

**EXETER CITY COUNCIL**

**SCRUTINY COMMITTEE – COMMUNITY  
31 AUGUST 2010**

**EXECUTIVE  
28 SEPTEMBER 2010**

**LOCAL AIR QUALITY MANAGEMENT  
2010 AIR QUALITY PROGRESS REPORT**

**1. PURPOSE OF REPORT**

- 1.1 To update Members on the Council's duties relating to local air quality management.
- 1.2 To consider the findings of the 2010 Air Quality Progress Report, and amend the Air Quality Area Management Order.

**2. BACKGROUND**

- 2.1 The Environment Act 1995 - Part IV requires Local Authorities to periodically undertake a review and assessment of air quality in their area.
- 2.2 This process involves assessing current levels of pollution and comparing those levels with the relevant standards.
- 2.3 The pollution standards and objectives for the review and assessment process are now formalised in the Air Quality Regulations 2000 and (Amendment) Regulations 2002. The air quality objectives are derived from air quality standards based on the best available medical and scientific understanding of the effect of individual pollutants on health. The standards are concentrations below which significant risks to public health are unlikely to occur.
- 2.4 The pollutants detailed in the Air Quality Regulations are:
  - carbon monoxide,
  - benzene,
  - 1,3-butadiene,
  - lead,
  - nitrogen dioxide,
  - sulphur dioxide and
  - particulates (PM<sub>10</sub>).
- 2.5 In April 2007 the Council was obliged to declare an Air Quality Management Area (AQMA) covering all of the main traffic routes in the city because of exceedences of the annual mean air quality objective for nitrogen dioxide (NO<sub>2</sub>) of 40 µ/m<sup>3</sup>. The main source of the NO<sub>2</sub> was found to be road traffic, with the highest levels identified beside congested roads where the buildings are close to the back of the pavement. In August 2008, an Air Quality Action Plan (AQAP) was published, which set out measures intended to reduce concentrations of NO<sub>2</sub>. This work was submitted to and approved by DEFRA.
- 2.6 In August 2009, one year after the publication of the AQAP, an Air Quality Action Plan Progress Report was produced, which monitored progress with implementing the

AQAP measures and evaluated their effectiveness in air quality terms where possible. The full report is available at the following link  
<http://www.exeter.gov.uk/index.aspx?articleid=4292>

- 2.7 This report concluded that generally progress with implementation of the measures was good, although some changes to implementation were identified. None of these were thought likely to significantly alter the impact of the Plan on air quality.
- 2.8 The review process identified one potential risk, which is that the preferred funding stream for the High Quality Public Transport Scheme within Devon County Council's Second Round Local Transport Plan (LTP2) has changed. This measure was a significant part of the LTP2 and were funding not to be available at the anticipated timescales, delivery of the associated air quality improvements would also be affected. The progress report concluded that this situation should be monitored in future annual reviews.
- 2.9 The progress report identified that there had been a reduction in peak time traffic flows during the period of the Action Plan although the evidence for a corresponding reduction in nitrogen dioxide concentrations was not clear. Because the Plan had only been in place for one year however, it was difficult to identify what the cause of these changes and whether they represent the start of a long-term trend. It was concluded that it was difficult to determine whether the Action Plan was delivering the predicted improvements in air quality.
- 2.10 The next Action Plan Progress Report will be published in August 2010 and discussions are currently taking place with Devon County Council regarding this.

### **3. 2010 AIR QUALITY PROGRESS REPORT**

- 3.1 This report summarises all new monitoring data in order to identify whether any exceedences of the air quality objectives have occurred and whether these are inside the AQMA. The completed report was submitted to DEFRA in April 2010 for comment.
- 3.2 The report concluded that the current AQMA boundary remained appropriate, i.e. it includes all the areas where the annual mean objective level is likely to be exceeded. The report shows that whilst there is some variation in nitrogen dioxide levels between years there is no obvious upwards or downwards trend. In response, DEFRA advised that the report was accepted with no need to proceed to a detailed assessment. However, it recommended that the AQMA be amended for the hourly mean objective to include the hourly NO<sub>2</sub> objective.

