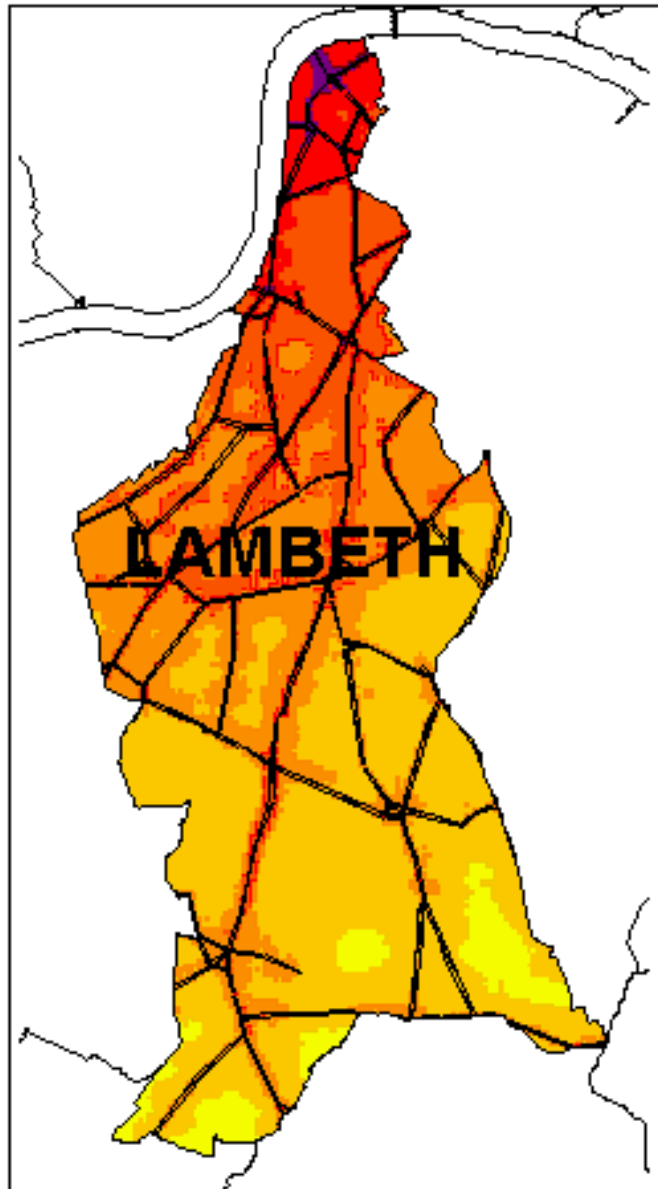


**ENVIRONMENT ACT 1995 PART IV
THE LONDON BOROUGH OF LAMBETH - PROPOSED AIR
QUALITY MANAGEMENT AREA
(STAGE 3 REVIEW AND ASSESSMENT)**



**Regulatory Services
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EXECUTIVE SUMMARY

In December 1999 Lambeth Council published its Third Stage Review and Assessment of local air quality, which concluded that the air quality standards would be achieved in Lambeth for all pollutants with the exception of nitrogen dioxide and fine particulates (PM₁₀).

This report has been produced to update the Third Stage Review and Assessment following the revision of the National Air Quality Strategy (NAQS) which was published in January 2000, with associated Guidance Notes issued in May 2000.

The most significant change to come out of the new NAQS was that new objectives and deadlines were set for the prescribed pollutants (**Table 1**). Early in the consultation period for the revised NAQS consultants CERC were asked to model the impact of the proposed PM₁₀/NO₂ objectives in anticipation of them becoming the new standard. Their findings are discussed in this report and summarised in Appendix 7 of the Lambeth's Third Stage Review and Assessment.

The results of this modelling exercise showed that the new PM₁₀ objective will render widespread exceedences of the annual mean objective unlikely by 2004. There will, however, still be some exceedences of the daily average in the North of the borough and along some busy roads in central and south Lambeth.

The revised NO₂ objective has had little impact on the likelihood of exceedences. By 2005 exceedences of the annual mean objective continue to occur in the extreme north of the borough and along the major road network whilst exceedences of the hourly maximum objective are unlikely.

The Environment Act 1995 requires the Council to declare Air Quality Management Areas in those locations where people will be exposed to air that is not expected to meet the air quality objectives. The geographical area covered by exceedences in the NO₂ standard was greater than, and incorporated, those areas of PM₁₀ exceedence. Therefore the contour line for exceedences of the annual mean NO₂ was used as the template for the proposed Air Quality Management Area, shown in **Map 9**. To allow for inaccuracies in the input data, a margin of error of 2ppb was applied to the NO₂ modelling results, consequently the 19ppb annual mean NO₂ contour was used to set the AQMA boundary line.

The resulting proposed Air Quality Management Areas cover the extreme north of the borough down to the Oval, the centre of Brixton, and extend along the major road routes including parts of the A3, A23, A202, A203, A2217, and A3036.

The Council is required to carryout consultation on the proposals for the designation of the Air Quality Management Areas and the report sets out the details of the consultation process. Following consultation the Council will make the order for the declaration of the Air Quality Management Area.

LIST OF MAPS

		Page
Map 1	Current year - NO ₂ hourly mean (1996 met data)	13
Map 2	Projected 2005 - NO ₂ hourly mean (1996 met data)	14
Map 3	Current year - NO ₂ annual mean (1997 met data)	15
Map 4	Projected 2005 - NO ₂ annual mean (1997 met data)	16
Map 5	Current year - PM ₁₀ 24 hour mean (1996 met data)	17
Map 6	Projected 2004 - PM ₁₀ 24 hour mean (1996 met data)	18
Map 7	Current year - PM ₁₀ annual mean (1996 met data)	19
Map 8	Projected 2004 - PM ₁₀ annual mean (1996 met data)	20
Map 9	Lambeth's proposed Air Quality Management Area	25

LIST OF TABLES

Table 1	Air Quality Objectives (Revised NAQS)	6
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**LAMBETH'S PROPOSED AIR QUALITY MANAGEMENT AREA
(STAGE 3 REVIEW AND ASSESSMENT REPORT)**

CONTENTS

	Page
Executive summary	1
List of Maps	2
List of Tables	2
1. Introduction	5
1.1 The Background	5
2. The Review of the National Air Quality Strategy	6
2.1 The Revised NAQS	6
2.2 Implications of the Revised NAQS Objectives	7
2.3 Government Guidance	7
3. Summary of Lambeth's Third Stage Review and Assessment	8
3.1 The Review and Assessment Methodology	8
3.2 The results	8
3.3 Response to consultation on the Third Stage Review and Assessment	8
4. Assessment of NO₂ and PM₁₀ using Revised NAQS Objectives	11
4.1 Modelling Methodology	11
4.2 Model Uncertainty/Validation	11
4.3 Model Results and Discussion	12
4.4 Conclusion	21
5. Proposals for Lambeth's Air Quality Management Areas	22
5.1 Designation of Proposed AQMA	22

	page
5.2 Lambeth’s Proposed AQMA: Description and Map	23
AQMA Map 9	25
6. Consultation	26
7. Future Action	27
7.1 AQMA Declaration	27
7.2 Further Review and Assessment	27
7.3 Action Plans	27
Appendix	29
References	30
Glossary	31

1.INTRODUCTION

1.1 The Background

The Environment Act 1995 places a duty on the Council to carry out a review and assessment of air quality within the borough in order to identify areas where national and international policies to curb air pollution are unlikely to be sufficient to meet the Government's air quality standards.

These air quality standards are described in the UK National Air Quality Strategy (NAQS) and the associated objectives are prescribed by The Air Quality Regulations 2000. Objectives are set for seven pollutants (see **Table 1**) prescribing limit values for each pollutant and a target date by which these objectives should be achieved.

The NAQS and accompanying guidance recommends that the review and assessment process should be undertaken in three stages. Stage 1 is primarily a screening exercise aimed at enabling the local authority to identify the pollutants that are unlikely to meet the objectives and highlight pollutant sources that should then become the focus of the second and third stage reviews. Stage 2 and 3 involve more detailed investigation of the highlighted pollutants.

Stage 3 is designed to produce an accurate and detailed picture of the areas where pollution levels are unlikely to meet the objectives by the target year. Using continuous air quality monitoring data and computer modelling the local authority is able to identify Air Quality Management Areas (AQMA) in those areas of the borough predicted to exceed the objectives.

In December 1999 Lambeth completed its Third Stage Review and Assessment of air quality in the borough. However, at the same time the Government's review of the National Air Quality Strategy was coming to its end and the publication of the new NAQS was imminent. It was anticipated that changes to the air quality standards would result in a relaxation of the PM10 daily mean objective, which would significantly affect Lambeth's AQMA proposals.

It was decided not to designate AQMA's based on the findings of the Stage 3 Review and Assessment, but to wait until the new NAQS and associated guidance had been issued. This report, therefore, has been produced to update the findings of the Third Stage Review and Assessment in line with the new NAQS objectives and to propose Air Quality Management Areas based on these new predictions.

