

**Warwick District Council**

**Local Air Quality Management**

**Summary Assessment Report**

**August 2004**

## EXECUTIVE SUMMARY

Part IV of the Environment Act 1995 places a statutory duty on local authorities to review and assess the air quality within their area. This Detailed Assessment is a requirement of the second round of review and assessment of air quality, for local authorities that have identified areas where there is a potential risk of exceedence of Air Quality Strategy (AQS) objectives within their Updating and Screening Assessment (USA). The assessment has been undertaken in accordance with the Technical Guidance LAQM.TG (03).

Warwick District Council's (WDC) first round of review and assessment of air quality concluded that all of the AQS objectives would be met throughout the District and therefore an Air Quality Management Area (AQMA) was not required.

The first phase of the second round of review assessment, the USA, concluded that a Detailed Assessment was required for annual mean nitrogen dioxide (NO<sub>2</sub>) near three junctions in the district:

- Bath Street / High Street / Clemens Street junction in Leamington Spa;
- Jury Street / High Street / Church Street / Castle Street junction in Warwick;
- A429 Wellesbourne Road / A429 Bridge Street / Church Street mini-roundabout junction.

The USA concluded that all other pollutant objectives would be met.

Detailed dispersion modelling has been undertaken using the Cambridge Environmental Research Consultants (CERC) ADMS-Roads dispersion model. The model has been verified against concentrations monitored near each of the junctions in 2003. Some of the monitoring data used in the verification of the model has been derived from short-term data, as WDC installed a roadside continuous monitor and several additional diffusion tube sites at the junctions in December 2003 (as a result of the findings of the USA). Therefore, the accuracy and reliability of modeling will increase, as more monitoring data becomes available.

Annual mean NO<sub>2</sub> concentrations were predicted to exceed the AQS objective, in its target year of 2005; in each of the assessment areas;

- In Leamington Spa, annual mean NO<sub>2</sub> AQS objective is likely to be exceeded at several properties at the roadside of Bath Street, High Street and Clemens Street.
- In Warwick, exceedences of the annual mean NO<sub>2</sub> AQS objective are expected within 5 m to 10 m of High Street and Jury Street, which encompasses several roadside properties. However, concentrations at properties along Castle Street and Church Street in Warwick are unlikely to exceed the objective.
- Predicted concentrations in Barford for 2005 indicate that properties within 5 m of the A429 will experience concentrations above the annual mean NO<sub>2</sub> AQS objective. Only properties within 50 m of the junction in Church Street are expected to experience concentrations exceeding the objective.

In order to facilitate the declaration of an AQMA, separate contour lines have been drawn representing the AQS objective for NO<sub>2</sub>.

*(To obtain a copy of the detailed Assessment Report, please contact:  
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