



Review and Assessment Report 2008

&

Air Quality Action Plan Progress

Report 2008

London Borough of Newham

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Executive Summary.

The review of monitoring data, as set in the LAQM Progress Report Guidance.(03), has shown that the conclusions and predictions from the first round of the review and assessment and subsequent Detailed Assessment for nitrogen dioxide are still valid and that the Council was correct in its decision to declare an Air Quality Management Area for the pollutants of nitrogen dioxide and PM₁₀.

No significant change has occurred such that air quality objectives are being exceeded in previously unidentified locations.

The findings from the last round of review and assessment, the Councils 2003 Stage IV assessment and DA remain valid, all pollutants except nitrogen dioxide and fine particles will meet the Governments air quality objectives. Specifically the 24-hour PM₁₀ objective of 50µg/m³ not to be exceeded more than 35 times a year and the annual PM10 objective has not been achieved across the boroughs main roads. Fine particle (PM₁₀) concentrations have remained stable since 1999 and remain close to objectives, exceeding the hourly objectives at roadside. Annual average levels are met.

Nitrogen dioxide concentrations exceeded annual average objectives at roadside and background automatic monitoring sites and diffusion tube sites. The hourly objective has not been achieved at the roadside.

Nitrogen dioxide levels are falling at the background monitoring station, however and of some concern levels are not falling at roadside.

Sulphur dioxide objectives have been achieved however it is noted that levels remain constant.

Carbon monoxide objectives were met

1. Introduction

The local air quality management (LAQM) system was introduced under the Environment Act 1995 and subsequent air quality regulations. As part of the LAQM, local authorities have to review current and future levels of air quality against national air quality objectives for seven pollutants (Table 1).

The London Borough of Newham completed the first round of Review and Assessment in 2003. This first round concluded that of the seven key pollutants, the objective levels for both nitrogen dioxide (NO₂) and fine particulates (PM₁₀) are likely to exceed national objectives. The London Borough of Newham therefore declared an air quality management area on the predicted line of exceedance in those areas where exposure occurred or was expected for PM₁₀ and nitrogen dioxide. For simplicity the larger of the two areas (nitrogen dioxide) was declared as the line for both pollutants. The map is reproduced in Appendix 2. Subsequent assessment (nitrogen dioxide stage 4 and detailed assessment 2006) has highlighted that exceedances are predicted to occur outside the current AQMA. Steps are therefore being undertaken to declare an enlarged AQMA by the end of this year. The Council's revised AQAP is also expected to be finalised by the end of this year. Copies of all the reports are available through the Council's web site www.newham.gov.uk or direct from Robin Whitehouse, robin.whitehouse@newham.gov.uk, tel 02084304429

This Progress Report follows the guidance produced by the Department of Food and Rural Affairs (Defra), the Local Air Quality Management Progress Report Guidance (LAQM.PRG(03)). This 2008 review and assessment report and annual Air Quality Action Plan progress report are combined into one Air Quality Progress Report.

The guidance is a prescriptive approach to report on new monitoring data, to update on the Council's progress with the Air Quality Action Plan and progress towards achieving the air quality objectives. Specifically the progress report aims to:

- Retain the profile of LAQM within the local authority
- Provide a means of communicating air quality information to members and the public
- Maximize the usefulness and interpretation of the monitoring carried out by the local authority
- Make the next stage of review and assessment easier, as the report provides a readily available up-to-date source of information
- Help local authorities respond to enquires for information on air quality
- Provide information to help other policy areas, such as transport and land use planning
- Provide a source of information for developers carrying out air quality assessments of new schemes
- Demonstrate progress on the Air Quality Action Plan

The progress report also includes information on any new local developments that might affect air quality.

Table 1

The National air quality objectives for the protection of human health:

Pollutant	Air Quality Objective		Date to be Achieved and retained thereafter
	Concentration	Measured As	
Carbon Monoxide	10 mg/m ³	Maximum Daily Running 8-Hour Mean	31 December 2003
Benzene	16.25 µg/m ³	Running Annual Mean	31 December 2003
	5 µg/m ³	Annual Mean	31 December 2010
1,3 Butadiene	2.25µg/m ³	Running Annual Mean	31 December 2003
Lead	0.5µg/m ³	Annual Mean	31 December 2004
	0.25µg/m ³	Annual Mean	31 December 2008
Nitrogen Dioxide	200µg/m ³ not to be exceeded more than 18 times per year.	1 Hour Mean	31 December 2005
	40µg/m ³	Annual Mean	31 December 2005
Particles (PM10)	50µg/m ³ (gravimetric) not to be exceeded more than 35times a year.	24-hour mean	31 December 2004
	40µg/m ³	Annual Mean	31 December 2004
Sulphur Dioxide	266µg/m ³ not to be exceeded more than 35 times a year	15 minute mean	31 December 2005
	350µg/m ³ not to be exceeded more than 24 times a year	1 hour mean	31 December 2004
	125µg/m ³ not to be exceeded more than 24 times a year	24-hour mean	31 December 2004

There are new obligations for Ultra Fine Particles (PM2.5) but these responsibilities have not been transferred to local authorities.

2 Monitoring Data

2.1 Monitoring

The London Borough of Newham has been monitoring air quality since 1985. The monitoring consists currently of 2 AUN graded sites (nitrogen dioxide, ozone, sulphur dioxide, carbon monoxide and PM₁₀) operational from 1998, 4 light scattering devices (particulates) from 2003 onwards and 22 nitrogen dioxide and 16 benzene diffusion tubes. Appendix 1 gives further details of the sites. The data produced from the monitoring and details of the sites are also available on the Council's website.

Table 2 Automatic Monitoring

Pollutant	Monitoring Sites						
	Cam Road	Wren Close	Green street	Romford road	North Woolwich road	Connaught bridge	High Street North
Nitrogen Dioxide	Y	Y					
PM10	Y	Y	Y	Y	Y	Y	Y
Sulphur Dioxide	Y	Y					
Carbon Monoxide	Y	Y					
Ozone	Y	Y					

o

Wren Close and Cam Road monitoring stations are operated to national standards with the works undertaken by the local authority, Envirotechnology and the QA/QC by AEA NETCEN.

The remaining continuous sites are operated to manufacturers recommendations (OSIRIS-Turnkey Instruments Limited)

Non automatic sites

The non-automatic sites are diffusion tube locations. Diffusion tubes provide an indicative measure of the pollutant being monitored. The locations are a mixture of roadside and background sites totalling 22 sites. Benzene (16 sites) and nitrogen dioxide are monitored. The monitoring is undertaken as part of a Londonwide monitoring program (Bureau Veritas).

Results

In the following sections, each pollutant is dealt with in more detail, providing graphs that show long-term trends and progress towards the objectives.

2.ii Nitrogen dioxide

The principal source of nitrogen dioxide (NO₂) in Newham is from road transport; other releases are from combustion processes such as boiler plant and industrial emissions. Nitrogen dioxide is associated with adverse effects on human health and is one of the pollutants of concern within the London area.

Road traffic emissions are currently the dominant source of NO_x in Waltham Forest, contributing between 50% and 62% (nitrogen dioxide detailed assessment). Other sources are non-road and include industrial emissions, domestic sources (heating and cooking), other transport sources (rail) and background sources; defined as natural / rural emissions outside of London.

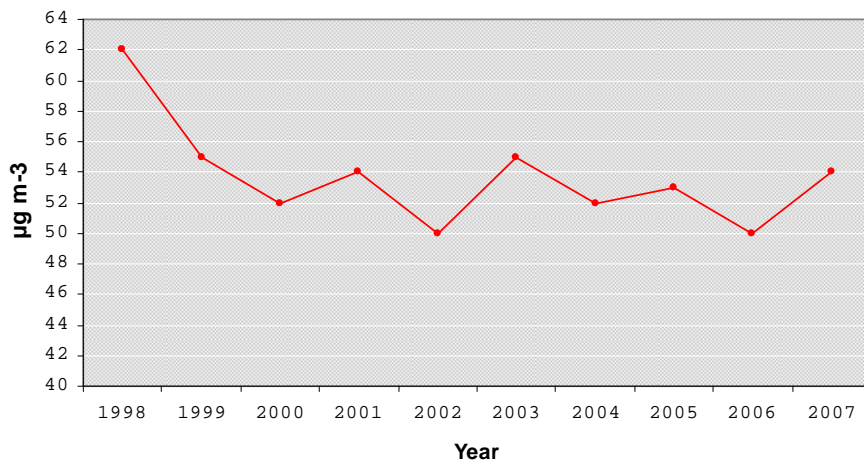
Cam Road

Table 3 Shows the NO₂ Concentrations measured at Cam Road.

Year	Annual Average ($\mu\text{g m}^{-3}$)	Exceedences of hourly objective	Data capture Rate (%)
1998	62	0	32(part year)
1999	55	1	82
2000	52	0	94
2001	54	0	98
2002	50	0	64.1
2003	55	0	93.6
2004	52	0	97.4
2005	53	3	95.5
2006	50	0	98.3
2007	54	24	99.3

Monitoring at this location has been in operation for 10 years. It is an Roadside site and represents relevant exposure.