2. THE REVIEW OF THE NATIONAL AIR QUALITY STRATEGY

2.1 The Revised NAQS

In 1998 the government started its review of the National Air Quality Strategy (NAQS). The review looked at ways of improving UK air quality policy and in particular compared the UK standards to those EU limits set out in its Air Quality Framework and Daughter Directives. As part of the review process the government undertook a long period of consultation. It finally completed its review in January 2000 when it published its revised NAQS, which included a revised set of objectives and deadlines (**Table 1**). This was followed by the new Air Quality Regulations 2000, which came into force on the 6th April 2000.

Table 1 AIR QUALITY OBJECTIVES (REVISED NAQS)

POLLUTANT	OBJECTIVE		TO BE ACHIEVED BY
	Concentration	Measured as	
Benzene	16.25µg/m ³ (5ppb)	Running annual mean	December 31,2003
1,3 Butadiene	2.2µg/m ³ (1ppb)	Running annual mean	December 31,2003
Carbon monoxide	11.6µg/m ³ (10ppb)	Running 8hour mean	December 31,2003
Lead	0.5µg/m ³	Annual mean	December 31,2004
	0.25µg/m ³	Annual mean	December 31,2008
Nitrogen dioxide	200µg/m ³ (105ppb)	1 hour mean not to be exceeded more than 18 times per year	December 31,2005
	40µg/m ³ (21ppb)	Annual mean	December 31,2005
Particulates (PM ₁₀)	50µg/m ³	24 hour mean not to be exceeded more than 24 times a year	December 31,2004
	40µg/m ³	Annual mean	December 31,2004
Sulphur dioxide	350µg/m ³ (132ppb)	1 hour mean not to be exceeded more than 24 times per year	December 31,2003
	125µg/m ³ (47ppb)	24 hour mean not to be exceeded more than 3 times per year	December 31,2003
	266µg/m ³ (100ppb)	15 minute mean not to be exceeded more than 35 times a year	December 31,2003

2.2 Implications of the Revised NAQS Objectives

The main differences between the original and the revised objectives that are of significance to this report are summarised below:

- The target dates for achieving the objectives have been changed from the year 2005 for all pollutants to a range from 2003 to 2008 according to the specific pollutant.
- All objectives are to be expressed in mass per unit volume ($\mu\text{g}/\text{m}^3$) rather than in parts per billion (ppb) in order to standardise the units with EU limits.
- The $50\mu\text{g}/\text{m}^3$ 24 hour objective for particulates has been relaxed by increasing the number of permitted exceedences from four exceedences per year to thirty five. To be achieved by 2004.
- A new annual mean objective for particulates of $40\mu\text{g}/\text{m}^3$ has been introduced to be achieved by 2004 (derived from the EU Daughter Directive).
- The hourly mean objective for NO_2 has been changed from 1 exceedence of $296\mu\text{g}/\text{m}^3$ (150ppb) to 18 exceedences of $200\mu\text{g}/\text{m}^3$ (104.6ppb) to be achieved by 2005.

2.3 Government Guidance

The Department of the Environment, Transport and Regions issued new guidance notes based on the outcome of the revised NAQS, and local authorities are required to have regard to this guidance during the review process. The LAQM guidance and Technical guidance notes used and referred to in this report are listed below:

- LAQM G1(00) Framework for Review and Assessment of Air Quality
- LAQM G2(00) Developing Local Air Quality Action Plans and Strategies
- LAQM G3(00) Air Quality and Transport
- LAQM G4(00) Air Quality and Land Use Planning
- LAQM TG1(00) Monitoring Air Quality
- LAQM TG2(00) Estimating Emissions
- LAQM TG3(00) Selection and Use of Dispersion Models
- LAQM TG4(00) Review and Assessment: Pollutant Specific Guidance

3. SUMMARY OF LAMBETH'S THIRD STAGE REVIEW AND ASSESSMENT

3.1 The Review and Assessment Methodology

At the Third Stage Review and Assessment of air quality the London borough of Lambeth together with seven other central London boroughs commissioned Cambridge Environmental Consultants (CERC) to undertake an air quality modelling study in central London using the computer model ADMS-Urban. Copies of Lambeth's Third Stage report and the CERC report are available from Lambeth Regulatory Services, 2 Herne Hill Road, London, SE24 0AU.

ADMS Urban is a dispersion model developed for use in urban environments. Pollution data is put into the model, which predicts how the pollution is likely to disperse using weather data and produces contour plot maps of predicted pollution levels.

Using this technique, pollution levels in Lambeth for the year 2005 were predicted. The results showed that the air quality objectives, for all of the prescribed pollutants, would be achieved in Lambeth with the exception of nitrogen dioxide (NO₂) and fine particulates (PM10). The geographical extent of these exceedences were displayed as pollution contour maps.

3.2 The Results

Nitrogen Dioxide

By 2005 exceedences of the annual mean NO₂ objective were shown to be widespread in the extreme north of the borough and in the remainder of the borough close to major roads.

Exceedences of the hourly maximum NO₂ objective was shown to be unlikely, except at the busiest of road junctions in the north of the borough.

Fine Particulates

By 2005 exceedences of the 24 hour running mean (99th percentile) for PM10 was shown to extend over the entire borough.

3.3 Response to Consultation on the Third Stage Review and Assessment

Approximately fifty five reports were sent out for consultation to individuals and organisations including statutory consultees such as the Secretary of State for the Environment, Environment Agency, Highways Agency, and neighbouring boroughs. Other local consultees included Lambeth Councillors, Lambeth Agenda 21 Officer, Environment forum and Neighbourhood Fora, local Public Transport Group as well as local libraries and a range of local interest groups and businesses. (A more complete list of consultees is included in **appendix 4** of the Third Stage Report).

Eleven responses were received. Comments were in general favourable and constructive. Specific points raised are discussed below.

DETR

The DETR found the report to be well structure and technically accurate, albeit potentially confusing with regard to the assessment of PM₁₀ against the old objective.

Three areas were highlighted for consideration:

1. There was no explicit consideration given to uncertainty in the modelling results.
2. The level of detail for the predicted areas of exceedence where isolated areas were identified (eg Brixton for NO₂) was insufficient for meaningful discussion.
3. There should be more explicit consideration of exposure, especially in the smaller hotspots.

We have attempted to address each of these points in this current report.

The uncertainty in the modelling results is discussed in some detail with regard to PM₁₀ and NO₂ in **sections 4.2 and 4.4**. Evidence of over prediction in the PM₁₀ results and margins of error to be applied to the final results is discussed with regard to both pollutants and how this will effect the areas of exceedence. A full explanation of model validation and levels of confidence in model performance is provided in the main CERC reports available from Regulatory Services, 2 Herne Hill Road, London SE24 0AU.

The level of detail for the predicted areas of exceedence is significantly improved in this report. A detailed road map of the borough overlaid with the AQMA boundary line is displayed in **section 5 (map 9)** so that geographical locations can be easily identified.

Relevant exposure with regard to inclusion in AQMA's is also discussed in more detail in **section 5**.

Environment Agency and London Borough of Croydon

Croydon confirmed that their predicted levels of PM₁₀ and NO₂ correlate well with Lambeth's at the borough boundaries demonstrating a high level of consistency in the modelling process.

Both the Environment Agency and the London borough of Croydon commented on Lambeth's findings for the stage 3 assessment of SO₂, which concluded that exceedences of the SO₂ objective are not predicted to occur in Lambeth by 2005.

Croydon raised concerns that, in the light of contradictory modelling predictions for SO₂ from CERC and SEIPH, the modelling methodology for SO₂ is currently not confident of providing robust predictions of whether or not the SO₂ objective is likely to be exceeded.

The Environment Agency also commented on the uncertainty in predicting SO₂ releases from Part A processes for 2005. However, it hoped that a modelling study it had recently commissioned would clarify the situation by apportioning the contribution made by individual Part A processes to ambient levels of SO₂ and NO₂. They appeared confident that, whilst Part A processes are likely to be the main source of SO₂ emissions, changes in operation and revised site specific limits for SO₂ would remove any exceedences by 2005.

Having noted these concerns it is the intention of the London borough of Lambeth to look at predicted levels of SO₂ again at the further review and assessment stage that will be required once the AQMA has been declared.

Air Quality Consultants Ltd

Air Quality consultants Ltd pointed out an error in the Stage 3 report. The error occurs in **Appendix 7: Modelling Air Quality in Central London-Proposed Revision of Objectives in Lambeth (Summary of the CERC Report)**. The contour plot map for the 90th percentile PM₁₀ was the wrong map and the titles of the maps on pages 74 and 75 should have read the year 2004 not 2005.

The correct map for the **Projected 2004: 90th percentile PM₁₀ (1996 met. data)** should have been the map which is now presented as **map 6** on **page 18** of this report.

