
AIR QUALITY REVIEW AND ASSESSMENT

1 SUMMARY

- 1.1 To update Members on the progress of the second review and assessment of air quality within Rochford District and to provide a resolution for future air quality monitoring and assessment.

2 INTRODUCTION

- 2.1 The Environment Act 1995 requires Local Authorities to periodically review and assess the air quality within their District. Rochford's first air quality review was completed in December 2000 and concluded that there were no likely exceedances of the national air quality objectives.
- 2.2 Local Authorities have started to carry out the next round of reviews and to consider whether the objectives are likely to be achieved in 2010. The next round of reviews will be carried out in two steps:
- An **Updating and Screening Assessment** – this will identify those aspects that have changed since the first round of reviews and which may require further assessment. The Local Authority will only be required to proceed to the second step if this stage indicates areas that require further work.
 - A **Detailed Assessment** – this will be required for any pollutants and specific locations that have been identified as requiring further work.
- 2.3 The Updating and Screening Assessment has now been completed and the results are reported below.

3 SECOND AIR QUALITY REVIEW

Updating and Screening Assessment

- 3.1 Having considered each pollutant, the consultant's report concluded that the air quality objectives will be met for benzene, 1,3-butadiene, carbon monoxide, lead, PM₁₀ (24 hour annual mean) and sulphur dioxide. However, the report concluded that a detailed assessment is required to assess the PM₁₀ 24 hour objective at residential properties in close proximity to Rawreth Industrial Estate (PM₁₀ is a measure of the airborne particulate matter). A dust monitoring programme will be required as part of the assessment.
- 3.2 The annual PM₁₀ objectives for 2010 were also considered and are predicted to be exceeded at all busy roads and junctions. The 2010 PM₁₀ objectives are provisional, so a detailed assessment is not required at this stage, but

when they are included in the regulations further assessment is likely to be needed.

- 3.3 With respect to Nitrogen Dioxide (NO₂) there are a number of road junctions where the annual mean NO₂ objective was predicted as only marginally being met. It is recommended that the Council carries out a monitoring programme to verify the predictions at these locations:
- A130 at nearest receptor
 - High Street/Eastwood Road junction in Rayleigh

Monitoring Programs and Detailed Assessment

- 3.4 Rochford District Council is now required to carry out a detailed assessment of PM₁₀ levels at receptors close to Rawreth Industrial Estate. The completion date for these assessments is the end of April 2004, but DEFRA has agreed to extend this to September 2004 to enable monitoring to be carried out in the drier summer months. The detailed assessment and dust monitoring programme will cost approximately £7300.
- 3.5 The NO₂ monitoring recommended would require 12 months monitoring with diffusion tubes at each location. The cost would be approximately £468 for 12 months monitoring.
- 3.6 In addition to the results of the Updating and Screening Assessment it is recommended that a 12 month NO₂ monitoring programme be also provided in Rochford at the junction between South Street, East Street and North Street. This area is not one that has currently been identified as only marginally meeting the objective, but future major development proposals within Rochford have the potential to increase traffic. The developer has been asked to carry out an air quality assessment and monitoring data would help verify the results of the assessment. The costs of this additional monitoring would be approximately £234 for 12 months monitoring.

4 RISK IMPLICATIONS

4.1 Resource Risk

Should monitoring indicate that the air quality objectives are likely to be exceeded an Air Quality Management Area (AQMA) would need to be designated and an air quality action plan produced. This could have significant financial and human resource implications.

4.2 Operational Risk

The additional officer time required to maintain the monitoring programme will impact most heavily during the busy summer months.

4.3 Regulatory Risk

The conclusions of the updating and screening assessment have been approved by DEFRA and the Council is now required to complete a detailed assessment of air quality in accordance with the requirements of the Environment Act 1995.

4.4 Third Party Risk

If an AQMA is required, this could have implications for properties within the designated area.

5 ENVIRONMENTAL IMPLICATIONS

- 5.1 The detailed assessment and monitoring will provide additional information about the air quality within the District. There have been complaints about dust in the vicinity of Rawreth Industrial Estate. The monitoring will establish the extent of the problem and whether any action is required to reduce emissions in the area.

6 RESOURCE IMPLICATIONS

- 6.1 There are financial costs of £8000, as detailed above. The NO₂ monitoring costs can be met from existing resources. The remaining costs have been included in next year's core revenue estimates.
- 6.2 In addition to the financial costs there will also be human resource implications over the monitoring period. The PM₁₀ monitoring will require an estimated 3 hours each week of the 3 month monitoring period and NO₂ monitoring will require 4 hours every 3-4 weeks.

7 RECOMMENDATION

- 7.1 It is proposed that the Committee **RESOLVES**

- (1) That the air quality monitoring and detailed assessment recommended in the Updating and Screening Assessment report should proceed, subject to sufficient funds being made available in the 2004/05 budget.
- (2) That the additional monitoring recommended within the centre of Rochford be provided.

Graham Woolhouse

Head of Housing Health & Community Care

Background Papers:

Rochford District Council Local Air Quality Management – Updating and Screening
Assessment October 2003
Local Air Quality Management - Policy Guidance LAQM. PG(03)

For further information please contact Joanne Ellis on:-

Tel:- 01702 318036
E-Mail:- joanne.ellis@rochford.gov.uk