

9 Environment Report

Air Quality

National Picture

The Environment Act 1995 introduced a system of Local Air Quality Management (LAQM) which is an integral part of achieving objectives set out by government in their air quality strategy. The first National Air Quality Strategy was established in 1997 and Air Quality Regulations came into force at the end of that year. The Department of Environment Transport and the Regions (DETR) undertook the first review of this strategy during 1998 and a revised document "The Air Quality Strategy for England, Scotland, Wales and Northern Ireland" (AQS) was published in January 2000. This forms part of the government's overall aim to improve the quality of life for people in the UK. It establishes the future for air quality policy aiming to protect human health and the environment. The strategy deals with eight pollutants, which occur widely throughout the UK and are produced mainly by transport and industry. Objectives for seven of the eight pollutants (see table below) will be prescribed in Regulations for the purposes of LAQM which local authorities have a duty to work towards. The transport related pollutants are Benzene, 1,3-Butadiene, Carbon Monoxide, Nitrogen Dioxide and Fine Particles (PM10). (The increasing use of unleaded petrol and ban on the sale of leaded petrol means that lead is no longer regarded as a transport related pollutant.)

Review and assessment is the first and most important step of LAQM. In this process district and unitary authorities have a statutory duty to consider present and likely future air quality and then assess whether objectives are likely to be achieved. Review and assessment is a three-stage process, each stage becoming more complex. Progress to the next stage is only

warranted if problems are identified by the previous stage. If at the end of stage 3 objectives are not likely to be achieved Air Quality Management Areas (AQMAs) have to be designated. For these areas Action Plans have to be drawn up setting out the measures which will be undertaken in pursuit of the objectives. Whether or not AQMAs are designated central government has advised local authorities to develop strategic approaches and develop Local Air Quality Strategies. The expectation is that District Councils will work closely with County Councils throughout the processes.

Air Quality Partnership Working in Cambridgeshire

In Cambridgeshire we have adopted a partnership approach for carrying out work on the review and assessment of air quality. The Air Quality Review and Assessment Working Group was formed in early 1998 to take forward the technical stages of the process. Together with the five District Councils we produced a first report covering stages 1 and 2 of the review and assessment in December 1998. Consultation on the report was undertaken at the beginning of 1999. Leaflets were also produced to enable wider dissemination of information. In addition, the report was selected by consultants, acting on behalf of DETR, to go on the Internet as an example of good practice. Awareness of the relationship between air quality and transport was raised during the LTP consultation process with air quality information being made available on the roadshow.

Results from the stage 1 and 2 processes showed that nitrogen dioxide, fine particles (PM10) and sulphur dioxide needed to be taken forward for further evaluation in stage 3 by all the District Councils. The main source of nitrogen dioxide and PM10 was

Objectives to be included in Air Quality Regulations 2000 for Local Air Quality Management

Pollutant	Objective
Benzene	16.25(g/m ³ as running annual mean to be achieved by 31 December 2003
1,3-butadiene	2.25(g/m ³ as running annual mean to be achieved by 31 December 2003
Carbon Monoxide	11.6mg/m ³ as running annual mean to be achieved by 31 December 2003
Lead	0.5(g/m ³ as annual mean to be achieved by 31 December 2004 0.25(g/m ³ as annual mean to be achieved by 31 December 2008
Nitrogen Dioxide	200(g/m ³ hourly mean not to be exceeded more than 18 times a year, to be met by 31 December 2005 40(g/m ³ annual mean to be achieved by 31 December 2005
Fine Particles (PM10)	50(g/m ³ 24 hour mean not to be exceeded more than 35 times a year, to be met by 31 December 2004 40(g/m ³ annual mean to be achieved by 31 December 2004
Sulphur Dioxide	350(g/m ³ hourly mean not to be exceeded more than 24 times a year, to be met by 31 December 2004 125(g/m ³ 24 hour mean not to be exceeded more than 3 times a year, to be met by 31 December 2004 266(g/m ³ 15 minute mean not to be exceeded more than 35 times a year, to be met by 31 December 2005

Summary of Results of Review and Assessment Stages 1 and 2

Pollutant	Local Authority				
	CCC	ECDC	FDC	HDC	SCDC
Benzene	✓	✓	✓	✓	✓
1,3-butadiene	✓	✓	✓	✓	✓
Carbon Monoxide	✓	✓	✓	✓	✓
Lead	✓	✓	✓	✓	✓
Nitrogen Dioxide	✗	✗	✗	✗	✗
Fine Particles (PM10)	✗	✗	✗	✗	✗
Sulphur Dioxide	✗	✗	✗	✗	✗

Key:

CCC = Cambridge City Council, **ECDC** = East Cambridgeshire District Council, **FDC** = Fenland District Council, **HDC** = Huntingdonshire District Council, **SCDC** = South Cambridgeshire District Council.

considered to be transport although in the latter case high background levels, for example from windblown dusts and secondary particles formed by chemical reactions are known to be significant in the county. High sulphur dioxide levels are associated with combustion plant at local industrial premises where high sulphur fuels are used.

Good progress is being made by the partnership on stage 3 and a report on this work will be produced in June 2000. This will identify as far as is possible the "hot spot" areas in the county. Consultation on this report will then take place over the summer. Views of consultees have to be taken into account and it is anticipated that, where necessary, AQMAs will be designated by October 2000. Work will then commence on drawing up Action Plans for these areas.

With regards to the traffic related pollutant nitrogen dioxide, there are currently problems and levels exceed the objectives in some areas of the county e.g. Cambridge City Centre, certain sections adjacent to the A14 in Huntingdonshire and South Cambridgeshire. However, Stage 3 modelling is showing that nitrogen dioxide levels in 2005 for these areas will be close to the objective. This is likely to mean that AQMAs are not designated at this stage. Monitoring will be vitally important to ensure that predictions are correct and the objectives are not in danger of being exceeded. The next Review and Assessment due to be undertaken in 2003 will confirm the situation.

With regards to fine particles, the review of the 1997 National Air Quality Strategy acknowledged the likely difficulty in meeting the objective. As a result the objective has been relaxed and the European Air Quality Objective adopted. Although this means that the current objectives will be met in Cambridgeshire, the government has already announced that this is an interim step and the objective for fine particles will be reviewed at the end of 2000. All indications are that the objective will be tightened.

Whilst work on Stage 3 is currently indicating that objectives are likely to be met there is no room for complacency. Monitoring of pollutant levels will continue and is being enhanced in those areas that are marginal. In addition we give importance to developing strong local air quality strategies to ensure that action continues to be taken to improve air quality. The LTP has an important role to play in establishing the transport measures,

which will form a vital part of these strategies. Information on monitoring and development of local air quality strategies will be reported in the Annual Monitoring Reviews