



**Air Quality and Action Plan Progress Report
for the
London Borough of Barking & Dagenham Council
(Revised 2008)**



July 2008

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Executive Summary

This is the Air Quality and Action Plan Progress Report 2007 for the London Borough of Barking & Dagenham Council ("the Council"). This report fulfils this part of the Council's commitment to the continuing Local Air Quality Management (LAQM) process. This report provides an annual update of recent air quality issues in Barking & Dagenham, including an update on recent air quality in the Borough, obtained from its monitoring results as well as a focus on the Council's progress on reducing air pollution through its Air Quality Action Plan.

The Council's earlier Review and Assessments of air quality confirmed that there were locations across the Borough with relevant public exposure where the Government's air quality objectives might be exceeded.

The more up to date monitoring of nitrogen dioxide and PM₁₀ in this report confirms that the Government's air quality objectives were exceeded widely at locations with relevant public exposure. The Council will therefore maintain its AQMA for these two pollutants.

The Council's monitoring results for sulphur dioxide however indicated that the objectives for these pollutants were not exceeded.

(Note – the 2008 revision relates to the action plan progress report section only and includes reference to the Council's Action Plan from June 2004 rather than the draft version.)

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1 Introduction to Air Quality and Action Plan Progress Report

1.1 Overview

This is the Air Quality and Action Plan Progress Report 2007 for the London Borough of Barking & Dagenham (“the Council”). This report fulfils this part of the Council’s continuing commitment towards the Local Air Quality Management (LAQM) process under Part IV of the Environment Act 1995

1.2 Background

The London Borough of Barking and Dagenham is situated to the east of London, within the Greater London conurbation. It is mainly residential although it has a sizeable industrial component. This industry includes traditional manufacturing industries with newer transport and distribution industries. The river Thames forms the southern boundary of the Borough. The London Boroughs of Newham and Redbridge are to the west and northwest and the London Borough of Havering is to the east. The Borough is crossed from east to west by two major roads, the A12 and the A13. Both these roads carry a substantial amount of through traffic passing from Essex into London. There are also a number of north-south routes, which are all Borough maintained roads.

The LAQM process forms a key part of the Government’s Air Quality Strategy to achieve the air quality objectives prescribed in the Air Quality (England) Regulations 2000 and 2002. Air quality progress reports were introduced following a detailed evaluation of the first round of local authority Review and Assessment. This evaluation identified a need both to develop a longer-term vision for LAQM and encourage the integration of air quality into the routine work of local authorities.

Local Authorities are required by section 88 (2) of the Environment Act 1995 to have regard to the government’s guidance documents when carrying out their LAQM duties. To assist local authorities and provide guidance for the overall LAQM process, the Department for Environment, Food and Rural Affairs (DEFRA) issued the following policy and technical guidance documents: LAQM PG (03), LAQM PG (S) (03), LAQM TG (03) and LAQM.PGA (05).

LAQM PRG (03) supplemented the above guidance and assists in the production of air quality progress reports. Based on this, local authorities are required to produce Progress Reports in those years when they are not carrying out an Updating and Screening Assessment (USA).

For nitrogen dioxide (NO₂) and PM₁₀ the Council has previously designated an AQMA along the A13 trunk road across the Borough. The monitoring results reported in the third round Updating and Screening Assessment confirmed that concentrations continue to exceed the annual mean objective in the AQMA. The Council also produced its Air Quality Action Plan in 2004.

The guidance also advises that the Progress Report is not designed to represent a further USA, although it states that, if at any time a risk is identified that an air quality objective might be exceeded, a Detailed Assessment should be carried out without delay.

The overall aim of the Progress report is to report on progress on implementing LAQM and report progress in achieving, or maintaining concentrations below the air quality objectives. The guidance considers that these aims can be best achieved by reporting on new results and on progress with implementation of the Action Plan.

2 New monitoring results in the London Borough of Barking & Dagenham

2.1 Outline of monitoring undertaken

The Council continued monitoring nitrogen dioxide (NO₂), sulphur dioxide (SO₂) and particles (PM₁₀) in its area. The Government's adopted air quality objectives for each of these pollutants as shown in Table 1 below.

Table 1 Air quality strategy objectives for NO₂, SO₂ and PM₁₀

Pollutant	Objective		Date to be achieved by
	Concentration	Measured as	
Nitrogen dioxide (provisional)	200 µg m ⁻³ not to be exceeded more than 18 times a year	1 hour mean	31 Dec 2005
	40 µg m ⁻³	Annual Mean	31 Dec 2005
Sulphur dioxide (SO ₂)	350 µg m ⁻³ not to be exceeded more than 24 times a year	1 hour mean	31 Dec 2004
	125 µg m ⁻³ not to be exceeded more than 3 times a year	24 hour mean	31 Dec 2004
	266 µg m ⁻³ not to be exceeded more than 35 times a year	15 minute mean	31 Dec 2005
Particles (PM ₁₀)	50 µg m ⁻³ not to be exceeded more than 35 times a year	Daily Mean	31 Dec 2003
	40 µg m ⁻³	Annual Mean	31 Dec 2004

The Council undertook continuous monitoring at three fixed long-term sites in the Borough:

- Barking & Dagenham 1 - at Rush Green is a suburban background site in the north east of the Borough (this site has been operating since 1999) and is part of the LAQN.
- Barking & Dagenham 2 – at Scrattons Farm is a suburban background site in the middle of the Borough (this site has been operating since 1998) and is part of the LAQN
- Barking & Dagenham 3 – at North Street in Barking is a kerbside site in the east of the Borough and is part of the LAQN. The site started operating in March 2007. The sampling height is 1.5 metres and the sample inlet is 1.5m from the road.

The above sites are also representative of relevant exposure. All the sites are part of the London Air Quality Network 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 the ERG at King's College London. In all cases the data are fully ratified unless reported otherwise. Details of the sites can be found at www.londonair.org.uk

The Council also undertook the non-continuous monitoring of NO₂ across its area.

2.2 NO₂ Monitoring

2.2.1 Continuous NO₂ monitoring in Barking & Dagenham

The Council monitored NO₂ in its area using both continuous chemiluminescence analysers and diffusion tubes.

The annual mean results for the continuous sites are presented in Table 2. Details of data capture are given in Table 9 in Appendix 1.

Table 2 Annual mean NO₂ concentrations for Barking & Dagenham (2002 – 2007) (µg m⁻³)

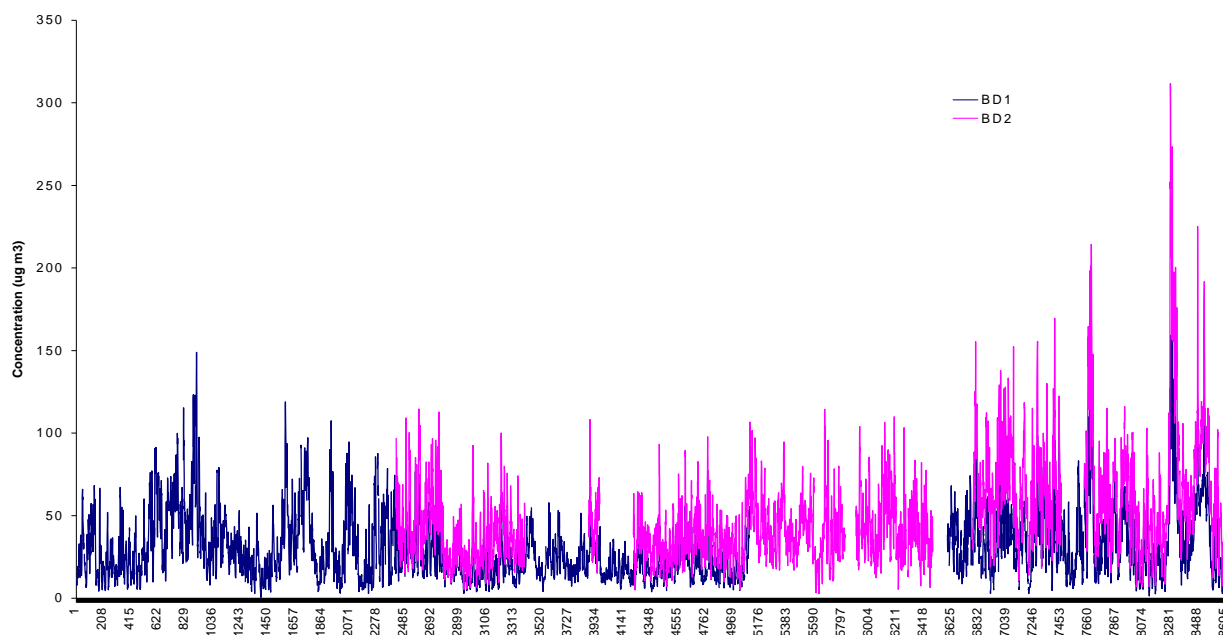
LAQN site	Type	2002	2003	2004	2005	2006	2007
Barking & Dagenham 1	S	32	32	31	30	31	31
Barking & Dagenham 3	K	-	-	-	-	-	49*

(* Indicates provisional data; italics < 90% data capture)

Concentrations at the Barking & Dagenham 1 suburban site consistently achieved the annual mean objective for all years reported. There were 2 hours that exceeded the hourly mean standard of 200 µg m⁻³ in 2007. This was the only year where this standard was exceeded at the site over this period.

The results for the Barking & Dagenham 3 kerbside site reported a higher concentration than the Barking & Dagenham 1 site for 2007 and exceeded the annual mean objective for the period reported. The data capture was much reduced below the 90% recommended. There were also 18 hours that exceeded the hourly mean standard of 200 µg m⁻³ over this short measurement period, indicating that the hourly objective may have exceeded the objective at the site with full data capture. Figure 1 shows a comparison of the two sites, highlighting a series of pollution episodes near the end of the year.