Figure 1 plot of annual mean measured NO₂ concentrations for Cam Road.



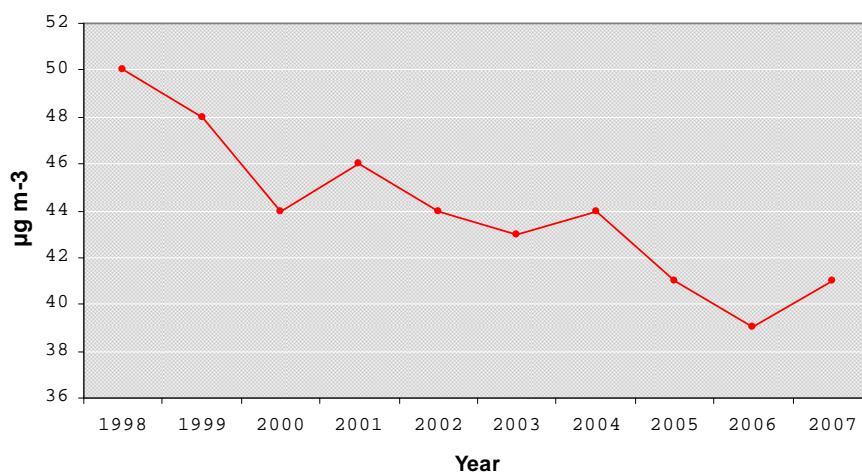
Wren Close

Table 4 shows the NO₂ Concentrations measured at Wren Close.

Year	Annual Average ($\mu\text{g m}^{-3}$)	Exceedences of hourly objective	Data capture Rate (%)
1998	50	1	50 (part year)
1999	48	2	94
2000	44	0	94
2001	46	0	91
2002	44	0	97.9
2003	43	0	74.5
2004	44	0	97.3
2005	41	0	94.8
2006	39	0	87.4
2007	41	4	98.5

This site moved location in 2003 (tant ave) therefore the data before and after are not truly comparable, however the site only moved 150m and is a similar distance to the significant local source, the A13 some 150m to the north.

Figure 2 plot of annual mean measured NO₂ concentrations for Wren Close.



The roadside site (Cam Road) does not show a clear trend, levels remain above the annual mean objective and in 2007 exceed the hourly objective, possible reasons for this are discussed below. The background site (Wren close) does show a reduction in concentration with a fairly consistent year on year reduction. The rate of fall however appears significantly less than predicted improvements particularly true of the roadside site. The exact reasons for this are unknown however the increase in % of diesel fleet, may account for some of the lack of improvement in measured levels. There are many reasons why measured results may not agree with modelled results but new evidence on the primary emission of NO₂ revised emission factors and the complexities of modelling slow moving stop/start traffic are significant areas.

2.iii PM₁₀ (Particles).

These small particles (<10µm diameter) can be breathed into the lungs, carrying with them a range of both natural and man made substances and are associated with both respiratory and cardio-vascular health problems. High levels of particulates can cause early deaths in people that already have lung or heart diseases and it has been estimated that PM₁₀ is responsible for approximately 10,000 early deaths per year in the UK.

The principal sources of fine particulates (PM₁₀) can be divided into three main categories;

Primary Sources - from combustion sources including road traffic, power generation and industrial combustion,

Secondary sources - formed from chemical reactions in the atmosphere,

and

Coarse Sources – all other sources including resuspended dusts, construction work dust, mineral extraction works, wind-blown dusts and soils, including sea salt and biological particles.

The Government set two objectives for PM₁₀ to be achieved by the end of 2004, which are equivalent to the EU Stage I limit values. The objectives are 40µg/m³ as the annual mean and 50µg/m³ as the 24 hour mean, not to be exceeded more than 35 times a year.

Monitoring is undertaken in Newham by TEOM and by OSIRIS (light scattering device). The TEOM's are operated to national standards. As this monitor tends to under-read compared to the standard gravimetric methods, the raw TEOM PM₁₀ data in this report has been corrected by an approved factor of 1.3 (Defra 2003).

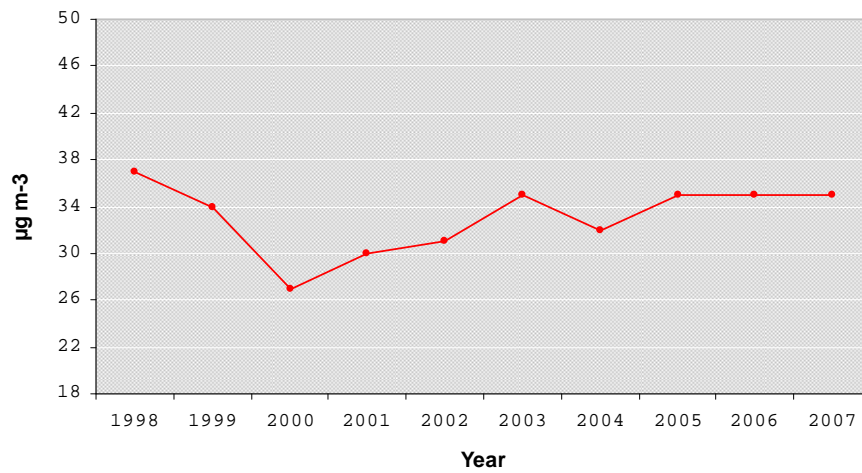
The OSIRIS data is collected to manufacturers instructions but cannot be considered as robust as the TEOM data.

Cam Road

Table 5 PM_{10} concentrations measured at Cam Road

Year	Annual Mean	Exceedences of 24 - hour Mean	Data capture rate
1998	37	18	30.2 (Part year)
1999	34	40	99.5
2000	27	13	98.7
2001	30	21	99.5
2002	31	19	97.3
2003	35	46	96.3
2004	32	18	96.1
2005	35	34	98.0
2006	35	32	96.1
2007	35	45	97.6

Figure 3 plot of annual mean measured PM_{10} concentrations for Cam Road



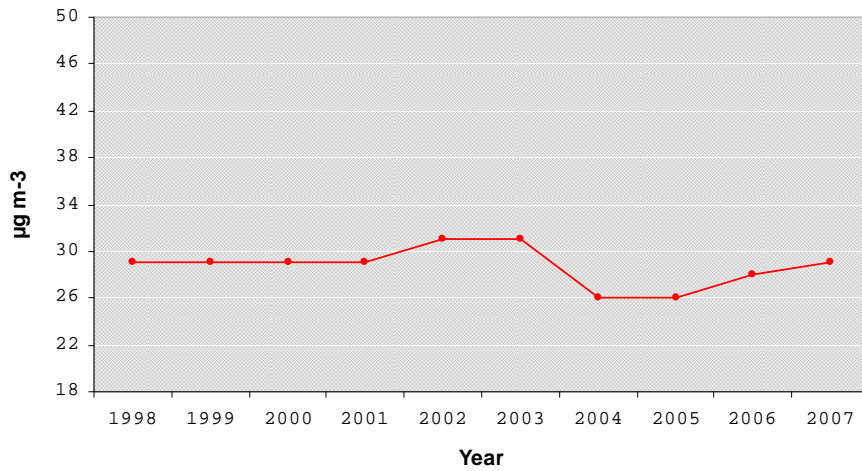
The annual average objective is met at the above station however the 24-hour mean not to be exceeded more than 35 times a year objective is exceeded. It is concerning to note that particulate levels are not reducing at this roadside site, if anything there is some evidence to indicate a possible increase (slight increase in the annual average and the number of 24 hour exceedances).

Wren Close

Table 6. PM₁₀ concentrations measured at Wren Close

Year	Annual Mean	Exceedences of 24-hour mean	Data capture Rate
1998	29	8	54.4 (Part year)
1999	29	24	97.4
2000	29	20	94.1
2001	29	21	96.0
2002	31	24	92.2
2003	31	33	91.2
2004	26	3	79.6
2005	26	5	98.5
2006	28	17	95.6
2007	29	17	92.8

Figure 4 plot of annual mean measured PM₁₀ concentrations for Wren Close.



The annual average and 24 hr mean objective are met at this background station. It is concerning to note however that particulate levels are not reducing at this location, and that levels remain almost identical to the late 1990's.

Osiris data

The annual data from the 4 osiris monitors is tabulated below. While the data is useful in considering trends the methodology and QA/QC procedures are not robust and therefore there is no commentary on the comparison with national standards.

Table 7 **PM₁₀ annual mean concentrations**

Year	Annual Mean				
	High street north	Connaught bridge	Romford road	Green street	North Woolwich Road
2003	23	-	-	32	-
2004	22	-	19	14	23
2005	24	-	32	23	29
2006	18	26	24	14	12
2007	30	30	-	32	32

2.iv Sulphur Dioxide.

The principal source of sulphur dioxide (SO₂) is from power stations and industrial combustion sources. Other sources include oil fired domestic and commercial heating.

