

FOR PUBLICATION

PROPOSED AIR QUALITY MANAGEMENT ORDER (BRIMINGTON)

MEETING:	1. CABINET 2. CABINET MEMBER FOR HEALTH AND WELLBEING
DATE:	1. 2 JUNE 2015 2. 20 MAY 2015
REPORT BY:	ENVIRONMENTAL HEALTH MANAGER
WARD:	ALL
COMMUNITY ASSEMBLY:	ALL
KEY DECISION REFERENCE	514

FOR PUBLICATION

BACKGROUND PAPERS FOR PUBLIC REPORTS:

UPDATING AND SCREENING ASSESSMENT REPORT 2015 (EXECUTIVE SUMMARY ATTACHED IN APPENDIX 2, FULL COPY AVAILABLE AS A SEPARATE DOCUMENT)

1.0 PURPOSE OF REPORT

- 1.1 To inform Cabinet of the findings of the Updating and Screening Assessment Report 2015; which has been submitted to DEFRA for approval. (the Executive Summary of this report is included as Appendix 2)
- 1.2 To advise Members of the requirements to prepare for the declaration of an Air Quality Management Area (AQMA) in Brimington due to exceedance of the annual air quality objective for Nitrogen Dioxide (NO₂).

2.0 RECOMMENDATIONS

- 2.1 That Members note the findings and recommendations of the Updating and Screening Assessment Report 2015.
- 2.2 That Members grant an Air Quality Management Order (subject to consideration of consultation responses delegated to the Executive Member Health and Wellbeing) creating an Air Quality Management Area in Brimington as shown in Appendix 3.
- 2.3 That Members agree that the Air Quality Strategy be revised and approved in principle for consultation purposes, and that other stakeholders are invited to comment on it.
- 2.4 That Members agree that an 'Air Quality Action Plan' be produced in consultation with Derbyshire County Council.
- 2.5 That a further report regarding the draft action plan for the AQMA be prepared later in the year.

3.0 BACKGROUND

- 3.1 Part IV of the Environment Act 1995 places a statutory duty on local authorities to review and assess air quality within their area. The Review and Assessment process is called Local Air Quality Management (LAQM). It is a progressive process starting with a screening assessment and leading to a more detailed assessment, if circumstances warrant it.
- 3.2 Local authorities have enforcement duties in relation to air pollution that support those of the government, the Environment Agency, and of other local authority planning activities such as land use and transport planning. Local authorities have to review and assess ambient levels of air quality in their areas; to designate local AQMA's where there are issues around national air quality objectives and take action to work towards meeting those objectives. Around 130 authorities have designated AQMA's mainly in urban areas along busy roads and in some industrial areas.
- 3.3 The Government has developed and published a National Air Quality Strategy (AQS) that sets out the air quality standards and objectives to be achieved by local authorities. The air quality objectives are listed in a table in the table below:

Table 1 - Air Quality Objectives included in Regulations for the purpose of LAQM in England

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m ³	Running annual mean	31.12.2003
	5.00 µg/m ³	Running annual mean	31.12.2010
1,3-Butadiene	2.25 µg/m ³	Running annual mean	31.12.2003
Carbon monoxide	10.0 mg/m ³	Running 8-hour mean	31.12.2003
Lead	0.5 µg/m ³	Annual mean	31.12.2004
	0.25 µg/m ³	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m ³	Annual mean	31.12.2005
Particles (PM ₁₀) (gravimetric)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m ³	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

3.4 Although the implementation of our air pollution duties at a local level may be difficult to quantify, it is clear that the planning functions of local authorities can make a major impact in controlling and reducing air pollution. The National Planning Policy Framework (NPPF) sets out that planning policies should take account of the presence of AQMAs and that planning decisions should be consistent with the Local Air Quality Action Plan.

3.5 Derbyshire County Council as Highways Authority also have a duty to address air quality in the preparation of transport strategies and plans. Improvement of Air Quality is set out as a key priority for

investment in the County Council's current Local Transport Plan (2011-2026).