Figure 1 NO₂ hourly monitoring results for the Barking and Dagenham sites (for January to July 2007)



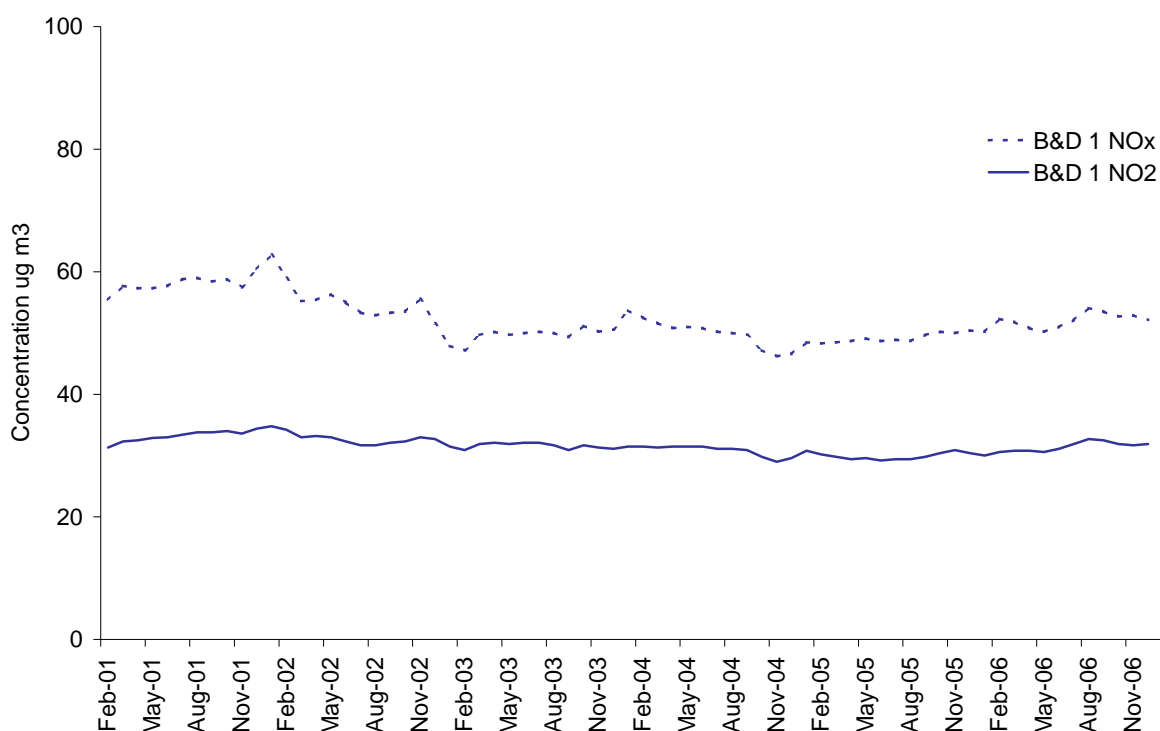
2.2.2 NO₂ and NO_x trends in the Barking & Dagenham

Rolling annual mean plots can be used to indicate changing annual concentrations over time. The use of rolling annual mean concentrations, based on averaged hourly means, largely removes seasonal influences and provides a guide to changing trends. NO₂ is mainly a secondary pollutant formed by chemical reactions in the atmosphere from NO_x emissions produced by combustion sources. These reactions also involve ozone, which is scavenged by NO. The relationship between NO_x and NO₂ is non linear and it is further complicated by changes in direct emissions of NO₂ from some road vehicles.

The rolling annual mean plot of NO_x concentrations (as the main primary emission) for the Barking & Dagenham 1 site is shown in Figure 2. This is for the period from 2001 through to the end of 2006.

Concentrations of NO_x at this site dropped from about 60 µg m⁻³ in 2001 to 50 µg m⁻³ in 2006, although this reduction was not even over time, due to the impact of the varying meteorology between years and changing emissions. The reduction in concentrations mainly arose through the introduction and continuing use of catalytic converters in petrol vehicles.

Figure 2 Rolling annual mean NO_x and NO₂ concentrations for the Barking & Dagenham 1 site



The rolling annual mean plot of NO₂ concentrations of the Barking & Dagenham 1 site is also shown in Figure 2. This analysis was also for the period from 2001 through to the end of 2006.

The rolling annual mean concentrations of NO₂ indicated a very slight downward trend at the Barking & Dagenham 1 suburban background site over time. The downward trend for NO₂ was less; approximately 4 µg m⁻³, from 2001 to 2004. In addition, concentrations subsequently increased over the period from 2004 to 2006 by approximately 2 µg m⁻³. This slight increase can

also be seen for NO_x and was most likely due to inter annual changes in meteorology over this period.

2.2.3 Diffusion tube monitoring of NO₂ in Barking & Dagenham

The Council also undertook NO₂ monitoring using diffusion tubes at sites across the Borough. The diffusion tubes were exposed at 10 locations, including a co-located tube (BD45) at the Barking & Dagenham 1 fixed monitoring site. All sites were outside the AQMA, apart from the BD35 site. Previously the Council used seven diffusion tubes used supplied by Casella Stanger and analysed by Gradko using a preparation method of 50% TEA in acetone. Since May 2004, the diffusion tubes have been provided by Staffordshire Scientific Services and the tubes changed on a monthly basis by Hyder Consulting (UK) Ltd. These diffusion tubes used a preparation of 50% TEA in water.

The details of the sites monitored are given in Table 3 and shown in Figure 8.

Table 3 Diffusion tube sites in Barking & Dagenham

Site	Street Location	Site type
BD32	Marsh Green School, Whitebarn Lane, Dagenham	Kerbside
BD35 (<i>in AQMA</i>)	555 Ripple Road, Barking at Lodge Avenue Flyover	Kerbside
BD38	Thames View Infant School, Bastable Avenue	Urban background
BD39	Link Centre, Heathway	Kerbside
BD40	Westbury Centre, Ripple Rd, Barking	Urban background
BD41	Fanshaw Hall, Barnmead Rd, Dagenham	Urban background
BD42	Sign Post adjacent to 120 London Road, Barking, IG11 8DD	Kerbside
BD43	Lamp post outside 350 Hedgemans Road, Dagenham, RM9 6BX	Kerbside
BD44	Lamp post Whalebone Grove, Junction with Whalebone Lane North, Chadwell Heath, Romford	Kerbside
BD45	Rush Green Junior School, Dagenham Road, Romford, RM7 0RL (<i>co-located site</i>)	Urban background

The results were adjusted for bias using factors derived from local co-location studies at the Barking & Dagenham 1 site for the years from 2004 to 2006. For 2002 and 2003 the bias factors of diffusion tube monitoring used DEFRA default factors years. The factors used were as follows (note – the DEFRA default factor is also shown for comparison purposes for the most recent years):

For period 2004 to 2006

	2004	2005	2006
Cm	30	30	31
Dm	29.49	26.34	28.60
Factor used	1.017	1.139	1.084
<i>Default</i>	<i>0.96</i>	<i>1.05</i>	<i>1.03</i>

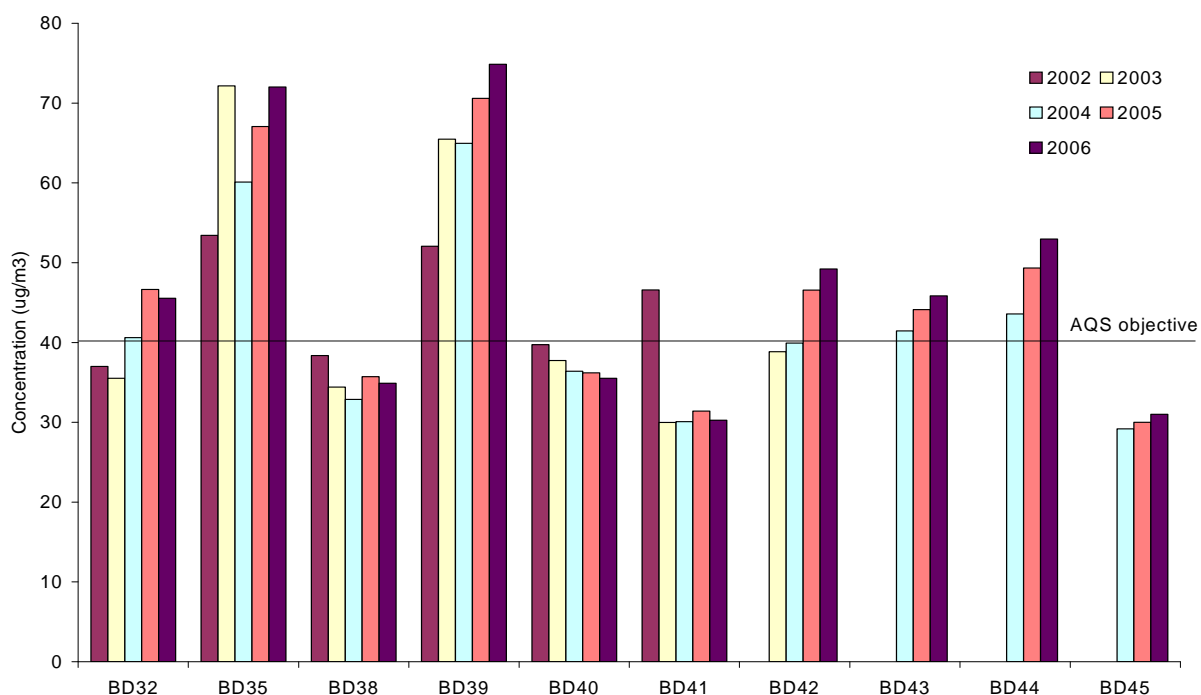
For period 2002 to 2003

Year	Bias factor	Source
2002	1.37	LWEP
2003	1.11	DEFRA spreadsheet

The factors used all indicated that the diffusion tube results under read in comparison with continuous monitoring.

The adjusted results are presented in Table 12 in Appendix 1 and Figure 3. All sites exceeded 75% data capture. The results indicated that all the urban background sites (BD 38, 40, 41 and 45) met the 40 $\mu\text{g m}^{-3}$ standard during the period considered. The sites also showed interannual variability with 2006 concentrations higher than results from previous years at most sites. The biased results for the kerbside sites exceeded the AQS annual mean objective for most of the years reported.

Figure 3 NO₂ bias adjusted results for D/Tube sites in Barking & Dagenham (2002 – 2006)



Estimates are also provided for 2010 using DEFRA year adjustment factors, based on 2006 measurements. These estimates indicate that despite the predicted reduction in emissions the sites on the A13 (BD35), Heathway (BD39), London Road, Barking (BD42) and Whalebone Grove (BD44) will still exceed the objective (see

Table 4).

Table 4 Estimated 2010 concentrations at the Barking & Dagenham diffusion tube sites

Location	Estimated 2010	Location type
BD32	39.4	Kerbside
BD35	62.4	Kerbside
BD38	31.2	Background
BD39	64.8	Kerbside
BD40	31.8	Background
BD41	27.1	Background
BD42	42.6	Kerbside
BD43	39.7	Kerbside
BD44	45.8	Kerbside
BD45	27.8	Background

For those sites outside the AQMA that are estimated to exceed the objective, the Council have undertaken a Detailed Assessment.

