



Local Air Quality in Cambridgeshire 2000

**Non-Technical Summary
of the Stage 3
Review and Assessment
Consultation Document**

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i) Foreword

In Cambridgeshire, a partnership of the five District Councils and the County Council has been set up to tackle the issue of air quality by carrying out a review and assessment of certain pollutants. The partnership, called the Air Quality Review and Assessment Working Group, was formed in 1997 to undertake the technical aspects of carrying out new duties the Government had given them. Review and assessment is the first step in a process known as Local Air Quality Management. This will help air quality considerations to be taken into account during land use and transport planning processes and provide the basis for action where improvements are found to be necessary.

The review and assessment work has been carried out in stages and a first report was produced in December 1998 covering the results of the first two stages. The third stage has involved sophisticated monitoring and computer modelling techniques to evaluate the extent of any pollution "hot spot" areas. The partnership authorities have now published the results of Stage 3 in a technical report, which can be viewed at local authority offices and public libraries throughout the County. A list of local authority contact details appears on the back cover of this summary document.

This booklet highlights the main findings of the report and looks forward to what will happen next in the ongoing work to improve air quality.

ii) What is air quality and why is it of concern?

Air is a complex mix of gases, particles and water vapour.

Poor air

Poor air quality results from the addition of substances in such quantities and of such duration that they may cause harm to human, plant or animal life, and materials or structures. Polluted air may also bring about changes in the weather or climate.

Air pollution tends to be worse in heavily congested areas, where there is pollution from traffic fumes, and in heavily industrialised areas. Smoke and Sulphur Dioxide, produced by the burning of fossil fuels e.g. wood, oil and coal, were the main pollutants up until the middle part of the 20th century. In the past few decades, “modern” pollutants from transport and industrial sources e.g. nitrogen oxides, carbon monoxide, ozone and very Fine Particles have come to prominence.



Sunrise over the Fens



Health effects

Air pollution can affect our health. The old, the young, and those suffering from asthma and heart and lung diseases are the most susceptible and at risk. Whilst the effects of air pollution on human health have probably spanned many centuries, it was not until the Industrial Revolution in the 19th century that poor air quality became associated with urban life.

Occupational studies and laboratory experiments have shown that many common air pollutants have the potential to damage animal and human health by affecting lung function, the immune response, or by causing cancer. However, there is still some debate about these health effects and research is ongoing.

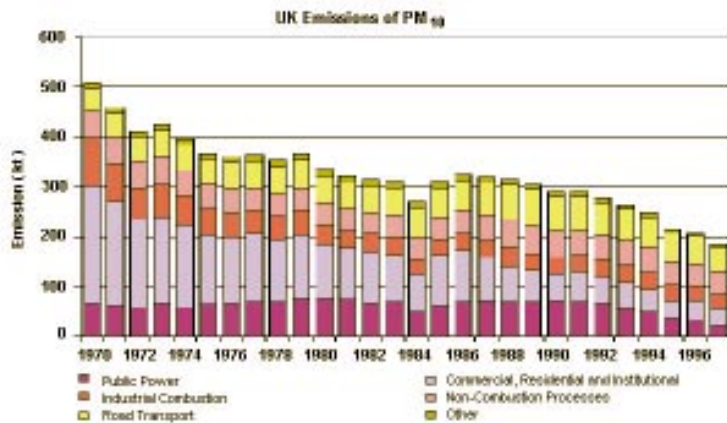
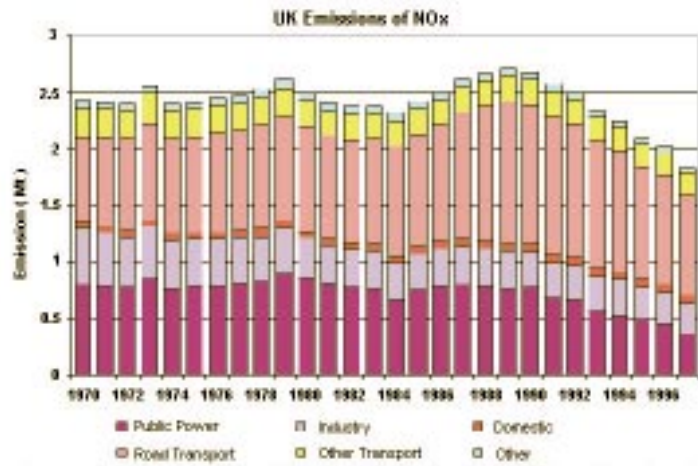
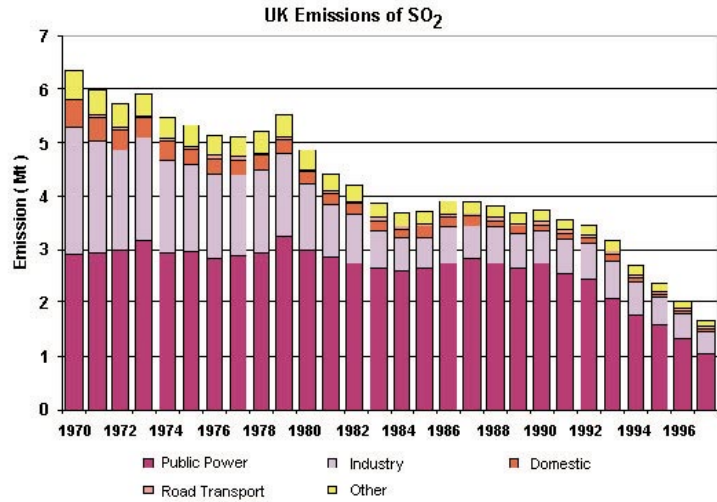
The views of the health authorities, with regard to the impact of various pollutants on the health of Cambridgeshire's residents, form an important part of taking forward work on air quality.

