



DERBY CITY COUNCIL

COUNCIL CABINET
15 JUNE 2004

Report of the Director of Corporate Services

Air Quality – Update and Screening Assessment**RECOMMENDATION**

- 1.1 To consider the outcome of the Update and Screening Assessment (USA) report on the city's Air Quality.
- 1.2 To approve proposals for statutory public consultation on the assessment report.

REASON FOR RECOMMENDATIONS

- 2.1 The USA report has highlighted several road junctions in the city where air quality needs further detailed scrutiny to determine whether or not the council needs to declare further 'air quality management areas', or revise boundaries to the existing ones.
- 2.2 The Council is statutorily required to make the report open for public consultation.

SUPPORTING INFORMATION

- 3.1 The Government's National Air Quality Strategy was published in 2000 and established the framework for local authorities to review and assess air quality and identify areas where Air Quality Objectives were likely to be exceeded. This was a phased process and Derby has already completed the first 4 phases, resulting in the declaration of 2 Air Quality Management Areas (AQMAs) and the adoption of an Air Quality Action Plan to tackle the nitrogen dioxide problem associated with vehicle emissions on the ring roads.
- 3.2 More recent Government guidance introduced a requirement for a two-phase second round of review and assessment – the first phase being to identify matters that have changed since the last review, which might lead to a risk of air quality objectives being exceeded at locations with relevant public exposure. This first phase (the 'Update and Screening Assessment' report) has now been completed. Copies of the full report have been placed on the Council's website, or are available on request from Environmental Health & Trading Standards. The Executive Summary is shown in Appendix 2 to this report.

- 3.3 Where the Update and Screening Assessment (USA) identifies a risk that air quality objectives will be exceeded, the Council is required to proceed to the second phase - a 'Detailed Assessment' of each location identified by the USA. This is designed to provide an accurate assessment of the likelihood of an air quality objective being exceeded and needs to be sufficiently detailed to allow designation of new AQMAs or amendment of existing ones. The government (DEFRA) recommends that Councils use quality-assured monitoring techniques and validated modelling methods to determine current and future pollutant concentrations in areas where there is a significant risk of exceeding air quality objectives. This represents a substantial, complex and resource-intensive task for the Council.
- 3.4 DEFRA has also specified a 3-year cycle for future rounds of review and assessment reports, interspersed with progress reports.
- 3.5 The current USA report brings the Review and Assessment process up-to-date for all seven pollutants specified in the UK Air Quality Strategy. In summary, it concludes that a Detailed Assessment is not required for sulphur dioxide (SO₂), carbon monoxide (CO), 1,3-butadiene or lead. Furthermore, a review of the existing nitrogen dioxide (NO₂) AQMAs is not required. This situation will be reviewed once sufficient continuous NO₂ monitoring data are available.
- 3.6 With regard to the PM₁₀ AQMA at Victory Road, which was declared as a result of stack emissions from the foundry at QDF Components Ltd, monitoring data has been used to confirm that the Air Quality Objectives for PM₁₀ are still likely to be breached. A Detailed Assessment will not therefore be required, and the AQMA will be unable to be revoked at this time. Instead, an Action Plan will need to be produced in respect of QDF Components Limited.
- 3.7 Detailed Assessments, as detailed in paragraph 3.3, will however, be required for the following pollutants and locations:

Benzene –

The White House Nursery and Anglers Lane benzene monitoring sites, which are in close proximity to Acordis Acetate, have existing benzene concentrations greater than the 2010 annual mean objective.