2.3 SO₂ monitoring

SO₂ monitoring was undertaken in the Borough at the Barking and Dagenham 1 site in Rush Green. Details of data capture for the period 2002 to 2007 are given in Appendix 1. The results from the site indicated that the 15-minute mean standard of 266 µg m⁻³ was not exceeded over the years reported. The maximum 15-minute means for each year of monitoring are shown in Table 5.

Table 5 Maximum 15 minute mean SO₂ concentration (µg m⁻³) (2002-2007)

LAQN Site	2002	2003	2004	2005	2006	2007
Barking & Dagenham 1	<i>129</i>	<i>132</i>	<i>134</i>	<i>65</i>	<i>82</i>	<i>68</i>

(Note - italics indicates < 90% data capture)

The 15-minute mean objective is the most stringent of the three SO₂ objectives; accordingly there were no recorded periods where the hourly and daily mean standards were exceeded.

The results confirmed that the SO₂ objectives were met at the Barking & Dagenham 1 monitoring site in the Borough.

2.4 PM₁₀ monitoring

The Council undertook continuous monitoring of PM₁₀ at two sites in the Borough. The Council used a TEOM instrument for monitoring PM₁₀ at the Barking and Dagenham 2 suburban site at Scrattons Farm and the results are therefore presented as a gravimetric equivalent, i.e. TEOM times 1.3 (in accordance with TG03 guidance). The Council also monitored PM₁₀ using a BAM (Beta Attenuation Monitor) at its Barking & Dagenham 3 kerbside site in North Street, Barking. The results for this site are also presented as a gravimetric equivalent, i.e. BAM times 0.83 (in accordance with TG03 guidance).

The monitoring results for the sites are given in Table 6. The results were fully ratified. Full details of the data capture are given in Appendix 1.

Table 6 PM₁₀ monitoring at the long-term Barking & Dagenham sites (2002- 2007)

Site		2002	2003	2004	2005	2006	2007
Barking & Dagenham 2	No. of days	21	44	15	5	17	14
Barking & Dagenham 3		-	-	-	-	-	16*
Barking & Dagenham 2	Annual	29	32	28	26	26	26
Barking & Dagenham 3		-	-	-	-	-	31*

(Note – bold indicates exceeds objective; italics < 90% data capture; * includes provisional data)

The results confirmed for each year of monitoring that there were days when the daily mean standard of 50 µg m⁻³ was exceeded. The current (i.e. 2004) daily mean objective was exceeded during 2003 at the Barking & Dagenham 2 suburban site only during 2003. It should be noted that 2003 was a year with high pollutant concentrations in many areas of the UK, due to the long periods of high pressure that arose during the hot summer months. Such periods are conducive to secondary particle formation over wide areas.

The 2006 Updating and Screening Assessment noted that the Barking and Dagenham 2 site had since 2001 consistently recorded higher pollution than the nearby Havering 3 roadside site in Romford. This was considered surprising and thought to be due to local influential sources close to the Barking and Dagenham 2 site, with a possible reason for this apparent increase in PM₁₀ a large construction site.

The annual mean objective was not exceeded at the Barking & Dagenham 2 site over this period.

The Barking & Dagenham 3 kerbside site opened recently and the monitoring results from the site indicated that mean concentrations were very slightly higher than the Barking & Dagenham 2 for 2007 to date, although the data capture is higher at Barking & Dagenham 2 (59%) than Barking & Dagenham 3 (27%). In addition there have been no days which exceeded the 24 hour standard of 50 µg m⁻³.

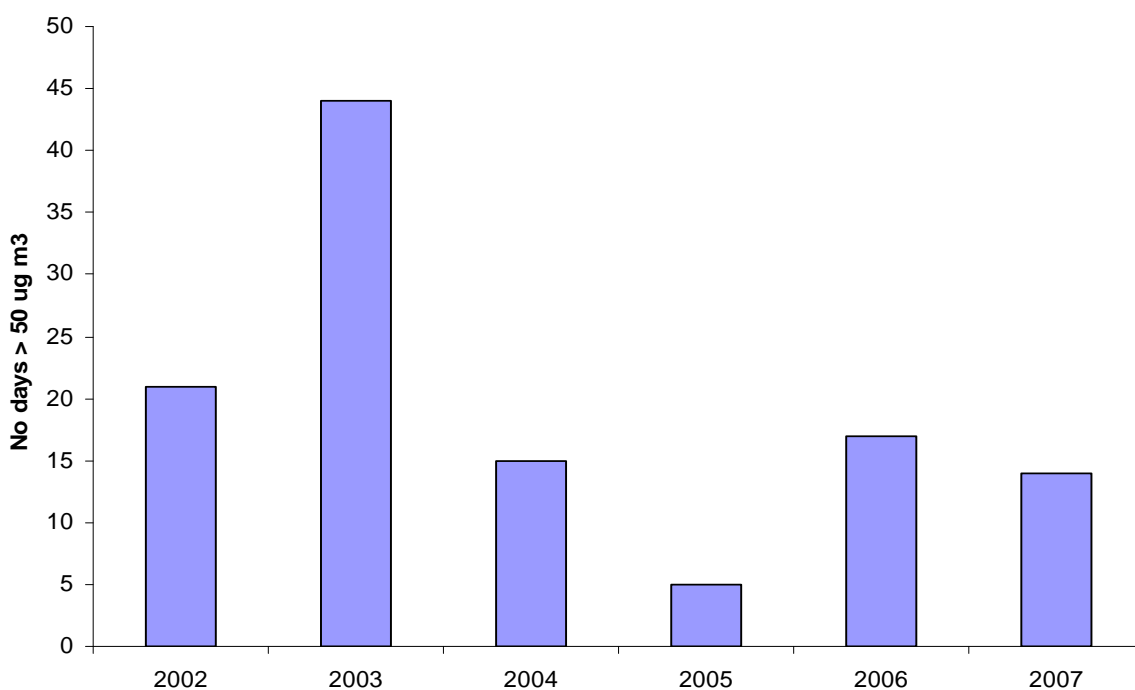
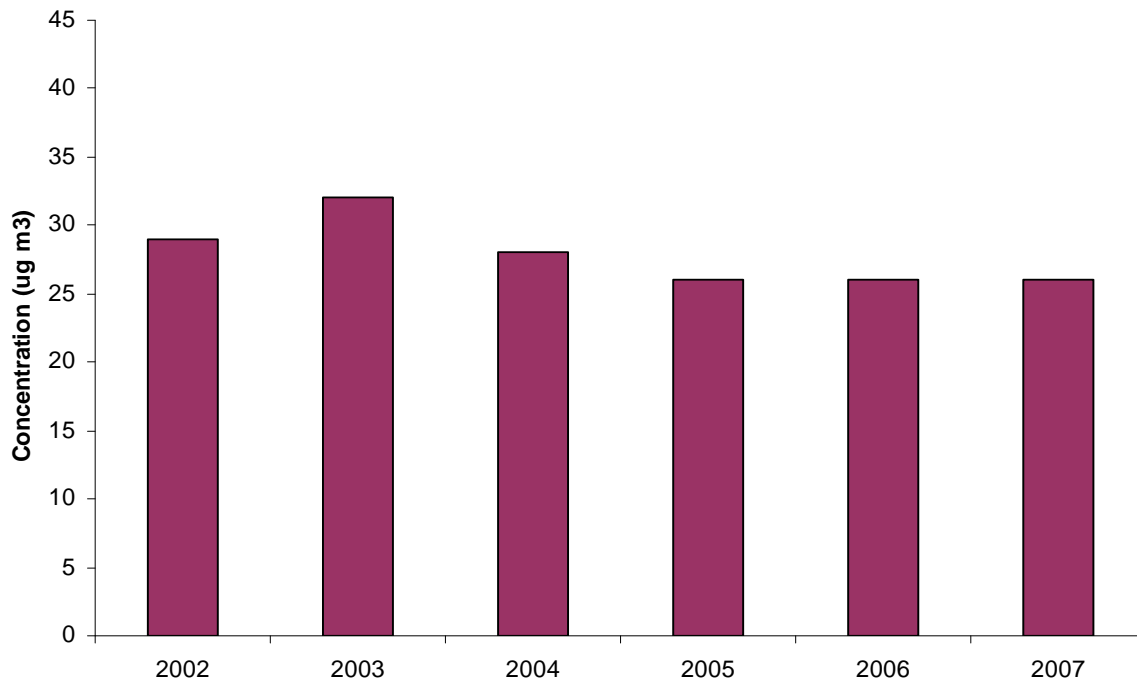
Figure 4 Number of days PM₁₀ greater than 50 µg m⁻³ at the Barking & Dagenham 2 site (2002 to 2007)

Figure 5 Annual mean PM₁₀ ($\mu\text{g m}^{-3}$) at the Barking & Dagenham 2 site (2002 to 2007)

An analysis of rolling daily mean PM₁₀ exceedences and annual mean PM₁₀ concentrations is provided for the Barking & Dagenham 2 monitoring site to indicate possible trends over time. The analysis was for the period from 2000 through to 2006.

Figure 6 illustrates changing concentrations over time for rolling daily mean PM₁₀ exceedences and Figure 7 shows changing rolling annual mean PM₁₀ concentrations. The use of rolling data in this way largely removes seasonal influences and thus provides a guide to changing trends over time.

The Barking & Dagenham 2 site had an interrupted dataset, with data missing for some of the time during the period shown. The dataset however included 2003. This was widely regarded as a year with higher particle concentrations than other years, with stable meteorological periods during the summer that led to the formation of regional secondary particles.

The influence of 2003 led to an increase in the numbers of days that exceeded and since this time the number has reduced (see Figure 6). The missing data make it hard to discern any change over this period, but overall the number of days exceeding the standard appeared to have changed very little (from 15 in 2000 to 16 in 2006). The peak was around 45 days due to the influence of 2003.

These findings are similar to the rest of London. Averages based on London sites for the period from 1995 to 2000 showed a downward trend from around 50 days above $50 \mu\text{g m}^{-3}$ to 10 days in 2002. By the end of 2004 the number of days exceeding the standard at background sites was comparable to that measured at the start of 2001, whereas inner London roadside sites had a higher number of days exceeding in 2004 than 2001 (ERG, 2006).