4.0 AIR QUALITY – PUBLIC HEALTH

- 4.1 The quality of the air breathed in local areas has implications for public health. Public Health England attribute approximately 400 deaths each year in the East Midlands to poor air quality. Nationally, poor air quality is estimated to cause 29,000 premature deaths per year – greater than road traffic accidents and smoking combined – and the economic impact due to poor health is also estimated to cost between £8bn and £20bn each year, those with asthma, lung diseases and heart conditions being most susceptible, Poor air quality also causes damage to buildings and local ecology. Smoke and dust emissions also damage local physical amenity. The majority of air pollution comes from road transport.
- 4.2 Air quality is a high national political priority. The issue is geographically spread, though concentrated in urban and industrial areas and around roads. The impact on human health is significant and although local authorities are important delivery agents, improvements in local air quality can only be achieved with input from partner agencies such as Derbyshire County Council. Steps have been taken to ensure effective joint working arrangements between the Borough and County Councils.
- 4.3 Under the Government's "better regulation" agenda, one of the initiatives including establishing the 'Rogers Review' to recommend around five specific high risk national priorities for local authority regulatory services. The Review examined over 60 policy areas for local regulatory services and one of the five priority areas identified included air quality. Local action to improve air quality contributes to national outcomes, as air pollution ignores local boundaries. This is an important issue for citizens, local government and central government.
- 4.4 Although the implementation of our air pollution duties at a local level may be difficult to quantify, it is clear that the planning functions of local authorities (both in land use planning and transport planning) can make a major impact in controlling and reducing air pollution, and would expect this to be the case in publishing the required Local Air Quality Action Plan.

5.0 OVERVIEW OF ACTION TO DATE

- 5.1 Chesterfield Borough Council has two real-time air quality stations which monitor for particulates (PM10), nitrogen dioxide (NO2) and sulphur dioxide. There are two permanent Air Quality Stations, which are fully affiliated to the Automatic Urban/Rural Network (AURN), and supplies monitoring data to central government. These are located on Chatsworth Road (adjacent to No 461) and on Loundsley Green playing fields (adjacent to the pavilion near to Pennine Way).
- 5.2 In addition to the real-time monitors we also use diffusion tubes at 38 locations around the borough. These are small plastic tubes with absorbent chemicals in the cap. These are mounted on lamp-post and downpipes of houses. These are changed once a month allowing an annual average of pollution to be measured. While they can only give a broad overview of pollution at a location, they are small, discrete, and cheap to use, and are very useful in gathering trend data.
- 5.3 We also currently gather data from a temporary site, on hire from TRL Ltd, used to assess possible pollution “hotspots”. This unit, measuring, nitrogen dioxide, can provide data in real-time. The data is managed, as part of the contract, by TRL Ltd, and the results are presented in a quarterly summary.
- 5.4 From 2007 monitoring and pollution modelling has revealed fluctuating levels of pollution (predominantly from traffic) along the major transport routes across the whole of the borough area. It has become increasingly apparent that traffic pollution is a concern at discrete areas where housing and road vehicle congestion are closely located.
- 5.5 Intensive monitoring, in the form of Detailed Assessments have been carried out at 4 specific areas (These areas were Whittington Hill; Sheffield Road; Duke Street, Staveley; and Church Street, Brimington). Monitoring data demonstrated that the four areas identified as being at risk of breaching the AQO were all below the objective and as such there was no requirement to declare AQMAs. However two of the areas in question (Sheffield Road, and Church Street, Brimington) were close to the objective and intensive monitoring has continued at these locations. This monitoring has now confirmed an ongoing marginal breach of the Air Quality Objective for Nitrogen Dioxide at the affected row of terraced housing on Church

Street, Brimington.

- 5.6 The monitoring at Church Street, Brimington was initially carried out by the use of 5 diffusion tubes (4 on Church Street, 1 on High Street). This monitoring, carried out over 12 months, indicated a possible breach of the air quality objective for nitrogen dioxide. In light of this a real-time monitor has also been used in the close vicinity (in the grounds of the Methodist Church Hall, opposite the affected houses), and this has confirmed breach of the Air Quality Objective for Nitrogen Dioxide.

6.0 PREPARATION FOR THE DECLARATION OF AN AIR QUALITY MANAGEMENT AREA (AQMA)

- 6.1 The findings of the Detailed Assessment Report 2013 and USA Report 2015 place the Borough Council in a position where is it statutorily bound to declare an AQMA along a short section of Church Street, Brimington.
- 6.2 A list of stakeholders and consultees is set out in both Section 8.2 and Appendix 1 of this report.
- 6.3 Any comments received will be considered in the follow on/further report to Members later in the year.

