

5.0 Progress Report for Carbon Monoxide

5.1 The national perspective

The main source of carbon monoxide in the UK is road transport which accounted for 67% of total releases in 2000. Annual emissions of carbon monoxide have been falling steadily since the 1970's and are expected to continue to do so. Current projections indicate that road transport emissions will decline by a further 42% between 2000 and 2005.

Modelling and monitoring undertaken at a national level indicates that existing national policies should generally be sufficient to achieve the current air quality objective for carbon monoxide.¹ There may however be some exceedances of the objective close to very busy roads.

5.2 The local perspective

In the First Stage Review and Assessment of Air Quality in York carbon monoxide was assessed against the following objective:

'An 8-hour running average of 10ppm, or less, to be achieved by the end of 2005.'

It was concluded that this objective would be met in York without the need for further action at a local level.

In the Second and Third Stage Review and Assessment of Air Quality in York carbon monoxide was assessed against a revised objective which was:

'An 8-hour running mean of 11.6mg/m³ (10ppm) or less to be achieved by the end of 2003.'

It was concluded that this objective would be met in York without the need for further action at a local level.

In the Update and Screening assessment, carbon monoxide was assessed against the current objective which is:

'10mg/m³ (8.62ppm) as a maximum daily 8-hour mean concentration to be achieved by the end of 2003.'

In accordance with the air quality guidance note LAQM.TG(03), the Update and Screening report considered both carbon monoxide monitoring data from two locations in the city and the impact of 'very busy' roads. An assessment of the traffic levels within York revealed that none of the roads within the York network fit the definition of being 'very busy' for the purpose of assessing against the carbon monoxide objective. Furthermore, an assessment of the

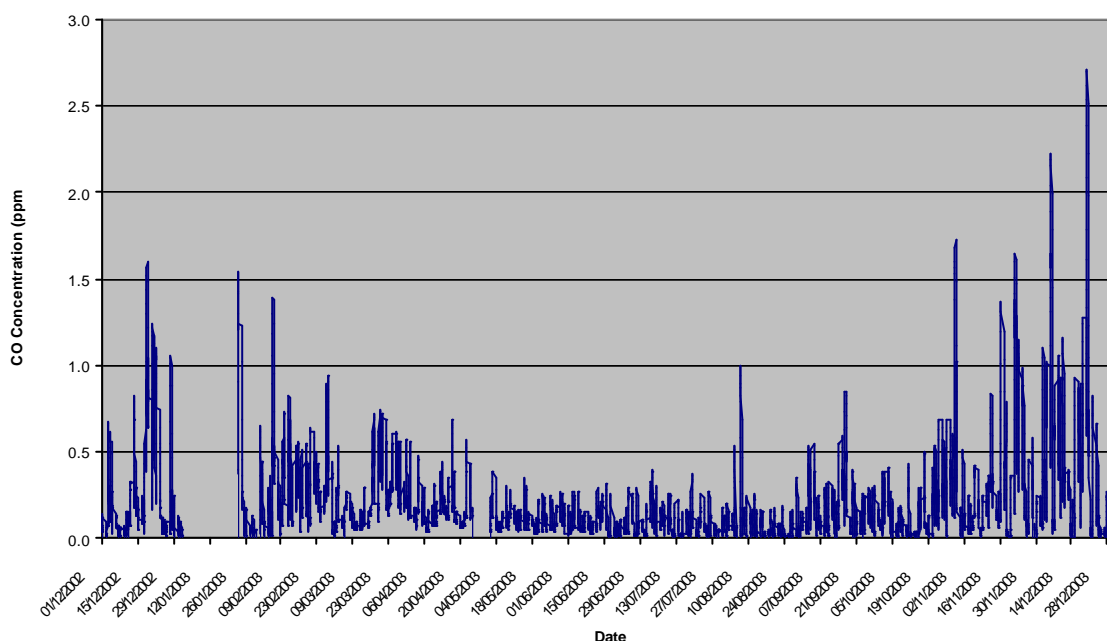
¹ DEFRA [Review and Assessment: Technical Guidance LAQM.TG \(03\)](#) 2003

monitoring data available at the time indicated that the maximum 8 hour means recorded were both well below the objective level. Monitoring at both these locations has now ceased and thus no further data is available from these analysers.

5.3 Recent carbon monoxide monitoring data

Since publication of City of York Council's Update and Screening Assessment a new carbon monoxide analyser (ML-9830) has been installed within the real time monitoring station situated at Rawcliffe. This analyser was purchased to act as a reference standard against which a number of portable analysers are currently being trialled for City of York Council's UTMC (Urban Traffic Management and Control) project. Carbon monoxide concentrations recorded by the analyser between 1/12/02 to 31/12/03 are shown in Figure 50 below:

Figure 50 : Daily 8-hour mean concentrations of carbon monoxide over the period 1/12/02 to 31/12/03 as recorded by the analyser situated at Rawcliffe air quality monitoring station



5.4 Conclusions

As can be seen from Figure 50 above, the objective level of 8.62ppm (10mg/m³) as a maximum daily 8-hour mean concentration, was not exceeded at any point over the monitoring period. All recorded concentrations were well below this objective level. A further update and screening exercise for carbon monoxide shall be carried out in April 2006.