iii) Sources of pollution

Pollution may be produced by human activity or from natural processes such as volcanoes, forest fires or wind blown dusts. In the UK, the most important sources of pollution are emissions from industry, transport and domestic households.

In Cambridgeshire, the major sources of air pollution are motor vehicle emissions, especially in the urban centres and along its major trunk roads, together with a number of industrial processes. The most important source of air pollution from domestic households arises from the burning of fossil fuels to produce heat or power.

Most pollutants disperse naturally in the atmosphere the further you move away from the source. The rate that they are dispersed depends upon the weather, local landscape and buildings. However, some pollutants are formed by chemical reactions in the atmosphere and can be carried long distances, even across continents e.g. ozone.

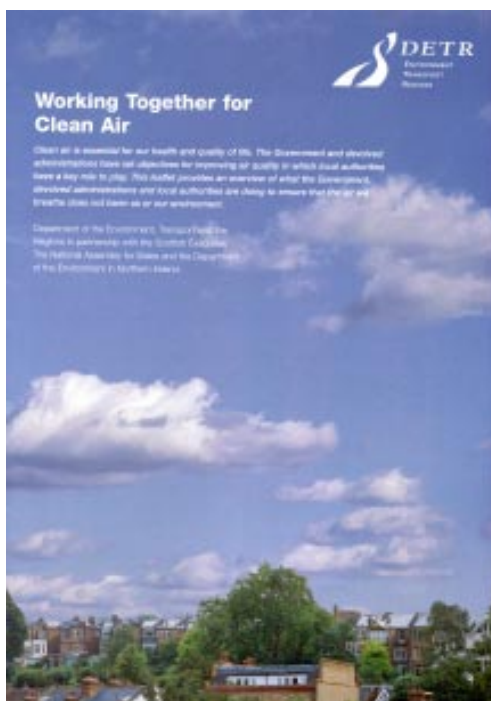


Source: Adapted from the UK National Atmospheric Emissions Inventory (NAEI) Eleventh Annual Report

iv) The Government's Air Quality Strategy and Local Air Quality Management

The Government has produced an Air Quality Strategy for England, Scotland, Wales and Northern Ireland. This states that air quality in the UK is generally very good, but there are still sometimes unacceptably high levels of air pollution that have the potential to harm human health and the environment.

The Strategy has set health based objectives for eight pollutants. Seven of the eight pollutants have objectives set in Regulations for Local Air Quality Management which started at the beginning of 1998. This means that your city and district councils are required to identify and take action to tackle any local air quality problems arising from these seven pollutants. Although ozone is included in the Government's strategy it is recognised that action will have to be taken at a national level to control this pollutant due to its transboundary distribution.



The Governments Strategy Leaflet

There are 3 main stages to Local Air Quality Management:

- **Review and Assessment**

Your city and district councils have to review and assess air quality within their areas to determine whether the Government's air quality objectives for each of the key pollutants are likely to be met by set dates.

- **Designation of Air Quality Management Areas**

Where your city and district councils conclude that one or more of the objectives are unlikely to be achieved, it must declare an Air Quality Management Area (a legal process) covering the part of its district where the problem lies.

- **Development of Action Plans or Local Air Quality Strategies**

Where an Air Quality Management Area has to be declared your city or district council must draw up an action plan setting out how the objectives will be achieved within this area. If there is no Air Quality Management Area the Government recommends that your city or district council draw up a Local Air Quality Strategy to ensure that the pollutant levels do not rise and cause problems in the future. Both of these courses of action have to be carried out in consultation with neighbouring local authorities, businesses, local people, the Environment Agency and the Highways Agency.

The Strategy has also set two objectives for the protection of vegetation and

ecosystems. However, these objectives are not set in the Regulations for Local Air Quality Management and do not form part of this review and assessment. Your district council may carry out monitoring in rural locations, away from trunk roads and industry, to make assessments against these objectives in the future.