7.0 EXISTING AIR QUALITY STRATEGY

- 7.1 In 2003 Chesterfield Borough Council prepared an air quality strategy. This strategy addressed the now withdrawn best value indicator, BVPI 81. This was later replaced with the 2007 national air quality strategy.
- 7.2 Due to the findings of the subsequent annual reports and the prospect of imminent declaration of an AQMA, the strategy should be reviewed and revised.
- 7.3 Regardless of the need for change, it is good management practice to review a strategy from time to time, to ensure that it is as effective and efficient as practicable.
- 7.4 The Air Quality Strategy 2015 will supersede the 2007 strategy. It builds and expands on the original principles as many of the original

aims are ongoing and have been incorporated into this revision of the Air Quality Strategy.

8.0 CONSULTATION

8.1 The Updating and Screening Assessment Report 2015 was submitted to DEFRA for consideration.

8.2 In undertaking this action we have a duty to also consult with:

- The Environment Agency,
- Public Health England,
- Derbyshire County Council (as the local highways authority),
- All neighbouring Local Authorities,
- Bodies representing local business interests.

We will also consult with the owners of the affected dwellings, and (where appropriate) their tenants, and Brimington Parish Council.

8.3 With respect to the revised Air Quality Strategy, the proposals have been discussed with Derbyshire County Council Highways team and our Regeneration service.

9.0 CONSIDERATIONS

9.1 Financial

9.1.1 Declaring an AQMA would have associated costs relating to extensive consultation, publicity and other work with partner stakeholders. These costs would have to be met from existing budgets. It is likely that monitoring equipment would be necessary to continue to monitor its status in the future.

9.1.2 However, declaration of an AQMA would potentially give the Council access to new sources of funding, e.g DEFRA Air Quality Grant Programme. We have been successful in obtaining funding from this source in the past.

9.2 **Equalities**

9.2.1 Poor air quality can irritate the airways of the lungs, worsening the symptoms of those with lung disease or asthma. It can also affect those with heart conditions, the elderly and very young and those with sensitivity to allergens.

9.2.2 A preliminary Equalities Impact Assessment has been conducted and concluded that no negative impacts are anticipated. A number of positive impacts are identified for particular groups as improving air quality has a direct link to public health, including asthma, lung disease and heart conditions. It particularly affects older and younger people.

Table 2 – extract from the Equalities Impact Assessment

Group or Protected Characteristics	Potentially positive impact	Potentially negative impact	No impact
Age – including older people and younger people.	✓		
Disabled people – physical, mental and sensory including learning disabled people and people living with HIV/Aids and cancer.	✓		
Gender – men, women and transgender.			✓
Marital status including civil partnership.			✓
Pregnant women and people on maternity/paternity. Also consider breastfeeding mothers.			✓
Sexual Orientation – Heterosexual, Lesbian, gay men and bi-sexual people.			✓
Ethnic Groups			✓
Religions and Beliefs including those with no religion and/or beliefs.			✓
Other groups e.g. those experiencing deprivation and/or health inequalities.	✓		

9.3 **Sustainability**

Similar considerations apply as put forward in the paragraph above. The preventative approach will avoid levels of road traffic that are unsustainable in terms of effects on human health. The proximity of pollution levels to the air quality objectives at Church Street, Brimington does highlight the need for caution and careful scrutiny of any development plans which might increase traffic flow on these routes; current examples include the mixed use development scheme at the former Staveley Works.

10.0 **OPTIONS TO CONSIDER**

- 10.1 Under Part IV of the Environment Act 1995, there is a statutory duty placed on all local authorities to review and assess air quality within their area. If the results of air quality monitoring demonstrate an exceedance of the air quality objective, an AQMA must be declared.
- 10.2 On 29 April 2015, the judgment of the Supreme Court ordered DEFRA to prepare and consult on new air quality plans for submission to the European Commission no later than 31 December 2015. This means that DEFRA must put in place measures to mitigate poor air quality.
- 10.3 By not declaring an AQMA we risk intervention from DEFRA and the Secretary of State (see section 11.0).

11.0 **RISK MANAGEMENT**

- 11.1 Our internal risks of not declaring an AQMA is, in effect, putting the health of the public at risk by not informing them of the quality of air they are breathing. It also means that Chesterfield Borough Council cannot take advantage of the additional powers and funding afforded by the Government to tackle local air pollution. Failure to declare an AQMA would mean that that Chesterfield Borough Council would breach its duty under Part IV of the Environment Act 1995 and the Secretary of State can intervene.