The Government have set a 15-minute mean concentration of $266 \mu\text{g}/\text{m}^3$ (not to be exceeded more than 35 times a year) to be achieved by 2005, a 1-hour concentration of $350 \mu\text{g}/\text{m}^3$, (not to be exceeded more than 24 times a year) to be achieved by 2004 and a 24-hour concentration of $125 \mu\text{g}/\text{m}^3$ (not to be exceeded more than 3 times a year) to be met by 2004. These three objectives are based on short term and long term health effects. Research has shown that an averaging time of only a few minutes may be required to protect sensitive individuals from harmful effects such as constriction of throat and airways.

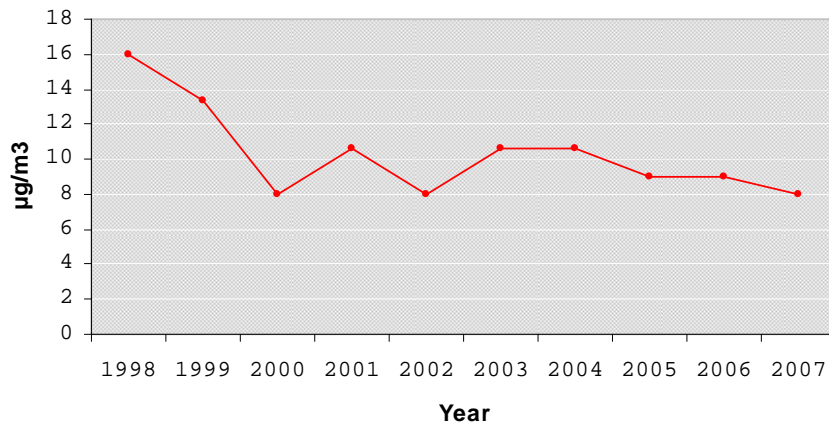
The first round of review and assessment predicted a widespread exceedence of the 15-minute mean sulphur dioxide objective across the borough. This exceedence was due to emissions from industrial sources in the East Thames corridor, mostly large power stations, known as Part A installations, regulated by the Environment Agency. The Environment Agency then commissioned a detailed assessment of these industrial sources for emissions of SO_2 and altered the relevant permits to remove the predicted exceedances. The Council's Stage IV further assessment work confirmed this.

Cam Road

Table 8: Sulphur dioxide ($\mu\text{g}/\text{m}^3$) concentrations measured at Cam Road

Year	Exceedences of 15 Minute Mean	Exceedences of hourly Mean	Exceedences of 24 hour Mean	Data Capture rate
1998	n/a	0	0	32(part year)
1999	n/a	1	0	99
2000	n/a	0	0	98
2001	n/a	1	0	98
2002	18	0	0	68.6
2003	22	1	0	95.9
2004	9	0	0	98.9
2005	25	1	0	98.4
2006	10	0	0	96.7
2007	16	0	0	99.4

Figure 5 Plot of SO₂ concentrations concentrations measured at Cam Road

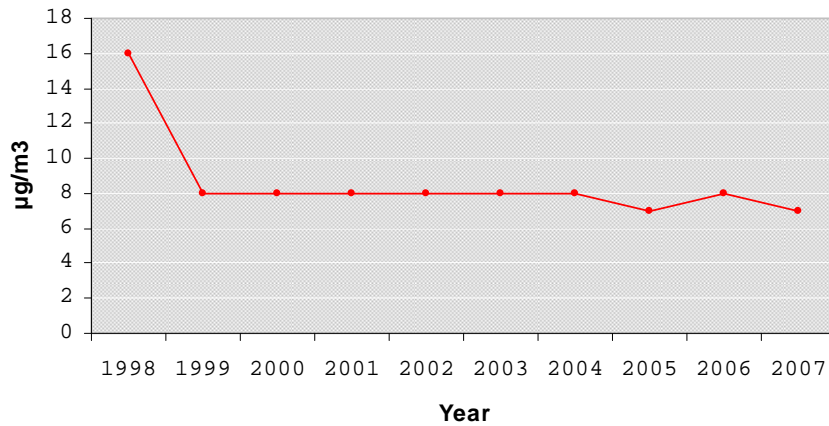


Wren Close

Table 9: Sulphur dioxide (µg/m³) concentrations measured at Wren Close

Year	Exceedences of 15 Minute Mean	Exceedences of hourly Mean	Exceedences of 24 hour Mean	Data Capture rate
1998	n/a	0	0	50 (part year)
1999	n/a	0	0	98
2000	n/a	0	0	98
2001	n/a	0	0	99
2002	0	0	0	98.5
2003	0	0	0	88.2
2004	0	0	0	98.8
2005	0	0	0	98.9
2006	0	0	0	98.9
2007	0	0	0	99.5

Figure 6 Plot of SO₂ concentrations measured at Wren Close



Concentrations of sulphur dioxide should be declining as a result of industries switching from oil or coal-fired heating to gas-fired heating and reductions in the sulphur content of fuels both for heating and road vehicle use. It is noted that in the 9 years of monitoring levels have remained constant.

2.v Carbon Monoxide

Results for carbon monoxide are shown below. This pollutant was discounted following the first round of review and assessment, levels remain well below objectives.

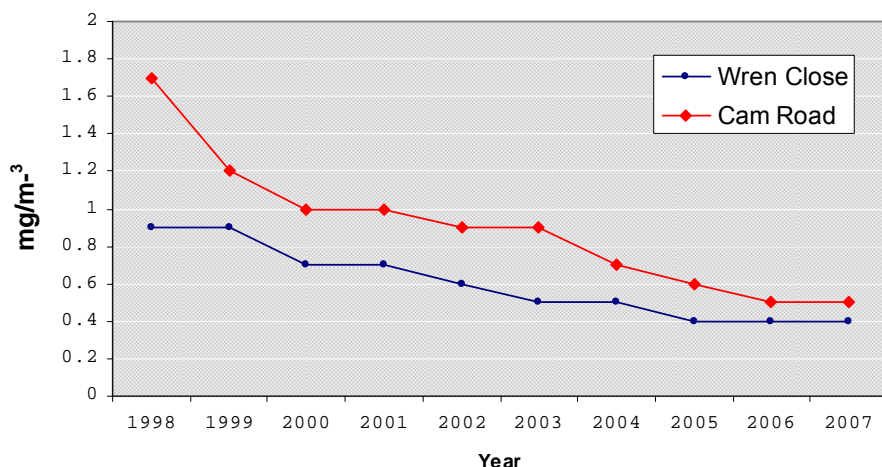
Table 10. CO concentrations measured at Cam Road (mg/m³)

Year	Annual Mean	Exceedences of running 8- hour mean	Data capture Rate
1998	1.6	0	32
1999	1.2	0	98
2000	1.0	0	97
2001	0.9	0	99
2002	0.8	0	95.5
2003	0.8	0	96.3
2004	0.7	0	98.7
2005	0.6	0	99.7
2006	0.5	0	97.4
2007	0.5	0	99.5

Table 11. CO concentrations measured at Wren Close (mg/m³)

Year	Annual Mean	Exceedences of running 8- hour mean	Data capture Rate
1998	0.8	0	50
1999	0.8	0	94
2000	0.7	0	94
2001	0.7	0	94
2002	0.6	0	97.1
2003	0.5	0	98.2
2004	0.5	0	98.6
2005	0.4	0	98.7
2006	0.4	0	96.8
2007	0.4	0	92.1

Figure 7 Plot of CO concentrations



2 vi Ozone

Results for ozone are shown below for completeness. Local authorities are not required to act on this pollutant. However as it is a pollutant with significant health effects and predicted falls in emissions of local nitrogen oxides could give rise to increased levels of this pollutant. Levels appear to have changed little over the 10 years at the roadside site but do appear to be increasing at the background site.

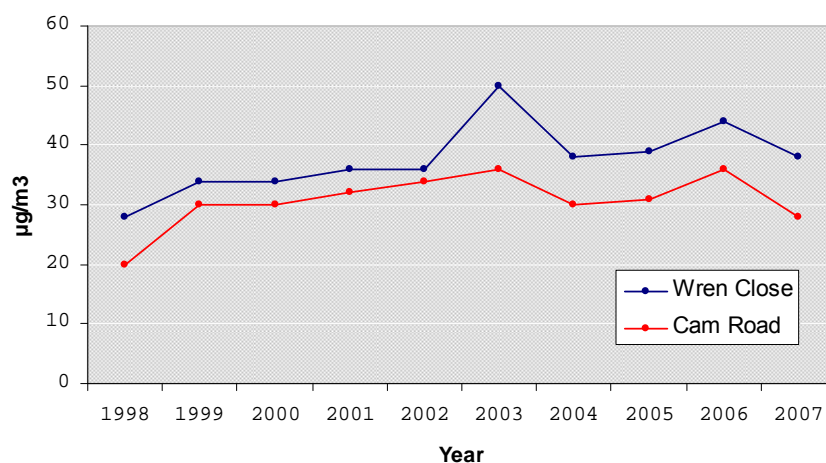
Table 12. O₃ concentrations measured at Cam Road (µg/m³)

Year	Annual Mean	Exceedences of running 8- hour mean	Data capture Rate
1998	20	0	31
1999	30	95	99
2000	30	51	96
2001	32	108	99
2002	34	29	64.5
2003	36	252	93.5
2004	30	103	99.0
2005	31	57	96.2
2006	36	218	97
2007	28	21	78.6

Table 13. O₃ concentrations measured at Wren Close (µg/m³)

Year	Annual Mean	Exceedences of running 8- hour mean	Data capture Rate
1998	28	14	50
1999	34	131	94
2000	34	55	94
2001	36	155	95
2002	36	71	97.9
2003	50	325	98.5
2004	38	95	98.9
2005	39	90	98.7
2006	44	301	98.9
2007	38	83	99.3

Figure 8 Plot of O₃ concentrations



2.v Data

The real-time data in this report has been ratified according to procedures in Defra's technical guidance document (LAQM.TG(03)). This advises that a fully documented quality assurance and quality control (QA/QC) process needs to be followed during air quality

monitoring, throughout the entire process of data collection, ratification and reporting. This ensures that:

- Data is representative of ambient concentrations in the area
- Measurements are accurate and precise in order to meet monitoring requirements
- Data can be consistently compared with data from national and international standard sites
- Measurements are consistent over time

Data from all sites are available from the Councils web site.