Figure 6 Rolling number of days $PM_{10} > 50 \mu g m^{-3}$ for Barking & Dagenham 2 (2000 to 2006)

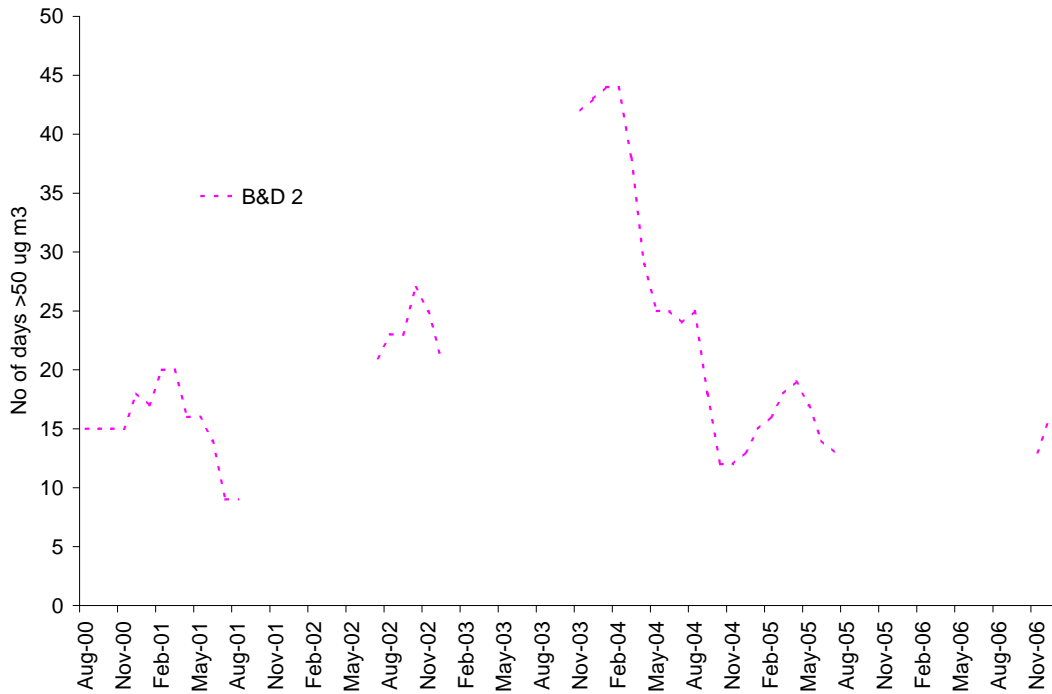
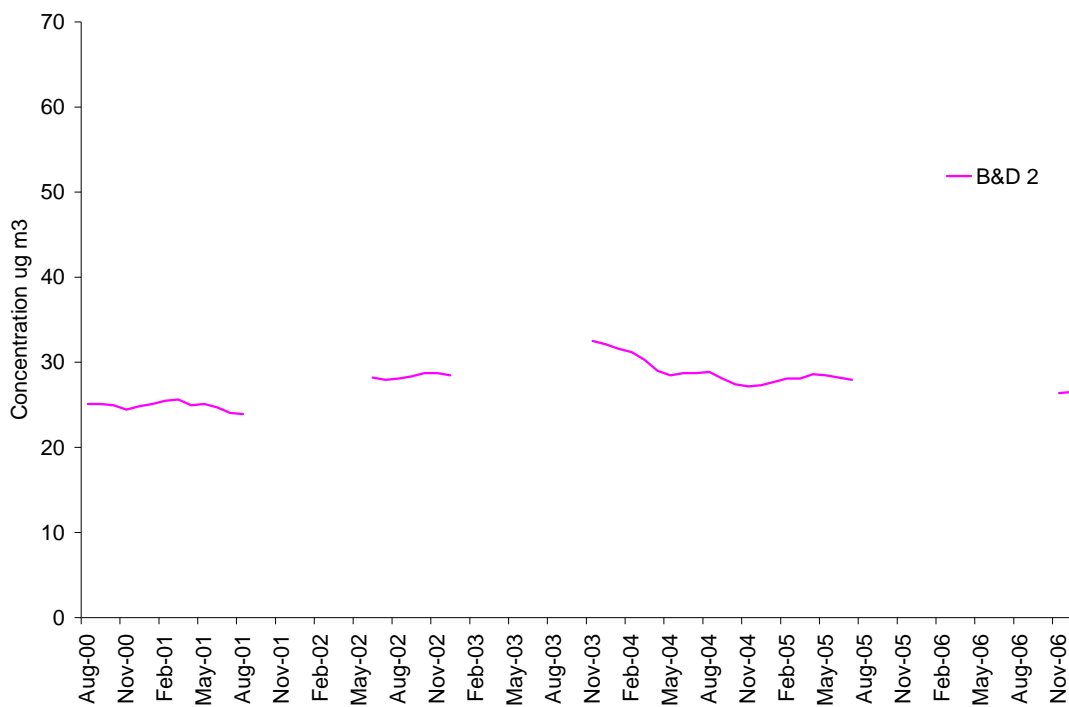


Figure 7 Rolling annual mean PM_{10} trends for Barking & Dagenham 2 (2000 to 2006)



The rolling annual mean trend for the Barking & Dagenham 2 site is shown in Figure 7. This highlights that although concentrations dropped slightly in 2004, this was mainly as a result of the pollution incidents in 2003 not being repeated in 2004. Although it is again hard to fully discern the trend over time due to missing data, levels in 2006 dropped to pre 2003 levels, but were very slightly higher than 2001 levels. The levels shown in 2000 were 25 days and 2006 were 26 days.

Across London annual mean concentrations of PM₁₀ were analysed for source apportionment by Fuller and Green (2006b). This analysis showed increases in the concentration of primary PM₁₀ in London between 1999 and 2003 and that it was highly likely that these increases were due to increases in road transport emissions. It was less clear however if these increases were due to increases in tail pipe or non-tail pipe emissions.

3 New local developments

This section outlines those local developments that have taken place that may affect air quality. These are not for consideration now but are listed for a more thorough assessment for the next round of Review and Assessment. The guidance identifies the following developments that should be considered:

- New industrial processes included in the list of Appendix 2 of LAQM. TG 03.
- New developments with an impact on air quality, especially those that will significantly change traffic flows. Only include those developments with planning permission granted.
- New landfill sites, quarries, etc with planning permission granted and nearby relevant exposure.

Table 7 New Local Developments since 2006

Development	Location
New Part A or B industrial processes	See below
New retail or mixed residential/ commercial development	None
New road scheme	None
New mineral or landfill development	None

3.1 New Part A/ B industrial processes

The Council has received one new application for a manufacturing timber and wood based products permit; two applications for the respraying of road vehicles and 40 applications for dry cleaning establishments in the Borough. These are currently being processed. (Details of other existing Part B installations permitted by the Council are given in Table 13 and Part A installations in Table 14).

3.2 Barking & Dagenham Local Development Framework

The Planning & Compulsory Purchase Act 2004 introduced a new development plan system. This is intended to streamline the local planning process and enable a Local Development Framework (LDF) to replace Unitary Development Plans (UDP).

Currently, the Barking & Dagenham Unitary Development Plan (adopted in 1995) is the document that guided new development and decisions on planning applications in the Borough. The documents within the Local Development Framework will, when they are adopted, contain policies that guide future land use and development within the Borough and replace policies that guide the assessment of planning applications. The LDF is required to be in general conformity with the relevant Regional Spatial Strategy. In Barking & Dagenham this is the London Plan: Spatial Development Strategy (SDS), which was produced by the Mayor of London (February 2004).

The Council prepared a revised Local Development Scheme (LDS); it is a work programme setting out what LDF documents the Council will produce over the next three years. It also sets out the timetable for preparation of these documents, which identifies all the documents that will form part of the new development plan and the timetable for their production. The Council put the revised LDS into effect on April 2007.

The LDF is a folder of planning documents that will guide decisions on the development and use of land in Barking & Dagenham. These documents, known as Local Development Documents (LDDs), can be divided into two types: Development Plan Documents, and Supplementary Planning Documents (SPDs). All (LDD's) will be subject to a Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) to ensure that they contribute to the objective of achieving sustainable development.

This LDS identifies the following priorities of the Council over the next three years in order to progress the LDF:

- the Core Strategy,
- the Borough Wide Development Policies;
- the Site Specific Allocations;
- an Area Action Plan (AAP) for Barking Town Centre; and
- the Proposals Map

Development Plan Documents (DPDs) will have development plan status. This means decisions on all planning applications will normally be made in accordance with the policies and proposals that are contained within them. A Planning Inspector will independently examine them. Supplementary Planning Documents (SPDs) will provide further detail to the policies and proposals in DPD's. They are not part of the development plan but are an additional consideration to be taken into account in taking planning decisions. They will be consulted on but will not be examined by an independent inspector.

The LDF is intended to be 'user-friendly' and quicker to adopt and review than the UDP, so that it is always up-to-date. It is to be a spatial strategy for the area. This means the LDF will go beyond traditional land-use planning. It will include policies and proposals for meeting the community's economic, environmental and social needs in the area. It will bring together and integrate policies for the development and use of land with other policies and programmes that influence how places look and feel and how they function. It will be clearly linked to the Council's Community Strategy, other Council Strategies and the strategies of other agencies, e.g. the health authority, with regard to land-use planning.

The London Thames Gateway Development Corporation (LTGDC) covers an area, which includes Barking Town Centre and land south of the A13 known as London Riverside. The LTGDC has produced a Development and Infrastructure Framework for the area that it covers. The Council will work in partnership with the LTGDC and will have regard to their Development and Infrastructure Framework in production of the LDF.

4 Action Plan Progress Report

4.1 Introduction

This section refers to Barking & Dagenham's Air Quality Action Plan, which was produced in 2004. It is concerned with the AQMA, although the impact of the actions will be wider and extend beyond the AQMA. The plan focuses on measures to reduce the air pollution impacts from road transport in the area, whilst recognising that transport needs also need to be met. It also includes measures to generally reduce background air pollution in the Borough.

The Action Plan confirms that the impact of each of the proposed measures is uncertain, and that it may be found that not all the proposed measures need to be implemented. However, it is also imperative that the impact of the measures that are implemented are continuously monitored and assessed, so that additional measures can be instigated as and when necessary.

4.2 Summary of key measures

This section provides a brief summary of some of the key measures in the action plan, although the Council's progress on all its actions is also provided in Table 8.

