



# 2010 Air Quality Progress Report for Scottish Borders Council

In fulfillment of Part IV of the Environment Act 1995  
Local Air Quality Management

Date May 2010

<b>Local Authority Officer</b>	<b>DAVID A. BROWN ENVIRONMENTAL HEALTH OFFICER</b>
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<b>Department</b>	Technical Services Environmental Health
<b>Address</b>	Council Offices Rosetta Road Peebles EH45 8HG
<b>Telephone</b>	01721 726 312
<b>e-mail</b>	dbrown@scotborders.gov.uk

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## Executive Summary

Scottish Borders Council undertakes a program of Air Quality Assessment in accordance with the Guidance produced by the UK Government and Devolved Administrations. Reports are produced annually on a rolling program. Earlier rounds of review and assessment have shown that the main industrial pollutants are unlikely to exceed the UK Air Quality Objectives at any location within the Council's area. And that only NO<sub>2</sub> from road traffic and PM<sub>10</sub> from domestic fuel consumption still required to be considered.

A Detailed Assessment of PM<sub>10</sub> levels was subsequently undertaken at a location agreed with the Scottish Government and Scottish Environmental Protection Agency as a worst possible case. This work has shown that no part of the Council's area was at risk of exceeding the Air Quality Objective for PM<sub>10</sub>.

As part of the air quality monitoring programme, the Council monitors nitrogen dioxide (NO<sub>2</sub>) using diffusion tubes at 19 different locations. The monitoring of NO<sub>2</sub> has shown no exceedences of the NO<sub>2</sub> Objectives, with levels on average decreasing annually.

In November 2009 a new automatic air quality monitoring station was commissioned in Peebles. This station is part of the AURN network. The pollutants monitored are NO<sub>x</sub> and Ozone.

Previous rounds of Review and Assessment have indicated that there were no areas in the Borders at risk of exceeding any of the listed pollutants. The new data and information collected for this report confirms the conclusions of previous reports and that a Detailed Assessment is not required for any pollutant.

## Table of contents

<b>1</b>	<b>Introduction</b>	<b>6</b>
1.1	Description of Local Authority Area	6
1.2	Purpose of Progress Report	6
1.3	Air Quality Objectives	7
1.4	Summary of Previous Review and Assessments	9
<b>2</b>	<b>New Monitoring Data</b>	<b>10</b>
2.1	Summary of Monitoring Undertaken	10
2.2	Comparison of Monitoring Results with Air Quality Objectives	14
<b>3</b>	<b>New Local Developments</b>	<b>21</b>
3.1	Road Traffic Sources	21
3.2	Other Transport Sources	21
3.3	Industrial Sources	21
3.4	Commercial and Domestic Sources	22
3.5	New Developments with Fugitive or Uncontrolled Sources	22
<b>4</b>	<b>Local / Regional Air Quality Strategy</b>	<b>23</b>
<b>5</b>	<b>Planning Applications</b>	<b>24</b>
<b>6</b>	<b>Air Quality Planning Policies</b>	<b>24</b>
<b>7</b>	<b>Local Transport Plans and Strategies</b>	<b>26</b>
<b>8</b>	<b>Climate Change Strategies</b>	<b>27</b>
<b>9</b>	<b>Implementation of Action Plans</b>	<b>28</b>
<b>10</b>	<b>Conclusions and Proposed Actions</b>	<b>29</b>
10.1	Conclusions from New Monitoring Data	29
10.2	Conclusions relating to New Local Developments	29
10.3	Other Conclusions	29
10.4	Proposed Actions	29
<b>11</b>	<b>References</b>	<b>30</b>

## Appendices

Appendix A	QA/QC Data
Appendix B	2009 NO <sub>2</sub> Monthly Mean Dataset
Appendix C	Maps of Diffusion Tube Sites Map of Scottish Borders Council

## List of Tables

Table 1.1	Air Quality Objectives included in Regulations for the purpose of Local Air Quality Management in Scotland.
Table 2.1	Details of Automatic Monitoring Sites
Table 2.2	Details of Non- Automatic Monitoring Sites
Table 2.3	Results of Nitrogen Dioxide Diffusion Tubes

## List of Figures

Figure 2.1	Map of Automatic Monitoring Site.
Figure 2.2	Trends in Annual Mean Nitrogen Dioxide Concentration Measured at Diffusion Tube Monitoring Sites.