3 Non-Automatic Monitoring Data

For monitoring locations of diffusion tubes throughout the borough, see Appendix1

The non-automatic sites are diffusion tube sites and monitor for nitrogen dioxide and benzene. Diffusion tubes provide an indicative measure of the pollutant being monitored. The advantage of using diffusion tubes is that they are inexpensive and provide useful information on pollutant variations across the borough to identify pollution hotspots and long-term trends.

The diffusion tube analysis (benzene and nitrogen dioxide) is managed by Bureau Veritas and they use a UKAS accredited laboratory. Full details of tube composition is available through the website.

3.i Nitrogen Dioxide

The Council monitors for nitrogen dioxide by diffusion tube at 22 locations throughout the borough. The locations are a mixture of kerbside, roadside and background sites. Results and site category are detailed below.

Table 14. Nitrogen dioxide ($\mu\text{g}/\text{m}^3$) concentrations as measured by diffusion tube:

Year	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site7
1999	33 (54)	37 (60)	35 (57)	41 (67)	37 (60)	28 (46)	28 (46)
2000	31 (51)	30 (50)	32 (53)	40 (67)	32 (53)	25 (40)	30 (49)
2001	37 (64)	32 (56)	35 (61)	33 (58)	53 (14)	26 (45)	25 (44)
2002	35 (55)	39 (61)	31 (48)	33 (52)	29 (46)	27 (43)	25 (39)
2003	42 (48)	38 (44)	38 (45)	42 (48)	39 (45)	29 (34)	32 (37)
2004	44 (49)	42 (46)	45 (50)	50 (56)	43 (47)	29 (32)	35 (39)
2005	44 (53)	41 (49)	48 (57)	45 (54)	38 (45)	27 (33)	30 (36)
2006	42 (51)	42 (51)	45 (54)	45 (55)	40 (48)	30 (36)	30 (36)
2007	45 (49)	47 (51)	51 (55)	41 (44)	49 (53)	30 (32)	34 (37)

Year	Site 8	Site 9	Site 10	Site 11	Site 12	Site 13	Site 14
1999	31(50)	34(56)	34(55)	34(56)	42(69)	-	-
2000	29(47)	34(56)	30(49)	31(52)	31(51)	-	-
2001	29(51)	40(70)	32(55)	29(50)	29(51)	-	-
2002	27(42)	31(48)	28(44)	30(47)	29(45)	34(54)	40(63)
2003	32(37)	-	33(38)	30(35)	39(46)	56(65)	57(66)
2004	35(39)	-	31(35)	41(45)	32(36)	59(66)	73(81)
2005	32(38)	-	36(43)	41(49)	41(49)	52(61)	83(98)
2006	37(45)	-	47(57)	40(49)	45(55)	47(57)	85(102)
2007	41(44)	-	44(57)	44(47)	43(46)	50(53)	88(95)

Year	Site 15	Site 16	Site 17	Site 18	Site 19	Site 20	Site 21	Site 22
1999	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-
2002	51(80)	53(83)	36(56)	40(62)	-	-	-	-
2003	44(52)	60(69)	44(50)	42(49)	45(52)	65(75)	48(55)	-
2004	54(60)	57(63)	49(55)	47(52)	61(67)	73(81)	47(52)	-
2005	54(64)	65(77)	53(64)	49(59)	62(74)	68(80)	44(53)	-
2006	57(69)	63(75)	53(64)	48(57)	73(88)	67(81)	41(50)	27(32)
2007	51(55)	70(75)	51(55)	87(93)	72(77)	74(79)	50(54)	40(43)

NB: Bias adjusted figures are shown in bold in brackets.

Since 2003 Newham has co-located diffusion tubes at both cam road and wren close automatic analysers (site 21 and 22) to determine a bias adjustment factor, which is then applied to the raw data for the particular year. Previously the bias correction was supplied by Bureau Veritas from the London wide survey. The bias adjustment factor used for 2007 was **1.07**.

These diffusion tube data results indicate that nitrogen dioxide levels are elevated above the Governments annual mean objective of $40\mu\text{g}/\text{m}^3$ at all locations apart from site 6 and site 7 which are both

background locations. Site 21 and 22 are co located sites with the air quality monitoring stations.

Benzene

Benzene monitoring is co located with the nitrogen dioxide diffusion tubes at 16 sites. Results are tabulated below. All results are well below the air quality standard of $16.25\mu\text{g}/\text{m}^3$ and show a general reduction in concentration over the monitoring period.

Table 15 Benzene ($\mu\text{g}/\text{m}^3$) concentrations as measured by diffusion tube:

Year	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site7
1999	3.30	4.39	5.03	3.93	3.05	2.8	2.78
2000	2.18	2.57	3.10	2.24	1.59	1.33	1.62
2001	1.65	1.92	2.36	2.16	1.65	1.24	1.47
2002	3.08	3.11	4.11	3.60	2.74	2.22	2.33
2003	2.60	2.76	2.78	2.65	2.22	1.77	2.08
2004	2.42	2.06	2.33	2.30	1.75	1.70	1.69
2005	1.51	1.43	1.65	1.67	1.22	1.06	1.17
2006	1.84	1.84	2.17	1.81	1.4	1.44	1.52
2007	2.21	1.86	2.95	2.44	1.35	2.05	2.05

Year	Site 8	Site 9	Site 10	Site 11	Site 12	Site 13	Site 14
1999	2.98	NO2 ONLY	2.45	2.24	2.95	-	NO2 ONLY
2000	2.39		1.53	1.43	1.92	-	
2001	1.5		1.78	1.16	1.50	-	
2002	2.43		2.54	2.35	2.43	-	
2003	1.93		1.86	1.82	2.15	2.87	
2004	1.88		1.48	1.71	1.86	2.87	
2005	1.30		1.03	1.31	1.28	2.54	
2006	1.53		1.48	1.57	1.51	2.13	
2007	1.72		1.57	1.49	1.97	3.03	

Year	Site 15	Site 16	Site 17	Site 18	Site 19	Site 20	Site 21	Site 22
1999		-			-	-	-	

2000		-			-	-	-	
2001		-			-	-	-	
2002	NO2 ONLY	-	NO2 ONLY	NO2 ONLY	-	-	-	NO2 ONLY
2003		2.87			-	-	-	
2004		2.87			2.42	2.87	2.87	
2005		2.80			2.12	2.80	1.67	
2006		3.21			2.23	2.54	2.04	
2007		2.97			2.28	2.51	2.32	

4 Monitoring Programme

Through previous review and assessment reports, it has been identified that the council will not meet the objectives from PM10 and NO₂ along major roads in the borough. The Council is therefore committed to maintaining its air quality-monitoring program in order to monitor progress of these two pollutants towards the national air quality objectives.

Additional monitoring may be carried out in the light of possible expansion of London City Airport, Stratford City and the Olympics. Monitoring is required by third parties to national standards and it is anticipated that if appropriate that this data will be reported in future years.

The Borough is also looking to expand the existing air quality management area which may also include additional monitoring if considered necessary or useful

5 Air Pollution Complaints

During 2007, Public Protection dealt with a total of 133 requests relating to air quality. Table xxx details the nature of the complaints

Table 16. Numbers of air pollution complaints during 2007

Complaint category	No. in 2007
Odours/fumes	42
Smoke from bonfires	10
Dust/grit including construction dust	50
Smoke from domestic chimneys	2
EPA Part B processes	10
Industrial Pollution	13
Air Quality general	6
Total	133

6 New Local Developments

In addition to reporting new monitoring results and air pollution complaints, Defra guidance requires that details on new local developments that might affect local air quality are included in the Air Quality Progress Report, i.e.

- New industrial processes
- New retail or mixed use developments that could significantly change traffic flows
- New landfills sites, quarries etc with nearby public exposure
- New road schemes or significant changes to existing road schemes

There are no landfills or quarries nor any significant changes to Part A processes within the Borough.