4.2.1 Monitoring air quality

The Council has maintained its commitment to monitoring air quality in the Borough and reporting to other bodies, including DEFRA and GLA since release of its draft plan.

4.2.2 Planning Policy and Control

The Council is continuing to use the planning system to bring air quality benefits, through imposing planning conditions and through using section 106 agreements for new developments.

The Council also supports the APPLE working group (Air Pollution Planning and the Local Environment) that has produced guidance to be used across London.

4.2.3 Traffic control and management

Actions include reducing speed limits and the introduction of 20mph zones, supporting roadside emissions testing in the Borough and working with Transport for London (TfL).

The Council also allocated £6.72m for the current year in its Local Implementation Programme (LIP) towards highways and transport improvements, including bus priority, support for road renewal, bus priority, walking, cycling and the London Cycle Network and other improvements.

4.2.4 Travel Plans in Barking and Dagenham

The Council's LIP includes provision for School Travel plans and Travel awareness programme. The Council also has a dedicated School Travel Plan Co-ordinator to give advice and information specifically on travel plans.

4.2.5 Low Emission Zone

The Council in its Action Plan recognised that the London-wide Low Emission Zone (LEZ) would play an important part in benefiting air quality in the Borough. Since the plan was produced, the Mayor of London (in May 2007) approved plans from TfL for the implementation of a LEZ, to cut harmful emissions from the most polluting lorries, coaches and buses. It will launch in February 2008, with the aim of improving air quality across the capital.

4.3 Progress Report Table

The progress in implementing the Air Quality Action Plan is reported in Table 8 below. The format follows the draft Air Quality Action Plan (December 2004). The table shows the Council targets and relevant comments.

Table 8 Progress Report Table

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
1	Continue to raise the profile of air quality within the Borough, Working with sub groups of the Borough Partnership to deliver the AQAP and seek to improve air quality	Ongoing	The Council is required to review and assess air quality in the Borough. To do this it monitors air quality around the Borough and provides data to the London Air Quality Network (LAQN), which reports the data online and in regular reports. The Council has also signed up to airTEXT that will advise by SMS, e-mail of elevated pollution in the Borough.	The Council completed its third round review of local air quality in 2006 and reported the findings in its Updating and Assessment report. The report is available on the Council's website (http://www.barking-dagenham.gov.uk/6-living/envir-protect/air-quality-review.html)	The Council has also received funding to update its AQ website.
2	As a means to extend the Council's air quality monitoring network, the Council will ensure that air quality associated with traffic management schemes is monitored, NO ₂ and PM ₁₀ levels will be monitored prior to, during and after some schemes are implemented	2004	A new monitoring site was installed at the kerbside of North Street in Barking, monitoring NO ₂ and PM ₁₀	Completed - although monitoring is continuing.	The site has been integrated into the LAQN (see http://www.londonair.org.uk)
3	The Council will continue to bid for funds for Traffic Calming schemes and Home Zones through the Borough Spending Plan and complete 2 planned Home Zone schemes by December 2004.	2004	The Council has successfully introduced a number of zones where the speed limit has been reduced to 20 mph. The Council has geared its programme for Home Zones to the more deprived parts of the Borough	Completed - The Council is committed to seeking funding through the LIP to increase the number of zones and consolidate existing schemes including: Rugby Rd, Marston Rd, Goresway, Buller Rd, Frizlands Rd, Rusholme Ave	The Local Implementation Plan (LIP) will guide the way for transport improvements over 5 years (from 2006 to 2011). The Council's final version of its LIP was published in 2007

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
4	The Council will continue to lobby Transport for London (TfL) to consider improvements to their road network	Ongoing	Key priorities include: greater use of the rail and river, selective highway and access improvements for freight, traffic management to protect sensitive areas, parking and loading controls, night time delivery trials, the inclusion of goods vehicle management as part of company Travel Plans initiatives, making the most effective use of freight trips, Freight Quality Partnerships to address local servicing and distribution issues	The Council continues to lobby for improvements to improve flow on the A13 where the AQMA which is located.	There is a need to work in partnership with TfL, Thames Gateway London Partnership, SRA and other agencies to ensure that proposals are implemented that will encourage an efficient movement of goods. The Council is keen to be proactive in encouraging the development of Freight Quality Partnerships, supporting projects, learning and disseminating good practice. Weight restrictions have been placed on roads including Hedgeman Road and Woodward Road to prevent "rat runs" from A13. At weekends and evenings there is a lorry ban. There is more info on this link http://www.londonlorrycontrol.com/about-llcs/history
5	The Council will introduce weight restrictions in residential areas to restrict HGV movement	2004	Weight restrictions were added to existing traffic calming measures to restrict HGVs in residential areas	Completed.	
6	The Council will introduce 20MPH zones adjacent to schools when any highway work is undertaken	Ongoing	Related to action 3 above	The proposed 2007/08 programme covers the following areas: Langley Crescent, Manor Road (Dagenham), Bell Farm Avenue, Geneva Gardens and Cambell School	
7	The Council will produce a parking management strategy that will encourage the use of public transport and cycling as an alternative to short distance car use.	2004/5	The Council's Parking Enforcement Plan (PEP) is a policy tool that will help to manage parking in the Borough and, in doing so, reduce unnecessary car travel and influence car ownership in the Borough.	Completed - a draft PEP was prepared for inclusion in the LIP.	

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
8	The use of CCTV cameras to enforce bus lane priorities will be encouraged and funds sought through the Borough Spending Plan.	2004	CCTV cameras were introduced to help enforce parking and bus lane regulations	Infrastructure works completed.	This is an ongoing enforcement action
9	Continue to work with London Buses, TfL, neighbouring Boroughs and bus operators to improve reliability and efficiency of bus services by attending regular meetings and discussing local problems	Ongoing	The Council supports the London Bus Priority Network (LBPN). Bus priority is key to improving bus trip speeds and reliability that, in turn, are essential features of the bus as an attractive alternative to the car.	The development and programming of the LBPN is undertaken on a pan London basis between the Boroughs and TfL. The schemes in the LIP reflect that arrangement.	A campaign with other boroughs to increase public awareness of buses that travel through boroughs is planned.
10	Introduce security measures at rail/ bus interchanges at Becontree Station and Dagenham East Station using CCTV	2004		Infrastructure works completed.	A year on year programme of external station access improvements will be determined following a full study to be commissioned by the Thames Gateway London Partnership (TGLP).
11	Improve footpaths, signage and directions to encourage people to walk and continue to extend the 'Just Walk' scheme	Ongoing	Pedestrian improvements are an important part of many programmes in the LIP, for example Town Centres, Road Maintenance, and Local Safety Schemes.	Just Walk scheme has been extended to lunchtime / morning walks with 4 walks set up. An East London Walking Festival was held last year for the British Heart Foundation	
12	Support the provision of better facilities at bus and rail stations and routes between the two	Ongoing	The Council participates in the TGLP 'Station Access Study' programme, through which station access improvements are identified and prioritised.	The Council has submitted, as part of this programme, proposals to improve access to Dagenham East Station.	The Council is keen to work in partnership with the rail industry to improve both the internal and external travel environment of stations in the borough. This includes both TfL/LUL and overland rail network interests.

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
13	Ensure that the need to travel by private car or by lorries other than for essential trips is reduced while accepting the role of the car and the lorry in helping to meet transport needs	Ongoing	Travel Awareness comprises a mixed menu of initiatives aimed at promoting the greater use of alternatives to the car. The Council aims to promote travel awareness and to promote the image of car-sharing, public transport, walking and cycling through marketing, events and the production of local travel information.	The Council organised Walk to School Weeks, Big Green Borough Day to promote sustainable travel. The 'Good Going' and 'Safer Travel at Night' campaigns and promotion of car clubs and car sharing. It also provides Travel Information through borough's cycling map and 'Just Walk' Routes.	
14	Support measures to manage travel demand in the Borough and encourage alternative travel modes to the car through traffic management measures. The road network should be managed to give priority to essential road users, environmental improvement, pedestrian safety, and safety of all users.	Ongoing	The Council aims to reduce unnecessary journeys made by car by promoting alternative travel options such as rail, bus, cycling and walking.		
15	Seek improvements to the public transport network that provides for the needs of residents, businesses and employees in the Borough without significant adverse impact on the environment.	Ongoing	The Council supports the London Metro Concept and OrbiRail, is a member of the North Orbital Rail Partnership (NORP) and will continue to lobby for improvements to the Barking – Gospel Oak line including its extension eastwards.		
16	Encourage its employees to use public transport for work related journeys by considering measures such as free bus and tube passes. This will reduce road congestion, increase use of public transport and set an example to other employers in the Borough. It will also give the Council a greater interest in ensuring that public transport is clean, safe and convenient and should result in saving money for the Council.	Ongoing	The Council encourages staff to use public transport to get to work, cycle or walk where possible.	The Council produced a Green Travel Plan providing information for staff on public transport, car sharing, cycling and other issues relating to green travel. It has purchased 2 electric pool cars that staff can borrow to use for work.	

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
17	Seek to protect and improve conditions for cyclists and pedestrians and will develop a range of actions in pursuit of the strategy.	Ongoing	The Council will continue to seek to improve conditions for cyclists and seek to increase the amount of cycling in the borough. The Council will seek to increase the amount of cycling facilities in the borough including off highway cycle routes through parks and green spaces, referred to in the LIP as 'Green Corridors'.		Other feasibility studies planned: Rugby Rd, Parsloes Park, Ripple Rd, Spurling Rd
18	Seek to understand the social and structural barriers that prevent people from cycling where it should be convenient to do so and to find ways to overcome those barriers. The Council will liaise with TfL Centre of Cycling Excellence to obtain assistance in developing a cycling strategy	Ongoing	The Council will in consultation with cyclist groups identify difficulties caused by one-way streets and possible remedial measures. A balanced approach and consideration of all transport users' needs will inform any proposals for one-way streets.	The Council produced a Cycling Action Plan that sets out what it intends to do to encourage more people to cycle and to make cycling safer and more convenient wherever possible. The plan will also implement locally the objectives of the London Cycling Action Plan and support mayoral Proposal 4J.1.	
19	Examine good practice of towns or districts where cycling is regarded as a major activity and identify why and how these areas are different to LBBD	2004		Completed – this led to the production of the Cycling Action Plan	
20	Ensure that schools encourage pupils and staff to cycle or walk to school and that adequate facilities are provided to enable this, including a network of safer routes and undercover cycle parking.	Ongoing	Schools are encouraged to adopt a school travel plan (STP), undertake travel surveys and identify safe routes and provides cycle shelters	The Council has its own School Travel Plan Officer to assist schools. 17 schools have a STP with funding sought for all schools	
21	Strongly encourage its employees to cycle to work and to use cycles for transport during work. Positive incentives will be considered such as charging for car parking spaces and using the money to support cycling.	2004/5		Completed - the Council formed a bicycle users group for staff which promotes cycling and supports council staff who cycle to work or cycle as part of their job.	

