	101, Evelyn Street	PG1/14 – Petrol Station
Shell	96A, Bromely Hill	PG1/14 – Petrol Station
Petrocell Service Station	SE13 7PY	PG1/14 – Petrol Station
Sydenham Service Station	277, Kirkdale, SE26 4QD	PG1/14 – Petrol Station
Catford (Co-op. 109949-SPET) Filling Station	Brownhill Road, SE6 1AD	PG1/14 – Petrol Station
Shell	Verdant Ln/Whitefoot Ln, SE6 1TP	PG1/14 – Petrol Station
Lewisham Crematorium	Verdant Lane, SE6 1TP	PG5/2 – Crematoria
H Sivyer (Transport) Ltd	160 Sydenham Road, Sydenham, SE26 5JZ	PG3/16 – Mobile Crusher
H Sivyer (Transport) Ltd	160 Sydenham Road, Sydenham, SE26 5JZ	PG3/16 – Mobile Crusher
Gavigan Paving	Bolina Road Depot, SE16 3LD	PG3/1 – Blending, Packing, etc of Bulk Cement
2001 DC	141, Stanstead Road, SE23 1HH	PG6/46 – Dry Cleaners
Aplanda DC	50, Sydenham Road, SE26 5QF	PG6/46 – Dry Cleaners
Asik DC	250, Brockley Road, SE4 2SF	PG6/46 – Dry Cleaners
Bellingham Cleaners	30, Randlesdown Road, SE6 3BT	PG6/46 – Dry Cleaners
Blackheath DC	20, Blackheath Village, SE3 9SY	PG6/46 – Dry Cleaners
Brookbank DC	155, Brookbank Road, SE13 7DA	PG6/46 – Dry Cleaners

Brownhill DC	277, Brownhill Road, SE6 1AE	PG6/46 – Dry Cleaners
Busy Bees DC	146, Sydenham Road, SE26 5JZ	PG6/46 – Dry Cleaners
Carlton DC	6, Catford Broadway, SE6 4SP	PG6/46 – Dry Cleaners
Catford DC	24, Rushey Green, SE6 4JF	PG6/46 – Dry Cleaners
Classic Dy Cleaners (A&E Dry Cleaners)	1, Verdant Lane	PG6/46 – Dry Cleaners
Clean World DC	56, Baring Road, SE12 0PS	PG6/46 – Dry Cleaners
Cleaning Touch DC	173, Kirkdale, SE26 4QH	PG6/46 – Dry Cleaners
Deespy DC	118, Woodpecker Road, SE14 6EU	PG6/46 – Dry Cleaners
Downham Express DC	488, Bromley Road, BR1 4PP	PG6/46 – Dry Cleaners
Dry Clean Point	266 New Cross road	PG6/46 – Dry Cleaners
Finesse DC	250, Evelyn Street, SE8 5BZ	PG6/46 – Dry Cleaners
Five Star DC	6, Burnt Ash Road, SE12 8PZ	PG6/46 – Dry Cleaners
Forbs DC	19, Lewisham Way, SE14 6PP	PG6/46 – Dry Cleaners
H & A Dry Cleaners	380, Baring Road, SE12 0EF	PG6/46 – Dry Cleaners
Honor Oak Cleaners	42, Honor Oak Park, SE23 1DY	PG6/46 – Dry Cleaners
Hydra DC	51, Brockley Rise, SE23 1JG	PG6/46 – Dry Cleaners
Jubilee DC	6, Sandhurst Market, SE6 1DL	PG6/46 – Dry Cleaners
Kirkdale Express DC	155, Kirkdale, SE26 4QJ	PG6/46 – Dry Cleaners
Ladywell Junction Express Cleaners	75, Ladywell Road, SE13 7JA	PG6/46 – Dry Cleaners
Lewisham DC	13, Lee High Road, SE13 5LD	PG6/46 – Dry Cleaners
Lewisham Way DC	189, Lewisham Way, SE4 1UY	PG6/46 – Dry Cleaners
M&S DC	118, Deptford High Street, SE8 4NS	PG6/46 – Dry Cleaners
Manor Lane DC	176, Manor Lane, SE12 8LP	PG6/46 – Dry Cleaners
Master DC	22, Downham Way, BR1 5NX	PG6/46 – Dry Cleaners
Palace DC	9, Sydenham Road, SE26 5ET	PG6/46 – Dry Cleaners
Perry Cleaners	174, Perry Vale, SE23 2LR	PG6/46 – Dry Cleaners
HSBE Dry Cleaners	18, Bromley Hill, BR1 4JX	PG6/46 – Dry Cleaners
Quality - HSDC	77, Rushey Green, SE6 4AF	PG6/46 – Dry Cleaners
Speedway DC	191, New Cross Rod, SE14 5DG	PG6/46 – Dry Cleaners
Stanbridge Launderette	23 Burnt Ash Hill, ,	PG6/46 – Dry Cleaners
Starbright DC	86, Brownhill Road, SE6 2EW	PG6/46 – Dry Cleaners

Starlite DC	370, Brockley Road, SE4 2BY	PG6/46 – Dry Cleaners
Starshine DC	3, Georges Parade, Perry Hill, SE6 4DT	PG6/46 – Dry Cleaners
Streakers DC	3, Burntash Hill, SE12 0AA	PG6/46 – Dry Cleaners
Suits U Bespoke DC	35, Staplehurst Road, SE13 5ND	PG6/46 – Dry Cleaners
The Dry Cleaner	186, Hither Green Lane, SE13 6QB	PG6/46 – Dry Cleaners
Three Square Express DC	6, Dartmouth Road, SE23 3XU	PG6/46 – Dry Cleaners
Top Class	80 Brockley Rise	PG6/46 – Dry Cleaners
Trend DC	239, Bromley Road, SE6 2RA	PG6/46 – Dry Cleaners
Turbo DC	17, Brockley Rise, SE23 1JG	PG6/46 – Dry Cleaners
Whistle & Flute DC	144, New Cross Road, SE14 5BA	PG6/46 – Dry Cleaners
Whitehouse DC	166, Hither Green Lane, SE13 6QA	PG6/46 – Dry Cleaners