In relation to part B processes there have been several changes with the closure of processes or the movement of processes to other areas within the borough.

Table 17 LAPC Processes

processes	March 2007
Industrial A1	8

Industrial A2	1
Petrol stations	16
Other	15

Roads

There are significant changes planned within the Borough over the coming 3 years in particular in and around the Olympic Park and Stratford city. Changes are also planned in Canning town with changes to the on off slips of the A13. However the only significant change to occur in 2007 was the closure of Carpenters Road. This closure has limited impact as much of the area was industrial with limited receptors.

Developments

There are a number of significant developments within the Borough, the Olympics and Stratford city cover several hundred hectares and were worked on throughout 2007. These developments have an impact at the construction phase and will have an impact at the operational phases. The status of the 2 sites is such that they are considered high risk sites under the London Code of construction dust and monitoring is undertaken around the site. The 2008 reports will need to consider the impact of the sites.

Air quality is recognised as a major planning consideration and all developments in areas adjacent the boroughs main road networks are evaluated for air pollution. Not all planning applications require a detailed air quality assessment to be carried out, but each application

is considered with regard to air quality. Newham uses planning powers through condition, informatives and section 106 agreements of the town and country planning act 1990 to reduce the impact of significant developments.

7 Air Quality Action Plan Progress Report

The Air Quality Action Plan Progress Report serves to update on the Council's progress towards achieving the air quality objectives. Specifically the progress report aims to:

- Retain the profile of LAQM within the local authority
- Provide a means of communicating air quality information to members and the public
- Maximise the usefulness and interpretation of the monitoring carried out by the local authority
- Make the next stage of review and assessment easier, as the report provides a readily available up-to-date source of information
- Help local authorities respond to enquires for information on air quality
- Provide information to help other policy areas, such as transport and land use planning
- Demonstrate progress on the Air Quality Action Plan

Newham's air quality action plan focuses on reducing NO_x and PM₁₀ emissions, primarily through measures to reduce traffic flow and vehicle emissions and to promote, improve and encourage the use of more sustainable forms of transport. Other actions focus on measures to reduce exposure, raise public awareness of air pollution, greener travel and local policy measures.

The Council's action plan applies to the entire borough, while the air quality management area is currently only part of the borough the action plan needs to apply borough wide to maximize it's

impact. Certain actions (planning development control may only apply within the air quality management area.

Whilst the annual average PM10 objective is likely to be met at background locations, with levels of PM10, which have not declined as predicted, but remain steady at around $28\mu\text{g}/\text{m}^3$. The NO₂ objective is falling at background locations, however levels in 2007 exceed objectives. Despite the combination of national and local measures in the Council's action plan, it is anticipated that the objectives will not be achieved in Newham.

In previous reports defra have advised that actions that have been achieved do not need to be included in the Action Plan progress report. Therefore in the following table, only those actions which have not been achieved in previous years are commented upon with regard to the progress, outcome to date and any comments for each action. The numbering of each action is taken from the Air Quality Action Plan.

**Progress report
Air Quality Action plan
April 2007/8**

The London Borough of Newham air quality action plan (Draft) detailed a series of actions to be undertaken by the Council to improve air quality in Newham. The table below (extracted from the action plan) details the actions that were in the plan alongside the activity within the year and where appropriate additional comments.

Reference	Section/ Actions	Priority	Impact	Activity 2006/7	comment	Activity/comment 2007/8
1.1	Abandoned and Untaxed Vehicles: Actions					
1.1A	Subject to securing funding, continue with the existing initiative to remove abandoned vehicles from Newham's streets meeting set targets for response and removal.	High	High		On going commitment	On going commitment
1.1B	Proceed with current enforcement action in partnership with the DVLA to report untaxed vehicles to the DVLA and to use devolved powers to remove untaxed vehicles from Newham's streets.	High	High		On going commitment	On going commitment
1.1C	Continue to operate a vehicle "Surrender" scheme to destroy and recycle unwanted vehicles free of charge and further publicise this service to reach all sections of Newham's diverse community.	High	High		On going commitment	On going commitment
1.2	Physical Traffic Management: speed & flow					
1.2A	In designing future road calming schemes the council will take into account the impact upon local air quality.	Medium	Low/ Medium		Mechanism to be put in place	Prior notification of scheme: provided to H to allow monitoring deemed necessary
1.2B	Carry out effective enforcement of 'moving traffic offences' to keep traffic flowing including action regarding the illegal use of bus lanes.	Low	Low		The Council uses its powers to enforce bus lanes	The Council uses its powers to enforce bus lanes
1.2C	Where resources permit ensure that the air quality associated with traffic management schemes is monitored prior to, during and after schemes are implemented.	Medium	Low/ Medium		On going monitoring, report to be prepared once adequate data set is available.	On going monitoring to be prepared once adequate data set is available. Preliminary suggests particulate

						still high w pedetrianis scheme. (remains a route)
1.3	Re-routing and Road Hierarchy					
1.3A	The council will carefully consider development proposals in relation to its defined road hierarchy. It will seek to ensure that traffic levels remain or become consistent with this hierarchy.	High	High		Traffic Assessment is part of the consideration of all development proposals	Traffic Assessment part of the consideration all develop proposals
1.3B	The council will only support the construction of new primary distributor, local distributor and access roads when these will bring net economic and/or environmental benefits to the borough. Regard will be had to the likely consequences of new roads for neighbouring boroughs, and measures will be taken, where appropriate, to minimise any likely adverse effects.	High	High		Public enquiry for bridge started june 2005	Public enq reopen in € 2009
1.4	Low Emission Zone, Access Control & Clear Zones					
1.4A	Support the consideration of an effective London wide LEZ and, following agreement and obtaining necessary funding, work with the GLA, ALG and other London Boroughs in implementing appropriate LEZ scheme(s).	High	High		Public enquiry for bridge started june 2005	LEZ in plac Publicity ar support giv through Cc web site
1.4B	Keep local transport operators (including passenger operators) informed of any LEZ scheme(s) proposed that would affect Newham and provide information regarding funding opportunities for fleet improvements.	Medium	Low/ Medium		Funding for fleet improvements (powershift etc) withdrawn by central government	LEZ in p Fi for fleet improveme (powershift withdrawn central governer
1.4C	The council will continue to create Home Zones where funding can be identified and encourage 'Home Zones' to be incorporated into appropriate new developments.	High	Medium/ High		Home Zones regarded by TfL as poor value for money	Home Zon regarded b as poor va money
1.4D	Consider the introduction of access control within appropriate future regeneration projects.	High	Medium/ High			
1.4E	Explore the possibility of working with neighbouring boroughs to introduce Clear Zones within the borough.	Medium	Low/ Medium		The Clear Zones concept is still unformed	No further developme
1.5	Road User Charging					
1.5A	The council will follow the developments of the Central London Congestion Charging Scheme (CCS). Should significant amendments to the scheme be proposed the council will carefully examine the air quality implications for Newham and fully participate in the formal consultation process.	Medium	Low/ Medium		Should an Eastern extension be proposed Newham will consider the implications	Should an Eastern extension l proposed Newham w consider th implication
1.5B	Newham council will campaign for differential	Medium	Low/	SoS	Public enquiry	SoS reope

	charging (with reduced rates for local residents) in the application of tolls at the forthcoming Thames Gateway bridge to discourage through traffic.		Medium	reopened enquiry. Expected to reconvene 2009	for bridge starting june 2005	enquiry. Expected to reconvene. Differential charging is of the prop scheme
1.6	Parking Management & Charging					
1.6A	Following public consultation and taking into account travel needs and the appropriateness of parking controls, Newham Council will continue to expand and extend the number of CPZ's within the borough.	High	Medium/High		CPZ.'s will be introduced where the need can be proved	Schemes be drawn up for stratford ar
1.6B	Newham Council will continue with parking enforcement and dealing with moving offences in bus lanes.	Medium	Low/Medium	Ongoing		
1.7	Urban Traffic Control Systems (UTCS)					
1.7A	Continue with the monitoring of traffic signals to ensure that the most appropriate balance is found between the motorised vehicles and other users of the road i.e. pedestrians.	Low	Low	Council will liaise with newly appointed TfL Boro Signals Officer	The Council will liaise with TfL on this issue	
1.7B	Investigate potential areas of the borough where signs may be used in traffic management to indicate points where engines should be turned off while queuing	Medium	Low/Medium		See 1.17F	
1.8	Infrastructure Development					
1.8A	Lobby, through partnerships where appropriate, for sustainable transport infrastructure developments such as the rail link river crossings.	High	High	Ongoing		Ongoing
1.9	Reallocated Road-Space					
1.9A	Continue to ensure that road space is reallocated to buses, coaches and cyclists or more sustainable transport modes.	Medium	Low/Medium	Ongoing		Ongoing
1.10	Public Transport Initiatives - Bus					
1.10A	Continue working within and supporting the policies of London Bus Priority Network, London Bus Initiative and Bus Priority Partnership, which include: road-space allocation and improvements, camera enforcement, modification of traffic signals for bus priority, countdown facilities etc.	Medium	Low/Medium	Ongoing		Ongoing
1.10B	To actively promote and facilitate emission testing conducted on buses within Newham by the Vehicle Inspectorate and to publicise these results to members of the public.	Medium	Low/Medium	Ongoing		Ongoing
1.11	Encouragement of Walking, Cycling and Motorcycle Use					
1.11A	Continue to ensure with new developments that pedestrian routes are safe, accessible, convenient and pleasant.	Low	Low	Ongoing		Ongoing
1.11B	The council supports completing, promoting and maintaining the strategic walking routes in London	Low	Low			