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
22	Provide a Borough wide network of cycle routes which links up with the National Cycle Routes Network and the London Cycle Network and liaise with local Cycling organisations to ensure that the routes are safe and convenient and that cyclists and walkers have priority at road junctions as far as possible	2004		Completed - the Council supports the LCN+ (a London wide network of strategic cycle routes). The programme of schemes to implement the LCN+ is coordinated by the lead borough for cycling in London and funding mainly comes from TfL.	
23	Promote safe cycling and provide cycling proficiency training for children and adults	2004	This is offered to all children over the age of 9 for free	Completed.	
24	Publicise the advantages and benefits of walking for shorter journeys.	Ongoing		The LIP recommended that a greater range of measures to improve cycling and walking be included within the LIP in order to reduce air quality and noise emissions from traffic and improve human health.	This is ongoing.
25	Promote and arrange for safer routes to school and organise walking buses along these routes. Steps will be taken to discourage parents from driving children to school.	2004	The schemes included in the LIP represent a year on year programme to implement the Council's adopted School Travel Plan Strategy.	The Council aims to have a school travel plan in place in every school in the borough by 2009. In order to deliver its strategy the Council will require continued financial support from TfL.	
26	Take steps to prevent and discourage motorists from parking on or obstructing pavements.	Ongoing	See action 7. The Council will work with all agencies to improve enforcement and fine pursuit and provide a tow away facility.		
27	Implement bus lanes at Lodge Avenue and Bennet's Castle Lane/ Becontree Avenue	2004	Bus lanes have been established in Lodge Avenue. There are "speed pillows" on Becontree Avenue.	Completed.	Further bus lanes are proposed in LIP
28	Support and encourage an increase in the use of the River Thames as a freight corridor.	Ongoing	The Council recognises the important economic role of freight and aims to encourage policies for the efficient movement of freight whilst minimising impacts on local communities and the environment. These include greater use of the river for freight movement.	This is part of the LIP.	

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
29	Actively support the movement of freight in and out of the Borough	Ongoing	The Council supports the establishment of a Thames Gateway Sub-regional Freight Quality Partnership. The Sub-Regional Freight Quality Partnership will support the aims and objectives of the London Sustainable Distribution Partnership (LSDP) and will work with the TfL Freight Unit, London Sustainable Distribution Partnership and the GLA.	This is part of the LIP.	
30	Produce a Green Travel Plan in relation to its employees travel requirements in order to minimize private vehicle use and to maximize public transport and cycle use.	2004	The Council produced a Green Travel Plan providing information for staff on public transport, car sharing, cycling and other issues relating to green travel. It also formed a bicycle users group for staff. The group promotes cycling and supports Council staff who cycle to work or cycle as part of their job. Two electric pool cars have been purchased for staff to be able to borrow to use for work.	Action completed.	
31	Lobby Government to develop legislation requiring developers to produce travel plans.	Ongoing	This is now part of the Mayor's Transport Strategy (see Policy 3.7).	Completed.	
32	Utilise planning conditions or section 106 agreements and work with developers to produce travel plans, which have measurable outcomes and consider financial penalties to secure compliance.	Ongoing	The Local Development Framework is replacing the UDP and as part of its LDF Core Strategy Options it has produced a Sustainability Appraisal of Options for S.106 agreements	This is ongoing.	
33	Take steps to limit the levels of private car use by Council employees in order to set an example to other employers	Ongoing	See 16 above.		
34	Use allocated funds to develop school travel plans.	2004	See 25 above.		

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
35	Ensure that the revised Unitary Development Plan includes a commitment to require travel plans for large developments within the Borough and enforce their outcomes.	2004	The LDF is replacing the UDP and as part of its Local Development Framework Core Strategy Options it has produced a Sustainability Appraisal of Options for Transport	Completed.	
36	Develop a Fleet strategy.	2004	See 16 for Travel Plans above.	The Council has produced a carbon management programme with the Carbon Trust. The programme mainly focuses on the corporate building stock, street lighting, fleet vehicle mileage and influencing staff behaviour.	
37	The Council will consider adopting the Good Practice Guide GPG318 Transport and Environmental Management System as a guide for management of the vehicle fleet.	2004		Completed – the Council adopted a green travel plan which incorporates its fleet management operation	
38	The Council will seek to use its vehicles less and to extend their life as much as possible through careful maintenance. When a vehicle has clearly reached the end of its economic life and a replacement is needed, a new energy efficient vehicle will be purchased using the best commercially available technology at the time for minimising CO ₂ . This may be biodiesel, LPG, petrol, electricity or hydrogen fuel cell.	Ongoing	See 37 above.		

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
39	The Council is aware that significant reductions in fuel usage together with longer life for vehicles can be obtained through driver training. The Council will ensure that the drivers of all Council owned vehicles and all essential car users receive appropriate training and will monitor fuel consumption before and after to evaluate the benefits.	Ongoing	See 37 above.		
40	Where possible, the Council will take advantage of reduced Vehicle Excise Duty and Enhanced Capital Allowances for the most efficient cars.	Ongoing	See 37 above.		
41	Work with the GLA, ALG and other boroughs to consider the results of the LEZ feasibility study and support the phased introduction.	Ongoing	The Council in its draft Action Plan recognised that the LEZ would play an important part in benefiting air quality in the Borough. Since then the Mayor of London in May 2007 approved plans from TfL for the implementation of a LEZ, to cut harmful emissions from the most polluting lorries, coaches and buses. It was formally launched in February 2008.	From February 2008 the LEZ applies to lorries over 12 tonnes. From July 2008 the LEZ will also apply to lighter lorries, buses and coaches.	
42	Keep Local transport operators informed of any proposed LEZ scheme and provide information regarding funding opportunities for fleet improvements.	Ongoing		Information provided on request.	

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
43	The Council will support the Vehicle Emission Testing and maintenance campaign and encourage the continuation of the project to include goods vehicles, buses and coaches.	Ongoing	The Council participated in the pilot London wide programme and has successfully bid as apart of the LIP for VET	The Council tested vehicle emissions around the borough in August 2007 and October 2007. Approximately 40 vehicles were tested on each occasion. In October 2007 all the vehicles passed, but in August 2007 4 vehicles failed the tests and were found to be emitting 4 times the level of accepted pollutants. The drivers were issued with warning letters informing them why they had failed the test and what they could do in future to pass. Press releases were produced outlining the results of the testing.	
44	The Council will increase publicity regarding VET and ongoing maintenance campaign and publish results.	Ongoing			
45	The Council will continue to lobby central Government for emission limits to be reduced.	Ongoing	The Council responds to Defra consultations, where appropriate on air quality.	This is ongoing.	The Council also responds GLA and other relevant consultations on air quality.
46	Encourage the siting of new commercial and industrial developments close to the public transport network and oppose major developments that do not include adequate access to public transport and cycling facilities.	Ongoing	The LDF is replacing the UDP. The LDD will initiate a review of the LIP car parking standards. The preferred policy option - CR 5 Sustainable Transport Preferred Option seeking a reduction of on and off-street parking will be encouraged, particularly in locations with a Public Transport Accessibility Level (PTAL) of between 4 and 6.	This is ongoing.	
47	Produce planning guidance to develop criteria for developments within the Air Quality Management Area addressing issues such as sustainable construction, promotion of alternative energy use and energy conservation measures.	2004	Under the Council's Spatial Regeneration Planning Policy, Planning Advice notes were produced giving advise on sustainable design and construction.	Completed.	

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
48	Ensure applicants carry out impact assessments for traffic impact assessments for traffic and air quality for all major developments within the borough. If such proposals lead to an unacceptable breach of air quality objectives, this should be a material planning consideration and grounds for refusal or include planning conditions to include mitigation measures to restrict the impact of the development. The Planning Authority must consider what will be deemed as an unacceptable breach, taking guidance from the National Society for Clear Air and the GLA.	2004	The Council is using the planning system to bring air quality benefits, through imposing planning conditions and through using section 106 agreements for new developments for car free developments. It also supports the APPLE working group (Air Pollution Planning and the Local Environment) that has produced guidance to be used in London.	Completed.	Impact assessments continue to be required by the Council.
49	Review the Unitary Development Plan to include policies and guidance to reflect the Air Quality Management Area as a material planning consideration taking into consideration emerging government guidance (draft PPG23) and recommendations contained within this action plan.	2004	The LDF is replacing the UDP (see 46 above). Air pollution is to be reviewed on adoption of the Core Strategy and Borough Wide Development policies		
50	Support the transport proposals in conjunction with the Thames Gateway Regeneration.	Ongoing	The Borough has existing employment areas where investment in transport and other local improvements are needed in order to promote the retention and expansion of job and other opportunities. Improvements to River Road/ Creekmouth Employment Area are planned.	These are included in the LIP.	
51	Continue to manage the Air Quality monitoring network and extend capabilities	Ongoing	The Council has installed a new monitoring site in Barking and will increase its diffusion tube network to > 50 sites. A NOx analyser will be installed at the BD2 site.	This is ongoing.	The NOx analyser was installed in 2007.