Nitrogen dioxide –

- The nitrogen dioxide diffusion tubes at Burton Road, Derwent Green and St Albans Road are currently outside of the NO₂ AQMAs, but have predicted NO₂ concentrations greater than the 2005 annual mean objective.
- There are 6 road junctions outside of the 2 existing NO₂ AQMAs that have both predicted annual means greater than the 2005 annual mean objective and relevant public exposure within 10 metres of the kerbside. These junctions are:
 - a) Osmaston Road/ Ascot Drive
 - b) Boulton Lane/ Chellaston Road/ Merrill Way
 - c) Stafford Street/ Friary Street
 - d) Derby Road/ Raynesway/ Acorn Way
 - e) Friar Gate/ Ashbourne Road/ Uttoxeter Old Road
 - f) Chain Lane/ Burton Road/ Pastures Hill

Particulate Matter –

- 12 road junctions are predicted to have more than 35 exceedances of the 2004 24-hour PM₁₀ objective, together with relevant public exposure within 10 metres of the kerbside. These junctions are:
 - a) London Road/ Harvey Road/ Shardlow Road
 - b) Newdigate Street/ Balaclava Road
 - c) Uttoxeter New Road/ Manor Road/ Kingsway
 - d) Burton Road/ Manor Road/ Warwick Avenue
 - e) Osmaston Park Road/ Moor Lane
 - f) Osmaston Road/ Ascot Drive
 - g) Burton Road/ Abbey Street
 - h) Boulton Lane/ Chellaston Road/ Merrill Way
 - i) St. Alkmunds Way/ Cathedral Road
 - j) Stafford Street/ Friary Street
 - k) Friar Gate/ Ashbourne Road/ Uttoxeter Old Road
 - l) Derby Road/ Raynesway/ Acorn Way

- 5 locations in close proximity to the proposed Alvaston Bypass are predicted to have more than 35 exceedances of the 2004 24-hour PM₁₀ objective, together with relevant public exposure within 10 metres of the kerbside. These locations are:
 - a) Properties fronting Raynesway South
 - b) Properties on A6 Blue Peter South to Field Lane
 - c) Properties on A6 Field Lane to Lindon Drive
 - d) Properties on A6 Lindon Drive to Keldholme Road
 - e) Properties on A6 Keldholme Road to Snelsmoor Lane

- 3.8 DEFRA's Policy Guidance document LAQM PG (03) provides advice on public consultation arrangements. For the USA report, consultation need not be as extensive as it represents a preliminary assessment only. It is therefore proposed to issue statutory consultees with copies of the full report with an invitation to comment. Copies will also be available to the general public in Council offices and libraries for a period of 6 weeks, commencing 10 May 2004, with invitations to comment. The report will also be placed on the Council's website for a similar duration and responses invited via e-mail. Because the report is largely technical and factual in nature, it is not anticipated that the outcome of consultation will result in a substantial re-draft being necessary. However, the outcome and any proposed revisions will be reported to a future cabinet meeting.
- 3.9 The USA report has been submitted to DEFRA, which has posted an electronic copy on its web site, as an example of best practice.
- 3.10 DEFRA's Policy Guidance document LAQM PG(03) provides advice on public consultation arrangements. For the USA report, consultation need not be as extensive as it represents a preliminary assessment only. The outcome of the forthcoming Detailed Assessments will require more thorough consultation. It is therefore proposed to consult directly with statutory consultees and also to make copies of the report available to the general public in Council offices and libraries for a period of 6 weeks.

OTHER OPTIONS CONSIDERED

4. No other options were considered.

For more information contact: Julian de Mowbray 01332 715228 e-mail: julian.demowbray@derby.gov.uk
Background papers: USA report - Copies to be made available in Members' Room
List of appendices: Appendix 1 - Implications
Appendix 2 - Executive Summary of USA Report

APPENDIX 1

IMPLICATIONS

Financial

1. DEFRA recommends that continuous analysers be used for carrying out the Detailed Assessments of air quality that are now required. Continuous analysers are expensive to purchase and have to date been funded by Supplementary Credit Approvals (SCAs). SCAs have now been replaced by Supported Capital Expenditure (Revenue), or SCE(R). Although it is not intended to purchase individual analysers for each road junction identified as needing a detailed assessment, bids for SCE(R) to fund the purchase of further monitors should be anticipated.

Legal

2. Local Authorities have a statutory duty, under the Environment Act 1995 to review and assess air quality in their areas. The USA report represents the first phase in the second round of 3-year review and assessment cycles.