4. ASSESSMENT OF NO₂ AND PM₁₀ USING REVISED NAQS OBJECTIVES

4.1 Modelling Methodology

The methodology for modelling air quality using ADMS Urban is discussed in detail in Lambeth's Third Stage Review and Assessment (December 1999) and the original CERC report. The modelling of NO₂ and PM₁₀ in this study to correspond to the revised NAQS objectives followed the same basic methodology and therefore a comprehensive discussion of the method is not repeated in this report.

The model inputs comprised the most recent data available on road traffic counts, road traffic emission factors, Part A sources and other emissions. Projections of emissions for 2005 have been based on London Traffic Survey forecasts for 2005. However, as this was a more limited study only one year of meteorology (1996) was considered (this year was chosen as high levels of secondary particulates occurred and hence can be viewed as an untypically poor year for PM₁₀).

The annual mean objective for NO₂ was unchanged in the revised NAQS and was not therefore remodelled. The original model predictions for annual mean NO using 1997 meteorological data are therefore presented in this report.

The revised PM₁₀ objective in the new NAQS is based on gravimetric measurements which are on average greater than the previous method of measurement (TEOM) by a factor of about 1.3. The procedure adopted in this study was therefore, to adjust the background concentration (secondary plus coarse component) by an appropriate factor and leave the primary component unchanged so that the change in mean concentration is by a factor of 1.3.

4.2 Model Uncertainty/Validation

The modelled predictions of future pollution levels form the basis from which the AQMA boundaries will be drawn. However, all model outputs are subject to uncertainty and this uncertainty must be taken into account when declaring the AQMA.

There are two main sources of uncertainty in the model output. Firstly, the treatment of dispersion in the model is necessarily a simplification of reality that inevitably introduces error. Such error can be quantified by validating the model against past air quality monitoring data. Secondly, the results of the predictions are strongly influenced by the assumptions made in the future projected emissions inventory.

In order to check the accuracy of the model predictions the results are compared to pollution levels from monitoring stations around central London. This process, known as validation, is used to give an indication of the degree of error expected in the modelled results.

The ADMS Urban model predictions for NO₂ and PM₁₀ were compared to actual monitoring data recorded at up to 12 sites around the central London area (see the main CERC report). The validation study showed that in general concentrations of

NO₂ and PM₁₀ were well predicted. In the case of the annual mean and 90th percentile 24 hour mean PM₁₀ the model predictions were typically within +/- 10%. For NO₂ there was some tendency to overestimate the peak hourly average NO₂ concentrations for the 1996 data. For annual mean NO₂ the departure of the 1997 data from the line of best fit shows that the model has a bias tending to overpredict by about 3-4ppb, however, this is considered to be acceptable when compared with other errors introduced by the modelling exercise.

4.3 Model Results and Discussion

Pollution concentrations for the revised objectives were calculated both at receptor points (monitoring sites) and as high resolution maps. Only the pollution contour maps are presented in this report (all other data is available from the original CERC report). Contour maps of concentrations corresponding to the revised NAQS objectives for NO₂ and PM₁₀ for current and future (2004/5) emissions are presented in **maps 1-8** and discussed below.

Nitrogen Dioxide

Maps 1 and **2** show the pollution contour plots for the revised hourly mean NO₂ objective for current year and 2005. The results indicate that there are widespread exceedences in the current year but by 2005 there will be no exceedences of the revised objective in Lambeth.

Map 3 and **4** shows the pollution contour plots for the annual mean NO₂ objective for current year and 2005 (this objective is unchanged from the original NAQS). The results indicate that, for the current year, there are exceedences of the entire borough and by 2005 exceedences continue to occur in the north of the borough, in the centre of Brixton and in the vicinity of major roads.

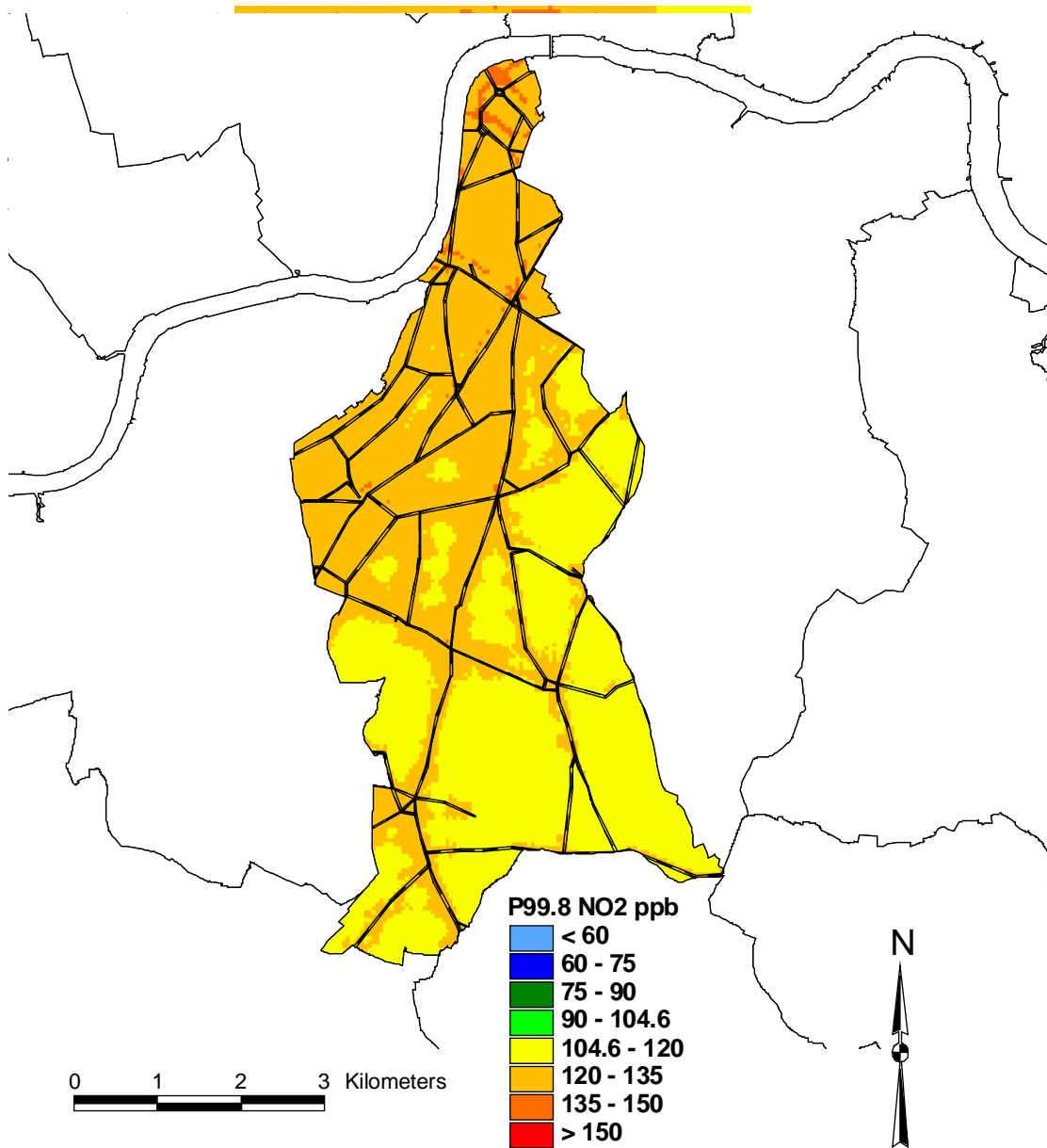
Particulate Matter (PM₁₀)

Maps 5 and **6** show the pollution contour plots for the revised 24 hour mean PM₁₀ (50µg/m³) for the current year and 2004. The results show that, in the current year, exceedences of the revised 24 hour mean objective occur across the whole of the borough. By 2004 exceedences are confined mainly to isolated areas in the north of the borough and along major roads.

Maps 7 and **8** show the pollution contour plots for the revised annual mean PM₁₀ objective (40µg/m³) for the current year and 2004. The results show that, in the current year, exceedences occur in the north of the borough and along major roads but by 2004 there are expected to be no exceedences of the revised annual mean.