Houghton Meadows - a Site of Special Scientific Interest

REVIEW AND ASSESSMENT : THE SEVEN POLLUTANTS CONSIDERED

Pollutant	Main Source	Objective Concentration	Measured As	Date to be achieved by
Benzene	Petrol vehicles	16.25µg/m ³ (5ppb)	Running annual mean	31/12/2003
1,3-Butadiene	Road transport	2.25µg/m ³ (1ppb)	Running annual mean	31/12/2003
Carbon Monoxide	Petrol vehicles and industry	11.6mg/m ³ (10ppm)	Running 8 hour mean	31/12/2003
Lead	Petrol vehicles and industry	0.5µg/m ³ 0.25µg/m ³	Annual mean Annual mean	31/12/2004 31/12/2008
Nitrogen Dioxide	Road transport and power generation	200µg/m ³ (105ppb) not to be exceeded more than 18 times a year	1 hour mean	31/12/2005
		40µg/m ³ (21ppb)	Annual mean	31/12/2005
Fine Particles (PM₁₀)	Road transport, power generation and industry	50µg/m ³ not to be exceeded more than 35 times a year	24 hour mean	31/12/2004
		40µg/m ³	Annual mean	31/12/2004
Sulphur Dioxide	Power generation and industry	350µg/m ³ (132ppb) not to be exceeded more than 24 times a year	1 hour mean	31/12/2004
		125µg/m ³ (47ppb) not to be exceeded more than 3 times a year	24 hour mean	31/12/2004
		266µg/m ³ (100ppb) not to be exceeded more than 35 times a year	15 minute mean	31/12/2005

Key: mg/m³ = milligrams per cubic metre; µg/m³ = micrograms per cubic metre; ppb = parts per billion; ppm = parts per million. Conversions of ppb and ppm to µg/m³ and mg/m³ at 20°C and 1013mb.

v) What's going on in Cambridgeshire?

The city and district councils in the County have been monitoring various air pollutants, at a variety of locations, for several years. Sites have been chosen either because they are near major transport routes or industrial sources, or because they provide a more general picture of background levels.

Review and Assessment

Reviewing and assessing air quality is easier said than done!

The partnership authorities started gathering information in 1997 and produced a comprehensive report on their initial findings in December 1998. These findings provided the benchmark for measuring future air quality in Cambridgeshire. It established that the pollutants causing most concern in the County were Nitrogen Dioxide, Sulphur Dioxide and Fine Particles (PM₁₀).

The city and district councils have now carried out further work on these 3 pollutants to determine any pollution "hot spot" areas in the County. Concentrations of future air pollution levels have been estimated using a sophisticated computer programme. This is a dispersion model known as ADMS-Urban. The results of this work are now out for consultation and have been published in the Stage 3 technical report. The main findings for each district follow in Section (vi). This latest work has been complex and highly technical.

The main factor that affects air quality is the weather. Short term pollution episodes, winter and summer smogs, occur when there are long periods of sunshine and low winds in summer and when there is a

temperature inversion, which prevents pollutants from being dispersed, in winter. The computer model was set to take account of the worst meteorological conditions, which have occurred within the last ten years. The model also requires traffic flow data and estimates of emissions from vehicles. Hence, uncertainties can arise connected with predictions of future traffic flows, numbers of heavy goods vehicles and reductions in emissions due to improved technology.

Pollutant	Stage 3 Report Findings
Benzene	The Air Quality Strategy (AQS) objectives are likely to be met by the end of 2003 throughout the County
1,3-Butadiene	By the end of 2003 the AQS objectives are likely to be met throughout the County
Carbon Monoxide	The AQS objective is likely to be complied with by the end of 2003 throughout the County.
Lead	The two AQS objectives are likely to be complied with by the end of 2004 and 2008 respectively throughout the County.
Fine Particles (PM ₁₀)	See details in following district sections
Nitrogen Dioxide	See details in following district sections
Sulphur Dioxide	See details in following district sections

vi) District-by-District

Cambridge City

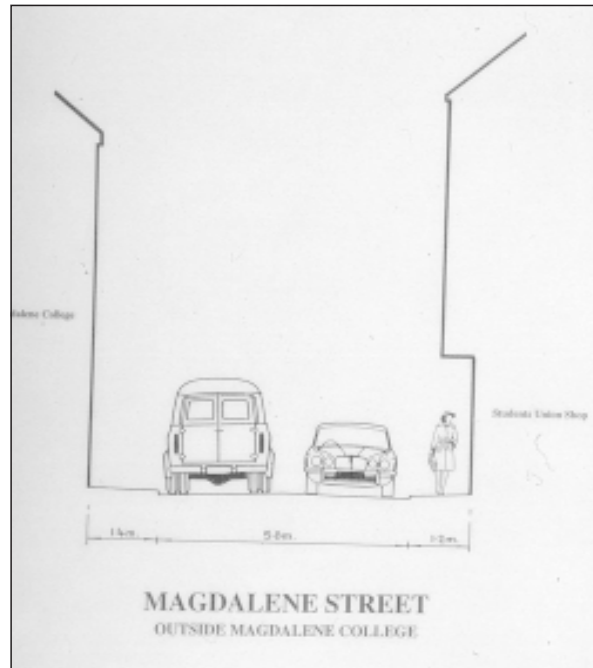


The Stage 3 technical report includes detailed assessments of Sulphur Dioxide and Nitrogen Dioxide and an intermediate assessment of Fine Particles. The latter assessment was deferred from the first report due to a lack of Government technical guidance. These assessments have relied on monitoring data from our 5 automatic monitoring sites (Parker Street, Silver Street, Gonville Place, Regent Street and Marshall's Engineering Works) and computer modelling to predict future concentrations. Allowances have been made for traffic growth, improvements in emissions due to development in vehicle technology, weather conditions and the impact of industry.



