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.

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/m^3 (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 previous Update and Screening assessments, carbon monoxide was assessed against the current objective which is:

> '*10mg/m^3 (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 reports considered both carbon monoxide monitoring data and the potential impact of 'very busy' roads. Assessments of 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. In the Update and Screening Assessment (2006) carbon monoxide monitoring data for the Rawcliffe site was presented up until October 2005.

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

This data indicated that the maximum 8 hour means recorded at Rawcliffe were well below the objective level.

5.3 Recent carbon monoxide monitoring data

Since the publication of the Update and Screening Assessment (2006) further carbon monoxide data for the Rawcliffe site has become available. Table 15 provides a summary of the carbon monoxide data collected at Rawcliffe for the duration of the period when the carbon monoxide analyser was in operation. The location of the Rawcliffe monitoring site is shown on figure 3 in chapter 2.

Table 15: Summary of carbon monoxide data collected at Rawcliffe

Year	Max 8 hr running mean (mg/m^3)	Min 8 hr running mean (mg/m^3)	% Data capture
2003	3.1	0.0	90%
2004	1.9	0.0	64%
2005	2.1	-0.2	86%
2006 [2]	2.3	0.0	82%

5.4 Conclusions

As can be seen from table 15 the objective level of 8.62ppm ($10mg/m^3$) as a maximum daily 8-hour mean concentration, was not exceeded at the Rawcliffe monitoring site between 2003 and March 2006 when the analyser was switched off. All recorded concentrations were well below the objective level. All carbon monoxide monitoring has now ceased in York.

[2] 1st January to 6th March 2006 only – air pollution station was closed after this date. Data capture is average for this period only.