1.11 C	The council will continue its Safer Routes to School programme.	Low	Low			
1.11 D	'Think Bike' in relation to highways and transport schemes and continue to retrofit and create with new developments cycle routes that are safe, accessible, and with cyclist prioritisation;	Low	Low			
1.11 E	Provide strategic and sufficient safe cycle and motorcycle parking	Low	Low	Ongoing		Ongoing
1.11 F	Continue to work towards and facilitate the implementation and maintenance of the London Cycle Network, Newham Cycle Network and National Cycle Network within the borough.	Medium	Low/ Medium	Ongoing		Ongoing
1.11 G	Continue to provide free cycle proficiency training for children and adults	Medium	Low/ Medium		Training will be continued as long as funding is available	Training will be continued as long as funding is available
1.11 H	Encourage staff use of bicycles by providing, where resources allow, additional parking spaces where required, pool bikes, and extend the availability of staff changing and showering facilities.	Medium	Low/ Medium			Opportunity increased use by staff resulting from move of 2 staff to Royal Docks
1.11 I	Continue to liaise with local cycle groups regarding cycle networks within the borough and publicise and encourage the use of cycle routes.	Medium	Low/ Medium	Ongoing		Ongoing
1.11 J	Continue to improve cycle and walking routes in the Borough.	Medium	Low/ Medium	Ongoing		Ongoing
1.11 K	The council will continue with a pilot study to providing Motorcycle Advanced Stop Lines within the borough and consider its implementation on a wider scale.	Low	Low	Ongoing		
1.12	Partnerships & Travel Plans (Workplace & School)					
1.12 A	Continue to encourage developers to introduce Travel Plans.	High	High	Major sites required to submit travel plans, including stratford city and silvertown quays		Ongoing
1.12 B	Continue to implement school travel plans via the 'Safer Routes Programme'	High	Medium/ High		Programme will continue	Programme will continue
1.12 C	Continue to work with service providers in order to encourage the transfer of passengers from one mode to another.	Medium	Low/ Medium	Beckton Bus Station now under construction improving bus-bus and bus-DLR interchange		Beckton Bus Station due to open October 2008
1.12	Establish regular contact with Newham's Business	Medium	Low/		Guidance	Guidance

D	Forum to discuss air quality issues. Research group member's with regards Travel Plan status; if required, provide guidance and assistance in adopting a Travel Plan.		Medium		available via TGLP Travel Awareness Officers	available v TGLP Trav Awareness Officers
1.12 E	Try to encourage businesses to participate in environmental management schemes that can improve indoor air quality of the work place and use purchasing to minimise energy use and emissions.	Medium	Low/ Medium			
1.12 F	Continue to support the vision of London's Lee Valley Transport Working Group: DELETE?	High	High		Group not meeting, needs investigating	No contact
1.12 G	Newham Council will work within the TGLP to implement a 'Sustainable Transport Strategy'.	High	High		Committed	Contact m: with travel coordinato group to m 2008 at clu level
1.12 H	Seek to establish additional partnerships within the borough that will have a positive impact on air quality.	Medium	Low/ Medium			See above developme climate cha group (with support) meetings arranged fr 2008 for "g staff" to liai energy clin change an
1.13	Air Quality Promotion, Education & Awareness Raising					
1.13 A	Regularly update the air quality pages on the council's website and produce frequent information bulletins to keep members of the public informed on air quality issues.	Medium	Low/ Medium	Website reviewed continually. AQ data available as well as AQ reports including staged reports (1-4) and USA's. Independent web site review in AQM listed Newham as one of the best in the country and best in London		Site regula updated. V site commē by AQ maç
1.13	Continue to monitor air quality in specified areas	Medium	Medium/	AQ		Monitoring

B	and extend where possible, including the addition of an automated monitoring station at London City Airport and <i>ad hoc</i> monitoring, which may extend over prolonged periods		High	monitoring continuing at 2 sites. Third party monitoring at a further 2 sites London City Airport and Dock road (team with FDMS) Liaison continuing with LCA for improved access to data. Additional OSIRIS site added near LCA, (5)		continuing.
1.13 C	Promote the air quality benefits associated with cycling during the schools cycling proficiency programme.	Low	Low		To be considered. Safety is the priority	
1.13 D	Assist students carrying out air quality research projects.	Low	Low			Data made available to web site on request
1.13 E	Continue to take part in the national campaigns subject to available funding and community support.	Medium	Medium/High			
1.13 F	Continue to promote low emission vehicles.	Medium	Medium/High			
1.13 G	Continue with two information screens at locations in East Ham and Stratford with live information upon air quality and its implications for health. Link these screens to the NEWTEXT initiative.	High	High	On going		On going
1.13 H	Work with partners to provide an air quality information service to Newham's residents and participate in the 'Yourair' project to provide air pollution alerts to vulnerable groups.	Medium	Medium/High	On going, 2 schemes in operation your air and Newhams local network, text and email service providing current and future Aq data (low medium high)		On going
1.14	Newham Fleet Management, Travel Plan & Clean Fuels				EST now working with Newham on fleet	EST now v with Newh: fleet improve

					improvement	
1.14 A	The council will ensure that its fleet of 350 vehicles meets high emissions standard (currently Euro III).	High	Medium/High	On going improvement process, all vehicles compliant with LEZ, many HGV's fitted with eminox particle filters.	From June 2006 all new vehicles will meet Euro IV.	
1.14 B	Fleet Operations will continue to trial the use of LPG fuelled and LPG/petrol dual fuelled vehicles and investigate the potential of other low emission fuels such as water/diesel emulsion as information comes available.	Medium	Low/Medium	On going	Due to short trips use of LPG/Petrol is about 50%	
1.14 C	Ensure that council vehicles are: <ul style="list-style-type: none"> well maintained, this includes bi-annual emission tests as a minimum; used on routes and tasks which are worked out to be as efficient as possible, operated by appropriately trained staff (to improve fuel economy) 	Medium	Low/Medium	Vehicles maintained to manufacturer's requirements; normally this means a minimum of twice per annum for HGV's. Emission checks undertaken once per year. Routes are continually assessed for greatest efficiency		On going
1.14 D	Continue with plans to ensure the retrofitting of CRT for all larger diesel vehicles.	Medium	Low/Medium	All appropriate vehicles fitted with CRT. Programme completed		Program completed
1.14 E	Establish a fleet register that includes emission information and measures to implement emissions improvements	Medium	Low/Medium	Formal register not kept. There is a list of vehicles but does not specify euro std, however all vehicles under 5 years old, all HGV's		

				fitted with CRT. All future purchases will be Euro IV.		
1.14 F	Promote alternative fuels and technologies through initiatives such as the use of an electric car and low emission vehicles	Medium	Low/ Medium			
1.14 G	Implement a Council Travel Plan that will include a range of measures to encourage staff to use public transport, cycling or motorcycles as an alternative to using cars.	High	High	The Council through its Climate Change Improvement Team is seeking to find ways to develop and implement a Council Staff Travel Plan in 2008	The Council is a member of the Thames Gateway London Partnership which employs 2 Travel Awareness officers	Travel plan drafted
1.14 H	Provide encouragement and guidance for individuals and groups who wish to clean up their vehicles through campaigns such as CleanUp and Powershift	Low	Low		Program stopped	Program stopped
1.14 I	Encourage businesses to try and achieve at least the Euro II standard plus a reduced pollution certificate or Euro III by 2005	Low	Low		LEZ program supercedes this project	LEZ program supercedes project
1.14 J	Identify appropriate sites for further alternative refuelling infrastructure together with TransportEnergy	Low	Low			
1.14 K	Support electric re-fuelling through the work of the London Clean Fuel Working Group	Low	Low			
1.15	Taxis, Mini-Cabs and Private Buses / Coaches					
1.15 A	Continue to control where taxis, mini-cabs, and local bus operators in Newham can park as a means of regulating their use.	Low	Low			
1.15 B	Support the regulation of taxis and minicabs through the Public Carriage Office, and encourage the introduction of additional measures to ensure emission levels are minimised by 2005, such as vehicle emission checks and changes to low-emitting fuel.	Low	Low		The Council supports the work of the PCO	The Council supports the work of the PCC
1.16	Road Freight Measures – Heavy Goods and Light Goods Vehicles					
1.16 A	Encourage and support initiatives to transfer road freight to rail and water.	Low	Low		UDP and LIP support this policy	UDP and L support this policy
1.16 B	Continue with Newham's strategy for traffic management by locating freight-generating developments on or near main road systems.	Medium	Low/ Medium		Will continue in partnership with the logistics sector	
1.16	Set up a Freight Quality Partnership through	Low	Low	TfL is funding	The Councils	Meeting with