Congested City Centre Street

Up-to-date information on air pollutant levels in the City is available on the Internet at <http://www.io-ltd.co.uk/cc.html>



Section of narrow street which hinders dispersion.

Sulphur Dioxide

Cambridge City Council carried out research on the air quality implications of Sulphur Dioxide emissions from individual sources, including small boiler plants using fuel oil or coal. Every major employer was questioned. Significant emissions of Sulphur Dioxide were found to occur at Marshall's Engineering Works and at Cambridge University Press.

Cambridge University Press uses heavy oil with a permitted sulphur content of five percent. European legislation will ensure that the content of this fuel is reduced to one per cent by 2003, which means pollutant levels will be reduced and no further action will be necessary.

Marshall's Engineering Works have been working together with Cambridge City Council and South Cambridgeshire District Council to measure the current levels of pollution and a continuous Sulphur Dioxide monitor has been installed and running since November 1999. Marshall's has also proposed to replace the oil-fired boilers with gas boilers, which will reduce Sulphur Dioxide emissions to a fraction of their present rate.

Cambridge City Council will continue to monitor Sulphur Dioxide levels and the programme for changing the boilers to ensure objective levels are met. If the Council feels that at any time the objective will not be met by the due date then an Air Quality Management Area will be declared.



Fine Particles Monitor

Nitrogen Dioxide

At present Nitrogen Dioxide levels are known to be above objective levels in the **City Centre** at Parker Street, Gonville Place and Silver Street. However, Cambridge City Council officers have calculated that the risk of exceedence of the objective for Nitrogen Dioxide by 2005 is low as "worst case" figures have been used in their calculations. Nevertheless they are concerned about meeting the objectives in

the City Centre, and areas next to feeder roads into the centre, so have decided to increase existing monitoring to help track computer model predictions.

To help ensure that Nitrogen Dioxide levels do not rise it is vital that action which is already being undertaken to help reduce congestion, e.g. traffic management measures, like the Core Scheme, and Park and Ride, continue as these also help to improve air quality in the City Centre.

Fine Particles (PM₁₀)

Four sites in the **City Centre** at Parker Street, Regent Street, Silver Street and Gonville Place have been regularly monitored for Fine Particles. The results indicate that the objective is likely to be met by 31 December 2004. However, the Government is undertaking a review of this objective and it is likely to change. In view of this the City Council will continue to monitor the sites and undertake a further review when these changes are known.



Monitoring in-takes, Regent Street

East Cambridgeshire



East Cambridgeshire District Council

Although East Cambridgeshire is a rural district there are still areas of concern relating to air quality. These have been considered during the review and assessment process and in more detail at Stage 3. The Chairman of the Environment Panel, Councillor Donald Adey, says:

“I would hope that the county-wide partnership work to which East Cambridgeshire has contributed in carrying out the Review and Assessment of Air Quality will continue since air pollution crosses district boundaries.

The work so far, which has attracted national recognition for its excellence, has provided a sound basis to move forward locally.

Although air quality in East Cambridgeshire is within the national objectives we are committed to further improvements.”



Fordham High Street



Rural monitoring site, Coveney

Sulphur Dioxide

East Cambridgeshire District Council carried out a survey of local major businesses and schools to determine how much fuel oil and coal were used by these premises. From the replies received, it was determined that there were no installations in the area that would emit excessive amounts of Sulphur Dioxide. There is no evidence to suggest that the air quality objectives for Sulphur Dioxide are likely to be at risk.

Nitrogen Dioxide

Nitrogen Dioxide has been monitored in East Cambridgeshire since 1996 at roadside locations in market towns and next to heavily trafficked trunk roads. This has shown that there could be possible exposure to Nitrogen Dioxide above the prescribed limits. For these reasons detailed computer modelling was undertaken for Fordham and Kennett which allowed more robust analysis, and for the results to be compared against objectives.

Although model predictions showed that the objectives are likely to be met throughout the area by the due date, monitoring will continue. Council officers are aware that possible increases in passenger travel and freight movement by rail over the next few years may add to pollutant levels and the effects of this change will require monitoring.

Fine Particles (PM₁₀)

Council officers assessed the levels of particles on the most heavily used highways in the East Cambridgeshire district. These were the A142 at Fordham and the A14 at Kennett. Detailed calculations showed that for both these sites objectives are likely to be met and no further action is required.