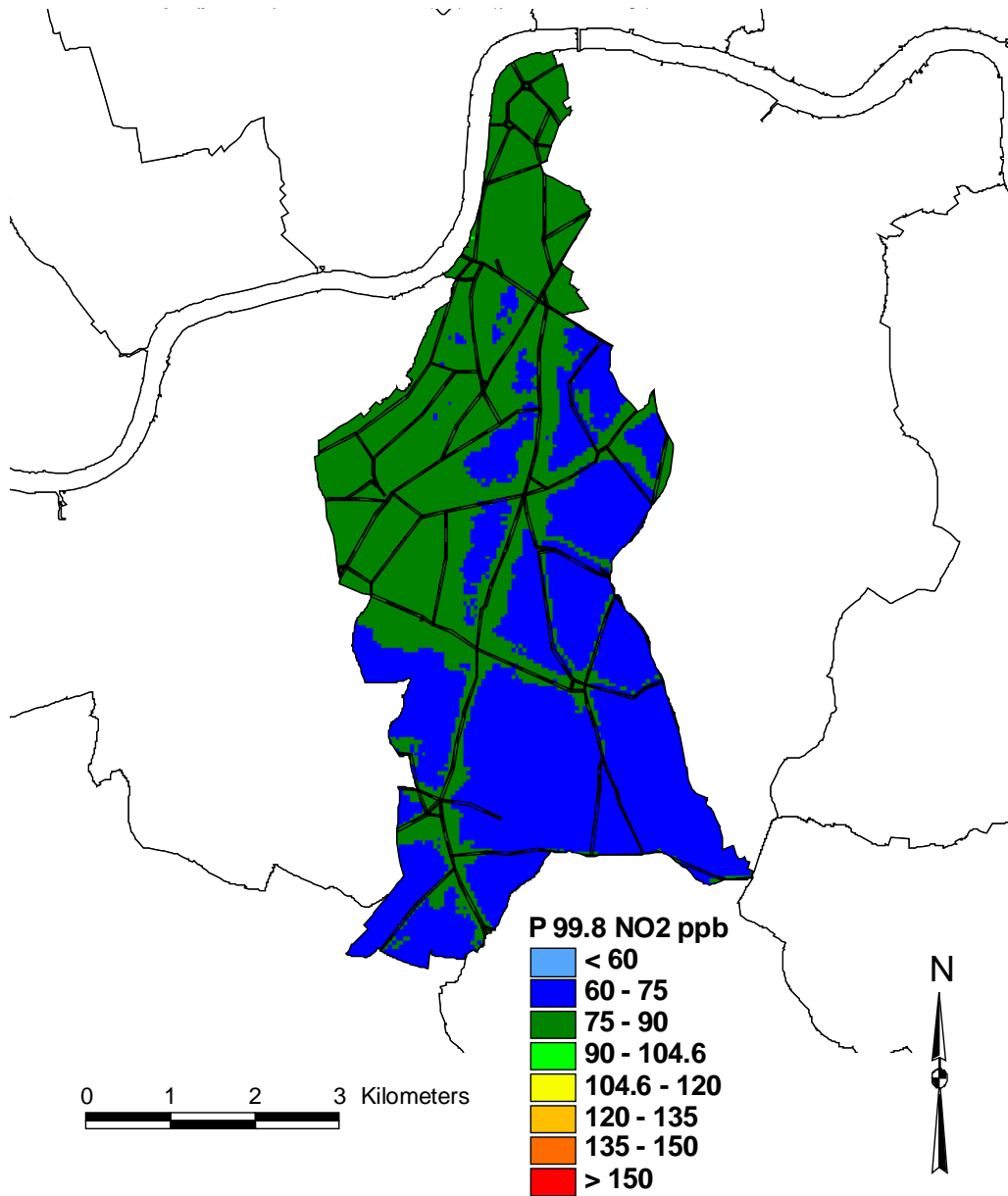
MAP 1: CURRENT YEAR - NO₂ HOURLY MEAN (1996 met data)

NAQS OBJECTIVE: 105ppb 1 hour mean (max 18 exceedences/year)



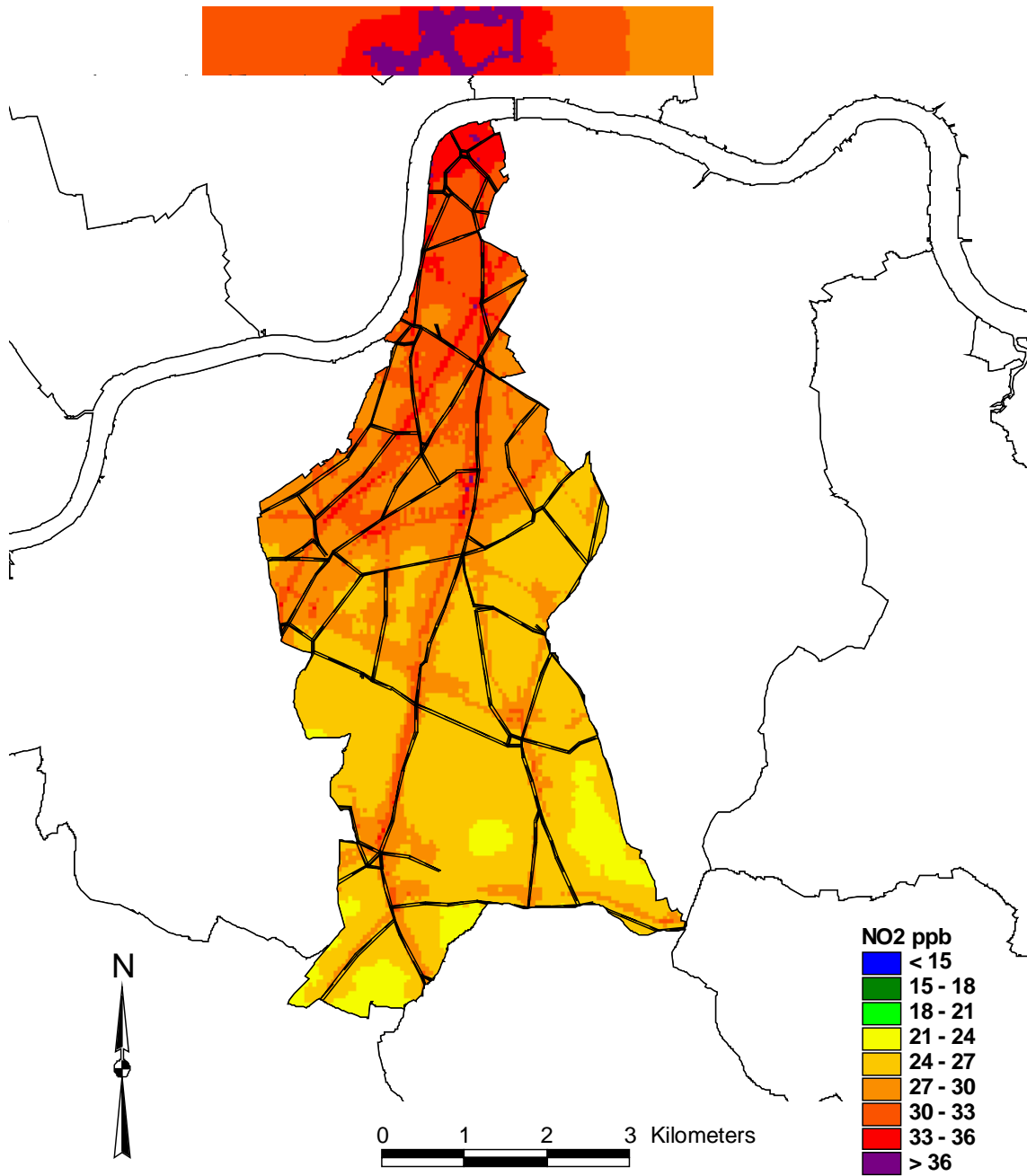
MAP 2: PROJECTED 2005 - NO₂ HOURLY MEAN (1996 met data)

NAQS OBJECTIVE: 105ppb 1 hour mean (max 18 exceedences/year)