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
52	Improve the information provided on the Council's web-site and provide links for the public to view current pollution levels	2004	The Council uses the LAQN website for the purposes of disseminating its results (see http://www.londonair.org.uk/london/asp/ahome.asp)	This is ongoing.	
53	Utilise the Departments Geographic Information System to show the declared AQMA and industrial point sources	2004	Details were included on the GIS.	Completed	
54	Continue to raise the profile of air quality within the borough, working together with the relevant subgroups, to deliver the air quality management plan and improve air quality.	Ongoing	Publicity on vehicle emission monitoring to increase public awareness. AirTEXT publicity provided in borough free paper that is delivered to every home. "Pop ups" used on staff computers to publicise airTEXT.	This is ongoing. Information provided on Council website, LAQN website and also provided directly on request.	The Council has produced a environmental Impact assessment spreadsheet and this has been considered by the GLA to be an exemplary approach to assessing EIAs.
55	Continue to carry out risk assessments on all industrial processes and take enforcement action for breach of conditions where necessary	Ongoing	Visits to all relevant industrial processes are undertaken based on risk assessments on a regular basis	This is ongoing.	
56	Continue to provide Operator Forums to encourage networking between operators of similar processes and to provide information and advice about legal requirements and developments within each sector.	Ongoing		Air quality improvements are required as part of the LIP and LDF.	
57	Continue to work as part of the East London Air Quality Cluster Group to develop planning guidance to be incorporated into the revised UDP and provided to developers in respect of dust from major developments sites and use planning conditions to minimise emissions of dust.	Ongoing	New London-wide guidance was produced by the LBs and GLA in 2006.	Completed	3 osiris PM monitors have been purchased and deployed at the University of East London site in Longbridge Rd

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
58	Develop proposals for dust sampling from construction sites	2004	The above guidance in action 57 has been adopted for use with all relevant construction projects.	Completed.	The use of the guidance is ongoing along with the Council's EIA spreadsheet (see item 54 above).
59	Continue random site inspections to ensure vehicles use wheel washes and are fully sheeted.	Ongoing		The authority monitors construction activities to minimise pollution caused by noise, dust and other nuisances	
60	Review its enforcement policy for dust control from construction sites within the Air Quality Management Area.	2004	See action 57 above.	Completed.	
61	Continue to provide a rapid response to complaints of dust nuisance.	Ongoing	See action 59 above.		
62	Develop a guide for officers on Sustainable Procurement	2004	The Council has incorporated sustainability issues in its practices, business plans and monitoring processes. One example is our process for approving expenditure on large projects that requests applicants for internal projects to answer questions on sustainability. A green office guide has also been produced.	Completed	
63	Monitor and record the impact on sustainability for each contract above £200k.	2004		Sustainability appraisals are undertaken where relevant.	From Jan 2008 CO ₂ emissions will be monitored under new indicator NI185.

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
64	The Council will adopt the proposals in the NBA survey as a target for the Housing Strategy and the Affordable Warmth Strategy.	2004	The Affordable Warmth Strategy is currently under review. Energy efficiency work is taking place through London Warm Zone. Specific wards are targeted, where there is a particular need for energy efficiency. The Council's aim is that all wards will eventually be covered. In addition to surveys, entitlement to grants is assessed. Warm Zone grants are available through the programme, if a property is ineligible for Warm Front funding.	This is ongoing.	
65	The Council will adopt the measures set out in the NBA Private Sector Report as targets for the Private Sector Housing Strategy.	2004		Completed - details of energy efficiency for houses in the borough are provided see http://www.barking-dagenham.gov.uk/6-living/housing/hs-energy-efficiency.html	
66	The Private Sector Housing Strategy and the Housing Strategy should include raising awareness of energy efficiency and the need to take personal responsibility for energy usage and CO ₂ emissions. Actions such as turning off unwanted lights, closing doors and windows, not leaving televisions and video recorders on standby have a tremendous savings potential. The strategy should aim to encourage purchase of low energy / low water consumption domestic appliances	2004		Completed – see action 65.	

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
67	The Council will investigate whether it could set a design energy consumption figure at a lower level than the minimum standards required by the Building Regulations.	2004		Completed – based on the Mayor's Energy Strategy proposal 132 'To contribute to meeting London's targets for the generation of renewable energy, the Mayor will expect applications referable to him to generate at least ten per cent of the site's energy needs (power and heat) from renewable energy on the site where feasible.	
68	The Council will ensure that district heating, CHP and renewable energy are considered for large-scale housing developments in the Borough including the new waterfront developments at Barking Reach and Dagenham Docks and in the Heath Park area.	Ongoing	As part of any proposed scheme the Council's Spatial Regeneration Division requires a Sustainability Statement, the main topic areas include has the development followed the Mayor's Hierarchy for heating and cooling systems; has the site been assessed for its suitability for renewable energy production and does the development make provision for 10% of energy needs to be generated from on-site renewable infrastructure?	This is ongoing.	
69	The Council will set realistic targets for increasing the use of renewable energy through provision of advice and information to owners and developers.	2004	See action 67.	Completed.	
70	Through liaison with the electricity suppliers, identify numbers of houses purchasing green electricity and to assist with promoting green electricity.	2004		Completed – energy conference held in 2004 to promote green energy.	
71	Through Planning, the Council will provide support for embedded photovoltaic generation and provide information and assistance to developers.	Ongoing		Planning advice provided to developers.	

No	Action	Original Timescale	Progress with measure	Outcome to date	Comments
72	Investigate best practice solar water heating and ensure that information is provided to all developers at the appropriate planning stage.	2004		Planning advice provided to developers.	
73	Ensure that all future policies and strategies incorporate a section on Climate Change, which will include an estimate of the resulting changes in global warming emissions.	Ongoing		All land use strategies include consideration of climate change.	
74	Continue to take part in Walk to School week and advertise its success.	2004		Completed – the Council participates annually.	
75	Participate in Don't Choke London and Car Free day	2004		Completed – the Council participates annually.	
76	Promote the car-sharing scheme and encourage staff to take part.	Ongoing		This is ongoing but is subject to availability of resources.	

5 Conclusion

This Air Quality and Action Plan Progress Report for 2007 fulfils the requirements of the DEFRA PRG 03 guidance and has updated monitoring results in the Borough and noted new relevant local developments and other initiatives. It also advises on the Council's progress in implementing its Action Plan.

The up to date monitoring results indicated that the Government's AQS objectives for NO₂ and PM₁₀ have been exceeded at locations across the Borough where there is relevant public exposure. Based on the findings in this report there is no need to progress to a further Detailed Assessment either to revoke its existing AQMA or determine whether any new AQMAs are required.

The Council will continue its air quality monitoring programme and prepare for the next round of Air Quality review and assessment.

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Appendix 1

Figure 8 Site map showing location of diffusion tubes in the Borough of Barking & Dagenham

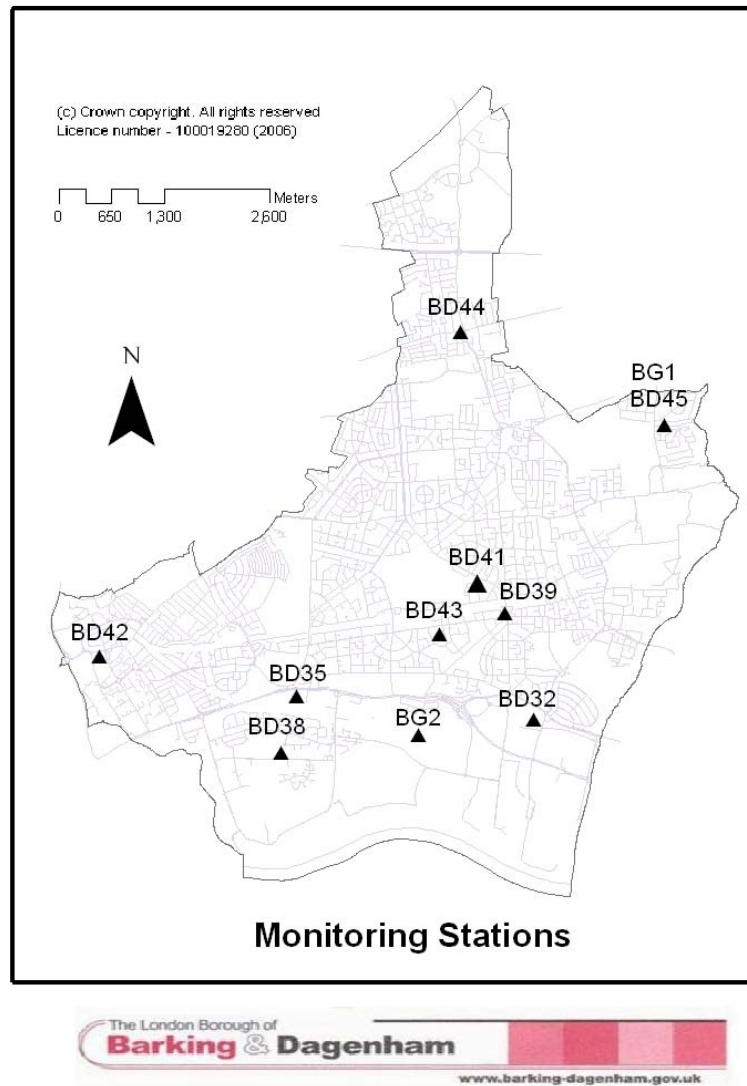


Table 9 NO₂ data capture (%)

LAQN site	Type	2002	2003	2004	2005	2006	2007
Barking & Dagenham 1	S	97	98	99	98	90	80
Barking & Dagenham 3	K	-	-	-	-	-	49

Table 10 SO₂ data capture (%)

LAQN site	Type	2002	2003	2004	2005	2006	2007
BD1	S	85	98	99	84	83	77

Table 11 PM₁₀ data capture (%)

LAQN site	Type	2002	2003	2004	2005	2006	2007
BD2	S	69	97	99	29	89	93
BD3	K	-	-	-	-	-	55

Table 12 Bias corrected NO₂ diffusion tube results for Barking & Dagenham (µg m⁻³)

Location	2002	2003	2004	2005	2006
BG32	37.0	35.5	40.6	46.6	45.5
BG35	53.4	72.2	60.1	67.1	72.0
BG38	38.4	34.4	32.9	35.7	34.9
BG39	52.1	65.5	65.0	70.6	74.9
BG40	39.7	37.7	36.4	36.2	35.5
BG41	46.6	30.0	30.1	31.4	30.3
BG42		38.9	39.9	46.6	49.2
BG43			41.5	44.1	45.8
BG44			43.6	49.4	53.0
BG45			29.2	30.0	31.0

Table 13 Part B installations in Barking & Dagenham (as at August 2007)