However, the proposed straw-burning power station in Sutton, which is fully authorised by the Environment Agency, is of special interest. This is due to be commissioned in September 2000 and straw burning will commence in early 2001. Although the computer dispersion model indicates that emissions will not lead to exceedences of the air quality objective for Fine Particles, the operators will carry out continuous monitoring of emissions from the process. Short periods of monitoring have already been undertaken by the operator at Sutton, Witcham, Mepal and Coveney, which will provide a useful guide to background levels of pollutants before the power station is commissioned. These



Wicken Fen Monitoring Station

results can be viewed at East Cambridgeshire District Council offices or on the Internet at www.chemex.com.



NO₂ Monitoring tube

Dr Nick Irish from the Cambridgeshire Health Authority, reported:

“As a result of [East Cambridgeshire District Council’s] work it is clear that there is nowhere in East Cambridgeshire where levels of air pollutants exceed, or are likely to exceed, the National Air Quality Standards. The standards are set on health-based criteria, and, therefore I’m pleased to note the lack of risk to the health of the public from air pollution in East Cambridgeshire.”

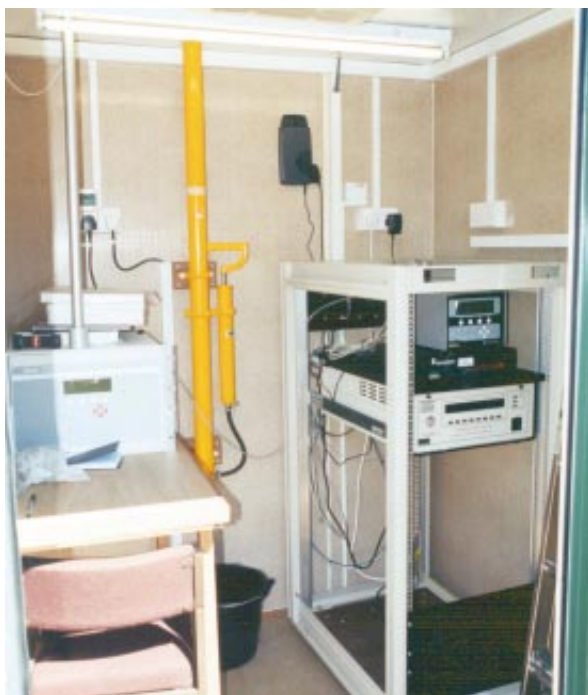
However, air quality has been identified as one of the key issues in the East Cambridgeshire’s Local Agenda 21 Workshops and Strategy and it will continue to be monitored and reviewed. The District Council is planning to develop a local air quality strategy. This will set out ways in which the air quality in the district can continue to be improved. Achieving this will depend on action by all who have an interest - if you would like to be involved, contact either Teresa Isaacs or Phil Wright (details on back cover), or visit our exhibition in Ely and surrounding villages during the third week of September 2000.

Fenland



Although Fenland is predominantly an agricultural area there are major employment centres e.g. Wisbech, Chatteris, March and Whittlesey, and industrial processes, such as brick making in the west of the district.

Nitrogen Dioxide has been monitored throughout the district since 1996. As a result of this review and assessment monitoring has been increased to cover Sulphur Dioxide and Fine Particles. In addition, the partnership is actively seeking the views of the Cambridgeshire Health Authority and NHS Primary Care Trusts on the possible health effects of Sulphur Dioxide and Fine Particles levels currently being experienced in the centre of Wisbech.



Monitoring equipment

Sulphur Dioxide

Fenland District Council sent questionnaires to all major employers in the district concerning the type of fuel they used and all replied. Analysis revealed one user of high-sulphur fuel (coal) in multiple boilers in Wisbech. This has the potential to emit sufficient quantities of Sulphur Dioxide to place the air quality objectives at risk. Currently, there is no proposal to regulate the sulphur content of coal.

At present, the objective levels of Sulphur Dioxide emissions are being exceeded. However, the Council has been liaising closely with the boiler plant operator, who is currently investigating options to replace the boilers with new, gas-fired plant. The Council is satisfied that it is likely that the new plant will be operational by 2004 and, therefore, it has decided not to declare an Air Quality Management Area in Wisbech.

Also, a programme of continuous monitoring of Sulphur Dioxide at a site in the centre of Wisbech has started. The results of this will form the basis of further review and assessment of air quality in the area.

The other significant source of Sulphur Dioxide emissions in Fenland is the brick manufacturing plant in Whittlesey. The level of emissions from this plant is expected to fall by 2005 due to changes in the manufacturing processes. In addition, the Environment Agency is set to launch new emissions limits for the brick manufacturing process. Fenland District Council believes that these limits will ensure that the objectives will be met in 2004 throughout Whittlesey.



Air quality monitoring station Wisbech

Nitrogen Dioxide

With regards to industrial sources, the main area of concern in Fenland, where there may be possible exposure to Nitrogen Dioxide levels above the legal limit, is at the coal-fired boiler plant in the centre of **Wisbech**. However, predictions have shown that the objectives are likely to be met throughout the area by the end of 2005.

Fine Particles (PM₁₀)

The centre of **Wisbech** is considered to be at risk from high levels of Fine Particles. This is due mainly to the burning of coal in the boilers previously referred to. Although, reductions in levels of pollution are to be expected following the implementation of the new Pollution Prevention and Control Regulations, it is unclear whether, or when, this plant will be regulated under the new regime. However, because of the proposed changes to replace the old boilers the Council has decided not to declare an Air Quality Management Area in Wisbech in relation to Fine Particles.