# **1 Introduction**

## **1.1 Description of Local Authority Area**

The Scottish Borders is situated between Edinburgh and the Lothians to the north, and Dumfries & Galloway and England to the south. The Council's area extends westward from the North Sea to South Lanarkshire. Many of the neighbouring Local Authorities are predominantly rural and the prevailing winds over the Council's are south westerly.

A map showing the Council's area is included at the end of the Appendices to this Report.

Consultation responses from earlier rounds of the Review and Assessment process have revealed no major sources of pollution outwith the council's area that might affect air quality in the Borders. Similarly, no sources of pollution have been identified in the Borders that might affect neighbouring Local Authority areas.

The largest Borders towns are Hawick and Galashiels both of which are transected by the A7 from Carlisle to Edinburgh. The A7 through Hawick has been re-routed via Commercial Road, and the town centre area made one-way to improve traffic flow and air quality. A similar traffic relief scheme is currently underway for Galashiels. The A68 which links Newcastle to Edinburgh via the A696 passes through Jedburgh, St Boswells, Earlston and Lauder. The A7 and A696 are linked by the Melrose bypass which serves the Borders General Hospital. The principal east-west route through the area is the A72 which links Galashiels, Walkerburn, Innerleithen and Peebles to the A701 Moffat – Edinburgh Road. In the west the main north-south road is the A1 which runs through the Council's North Sea coastal area from Edinburgh to Berwick-upon-Tweed. The town of Eyemouth is the closest population centre to the A1.

The Borders rail network was closed and demolished in the 1960s, leaving the East Coast mainline as the only railway in the Council's area. However, work to reopen part of the former Waverley Line from Midlothian to Galashiels has been commenced this development will be assessed when the operating details of the new line are finalised.

Many of the processes within the Council's area authorised by SEPA (Scottish Environmental Pollution Agency) involve quarrying and cement batching. These have the potential to contribute to local low level pollution, mainly by fugitive dust and other particulates. There are also a number of poultry operations in the area, which have now been brought within the assessment regime.

## **1.2 Purpose of Progress Report**

Progress Reports are required in the intervening years between the three-yearly Updating and Screening Assessment reports. Their purpose is to maintain continuity in the Local Air Quality Management process.

They are not intended to be as detailed as Updating and Screening Assessment Reports, or to require as much effort. However, if the Progress Report identifies the risk of exceedence of an Air Quality Objective, the Local Authority (LA) should undertake a Detailed Assessment immediately, and not wait until the next round of Review and Assessment.

### **1.3 Air Quality Objectives**

The air quality objectives applicable to LAQM in Scotland are set out in the Air Quality (Scotland) Regulations 2000 (Scottish SI 2000 No 97), the Air Quality (Scotland) (Amendment) Regulations 2002 (Scottish SI 2002 No 297), and are shown in Table 1.1. This table shows the objectives in units of microgram's per cubic metre,  $\mu\text{g}/\text{m}^3$  (milligram's per cubic metre,  $\text{mg}/\text{m}^3$  for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

**Table 1.1 Air Quality Objectives included in Regulations for the purpose of Local Air Quality Management in Scotland.**

<b>Pollutant</b>	<b>Concentration</b>	<b>Measured as</b>	<b>Date to be achieved by</b>
<b>Benzene</b>	16.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
	3.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2010
<b>1,3-Butadiene</b>	2.25 $\mu\text{g}/\text{m}^3$	Running annual mean	31.12.2003
<b>Carbon monoxide</b>	10.0 $\text{mg}/\text{m}^3$	Running 8-hour mean	31.12.2003
<b>Lead</b>	0.5 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2004
	0.25 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2008
<b>Nitrogen dioxide</b>	200 $\mu\text{g}/\text{m}^3$ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2005
<b>Particles (PM<sub>10</sub>) (gravimetric)</b>	50 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	50 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 7 times a year	24-hour mean	31.12.2010
	40 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2004
	18 $\mu\text{g}/\text{m}^3$	Annual mean	31.12.2010
<b>Sulphur dioxide</b>	350 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 $\mu\text{g}/\text{m}^3$ , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005



## 1.4 Summary of Previous Review and Assessments

Scottish Borders Council has undertaken an Air Quality Assessment Programme in terms of the guidance on air quality management published by the Scottish Government.

The Updating and Screening Assessment 2003 concluded that Galashiels High Street was at risk of exceeding the Objective for Nitrogen Dioxide (NO<sub>2</sub>) from traffic. A risk of exceedence for Sulphur Dioxide (SO<sub>2</sub>) and PM<sub>10</sub> from domestic fuel use was also identified in Newcastleton. Detailed Assessments were therefore required for these pollutants.