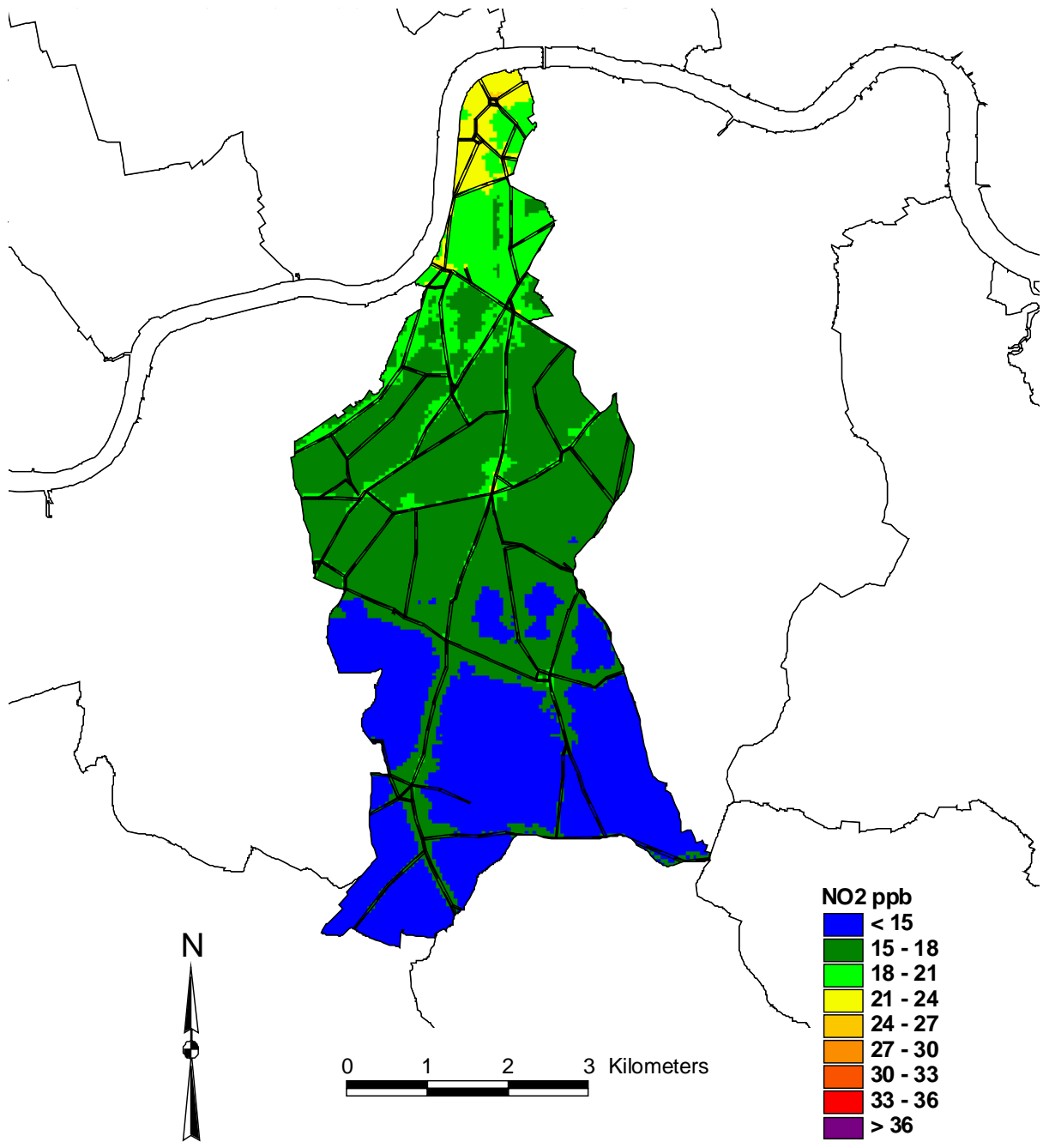
MAP 3: CURRENT YEAR - NO₂ ANNUAL MEAN (1997 met data)

NAQS OBJECTIVE: 21ppb annual mean



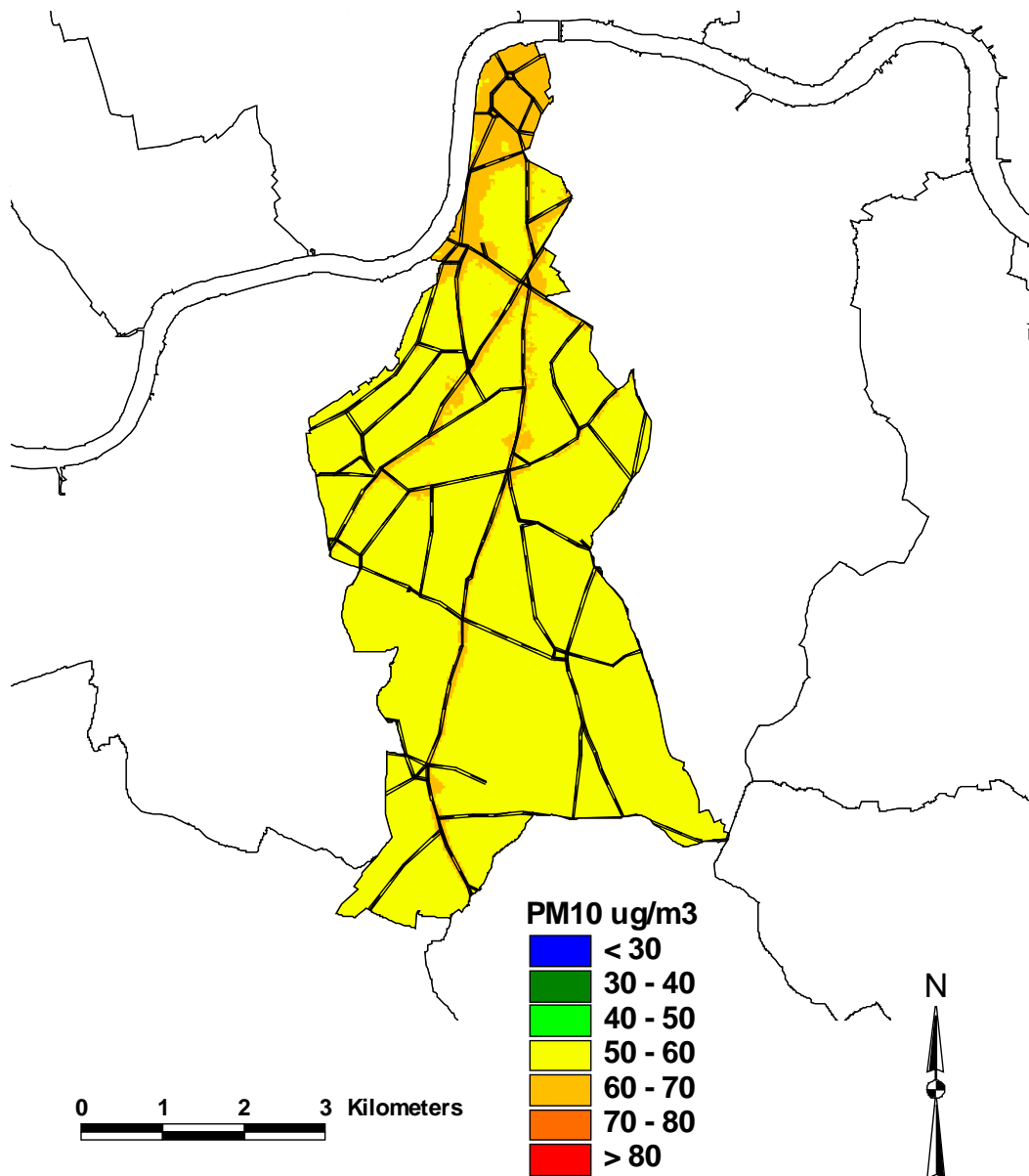
MAP 4: PROJECTED 2005 - NO₂ ANNUAL MEAN (1997 met data)

NAQS OBJECTIVE: 21ppb annual mean



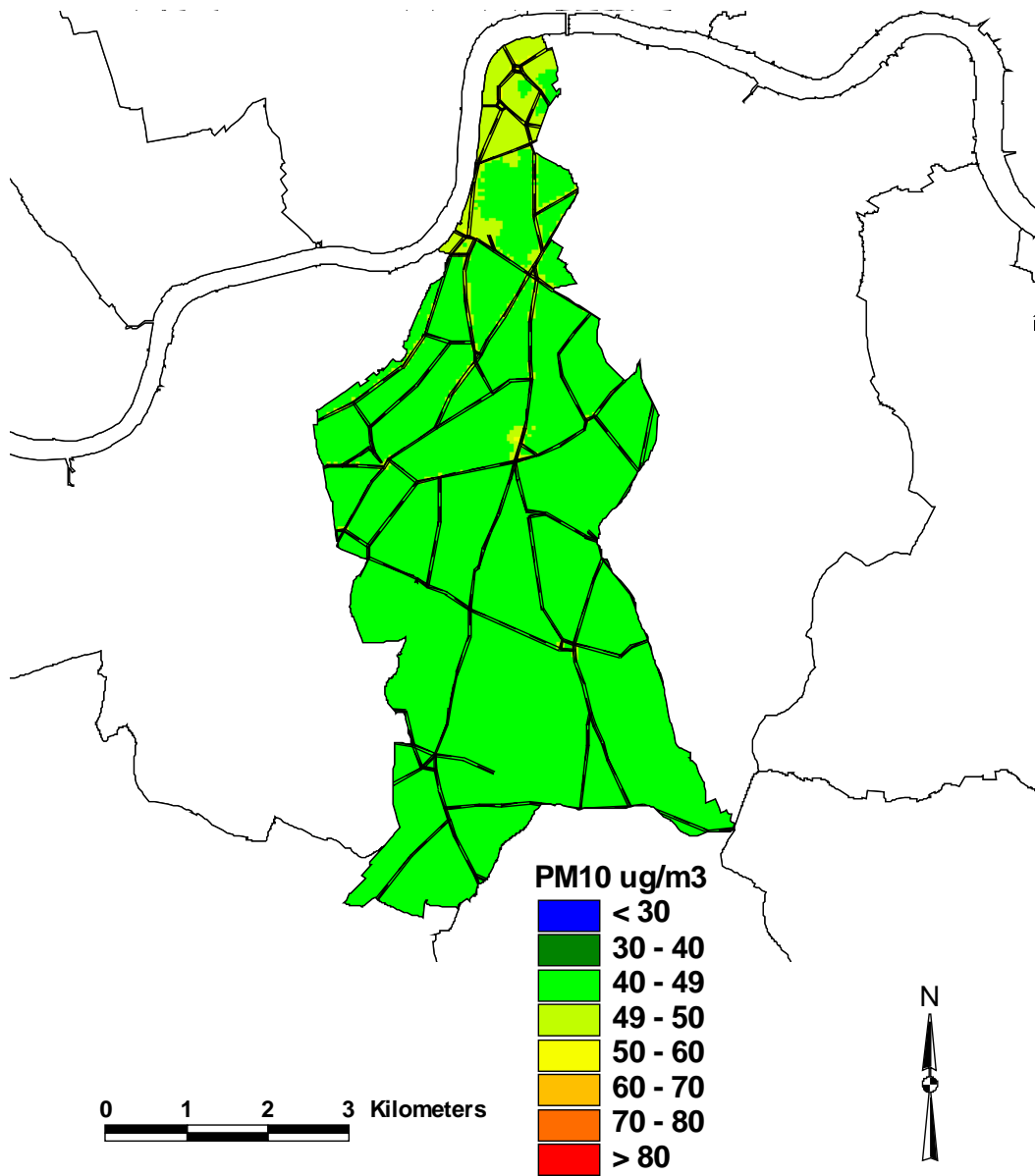
MAP 5: CURRENT YEAR - PM₁₀ 24 HOUR MEAN (1996 met data)