Monitoring started in the town in April 2000 at the same location as for Sulphur Dioxide and data will be used for further review and assessments.

Overall conclusions

The Stage 3 Report for Fenland concludes that high levels of Sulphur Dioxide and Fine Particles are present in **Wisbech** as a result of emissions from an industrial source. The review also concludes that the national objectives will be met elsewhere in the district by the target dates, both for these pollutants and for Nitrogen Dioxide. However, the Council remains concerned about the perceived levels of traffic pollution in the four market towns and is considering how traffic management can be best addressed in the area. Councillor Pam Potts, Chairman of the Council's Environmental Services Committee, said:

“The main report is a very complex technical document, which cannot reflect the Council's continuing concerns about pollution from road vehicles. I hope the public will respond to the information contained in this document and use the leaflet being circulated to every home in the district, to let us have their views about the air we all breathe in Fenland.”



Industrial smoke pollution

Huntingdonshire



During all of the stages of this review and assessment of air quality Huntingdonshire District Council have used continuous and passive monitoring techniques. The passive monitoring undertaken is in the form of Nitrogen Dioxide diffusion tubes, located strategically at 20 sites throughout the district. Continuous monitoring using state of the art equipment is also undertaken at two sites for Nitrogen Oxides and Fine Particles (PM₁₀). The longest established site for continuous monitoring is at Pathfinder House, adjacent to the busy ring road in Huntingdon, whilst a more recent acquisition is the mobile monitoring unit which presently monitors at a location suitable for providing background readings of air quality.

Further to the monitoring undertaken, sophisticated computer modelling techniques have been used during the third stage of the review and assessment process. This mathematical modelling has been carried out for three of the prescribed pollutants - Sulphur Dioxide, Nitrogen Dioxide and Fine Particles.

Sulphur Dioxide

The Council's Environmental Health Services Division sent out questionnaires to all major employers in the district concerning the type and quantity of fuel in use at their premises and all responded. Analysis of the questionnaires revealed that there were two users of medium fuel oil in

multiple boilers each with the potential to emit sufficient quantities of Sulphur Dioxide to place the air quality objectives at risk. Based upon fuel usage data for typical operating conditions the computer software programme, ADMS-Urban, was used to estimate ambient concentrations of Sulphur Dioxide in the vicinity of the two sites for comparison against the air quality objectives. This indicated that, on balance, the air quality objectives for Sulphur Dioxide are likely to be met throughout Huntingdonshire by the due dates. The conclusions are based upon robust scientific calculations, which are informed by expected operational changes at the sites.

Nitrogen Dioxide

There are four point sources, two of which are in the district, which could potentially emit significant quantities of oxides of nitrogen, to place the Nitrogen Dioxide air quality objectives at risk.

The site in Huntingdon, which is regulated by the Environment Agency, was examined and satisfied the required standards. The operators of this site are also planning to upgrade equipment, which will further reduce emissions.

The site near Kimbolton was found to emit very low levels of oxides of nitrogen due to the high temperature of the discharge, which significantly enhances pollutant dispersion.

A power station in Peterborough is more than five kilometres away from the Huntingdonshire border and levels are, therefore, not significant.

Another power station near St Neots has been monitored closely by National Power, and test results confirm earlier findings of the Council that no further action is required.



A14 - about a quarter of the traffic is heavy goods vehicles

However, the levels of Nitrogen Dioxide around some of the district's roads are of concern, and assessment using monitoring and modelling techniques was carried out on the most heavily used roads in the area.

The results showed that the air quality objectives for Nitrogen Dioxide are likely to be met by the due date. However, the Council is continuing to monitor air quality, and will develop a local air quality strategy to ensure that land use and transport use can incorporate the necessary actions and policies to ensure delivery of the air quality objectives.

Fine Particles (PM₁₀)

Monitoring and modelling of the most heavily used roads in the district indicates that the air quality objectives for Fine Particles are likely to be met throughout Huntingdonshire by the due dates.

This conclusion is based upon evidence that the objectives are currently being met and will therefore be met in the future. Particulate emissions from vehicles are predicted to decrease as a result of advancing technological controls and future emission factors were incorporated in to modelling undertaken. Of course, this could be slightly offset by increased traffic flows and the Council will periodically assess the situation.



Fine Particles monitor at Huntingdon Ring Road

South Cambridgeshire



South Cambridgeshire is primarily a rural district with a buoyant economy. Rather than having one industrial centre, a number of small industrial areas are spread around the district. Commuting to work is a common characteristic of South Cambridgeshire residents, placing pressure on the transport network. Additionally, the A14, which is part of the road network in the district, is a strategic transport route carrying intercontinental freight to and from the port of Felixstowe, and the M11 links the north and Midlands with Stansted Airport and London. Both industrial processes and transport emissions affect the quality of the air in South Cambridgeshire. The review and assessment that has been carried out has attempted to identify the major risks to air quality and to quantify their impact using computer models and also by taking actual measurements.