A Detailed Assessment of NO<sub>2</sub> from Traffic in Galashiels was undertaken and no risk of exceedence was identified. Traffic flow through the High Street street - canyon will be reduced further on completion of the Galashiels A7 Traffic Relief Scheme.

A Detailed Assessment of SO<sub>2</sub> and PM<sub>10</sub> levels in Newcastleton took place over the winter and spring of 2004 - 2005. The report concluded that there was no risk of either pollutant exceeding the Air Quality Objectives. Doubt was subsequently raised as to whether or not the monitoring location was representative of the highest predicted concentrations for particulates.

The Council's Updating and Screening Assessment in 2006 and Progress Report in 2007 both concluded that the Air Quality Objectives for each of the pollutants were unlikely to be exceeded at any location in the Council's area, and therefore a Detailed Assessment would not be required for any pollutant.

Following a review of the data from the Newcastleton Detailed Assessment, it was felt that additional monitoring should take place at a different location. A further twelve-month PM<sub>10</sub> monitoring programme at the relevant location was therefore undertaken between June 2007 and May 2008. The data obtained has shown concentrations to be below the Scottish Objectives for both annual and daily averages and that the Objectives are not likely to be exceeded.

The Progress Report in 2008, which contained interim data from the Newcastleton PM<sub>10</sub> study, and the Updating and Screening Assessment Report in 2009 both confirmed that the Air Quality Objectives were not likely to be exceeded at any location in the Scottish Borders.

## 2 New Monitoring Data

### 2.1 Summary of Monitoring Undertaken

#### 2.1.1 Automatic Monitoring Sites

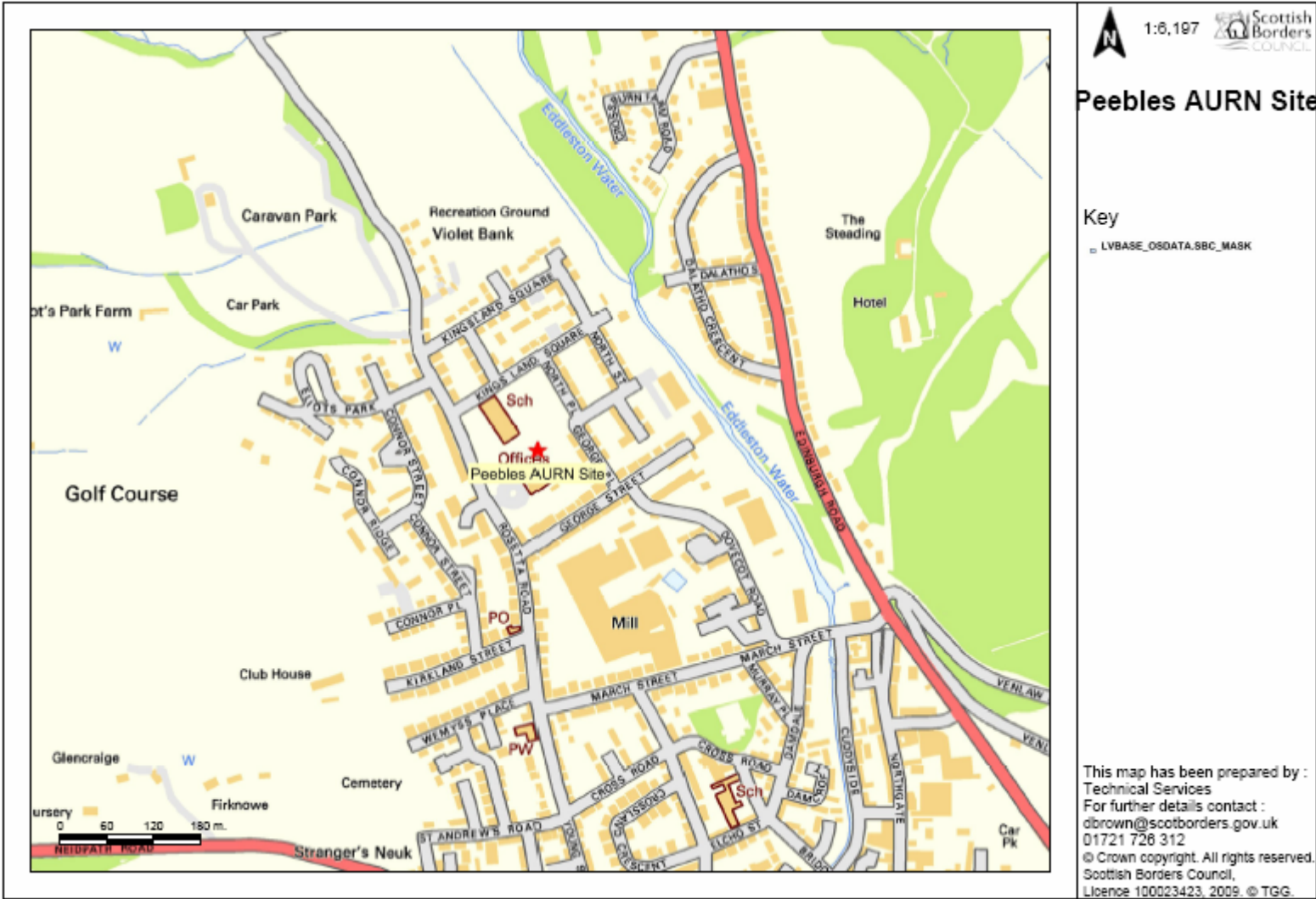
Since November 2009, an automatic monitoring station has been in operation in the grounds of the Council Offices at Rosetta Road, Peebles. This station is funded by DEFRA/Scottish Government as part of the Automatic Rural and Urban Network.