C	Newham's Transport Strategy/Policy?.			a Freight Quality Partnership co-ordinator through Thames Gateway London Partnership	Local Implementation contains proposals for a FQP	FQP office arranged for 2008
1.16 D	Provide help, encouragement and awareness raising to Road Freight groups within the borough, concerning funding for cleaner vehicles.	Low	Low		As Above	
1.16 E	Use roadside vehicle emissions checks for HGV's and LGV's, to encourage regular servicing, maintenance and replacement of old vehicles.	Low	Low			
1.16 F	Minimise the misuse of roads by freight from major construction sites by continuing to and expand the spot-checking of roads used and whether loaded vehicles are covered.	Low	Low			
1.16 G	Participate in the review of the London night-time lorry ban. Support linking any relaxing of the ban to ease day time congestion with the use of emission abatement and cleaner fuels.	Low	Low	Continuing Support	The Council will support the link subject to the proposed caveats	On going
1.16 H	Newham council will assess the scope for the use of priority lanes by freight vehicles and the implications for other road users.	Low	Low		The Council sees no locations in Newham where this would be viable	No proposal.
1.17	Roadside Emissions Testing and Enforcement					
1.17 A	Following evaluation of the one year London - Wide Vehicle Emission Testing (VET) campaign support the continuation of an effective program subject to securing government funding.	High	High	Ongoing	VOSA not liaising with Local authorities adequately.	VOSA not with Local authorities adequately
1.17 B	Newham Council will initiate and support the Vehicle Inspectorate in roadside vehicle emissions testing programmes carried out in the borough	High	High	Support for VOSA on request.		Support for VOSA on request.
1.17 C	Offer voluntary vehicle testing and engine adjustment on an annual basis.	High	High	Free emission monitoring and tuning offered in 2 locations in Newham over a 1 week period. 200+ vehicles tested	The amount of testing will vary from year to year depending on funding. Level of failures falling, ability to rectify on site diminishing	No testing undertaken 2007

1.17 D	Newham Council will publicise Vehicle Emission Testing to ensure that motorists are aware of the new powers and of the voluntary testing and adjustment.	High	High	Widespread publicity during the testing period.		No testing undertaker 2007
1.17 E	Newham Council will also work in conjunction with the Mayor for London to raise awareness of the importance of good vehicle maintenance	Low	Low	Advice leaflets and keyrings given out during testing period. Leaflets etc available at Council offices at other times		
1.17 F	Newham Council will seek to enforce new powers to insist that motorists switch off their engines while stationary.	Medium	Low/ Medium	Not progressed	This is not a major issue in Newham, schemes are difficult and costly to set up. Under review following operation of some schemes in London	No action
2.1	Passenger Rail and Underground Services					
2.1A	Establish Quality Partnerships with the rail and tube industry to promote increased levels and quality services in the Borough.	Medium	Low/ Medium		Liaison with TfL and Train Operating Companies is ongoing.	
2.1B	Support improvements in rail / tube infrastructure.	High	High	Newham is a member of the North Orbital Rail Partnership, East London Line Group and West Anglia Route Group	Support contained in Local Implementation Plan	
2.2	Freight Rail					
2.2A	Newham Council will continue to support initiatives to transfer freight from road to rail.	Medium	Low/ Medium		Will support transfer in partnership with the logistics sector	
2.2B	The council will investigate the potential of establishing Quality partnerships within the freight rail industry to ensure best practicable means are	Medium	Low/ Medium	See 1.16C	The Councils Local Implementation	

	adopted with regards air pollution and other environmental issues.				n contains proposals for a FQP	
2.2C	The council will lobby for rail infrastructure improvements.	Medium	Low/ Medium	See 2.1B		
2.3	Maritime, Ports and Waterways freight and Passenger movements)					
2.3A	Where possible continue to safeguard mooring sites along the waterways in Newham, which have been earmarked for river bus, taxi and freight movements.	Medium	Low/ Medium			Objective c Freight Qu Partnership
2.3B	Continue to encourage and facilitate river use by river side industries and freight operators	Medium	Low/ Medium		The Council will protect such wharves as are still safeguarded	
2.3C	Develop sustainable water transport services within the borough in partnership with other boroughs	Medium	Low/ Medium			
2.4	Airport Measures					
2.4A	Under a planning agreement with Newham Council London City Airport (LCA) is committed to funding consultants to carry out a study of the impact of the airport upon air quality.	High	Medium/ High	Liaison continuing with LCA in to the scope of consultants role. Monitoring commenced for NOx and PM10 and NO2 diffusion tubes. New ES includes emission data from aircraft	LCY written to LBN with formal proposal for Short, medium and longterm AQ studies to be carried out during 2006	Planning application received, a approval w subject to detailed se agreement will enhance monitoring Aq and sustainabil improve
2.4B	Regular updates to the LCA 'Green Transport Plan' to effectively manage the transport needs of their employees and passengers that includes targets to reduce care journeys.	High	Medium/ High	LCA DLR usage at 50%, continuing steps to reduce private car and to maximise use of PT		LCA contin operate wil levels of pu transport a If planning application approved t include nee detailed tra plans etc
2.4C	Newham Council will liaise with LCA for the Vehicle Inspectorate to carry out random emission checks of queuing taxis at the Airport.	High	Medium/ High	No testing undertaken airport willing to allow for such testing.	VOSA to be pursued.	VOSA to b pursued.
2.4D	Newham Council will require London City Airport to meet its commitments under existing S106 agreements to provide air quality monitoring at the	Medium	Low/ Medium	Monitoring commenced	Works on installation commenced	Monitoring pm10 and going

	site				May 2006, completion summer 2006	
2.4E	Newham Council and London city airport will continue to lobby for a CROSSRAIL proposal that includes access to LCA.	High	High	completed		Lobbying continues
3.1	Industrial Measures					
3.1A	In accordance with government guidance, continue to inspect processes regulated by the local authority to ensure compliance with authorisations. This will ensure that such processes are not responsible for exceedances of the National Air Quality Objectives.	High	High	Inspections were carried out to the frequency required by the risk assessment method. Inspections are also conducted in respect to complaints or for check up purposes.	2004/5 DEFRA return statistics show that 194% of inspections were conducted compared to the minimum number that were required. 2005/6 The number of inspections conducted exceeded the minimum number that was required.	The number inspections conducted continue to exceed the minimum number that is required.
3.1B	Continue to liaise with other industrial/commercial operators as well as other local authorities to promote good environmental practice.	Medium	Low/ Medium	Attend meetings of the London wide PPC forum and the East London PPC cluster group.		Shared meeting of the Defra Industrial Pollution L group.
3.1C	Continue to liaise with the Environment Agency regarding 'part A' processes in Newham.	Medium	Low/ Medium	Liaison with EA officers when complaints are received regarding Part A processes. Consultation responses are given on IPPC applications.	2004/5 A public register of processes is kept for public consultation requiring management of EA correspondence for this purpose. 2005/6 A public	A public register of processes kept for public consultation requiring management of EA correspondence for this purpose. Meetings with officers are conducted discuss past issues regarding sites in Newham.

					register of processes is kept for public consultation requiring management of EA correspondence for this purpose.	
3.1D	Investigate industries in the borough to ensure that all appropriate processes are authorised.	Medium	Low/ Medium		2005/6 The survey found dry cleaning operations that will require permitting during 2006/7.	All reallocated industries & cleaners within the Borough have been permitted.
3.1E	Continue to investigate complaints regarding smoke from industrial and commercial premises.	Medium	Low/ Medium	The Pollution Control Unit responds directly to complaints received of smoke and odour from industrial and commercial premises.	2004/5 Close liaison with the Council's Initial Response Team ensures that pollution from regulated installations is dealt with under the Pollution Prevention and Control Regulations (2000). 2005/6 Close liaison with the Council's Initial Response Team ensures that pollution from regulated installations is dealt with under the Pollution Prevention and Control	Close liaison with the Council's Initial Response Team ensures that pollution from regulated installations is dealt with under the Environmental Permitting Regulations 2007.