Air quality monitoring in South Cambridgeshire includes: -

- Continuous monitoring of Sulphur Dioxide in two locations to measure the contribution made by two separate industrial processes;
- A high-tech roadside laboratory that measures oxides of nitrogen and Fine Particles from Cambridgeshire traffic and relays results automatically to the central office;

- Passive diffusion tubes to give a long-term indication of Nitrogen Dioxide levels.

Dale Robinson, Chief Environmental Health Officer, said:

“The information that is collected enables the Council to check that air quality in the district meets national standards to help safeguard the health of our residents.”

The issues outlined below are a summary of those topics discussed in greater depth in the technical report.

Sulphur Dioxide

Industrial pollution is the main source of Sulphur Dioxide emissions in the district. These sources include processes closely governed by legislation, and smaller processes that can operate without the need to obtain permission from pollution control authorities.



Sulphur Dioxide Monitor

Regulated processes

Rugby Cement in Barrington is regulated by the Environment Agency, who allows the company to emit a certain quantity of Sulphur Dioxide as a by-product of the cement-making process. Monitoring is carried out in Barrington to measure Sulphur Dioxide concentrations at ground level. To date there have been no measurements recorded above the standard.



Industrial Chimney

Unregulated processes

Analysis of fuel-use across the district has identified several users of medium and heavy fuel oil, which have the potential to cause Sulphur Dioxide pollution at a level above the limits. These boiler plants are being operated within current standards, but are unregulated so far as pollution control legislation is concerned.

Modelling of emissions at the Papworth Trust factory complex at Papworth Everard has shown that there is a residential area

surrounding the premises that could be affected by levels of Sulphur Dioxide above the objective. However, the plant is in the process of being closed down, and its operations will move to modern premises on the outskirts of the village. The new factory will be connected to mains gas for heating purposes.

Monitoring and modelling of Sulphur Dioxide emissions at Marshall's Engineering Works have shown there to be high concentrations of Sulphur Dioxide, around the works and surrounding residential area, originating from several boiler installations on site. The company has reacted positively to this information and has plans to implement a capital investment programme to replace several boilers with a more localised natural gas heating system.

As both the above companies will be implementing measures to reduce emissions, South Cambridgeshire District Council anticipates that air quality objectives are likely to be met, and has therefore decided not to declare any Air Quality Management Areas at this time.

Nitrogen Dioxide and Fine Particles (PM₁₀)

Research into traffic flows has shown the heaviest flow to be along the A14 between Bar Hill and Girton. Modelling of this section, taking into account background and local industrial sources, indicates that national air quality objectives are likely to be met here and throughout the district. Whilst there is a substantial contribution to Nitrogen Dioxide and Fine Particles pollution from the traffic, pollutant levels decrease rapidly with increasing distance from the roadside. Monitoring of both traffic figures and air quality will continue in order to ensure that the predicted levels are accurate.

vii) What happens next?

Overall the results of the review and assessment for Cambridgeshire have indicated that we are likely to meet Government objectives but there is no room for complacency. Action which is already being undertaken in connection with improving air quality needs to continue. Monitoring of pollutant levels is essential to ensure computer predictions are correct.

Consultation

The partnership authorities take the issue of air quality very seriously and plan to hold widespread consultation with organisations, businesses and residents throughout Cambridgeshire.

Copies of the full technical report can be viewed at your local library or local authority office. In addition to this non-technical summary, a leaflet and questionnaire have also been produced which can be obtained from any of the local authorities listed on the back cover.

**Make your views known.
All responses to be
received before Friday
13th October 2000**

Throughout September and to mid-October the partnership authorities will be seeking your views on their work and the best course of action for the future. A display trailer will visit every local authority area in the County, which will provide an additional opportunity for you to make your views known.

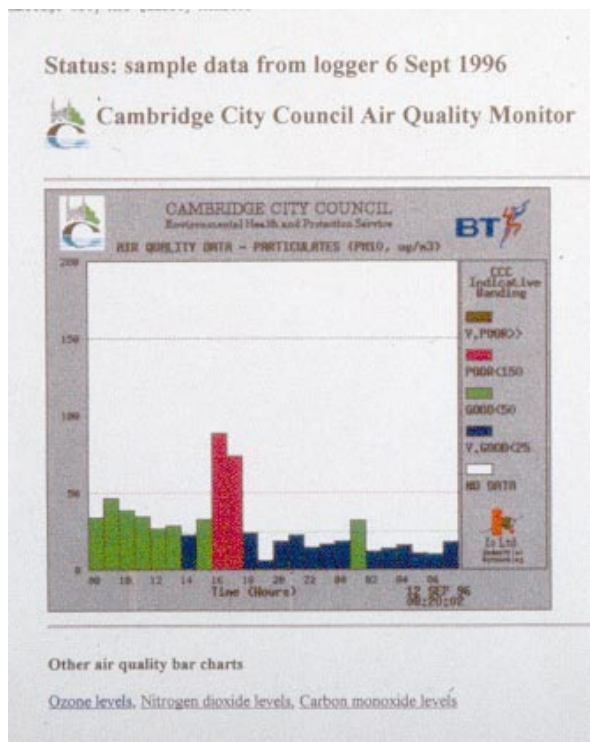
Display trailer timetable

Phone the contact officer to find out the exact dates and times and where the trailer will be parked.