Personnel

3. Local air quality management is a statutory function and an expanding area of responsibility for the council. The quantity of work required to complete the Detailed Assessments is substantial and ongoing. Coupled with staff resources that may be required to implement the Council's Air Quality Action Plan, it may become necessary to submit future bids for additional staff resources.

Equalities Impact

4. A reduction in air pollution will assist in removing health inequalities associated with people living in areas of poor air quality.

Corporate Objectives and Priorities for Change

- 5.1 The proposal comes under the Council's Objectives for **a healthy environment**.
- 5.2 The proposal furthers the priority of **develop the management of the city and district centres to improve their attractiveness and viability**.

UPDATING AND SCREENING ASSESSMENT – EXECUTIVE SUMMARY

An Updating and Screening Assessment (USA) has been undertaken for the area under the authority of Derby City Council in accordance with the Local Air Quality Management Technical Guidance Note LAQM.TG(03) [1]. The USA is part of a continual process of Review and Assessment of local air quality undertaken by local authorities in the UK.

The Council completed Stages 1 and 2 of the Review and Assessment process, and reported the outcome in July 1999 [2]. The Stage 3 report was published in December 2000 [3]. This assessment identified one location at which the short term PM₁₀ objective in use at that time was likely to be exceeded, and several locations at which the annual average NO₂ objective were likely to be exceeded. Consequently two AQMAs were declared in August 2001.

Subsequently, the Council undertook a Stage 4 Review and Assessment of the air quality in the two AQMAs. Two Stage 4 reports were published: PM₁₀ in August 2002 [4]; and NO₂ in January 2003 [5].

During 2002, the AQMA for PM₁₀ was further investigated by monitoring the levels of PM₁₀ in the area. This showed an improvement following a reduction in local industrial PM₁₀ emissions. Drafting an Action Plan to tackle any air quality problem was deferred until further monitoring data was available. These additional monitoring data are considered in this USA.

A draft Action Plan to address the AQMA for NO₂ was issued in January 2003 [6]. Investigation showed that the main source of NO₂ in the AQMA was road traffic. The Action Plan contains a series of actions that together will be beneficial to the air quality of the whole of Derby, as well as targeting air quality problems within the AQMA. It was however determined that no single action would be sufficient to provide the entire air quality improvement required.

This USA brings the Review and Assessment process up-to-date for all seven pollutants in the UK Air Quality Strategy. In summary, this USA concludes that a Detailed Assessment is not required for sulphur dioxide, (SO₂), carbon monoxide (CO), 1,3-butadiene or lead. Furthermore, a review of the existing 2 NO₂ AQMAs is not required. This situation will be reviewed once sufficient continuous NO₂ monitoring data are available.

With regard to the PM₁₀ AQMA at Victory Road, which was declared as a result of stack emissions from the foundry at QDF Components Ltd, monitoring data has been used to confirm that the Air Quality Objectives for PM₁₀ are still likely to be breached. A Detailed Assessment will not therefore be required, and the AQMA will be unable to be revoked at this time. Instead, an Action Plan will need to be produced in respect of QDF Components Limited.

Detailed Assessments will be required for the following pollutants and locations:

Benzene –

- The White House Nursery and Anglers Lane benzene monitoring sites, which are in close proximity to Acordis Acetate, have existing benzene concentrations greater than the 2010 annual mean objective.

Nitrogen dioxide –

- The nitrogen dioxide diffusion tubes at Burton Road, Derwent Green and St Albans Road are currently outside of the NO₂ AQMAs, but have predicted NO₂ concentrations greater than the 2005 annual mean objective.
- There are 6 'busy' road junctions outside of the 2 existing NO₂ AQMAs that have both predicted annual means greater than the 2005 annual mean objective and relevant public exposure within 10 metres of the kerbside. These junctions are:
 - a) Osmaston Road/ Ascot Drive
 - b) Boulton Lane/ Chellaston Road/ Merrill Way
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 - e) Properties on A6 Keldholme Road to Snelsmoor Lane

Once these Detailed Assessments have been completed, Derby City Council will be in a position to determine whether one or more additional AQMAs will need to be declared.