

# **Scottish Borders Council**

## **Air Quality Progress Report**

The Environment Act 1995 and subsequent Regulations require local authorities to conduct a Review and Assessment of air quality in their area to assess compliance with the standards and objectives set out in the Air Quality Strategy for England, Scotland, Wales and Northern Ireland.

An Updating and Screening Assessment was produced on behalf of Scottish Borders Council in 2003 by BMT Cordah Ltd. The report considered the monitoring data and conclusions contained in the Council's in-house report, which was produced in August 2000. It also reviewed the earlier report's conclusions in the light of changes to the air quality standards and the most recent data acquired by the Council's monitoring programme.

The report concluded that Nitrogen Dioxide (NO<sub>2</sub>) might exceed NAQS objectives for road traffic and Scottish Borders Council would need to progress to a detailed assessment for NO<sub>2</sub>. Sulphur Dioxide (SO<sub>2</sub>) was predicted to possibly exceed NAQS objectives for domestic fuel burning in two locations Newcastleton and Denholm, therefore Scottish Borders Council would be required to proceed to a Detailed Assessment for SO<sub>2</sub>. Particulate (PM<sub>10</sub>) concentrations from domestic fuel burning might also exceed NAQS objectives for 2010 and the Council would therefore be required to progress to a Detailed Assessment for PM<sub>10</sub>. As the "worst possible case" scenario of the two villages, it was decided that real time monitoring of SO<sub>2</sub> and PM<sub>10</sub> would be carried out in Newcastleton.

For the remaining pollutants, namely carbon monoxide, benzene, 1,3-butadiene, and lead the assessment concluded that it was unlikely that there would be an exceedance of any of the respective NAQS objectives.

It would therefore be necessary for the Council to progress to a Detailed Assessment for NO<sub>2</sub>, SO<sub>2</sub> and PM<sub>10</sub> to be submitted to the Scottish Executive by April 2004 and to complete a progress report for the remaining pollutants by that date.

The Council was unable to meet the costs involved in carrying out the Detailed Assessment from its existing budget so the Scottish Executive was approached for additional funding to cover the work. Unfortunately, the funds in the current Capital Consent scheme had been fully committed by that time and no additional money was available until the new grant scheme commenced in 2004. An application for additional funding was duly submitted in February 2004 and the Scottish Executive subsequently awarded a grant of £31 500 to enable the Council to carry out the necessary work.

In the intervening period a tender document was prepared in respect of the Detailed Assessment contract, and this was circulated to a number of companies. After considering the bids received, the Council appointed AEA Technology Ltd to undertake the required monitoring, subject to grant money being made available.

Arrangements were made to carry out the assessment work during winter of 2004 – 2005 and it was the Council's intention to produce an interim report in April 2004, to be followed by the full Detailed Assessment report on completion of the real-time monitoring. In subsequent discussions with the Consultants however, it emerged that the duplication of work involved in production of an interim report would give rise to costs which were likely to be disproportionate compared to the overall cost of the total monitoring program.

Accordingly it was decided to submit this report before the end of the 2004 financial year summarising the situation to date, with the full Detailed Assessment report to be produced on completion of the real time monitoring and emission modelling work.

Since producing the 2003 USA Report, the Council has continued collecting data from its network of fifteen NO<sub>2</sub> Diffusion Tubes. The locations of these sites remain unchanged from those detailed in the USA report. Supply and analysis of the tubes has continued to be provided by South Yorkshire Laboratory in order to maintain consistency of the results. Full analysis of these results will be presented in the main Detailed Assessment Report, but a chart showing the uncorrected mean levels is attached.

The highest levels have been detected on Galashiels High Street, Hawick High Street and Hawick Bourtree Place.

From the graph it is apparent that there has been a drop in levels measured in Hawick High Street and Bourtree Place, coinciding with completion of the town's traffic release scheme. The rise in levels indicated during the 2003/2004 period can be attributed to extensive street remodelling work that took place in the High Street/Bourtree Place area during that time which caused a temporary increase in congestion.

The levels detected in Galashiels are still the highest in the Council's area and it is for this reason that a temporary real time monitoring station was set up at this location over the winter quarter. Three diffusion tubes were also co-located at this site. The results have not yet been received from our consultants but will be included in the Detailed Assessment report.

The village of Newcastleton was chosen as the site for monitoring PM<sub>10</sub> and SO<sub>2</sub> levels arising from the domestic combustion of solid fuel. The Council's consultants set up a monitoring station in mid November 2004, to run for a minimum of six months. Again, data from this station has yet to be received and will be included in the main Detailed Assessment report. As part of the data gathering exercise, a postal fuel use survey has been carried out in the village and surrounding area. To date, this has produced an information return of approximately 56%. The survey findings will be incorporated into the final modelling exercise to be included in the detailed Assessment.

In the period since the production of the 2003 USA Report, no new sources of the listed pollutants have been identified within the Council's area. There have been no

changes to the road or rail network nor have there been any new developments, which might affect air quality.

The period of real time monitoring will end in the middle of May 2005. It is anticipated that the collation of all relevant data and the production of the final Detailed Assessment report will take place shortly thereafter.

Copies of the final report will be forwarded to both the Scottish Executive and the Scottish Environmental Protection Agency as soon as they become available.

### **Nitrogen Dioxide Diffusion Tube Data**

<b>Annual Mean Levels - µg/m<sup>3</sup></b>					
<b>Site</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
<b>Galashiels Council Chamber</b>	31	31	31	31	28
<b>Galashiels Stanley Street</b>	11	17	13	14	11
<b>Galashiels High Street</b>	45	44	45	41	41
<b>Peebles Gladstone Place</b>	12	14	13	11	11
<b>Peebles High Street</b>	27	28	26	25	23
<b>Hawick Sandbed</b>	28	27	27	27	26
<b>Hawick High Street</b>	42	35	36	32	37
<b>Hawick Renwick Terrace</b>	10	11	10	15	12
<b>Hawick Silverbuthall Road</b>	12	14	11	11	10
<b>Hawick Bourtree Place</b>	40	39	34	27	36
<b>Kelso Bridge Street</b>	23	25	21	21	21
<b>Kelso Mercers Court</b>	10	11	10	10	9
<b>Melrose St Dunstons Park</b>	13	15	11	12	10
<b>Hawick Market Street</b>		25	23	26	24
<b>Hawick Commercial Road</b>		20	18	19	18

Nitrogen Dioxide Annual Mean Levels - ugm-3