### **4. IMPLICATIONS OF THE POSSIBLE EXCEEDENCE OF THE HOURLY NO<sub>2</sub> OBJECTIVE**

- 4.1 The short-term objective is that a 1-hour mean concentration of 200 µg/m<sup>3</sup> should not be exceeded more than 18 times a year. The only location in Exeter where compliance with this objective can be measured directly is the automatic monitoring station at the RAMM. Here, there were no exceedences of 200 µg/m<sup>3</sup> measured during 2009, but the annual mean concentration was only 40 µg/m<sup>3</sup>.
- 4.2 However, there are four locations in the city where 2009 annual concentrations were above the 60 µg/m<sup>3</sup> level which indicates that an exceedence of the short-term objective is also likely. These were East Wonford Hill (72.3 µg/m<sup>3</sup>), the Cowick Street/Cowick Lane junction (65.2 µg/m<sup>3</sup>), Honiton Road (63.3 µg/m<sup>3</sup>) and Livery Dole (62.7 µg/m<sup>3</sup>). Of these, only East Wonford Hill has exceeded 60 µg/m<sup>3</sup> previously (in

both 2007 and 2008). Members should note that all these locations are already included within the current AQMA.

- 4.3 Following this further guidance from DEFRA, discussions have been held with Devon County Council to explore the implications of the potential exceedence of the nitrogen dioxide hourly average objective on the Air Quality Action Plan measures and the LTP3 process.

## **5. CONCLUSIONS**

- 5.1 It is possible that the hourly average objective for nitrogen dioxide may be exceeded at four locations in the City:

- East Wonford Hill
- Cowick Street/Cowick Lane junction
- Honiton Road – no relevant locations, even for the hourly objective
- Livery Dole

- 5.2 Therefore, as a precautionary measure, the AQMA Order 2007 should be amended and the draft revised AQMA Order 2010 is detailed in Appendix 1.

## **6. FINANCIAL IMPLICATIONS**

- 6.1 The City Council has been actively monitoring air quality for a number of years, with two real-time monitoring stations and 60 static diffusion tube monitoring points. No additional resources are needed for the Council to continue with this monitoring.

- 6.2 There is no intention to revise the Action Plan as a result of the amendment of the Air Quality Management Order. The measures to be implemented by the Action Plan are all drawn from existing plans and policies and therefore the Action Plan itself has no new financial implications. It should be noted that the measure that is likely to have greatest impact on air quality is the Local Transport Plan 2 (LTP2) which is the responsibility of Devon County Council.

## **7. RECOMMENDED**

- 1) that the conclusions of the 2010 Air Quality Progress Report be noted.
- 2) that Members approve the amended Air Quality Management Area Order detailed in Appendix 1.
- 3) that the Air Quality Management Area Order is sealed and a copy submitted to DEFRA.

REPORT OF HEAD OF ENVIRONMENTAL HEALTH SERVICES

S:PA/LP/Committee/810SCC11  
16.8.10

**COMMUNITY & ENVIRONMENT DIRECTORATE**

**Local Government (Access to Information) Act 1985 (as amended)**

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**Background papers used in compiling the report:-**

2010 Air Quality Progress Report for Exeter City Council

Air Quality Strategy for England – DEFRA

Air Quality Regulations 2000 and (Amendment) Regulations 2002

Local Air Quality Management – Technical Guidance (LAQM.TG(09) – DEFRA

Local Air Quality Management – Policy Guidance (LAQM.PG(09) - DEFRA

## Appendix 1



# Exeter City Council

## ENVIRONMENT ACT 1995 SECTION 83

### THE EXETER AIR QUALITY MANAGEMENT AREA ORDER 2010

Whereas it appears to Exeter City Council (“the Council”) that the annual mean and 1-hour mean air quality objectives for nitrogen dioxide set out in the Air Quality (England) Regulations 2000 (SI 928), and the Air Quality (England) (Amendment) Regulations 2002 (SI 3043) were not achieved by 31 December 2005, the Council in exercise of its powers under section 83(1) of the Environment Act 1995 hereby makes the following Order:

1. This Order shall be known as the Exeter Air Quality Management Area Order 2010.
2. The area edged in red on the plan attached to the Order shall be designated as an Air Quality Management Area.
3. The Order shall come into operation on **insert date** and shall remain in force until it is varied or revoked by a subsequent order.
4. The Exeter Air Quality Management Area Order 2010 shall be varied accordingly.