					Regulations (2000).	
3.1F	Produce an emission inventory for part B processes in the borough and regularly update this on the 'Pollution Control Unit' website.	Medium	Low/ Medium		2004/5 The website lists the authorised installations and details the types of industries and their emissions. 2005/6 The website is currently undergoing revision, but will list the authorised installations and detail the types of industries and their emissions.	The website details the authorised installations of industries and their emissions. The website is currently undergoing revision, to changes under the Environment Permitting Regulation 2007.
3.3	Fugitive Emissions					
3.3A	Produce dust guidance for construction sites	High	Medium/ High	delivered		Provided £ funding for BPG
3.3B	Continue and develop additional dust sampling in association with construction sites	Medium	Low/ Medium	delivered		
3.3C	Continue with and extend random spot checks of vehicles from major construction sites to ensure they are covered if carrying material that can become windblown.	Medium	Low/ Medium		Issue covered in dust protocol	Issue covered in dust protocol
3.3D	Continue with street cleaning to minimise the re-suspension of road dust and review the cleaning regime currently in place.	Medium	Low/ Medium		CTRL construction completed	
3.3E	Use planning conditions and section 106 agreements to minimise emissions of dust from development sites.	High	Medium/ High	Codes of construction practice required of developers are included in section 106 agreements. Standard planning conditions	On going	On going

				include emission criteria for delivery vehicles and off road plant. Require the installation of wheel washes, background surveys and monitoring		
3.3F	Continue to ensure that contractors working on behalf of the council demolishing council buildings or clearing council sites have a clause in their contract that ensures they minimise dust production.	High	Medium/High	Env H liaise with contractors on large Council demolition projects to advise and minimise dust, planning applications require environmental code.		Env H liaisons contractors large Council demolition projects to and minimise dust, planning application require environmental code.
3.4	Domestic and Commercial Energy Measures					
3.4A	When purchasing fuel for use by the council to always consider 'green electricity'. All major electricity users within the council currently use 'green electricity' from a renewable source..	Low	Low		All major electricity users within the council (including street lighting) are to be contacted this year to purchase electricity generated from a zero carbon renewable source.	
3.4B	Continue to encourage and promote the use of sustainable energy sources such as Solar-Voltaic cells. To apply for grant funding to install a large scale solar voltaic project in the Woodgrange regeneration area.	Low	Low	On going		Scheme to 1000 solar thermal sy: cancelled.
3.4C	Ensure that older boilers within council premises are replaced with those that meet current emission standards and strive to completely withdraw from the use of solid fuels and oil-fired burners	Low	Low	On going replacement	There is virtually no use of solid fuels now in the Borough.	

3.4D	Through the Environmental Sustainability Checklist for Major Development (Supplementary Planning Guidance) require for energy use assessments, require buildings to have high BREEAM rating, require housing to have an EcoHomes assessment and support GLA policy to encourage the introduction of technology to generate a percentage of the energy used on site or, if this cannot be achieved, import a percentage of the energy requirements from the 'Green Grid'.	Medium	Low/ Medium			The Sustain Checklist n in place as Newham's planning p moving ah with 'Susta Buildings Comment [RB1]: Page: 87
						Document purpose of to expand o: policies with Newham UJ London Pla assist those applying for planning for developmen proposals w the Borough will provide guidance on range of environmen general sustainabilit matters for t considering developmen proposals in borough. Preparation will start in and the doci will be com in 2009.
3.4E	Continue to spend the council's climate change levy rebate on energy efficiency improvements.	Low	Low			
3.4F	Prepare an energy strategy, in line with the London Mayor's Energy Strategy, which will aim to increase energy efficiency within the council and promote energy awareness.	Low	Low			A new Clin Change an Sustainabi strategy frc 2009-2014 being prod at present
3.4G	To provide information on energy efficiency in the home.	Low	Low	On going	Newham Homes is working hard and is well on target to make all their domestic	On going

					stock passed the Decent Homes standard as required by 2010. Newham has made a higher CO2 reduction than any other London Borough as required by the Home Energy Conservation Act 1995 (this act requires all local authorities to reduce CO2, within their area, by 30% by 2011. The Newham figure currently stands at 23% improvement after the eighth year.	
3.5	Land Use Planning					
3.5.A	When the borough's Unitary Development Plan is reviewed incorporate emerging government guidance and relevant principles of this Air Quality Action Plan	High	High		Changes under discussion for LDP	Changes u discussion LDP
3.5.B	The Council will produce Supplementary Planning Guidance on Sustainable Design which will address such issues as sustainable construction, the promotion of alternative energy use and energy conservation measures, all of which will impact indirectly on air quality. A guidance note will also be produced to advise developers on the land-use implications of this Air Quality Management Action Plan and other relevant air quality-related policies.	High	High	On going		On going
3.5.C	All traffic trip generating development major development proposals need to be accompanied by transport and air quality assessments. If such proposals lead to an unacceptable breach of air quality objectives this may be grounds for a refusal of the application, however the Council will usually seek the inclusion of mitigation measures and, where appropriate, planning obligations will be imposed where these can feasibly address the adverse impacts of development on public amenity	High	High	On going		On going

	and human health.					
3.5 D	The air quality implications of all developments will be taken into account when considering planning applications and appropriate conditions will be applied. Special consideration will be given to development that falls within the Air Quality Management Area and conditions may include a requirement to obtain a specialist report that details the measures to minimise the adverse impact on local air quality and/or minimise exposure to air pollution.	High	High	Where significant applications are made, refused unless accompanied with an AQ assessment.		On going
3.6	Corporate Procurement					
3.6A	The council's Procurement Strategy will integrate environmental issues into procurement processes.	Medium	Low/ Medium			On going

Other Actions

There is an increase in the number of planning applications for developments including biomass boilers. Biomass boilers are becoming more widespread throughout the borough and across London. There is concern that increase in number of biomass boilers and domestic wood burners will affect and increase in emissions of NO₂, PM10's and ultrafine particles.

Public protection has adopted is dissatisfaction with such developments and requires further details to be provided before approval. Poor applications (often small furnaces using wood chip) will normally be recommended for refusal. Further information on biomass can be found at

:- <http://www.londoncouncils.gov.uk/doc.asp?doc=21683&cat=2665>

APPENDIX 1

Map of Borough showing locations of monitoring sites

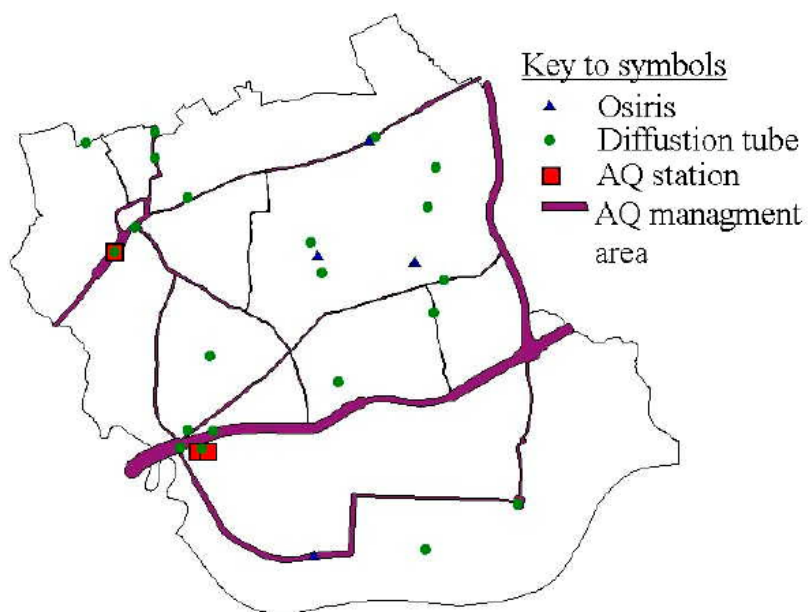


Table showing monitoring site details for nitrogen dioxide tubes

Site No.	Address	Grid Reference	Distance to Rd. (m)	Class
1	Temple Mill Lane, E15	TQ538280/185359	3.3	Roadside u2
2	115 Romford Rd	TQ539572/184659	17.2	Roadside u2
3	576-590 Romford Rd	TQ541954/185430	6.5	Roadside u2
4	Barking Rd Town Hall	TQ542831/183618	4.5	Roadside u2
5	West Ham Town Hall	TQ538899/184283	26.5	Backgrd. u4
6	230B Grange Rd	TQ539859/182655	31	Backgrd. u4
7	General Hospital, Glen Rd	TQ541492/182332	330	Backgrd. u4
8	High St South E6	TQ542688/183202	14.8	Roadside u2
9	99 Barking Rd E16	TQ539585/181720	30.8	Intermediate
10	Tant Avenue E16	TQ539747/181477	140	Backgrd. u4
11	City Airport	TQ542583/180201	12.5	Special sp
12	Galleons Roundabout	TQ543762/180784	22	Roadside u2
13	290-292 Green Street E7	TQ541134/184098	<1	Centre u3
14	410 Green Street E13	TQ541286/183705	<1	Centre u3
15	207 Leytonstone Rd E15	TQ539155/185487	<1	Kerbside u1
16	107 Leytonstone Rd E15	TQ539164/185158	<1	Kerbside u1
17	44 Browning Rd E12	TQ542729/185047	<1	Backgrd. u4
18	216 Browning Rd E12	TQ542216/184547	<1	Backgrd. u4
19	Beckton Arms, Hermit Rd	TQ239906/181702	3.2	Roadside u2
20	Canning Tn. Roundabout	TQ539456/181499	<1	Kerbside u1
21	Cam Rd, E15	TQ538657/183973	3.5	Roadside u2
22	Wen Cl. Monitor Station	TQ539701/181459	137	Backgrd. u4

Appendix 2

AIR QUALITY MANAGEMENT AREA