Process	Name	Address	Postcode
Petrol Vapour Recovery			
006377	Mr. G Jothinath	165 Alfreds Way, Barking	IG11 0AS
006378	Shell PFS	London Road, Barking,	IG11 8BU
006379	Total Service Station	260 Oxlow Lane, Dagenham	RM10 7YX
006380	Murco Petroleum Ltd	Chadwell Heath Filling Station, 287 High Road, Chadwell	
006381	BP Service Station	318 Rainham Road South, Dagenham	RM10 7UU
006382	Somerfield Stores Ltd	402 Becontree Avenue, Dagenham	RM8 3UD
006383	Shell U.K. Limited	467 Ripple Road, Barking	IG11 9QZ
006384	ROC UK LTD, Cranbrook Service Station	509A Whalebone Lane North, Chadwell Heath, Romford	RM6 5QX
006385	Park Garage Group PLC	699 Rainham Road South, Dagenham	RM10 8XB
006386	Texaco	796 Ripple Road (A13), Barking	IG11 9BG
006387	Somerfield Stores Ltd	Hassell's Garage, 79 Whalebone Lane South, Dagenham	
006388	Tesco Stores	Highbridge Road, Barking, Essex,	IG11 7BS
006389	ASDA Stores Limited	Merrielands Crescent, Dagenham	RM9 6SJ
006390	Park Garage Group PLC	131-134 New Road, Dagenham	RM8 90AU
006391	Esso Petroleum Co Ltd	Rainham Road South, Dagenham	RM10 8YT
006392	Tesco Stores Limited	632 Ripple Road, Barking	IG11 9PG
006393	Total Convenience Store UK	Wood Lane, Dagenham	RM8 9NS
007890	Mr. Rayman Calcutt	Gale Street, Dagenham	RM9 49U
007891	Total Fina	796-806 Dagenham Road, Dagenham	RM10 7UB
Paint Application in Vehicles			
006342	Ford Motor Company Limited	Chequers Lane, Dagenham	RM9 6SN
Respraying of Road Vehicles			
006269	Dagenham Motors Ltd	51 River Road, Barking	IG11 0DA
006294	AJC Wilsons Bodyshop	429-431 Rainham Road South, Dagenham	RM10 8R
006330	Crown Motors (Dagenham) Limited	699 Rainham Road South, Dagenham	RM10 8XB
006365	Dagenham Motors Ltd	New Road, Dagenham	RM9 6EX
006366	Dagenham Motors Ltd	Ripple Road, Barking	IG11 9PG
006369	PPA Coachworks Ltd	Unit H2, Chadwell Heath Industrial Est., Kemp Road, Dagenham	RM8 1SL
009109	L.A Motors Ltd	24A River Road, Barking	IG11 0DG
009242	China Square	640 Ripple Road, Barking	IG11 0RU
Manufacturing Timber & Wood			
006371	C. Blumson Limited	Maple Wharf, 36-38 River Road, Barking	IG11 0DN

009187	Essex Wood Recycling	Blue Triangle Business Park, Choats Road, Dagenham	
Bulk Cement			
006331	CEMEX (formerly RMC) Eastern Counties Limited	Jetty No 8 Choats Road, Dagenham	RM9 6RJ
006356	Hanson Premix	Dagenham Dock, Chequers Lane, Dagenham	RM9 6QD
006368	Cemex UK Cement Ltd	Victoria Wharf, 78 River Road, Barking	IG11 0DS
006374	Abbey Concrete Ltd	James Lovell Business Estate, Hammond House, Freshwater Road, Dagenham	
009166	Cemex (formerly known as RMC Ready Mix)	Victoria Wharf, 78 River Road, Barking	IG11 0DS
Roadstone Coating			
006276	Hanson Aggregates South Ltd	Dagenham Depot, Chequers Lane, Dagenham	RM9 6QD
006329	RMC Aggregates Greater London	Choats Road, Dagenham	RM9 6RJ
006367	Ringway Roadstone Ltd	1 Western Extension, Dagenham Dock, Chequers Lane, Dagenham	
008414	Ringway Foambase recycling Plant	Western Extension Dagenham Dock, Thunderer Road, Dagenham	RM9 6
Mobile Concrete Crushing			
006334	J D Demolition Limited	Debden Wharf, 54-58 River Road, Barking	IG11 0DW
006339	Greylands Waste Ltd	72-76 River Road, Barking	IG11 0DY
007872	J D Demolition Limited	Debden Wharf, 54-58 River Road, Barking	IG11 0DW
007873	J D Demolition Limited	Debden Wharf, 54-58 River Road, Barking	IG11 0DW
006341	Squibb & Davies (Demolition) Limited	62 River Road, Barking	IG11 0YU
006344	Neptune Contract Services Limited	Choats Road, Dagenham	RM9 6LB
007874	Neptune Contract Services Limited	Choats Road, Dagenham	RM9 6LB
007875	Squibb & Davies (Demolition) Limited	62 River Road, Barking	IG11 0YU
007876	Squibb & Davies (Demolition) Limited	62 River Road, Barking	IG11 0YU
006373	Watkinson Industrial Limited	76 River Road, Barking	IG11 0DS
007901	Watkinson Industrial Limited	76 River Road, Barking	IG11 0DS
008292	Multi Services Kent Limited	72-76 River Road, Barking	IG11 0DY
008758	Hunts Waste Recycling	75-77 Chequers Lane, Dagenham	RM9 6LA
009185	Forefront Contracting Ltd	Recycling Unit, Yard 2 Choats Road, Dagenham	RM9 6PT
009246	Multi Services Kent Limited	72-76 River Road, Barking	IG11 0DY
Formulation and finishing of pharmaceutical products			
006375	Aventis Pharma Limited	Building D63a, Aventis Pharma,	RM10 7DX

		Rainham Road, South, Dagenham	
Waste Oil and Recovered Oil Burners less than 0.4MW			
7969	The Auto Clinic	17 River Road, Barking	IG11 0HE
8747	Map Plant Ltd	Brunswick House, Ripple Road, Barking	IG11 0SL
Dry Cleaners			
7024	Bailey's Dry Cleaners	236 Oxlow Lane, Dagenham	RM10 7YX
7025	B.C.D. Dry Cleaners	4 Cinema Parade, Whalebone Lane South, Dagenham	RM8 1AA
7026	Better Clean	34 High Road, Chadwell Heath, Romford	RM6 6PR
7027	Klass Dry Cleaners	74 Whalebone Lane South, Dagenham	RM8 1BB
7028	City of London Launderette	119 Ripple Road, Barking	IG11 7NY
7029	David Moorcroft	120 Dagenham Road, Rush Green, Romford	RM7 0TL
7030	Barking Dry Cleaning Centre	41 Ripple Road, Barking	IG11 7NT
7031	Hot Pants	8 Beadles Parade, Rainham Road South, Dagenham	RM10 8YL
7032	Express Dry Cleaners	687 Green Lane, Dagenham	RM8 1YA
7034	Five Elms Dry Cleaners	277 Wood Lane, Dagenham	RM8 3NH
7035	Grosvenor Cleaners	497 Gale Street, Dagenham	RM9 4TP
7036	Heathpark Launderette	37 Stansgate Road, Dagenham	RM10 7LU
7037	Heathway Dry Cleaners	4 Station Parade, Heathway, Dagenham	RM9 5AW
7038	Jades Dry Cleaners	17 Faircross Parade, Longbridge Road, Barking	IG11 8UN
7039	Jeyda Dry Cleaners	436 Becontree Avenue, Dagenham	RM8 3UB
7041	Leyla's Dry Cleaners Ltd	582 Rainham Road South, Dagenham	RM10 7XD
7042	Misuse Linen Services	Unit 7a, Barking Business Cent, Thames Road, Barking	
7043	City of London Launderette	570A Longbridge Road, Dagenham,	RM8 2AR
7044	PJs Ironing Service	145 Becontree Avenue, Dagenham	RM8 2UL
7045	Prestige Dry Cleaner	Asda Stores, Merriellands Crescent, Dagenham	RM9 6SJ
7046	Ripple Dry Cleaning	388 Ripple Road, Barking	IG11 9RS
7047	Speedi Klean	590 Longbridge Road, Dagenham	RM8 2AR
7048	Thames Launderette	2 Farr Avenue, Barking	IG11 0NZ
7049	Valet Dry Cleaning Services	8 Station Parade, Barking	IG11 8DN
7050	Washateria	52 Longbridge Road, Barking	IG11 8RT
7051	West Laundries Ltd	Unit 5, Riverside Industrial E, Thames Road, Barking	IG11 0ND
8100	DELUXE DRY CLEANERS	12 Porters Avenue, Dagenham	RM8 2AQ
8104	A to Z Dry Cleaner	218 High Road, Chadwell Heath, Romford	RM6 6LS
8482	Launderette & Dry Cleaners	14 Woodward Road, Dagenham	RM9 4SJ
9029	Launderette	438 Becontree Avenue, Dagenham	RM8 3UB
9030	Launderette (pay machines)	128 Church Elm Lane, Dagenham	RM10 9RL

9031	Faircross Laundrette	22 Faircross Parade, Longbridge Road, Barking	IG11 8UW
9032	Ironing Maids	490 Gale Street, Dagenham	RM9 4NU
9033	City of London Launderette	24 Whalebone Lane South, Dagenham	RM8 1BJ
9034	City of London Launderette	570 Longbridge Road, Dagenham	RM8 2AR
9035	AOC Interiors Ltd	Unit 10, Rippleside Commercial, Ripple Road, Barking	IG11 0RJ
9206	Lords Linen Services Ltd	Unit 6, Rippleside Commercial, Renwick Road, Barking	IG11 0RJ
9237	Vogue Cleaning Service	Kemp Road, Dagenham	RM8 1ST
9238	Defur Descaling Services	Harrow Road, Barking	IG11 7QZ
9239	Suitability Dry Cleaners	206 High Road, Chadwell Heath, Romford	RM6 6LS

Table 14 Part A installations in Barking & Dagenham (enforcing authority is the Environment Agency)

Activity	Installation no. (i.e. MAU flare ref)	Premises	Premises Address
Paragraph 4.2 sch 1 Chemical Process	8123	Aventis Pharma Limited	Building D63a, Aventis Pharma, Rainham Road South, Dagenham, Essex, RM
Paragraph 6.8 Part A(1)(e) Treating & Processing Milk >200T/day	7895	Dairy Crest Dairies Ltd	Dairy Crest, Selinas Lane, Dagenham, Essex, RM8 1QH
Paragraph 1.1 Part A(1)a Burning any fuel in an appliance thermal input >50MW	7922	Barking Power Station	12 Chequers Corner, Chequers Lane, Dagenham, Essex, RM9 6LA
Paragraph 1.1 Part A(1)a Burning any fuel in an appliance thermal input >50MW	7923	Ford Motor Co. Limited	Ford Industrial Park, Ford Mot, Thames Avenue, Dagenham, Essex, RM9 6S