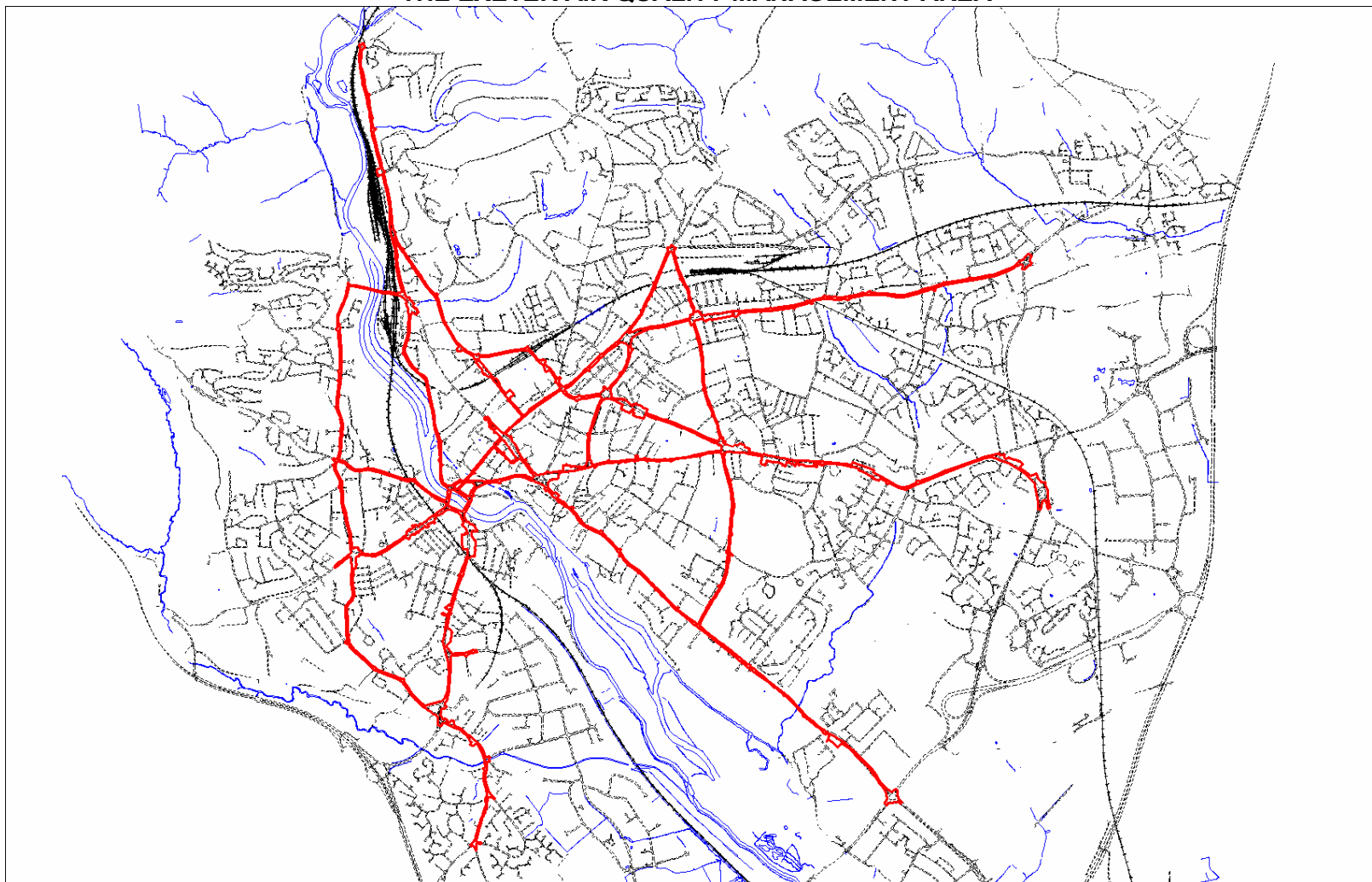
Dated the **X**th day of **Month** 2010

The Common Seal of  
Exeter City Council  
was hereunto affixed in the presence of:

A duly authorised signatory

Seal no.

## THE EXETER AIR QUALITY MANAGEMENT AREA



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