Date	Location
1 st week of September	South Cambridgeshire <ul style="list-style-type: none">- Tesco, Fulbourn- Tesco, Milton- South Cambs DC Offices- Swavesey Village College- Comberton Village College- Melbourn Village College- Sawston Village College
2 nd week of September	Cambridge City <ul style="list-style-type: none">- J Sainbury, Coldhams Lane- Grafton Centre
3 rd week of September	East Cambridgeshire <ul style="list-style-type: none">- Ely- Soham- Fordham- Stetchworth- Sutton
4 th week of September	Fenland <ul style="list-style-type: none">- Wisbech- March- Chatteris- Whittlesey
1 st week of October	Huntingdonshire <ul style="list-style-type: none">- Huntingdon- St Ives- St Neots- Yaxley

Finding out more about air quality

There's a wealth of information on the Internet at <http://www.aeat.co.uk/netcen/airqual/welcome.html>. Information about pollutant levels in Cambridge City can be found at <http://www.io-ltd.co.uk>.



What the local authorities will be doing

Your city and district councils will continue to monitor air pollutants and to work with the County Council. Monitoring is being increased in certain "hot spot" areas such as the roads leading into Cambridge City, along the A14 and in some market towns.

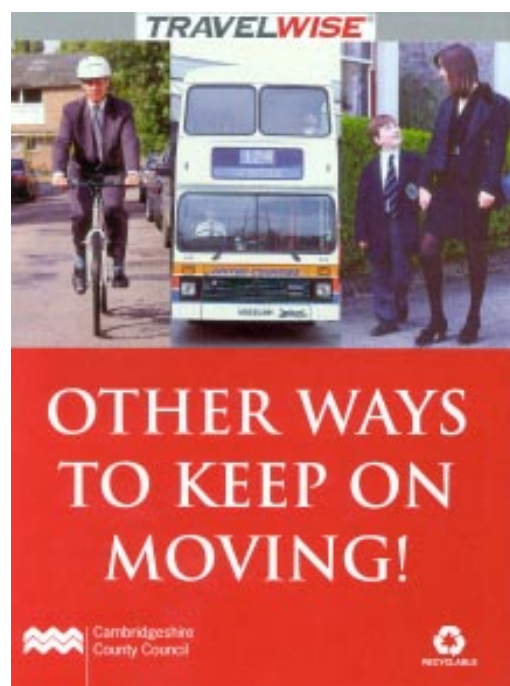
Progress on monitoring activities will be reported regularly and used to inform the various land use and transport plans produced by local authorities.

Your local authorities will continue to work in partnership to improve air quality and establish and maintain Local Air Quality Management Strategies.

Doing your bit

We can all "do our bit" by:

- Making our views known during this consultation
- Participating in action such as:
 - Sharing your car and combining journeys with others
 - Making fewer journeys by car
 - Maintaining your car correctly
 - Driving smoothly - this reduces fuel consumption and pollution
 - Reporting HGV diesel vehicles with smoky exhausts to the Hotline (Tel: 0116 276 2411)
 - Getting on your bikes or walking - especially for short journeys
 - Using public transport when possible.



This leaflet has been produced by the Air Quality Review and Assessment Working Group



Cambridge City Council
Mandela House
4 Regent Street
Cambridge
CB2 1BY

Contacts: Jo Dicks or
Ieuan Edwards
Environmental Health and
Protection Service

Telephone No:
01223 457892



East Cambridgeshire
District Council

East Cambridgeshire
District Council
The Grange
Nutholt Lane
Ely
CB7 4PL

Contacts: Teresa Isaacs,
Phil Wright or Julia Atkins
Environmental Health
Department

Telephone No:
01353 665555



Fenland District Council
Fenland Hall
County Road
March
PE15 8NQ

Contacts: Graeme Carson
or Toby Lewis
Environmental Services
Division

Telephone No:
01354 622431 or 622434



Huntingdonshire
District Council
Pathfinder House
St Mary's Street
Huntingdon
PE29 3TN

Contacts: Adrian
Beeching or Chris Watkin
Environmental Health
Services Division

Telephone No:
01480 388363



South Cambridgeshire
District Council
South Cambridgeshire Hall
9-11 Hills Road
Cambridge
CB2 1PB

Contacts: Susan Boundy
or Allan Hodgson
Environmental Health
Department

Telephone No:
01223 443124 or 443132



Cambridgeshire
County Council

Environment and Transport

Cambridgeshire
County Council
Shire Hall
Castle Hill
Cambridge
CB3 0AP

Contact: Janet Martin
Environment and Transport
Department

Telephone No:
01223 717831