NAQS OBJECTIVE: 50 $\mu\text{g}/\text{m}^3$ 24 hour mean (max 35 exceedences/year)



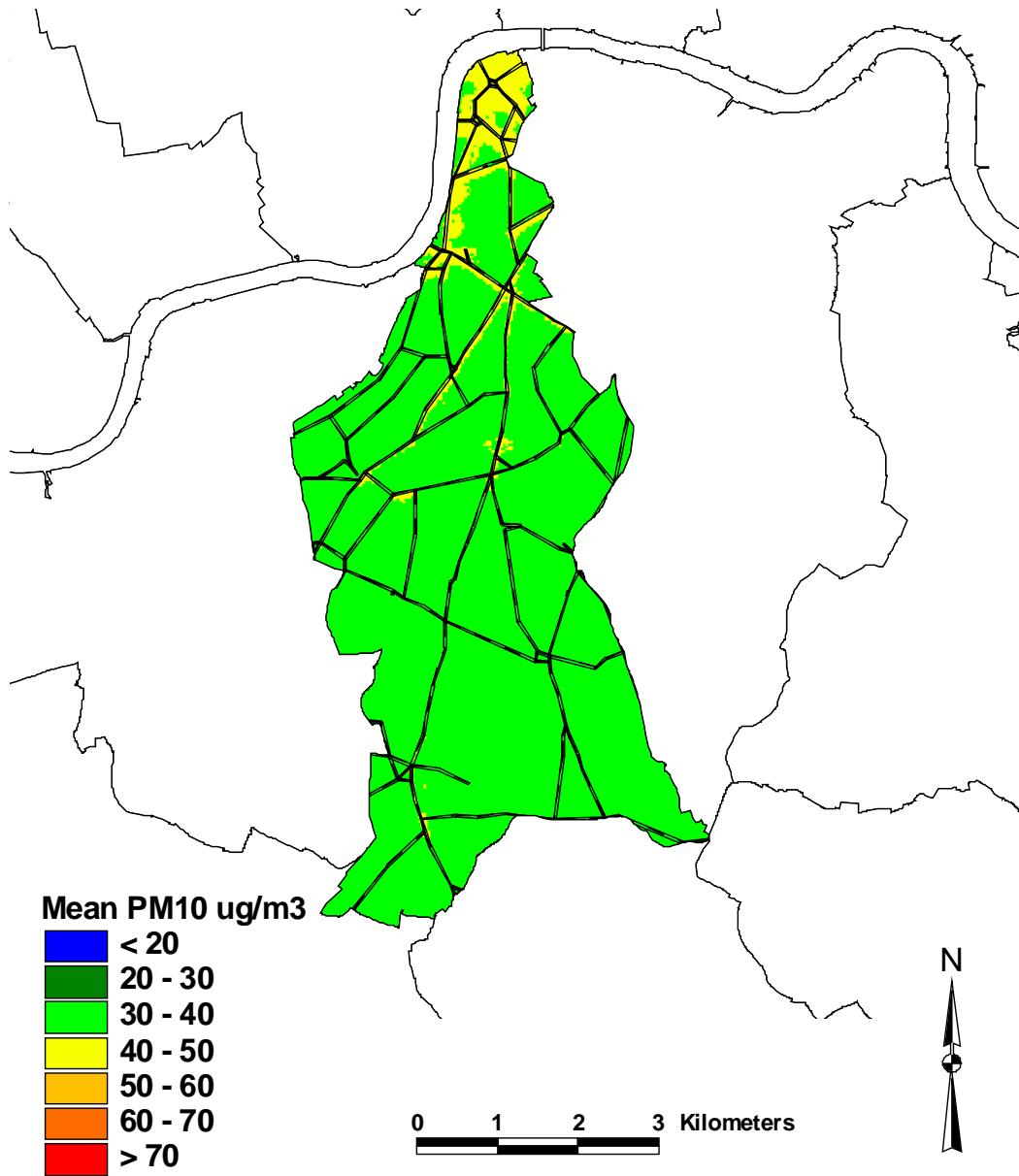
MAP 6: PROJECTED 2004 - PM₁₀ 24 HOUR MEAN (1996 met data)

NAQS OBJECTIVE: 50 $\mu\text{g}/\text{m}^3$ 24 hour mean (max 35 exceedences/year)



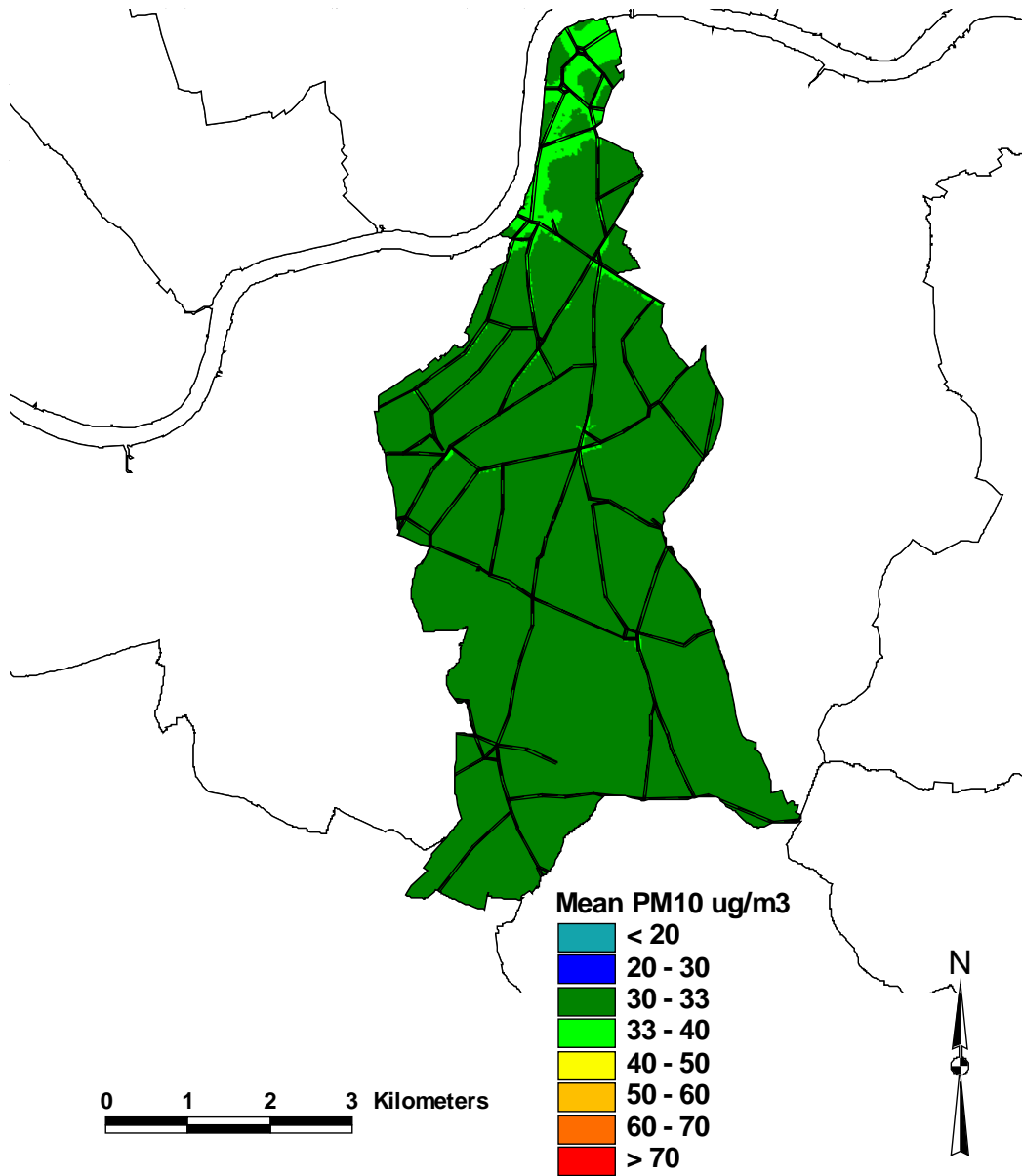
MAP 7: CURRENT YEAR - PM₁₀ ANNUAL MEAN (1996 met data)

NAQS OBJECTIVE: 40 µg/m³ annual mean



MAP 8: PROJECTED 2004 - PM₁₀ ANNUAL MEAN (1996 met data)

NAQS OBJECTIVE: 40 $\mu\text{g}/\text{m}^3$ annual mean



4.4 Conclusion

Although air quality in Lambeth will improve over the next 4 to 5 years, parts of the borough still have levels of air pollution that will not meet the Government's future air quality standards. The results of the assessment of air quality using the revised NAQS objectives specifically concluded that exceedences of Nitrogen dioxide and particulate matter are still likely to be occurring by government target dates.