Table 3 – Risk factors affecting adoption of declaration of an AQMA

Risk	Likelihood	Impact	Mitigating action	Revised Likelihood	Residual impact
Intervention from DEFRA for not declaring an AQMA	High	Financial penalty Loss of local control Reputation of the Council	Declare AQMA	Low	Low
Possible liability for EU fine passed onto CBC under Localism Act 2011 when AQMA declared	Medium	High financial penalty	Seek approval from DEFRA to prepare an Air Quality Strategy and an Action Plan	Medium	High
Adverse affect on planning decisions if AQMA declared	High	More effort required from applicant/ developer	Consult with Planning Officers; ensure applicants and developers are aware of the implications of AQMA	Medium	Low
Adverse publicity	High	High reputational impact, blamed for not resolving the air quality issue.	Work with Derbyshire County Council Highways Authority to formulate a robust 'Action Plan'	Medium	Low

12.0 RECOMMENDATIONS

- 12.1 That Members note the findings and recommendations of the Updating and Screening Assessment Report 2015.
- 12.2 That Members grant an Air Quality Management Order (subject to consideration of consultation responses delegated to the Executive

Member Health and Wellbeing) creating an Air Quality Management Area in Brimington as shown in Appendix 3.

- 12.3 That Members agree that the Air Quality Strategy be revised and approved in principle for consultation purposes, and that other stakeholders are invited to comment on it.
- 12.4 That Members agree that an 'Air Quality Action Plan' be produced in consultation with Derbyshire County Council.
- 12.5 That a further report regarding the draft action plan for the AQMA be prepared later in the year.

13.0 REASONS FOR RECOMMENDATIONS

- 13.1 To ensure Chesterfield Borough Council fulfils its statutory duty under Sections 82 to 84 of the Environment Act 1995, in such a way as to protect the health of residents within the Borough.

RUSSELL SINCLAIR
ENVIRONMENTAL HEALTH MANAGER

Further information can be obtained from Russell Sinclair on Extn 5397

Officer recommendation supported.



Signed Cabinet Member

Date 20.5.2015

Consultee Cabinet Member/Assistant comments (if applicable)

CONSULTATION INITIATIVES

These initiatives are not listed in any particular order:

1. Send consultation leaflet to every house falling within the AQMA.
2. Attend and present at the Community Assembly (East) on 17 June 2015.
3. Article in Borough Bulletin.
4. Advertise on CBC webpage.
5. Article as 'feature story' on internet.
6. Article on social media and local press.
7. Presentations and seminars to Councillors/other local authority teams/other interested parties.
8. Up to date information on CBC air quality pages.
9. Article in Your Chesterfield newspaper.

**2015 UPDATING AND SCREENING ASSESSMENT FOR
CHESTERFIELD BOROUGH COUNCIL**

(A full copy of the report is available upon request from the Environmental Protection Team. The full report will be uploaded to the Council's website when final comments have been received from DEFRA).

Executive Summary

Chesterfield BC carried out monitoring for Nitrogen Dioxide, Particulates (PM₁₀ and PM_{2.5}), and Benzene under the auspices of the air quality management regime.

The results indicate an ongoing marginal breach of the Air Quality Objective for Nitrogen Dioxide at the row of terraced housing on Church Street, Brimington. The ongoing monitoring by the use of diffusion tubes has been augmented by the use of an automatic NO_x monitor throughout 2014, located directly opposite the houses in the grounds of a church hall. The process of declaring an AQMA for this location, which began following the last report, is continuing.

The monitoring indicates that the former breach of the Air Quality Objective for Nitrogen Dioxide at part of a row of terraced housing on Sheffield Road, Whittington Moor, is resolved. The use of an automatic NO_x monitor at this location will take place in 2015, and it is hoped that there will be sufficient data for this to be included in the following report, to be submitted in 2016.

Monitoring indicates that there is no breach of the Air Quality Objective for PM₁₀ and the trend demonstrates a reduction in levels at both AURN sites. Current monitoring will continue.

Monitoring indicates that there is no breach of the Air Quality Objective for Benzene, the trend shows a very gradual increase in levels, but shows no realistic likelihood of breaching the Objective. Current monitoring will continue.

BOUNDARY OF PROPOSED AQMA AND THE IMMEDIATE VICINITY

4 to 18 (inclusive) Church Street, Brimington

