Committee: Environment Agenda Item

Date: 17<sup>th</sup> March 2011 12

Title: 2010 Air Quality Review

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# **Summary**

1. This report presents the results of air quality monitoring around the District during 2010 and highlights an additional area of poor air quality in Saffron Walden. Members are asked to consider whether to designate an additional Air Quality Management Area or to revoke the existing AQMAs in Saffron Walden and replace them with an enlarged single AQMA.

#### Recommendations

2. That the Council consults on revoking the existing AQMAs within Saffron Walden and replaces them with a single larger AQMA which incorporates all areas of poorer air quality within the town.

# **Financial Implications**

3. None

### **Background Papers**

4. The following papers were referred to by the author in the preparation of this report and are available for inspection from the author of the report.

Local Air Quality Management Policy Guidance LAQM.PG(03) Defra 2003

### **Impact**

5.

Communication/Consultation	Consultation is a requirement	
Community Safety	None	
Equalities	None	
Health and Safety	None	
Human Rights/Legal Implications	Legal duty to act where air quality objectives are not being met.  Part IV of the Environment Act 1995	
Sustainability	Reducing pollution from road vehicles will	

	also reduce carbon dioxide emissions	
Ward-specific impacts	District wide, but focus on Saffron Walden	
Workforce/Workplace	None	

### **Situation**

- 6. The Council has a programme of monitoring air quality around the District using simple diffusion tubes (DTs) and continuous real time monitoring of nitrogen dioxide which is the pollutant causing air quality to exceed the national standard of 40 μg/m³ measured as an annual mean value, in a number of locations.
- 7. The results for 2010 are shown in Appendix 1, the diffusion tube results have been provisionally adjusted using data from the three tubes co-located with the continuous monitor at the Saffron Walden Fire Station, as results become available from other Councils using DTs from the same laboratory the bias adjustment factor may be further refined.
- 8. Burton End: the DT result for this location has been consistently at or above the 40 μg/m³ threshold for a number of years and is positioned very close to the M11 at the junction of Church Road and Bury Lodge Lane, Stansted. Continuous monitoring has been carried out this year in the grounds of Stansted Hall, a little further from the M11 that the Burton End location, and has shown that levels reduce quite quickly with distance from the centre of the motorway. The nearest public exposure is at the caravan sites in Church Road and it is likely that exposure levels are below the annual mean level for nitrogen dioxide.
- 9. Saffron Walden: Appendix 2 shows the annual mean values for the various sites within Saffron Walden since 2005, the initial trend was an improvement in air quality but since 2008 this has been reversed and levels have continued to increase. This is a national trend and is thought to be associated with modern vehicle engines not performing as well as predicted and an increase in the amount of primary nitrogen dioxide emitted from diesel engines. Of the sites exceeding the 40 μg/m³ threshold only the London Road site is outside an existing Air Quality Management Area. The DT is positioned close to the mini roundabout on the north side of London Road at its junction with Debden Road, and last year a DT was positioned on the Debden Road side of the mini roundabout. It is somewhat surprising that over a short distance the results should be so different, 50 and 32, but this may be due to the queuing of traffic on the north side of the road heading towards the traffic lights at the bottom of the High Street.
- 10. The levels at the newly established monitoring site close to the junction of Debden Road and Mount Pleasant Road near the Friends' School is just below the 40  $\mu$ g/m³ threshold but is of concern as there is considerable congestion at this cross roads at times and there are residential properties very close to the pavement.

- 11. There are two options open to the Council either to consult on declaring a fourth AQMA or to consult on revoking the existing three AQMAs and declare one AQMA covering a much larger area as suggested in the accompanying plan in Appendix 3 (A circle of radius 700m centred on map reference TL5395038300 Elm Grove).
- 12. The policy guidance from the Government (LAQM.PG(03)) makes it clear that there are no hard and fast rules on determining the boundaries of an AQMA and that local authorities can designate a wider area or smaller areas as it thinks appropriate, but will need to consult businesses and the local community amongst others and will need to explain and justify their proposals to Defra.
- 13. Officers' opinion is that on balance a single larger AQMA covering the centre of Saffron Walden would ensure that any future deterioration in air quality is likely to be within that area and that the subsequent Action Plan that will have to be developed to tackle poor air quality can cover measures and sources over a wider area. The intention is to require air quality assessments for planning applications which have the potential to adversely influence air quality within this wider area, and if developments are approved to seek contributions from developers towards mitigating the impacts on air quality identified in assessments. The Action Plan will provide the policy basis for seeking contributions.

## Risk Analysis

14.

Risk	Likelihood	Impact	Mitigating actions
That the Council will be in breach of its duty under section 83 (1) Environment Act 1995	Significant	Opportunities to improve air quality will be missed	None

- 1 = Little or no risk or impact
- 2 = Some risk or impact action may be necessary.
- 3 = Significant risk or impact action required
- 4 = Near certainty of risk occurring, catastrophic effect or failure of project.