The main source of these pollutants is motor vehicles. The high volume of traffic and road congestion along the major road routes in Lambeth, especially in the north of the borough is directly reflected in the pollution pattern shown in the contour maps.

For NO₂ the exceedences of the objective are to be found in the extreme north of the borough, the centre of Brixton and the busiest roads. For PM₁₀ the exceedences are limited to isolated areas in the north and small pockets along the busiest roads. There is, however, a more substantial area in the northern tip of the borough lying just below the PM₁₀ 24 hour mean level at 49µg/m³, and similarly there is a significant increase in the area of NO₂ exceedence lying just below the NO₂ annual mean level at 19ppb. These 'borderline' areas of exceedence are significant when margins of error are taken into account.

Consultation with other central London boroughs, Imperial College London and the University of Greenwich regarding the uncertainties associated with the modelling results concluded that, for the purposes of setting boundary lines for Air Quality Management Areas, margins of error should be estimated and applied to the model predictions. The following margins of error were calculated:

- For NO₂ the margin of error was derived by taking the root mean square difference between logs of modelled and monitored concentrations (measured at 12 sites for 1997 and 7 sites for 1996). This gave a dispersion model uncertainty (one standard deviation) of 2ppb. The result was to add 2ppb margin of error to the 21ppb annual mean contour, thus extending the area of exceedence to 19ppb.
- For PM₁₀ it was not possible to base the margin of error on statistical analysis as there were too few data points and too many uncertainties. Therefore, it was derived from local judgement using a precautionary approach. The result was to add a 1µg/m³ margin of error to the 50µg/m³ 24 hour mean contour, thus extending the area of exceedence to 49µg/m³.

Therefore for nitrogen dioxide the AQMA boundary line will be based on the 19ppb contour and for particulates on the 49µg/m³ contour.

5. PROPOSALS FOR LAMBETH'S AIR QUALITY MANAGEMENT AREAS

5.1. Designation of proposed AQMA

The Environment Act 1995 requires local authorities to declare Air Quality Management Areas where air quality objectives are not likely to be achieved within a specified time period and individuals are likely to be exposed to pollution over the averaging time of the objective.

In Lambeth the two pollutants that are not expected to achieve the NAQS objectives within the specified time period are PM₁₀ and NO₂, however, the area of exceedence for NO₂ is the largest area and includes all areas of exceedence for PM₁₀. The contour line for annual mean NO₂ is therefore the one used as the template for the delineation of the AQMA in Lambeth.

Although the declaration of an AQMA is important to demonstrate the existence and spatial distribution of air quality problem within the borough, the precise boundary of the AQMA is not expected to be an exact science. Government guidance advises that whilst AQMA's should include all areas of exceedence, in practice there may be a wide margin of discretion in drawing the boundary line.

It is not realistic to simply put a line around the pollution contour and declare this to be the AQMA. The modelling output must be interpreted in the light of knowledge of the model uncertainties, local knowledge about likely degree of human exposure, traffic levels and congestion and the need for the AQMA to be reasonably clear and to make some sort of physical and administrative sense on the ground.

The Air Quality Regulations 2000 makes it clear that local authorities should only consider exceedences at locations where relevant exposure would be realistic. Government guidance advises that public exposure and relevant locations are those outside locations "where members of the public are regularly present and are likely to be exposed over the averaging time of the objective". DETR recommend that for objectives with long averaging times such as annual mean NO₂, then the AQMA should include residential property, schools, libraries and hospitals but not offices, and for 24 hour mean PM₁₀ the area should cover all of the above including the gardens.

Residential property, schools, libraries, hospitals and other sensitive locations are distributed widely throughout the borough. It was therefore decided that all areas of exceedence should be included in the AQMA since regular exposure of the public might reasonably be expected at these locations.

Consequently Lambeth's proposed AQMA has sought to adopt a precautionary approach, based on available data, whilst at the same time following convenient administrative boundaries. This means that in some places marginal areas within the 19ppb contour are not included (although the precautionary margin should ensure that no areas that exceed the 21ppb objective are excluded from the AQMA) and conversely that some areas below the 19ppb contour are included.

The areas of the borough to be included in the proposed AQMA are shown in the following section (**Map 9**). The main body of the AQMA is located in the north of the borough reflecting the poorer air quality of central London. There is a smaller area covering central Brixton and ribbons along the main road routes through the borough reflecting emissions from busy roads and congestion.

5.2. Lambeth's Proposed AQMA: Description and Map

The main body of the AQMA covers the northern part of the borough down to and including the following boundary roads (to kerbside):

- Miles Road
- Crossing South Lambeth Road to Fentiman Road
- Crossing Clapham Road to Handforth Road
- Crossing Brixton Road to Cranmer Road
- Cranmer Road to junction with Foxley Road
- Foxley Road to Camberwell New Road

The central Brixton AQMA is enclosed by the following boundary roads(to kerbside):

- Stockwell Park Walk crossing Brixton Road to St John's Crescent (up to junction with Wiltshire Road)
- Wiltshire Road (from junction with St John's Cr) to Canterbury Crescent to Popes Road to Atlantic Road to Railton Road (up to junction with Kellett Road)
- Kellett Road to Effra Road
- Effra Road to junction with St Mathews Road
- St Mathews Road crossing over Brixton Hill to Porden Road
- Porden Road crossing Acre Lane to Trinity Gardens
- Trinity Gardens to Brighton Terrace to Tunstall Road to Shannon Grove to Nursery Road
- From the Shannon Grove end of Nursery Road the boundary line is taken down the perimeter boundary by the running track of the Ferndale Sports Centre to Ferndale Road
- Ferndale Road to Pulross Road to the junction of Dalyell Road
- Dalyell Road to junction with Gateley Road
- Gateley Road to Stockwell Avenue
- Stockwell Avenue to junction of Stockwell Road and Stockwell Park Walk

The Tulse Hill AQMA includes the following roads (including all fronting properties up to the back fence boundary).



- Tulse Hill from junction with Hardel Rise to junction with Norwood Road/Thurlow Park Road
- Norwood Road from junction with Tulse Hill/Thurlow Park Road to junction with Leigham Vale
- Christchurch Road from junction with Norwood Road to junction with Hardel Rise
- Hardel Rise
- Perran Road

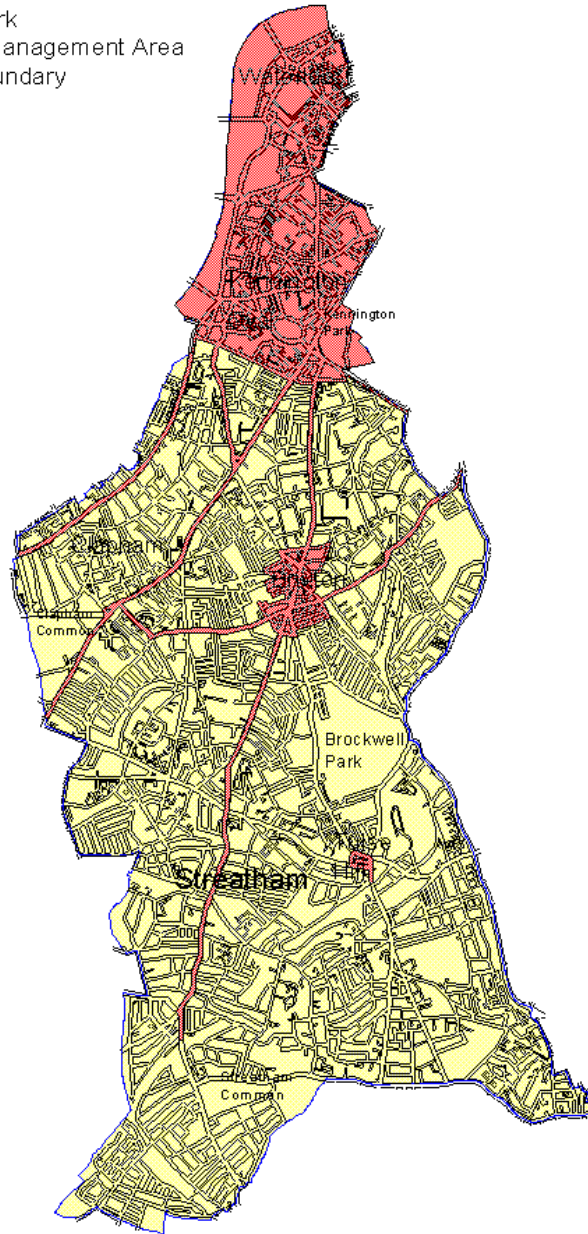
The following main road routes (including all fronting properties up to the back fence property boundary line) are also proposed AQMAs:

- A202 Camberwell New Road
- A3036 Wandsworth Road
- A203 South Lambeth Road
- A3 - from borough boundary to end of Clapham Road (Balham Hill/Clapham Common South side/Clapham High Street/Clapham Road)
- A2217 Clapham Park Road, Acre Lane and Coldharbour Lane
- A23 Brixton Road, Brixton Hill, Streatham Hill, Streatham High Road up to the junction at Ambleside Avenue and Stanthorpe Road

MAP 9

Lambeth Proposed Air Quality Management Area

-  Road Network
-  Air Quality Management Area
-  Borough Boundary



6. CONSULTATION

Local authorities are required by the Environment Act to consult at each stage of their air quality review and assessment. The Act specifies the statutory bodies to be included in the consultation and also requires consultation with a representative sample of local business, community groups and local action groups, as well as neighbouring authorities that share their boundaries.

In order to consult effectively with as wide a range of people and organisations as possible a list of local consultees has been drawn up that will include local campaigning groups, environmental forums, neighbourhood and residents associations, and Agenda 21 participants (a full list of consultees is published in **appendix 1**). The aim of the exercise is to consult as widely as possible with the local community to ensure that the Air Quality Management Area and resulting Action plan will be understood and supported.

Given that the main air quality issues in Lambeth, as well as the rest of central London, are a result of traffic generated pollution, Lambeth would welcome the consultation exercise to embrace a wider discussion on local transport strategies.

Following consultation it is intended that the London Borough of Lambeth will declare Air Quality Management Areas where there are exceedences of the air quality objectives and take the main consultation issues into account when drawing up Action Plans for these areas.

Comments on this report and the proposal for Lambeth's Air Quality Management Areas should be sent to:

Address Lambeth Regulatory Services
 2 Herne Hill Road
 London, SE24 0AU

Fax 020 7926 6150

E mail gnarramore@lambeth.gov.uk

The consultation period is six weeks and all comments should be received by 26th March 2001.

7. FUTURE ACTION

The next steps are to declare the Air Quality Management Area, carry out a further review and assessment and draw up Action plans.

7.1 AQMA Declaration

Following the consultation the Council will declare by order Lambeth's Air Quality Management Area. This will be completed by 31st March 2001.

7.2 Further Review and Assessment

Having declared its AQMA the Council is required to carry out a further review and assessment of air quality within the AQMA to ascertain the extent of improvements required to achieve the NAQS targets and the relative contribution of different sources.

Further modelling may be required at this stage allowing local authorities to build on the modelling work done in their third stage review by updating and fine tuning the inputs for traffic and emissions inventory data.

This further assessment should aim to give a clear picture of the sources which authorities can control or influence to ensure that action plans strike a balance between the contribution from local authorities and the contribution that must come from other sectors.

The report on the further review and assessment is to be completed by 31st March 2002 and will include consultation.

7.3 Action Plans

The Council is required to prepare a written action plan, in consultation with local interest groups, residents, businesses and statutory consultees, outlining its strategy for achieving the air quality objectives within its AQMA's.

Road traffic is the major source of pollution in Lambeth and the whole of London. It is clear therefore that individual boroughs cannot improve air quality in their locality in isolation and will need to work closely with other London boroughs to ensure that their action plans are complementary and consistent. It is intended that the work of the Central London Cluster Group will be continued in order to co-ordinate actions to improve air quality across London.

The Mayor of London is also required to produce an Air Quality Strategy for London, which must incorporate the policies contained in the NAQS and set out what steps the Mayor will take to achieve the NAQS objectives within Greater London. London boroughs must have regard to the Mayors London Air Quality Strategy and are required to consult with the Mayors Office when carrying out their further Review and Assessments and drawing up Action Plans.

The aim of Lambeth's action plan will be to bring about improvements in air quality by reduction in traffic levels and the actions of transport providers, planners, regulators and users will be fundamental to this process. The type of issues and proposals that need to be considered will include:

- Traffic reduction Targets
- Planning restrictions on traffic movements
- Car free developments
- Encouragement/priority to public and low polluting transport eg continuous bus lanes
- Businesses to develop green travel plans for staff and associates
- Company car parking levies
- Low Emission Zones
- Congestion Charging
- Promotion of electric/gas/alternative fuel vehicles

In addition to the above the action plan should included in the following information:

- Details of the pollutants to be addressed and an indication of their sources
- Outline the involvement and relative contributions of other local authorities, individuals or agencies in securing the objectives of the action plan.
- The London Air Quality Strategy proposals for inclusion in the action plan
- Timescales for implementation of proposals in the action plan

The Draft Action Plan will be developed over the next 12 months and following wide consultation the formal Action Plan will be published by September 2002.

APPENDIX 1

ARRANGEMENTS FOR CONSULTATION AND ACCESS TO PUBLIC INFORMATION

Schedule 11 of the *Environment Act 1995* sets out statutory consultation arrangements for local authorities in respect of their air quality review and assessment processes. This requires the authority to consult a number of organisations and individuals, including the Secretary of State, adjacent local authorities, and other bodies which the authority may consider appropriate to consult.

Copies of this report have been sent to the following organisations for consultation:

The Secretary of State for the Environment
The Mayor for London
The Government Office for London
The Environment Agency
The Highways Agency
The Association of London Government
LPAC
Transport for London Street Management
The London Borough of Southwark
The London Borough of Croydon
The London Borough of Bromley
The London Borough of Merton
The London Borough of Westminster
The London Borough of Wandsworth
Chartered Institute of Environmental Health
Agenda 21 Officer
Lambeth's Library Service
Lambeth Voluntary Action Council
Lambeth Environment Forum
Chambers of Commerce
South Bank Forum
Lambeth Public Transport Group
Neighbourhood Tenant's Forum via Housing Community Development Unit
Streatham community forum
Patmos Area Conservation Community Association

A copy of this report has been placed in the reception of Lambeth Town Hall, Town Hall Parade, Brixton, London SW2 and distributed to each of Lambeth's Public Libraries. In addition, the report is available for inspection by the public free of charge at 2 Herne Hill Road, London SE24 OAU between the hours of 9am and 5pm.

Further copies of the report are available at a charge of £20 from the Council's Regulatory Service, details of which are given on the front cover of this document. Cheques should be made payable to the "London Borough of Lambeth".

References

1. Environment Act 1995 – Chapter IV – *Local Air Quality Management*
2. *United Kingdom National Air Quality Strategy* - The Stationary Office 2000
3. *Air Quality Regulations* 2000
4. DETR – *Guidance Notes: G1, G2, G3 and G4* – May 2000
5. DETR- *Technical Notes: TG1, TG2, TG3, TG4* – May 2000
6. DETR (1998): *Review and Assessment Pollutant Specific Guidance*
7. *Modelling Air Quality in Central London* - Carruthers et al (1999) CERC
8. *Modelling Air Quality in Central London: Proposed Revision of Objectives* – Carruthers et al (1999) CERC
9. NETCEN Website: <http://www.aeat.co.uk/netcen/aqarchive/archome.html>

Glossary

Term	Description
ADMS	Atmospheric dispersion modelling system
Air Quality Objective	The concentrations and averaging periods set out in the Air Quality Regulations 1997
Air Quality Standard (AQS)	Derived from the EPAQS recommendations, set out in the National Strategy standards
AQMA	Air Quality Management Area
R&A	Review and assessment
Atmospheric dispersion model	A mathematical method for calculating levels of pollutants under a set of known variables
DETR	Department of the Environment, Transport and the Regions (formerly DoE)
Fine particulate	Particles less than 10 microns
LAQN	London Air Quality Network
LRC	London Research Centre
Mean	The average of a data set.
mg/m ³	Milligrammes per cubic metre
NAQS	National Air Quality Strategy
ppb	parts per billion
ppm	parts per million
SEIPH	South East Institute of Public Health
TEOM	Tapered Element Oscillating Microbalance
µg/m ³	Microgrammes per cubic metre