The station details and pollutants monitored are described in Table 2.1 and Figure 2.1 below.

**Table 2.1 Details of Automatic Monitoring Sites**

Site Name	Site Type	OS Grid Ref	Pollutants Monitored	Monitoring Technique	In AQM A?	Relevant Exposure ? (Y/N with distance (m) to relevant exposure)	Dist. to kerb of nearest road (N/A if not applicable)	Worst-case exposure?
Peebles	AURN Suburban	324812 641083	O <sub>3</sub> / NO <sub>x</sub>	UV Absorption /Chemilumin.	N	N/A	N/A	N/A

Figure 2.1 Map of Automatic Monitoring Site.



### **2.1.2 Non-Automatic Monitoring**

Scottish Borders Council carries out monitoring of Nitrogen Dioxide using diffusion tubes at nineteen sites.

All sites have been selected to be representative of relevant exposure and the locations have been agreed with the Scottish Government and SEPA.

Seven sites are located in Galashiels, six in Hawick, two in Kelso, two in Peebles and one in Melrose. One site in Galashiels which had been lost due to the removal of the monitoring location following a road traffic incident was reinstated during the year.

The locations of the sites are summarised in Table 2.2 and maps are provided in Appendix C.

**Table 2.2 Details of Non- Automatic Monitoring Sites**

Site Name	Site Type	OS Grid Ref		Pollutants Monitored	In AQMA?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Distance to kerb of nearest road (N/A if not applicable)	Worst-case Location?
Council Chamber, Galashiels	Kerbside	349298	635928	NO <sub>2</sub>	No	Y 1m	2m	Yes
Stanley / Meikle St., Galashiels	Urban Background	348587	636142	NO <sub>2</sub>	No	Y 1m	1m	Yes
High St., Galashiels	Kerbside	348953	636445	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Gladstone Pl., Peebles	Urban Background	324757	640643	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
High St., Peebles	Kerbside	325085	640389	NO <sub>2</sub>	No	Y 1m	2m	Yes
Sandbed, Hawick	Kerbside	350106	614464	NO <sub>2</sub>	No	Y 1m	3m	Yes
High St., Hawick	Kerbside	350314	614631	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Renwick Terr., Hawick	Urban Background	349803	613961	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Silverbuthall Rd., Hawick	Urban Background	350526	615857	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Bourtrees Pl., Hawick	Kerbside	350497	614888	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Mart St., Hawick	Kerbside	350501	615096	NO <sub>2</sub>	No	Y 1m	3m	Yes
Commercial Rd., Hawick	Kerbside	350222	614899	NO <sub>2</sub>	No	Y 1m	2m	Yes
Bridge St., Kelso	Kerbside	372771	633870	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Mercer's Ct., Kelso	Urban Background	372460	634923	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
St. Dunstan's Park, Melrose	Urban Background	354548	634038	NO <sub>2</sub>	No	Y 1m	1m	Yes
Rogersons High St, G.shiels	Kerbside	349063	636287	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Border Angling, High St, G.shiels	Kerbside	348976	636371	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Edingtons, High St, G.shiels	Kerbside	348982	636384	NO <sub>2</sub>	No	Y 1m	1.5m	Yes
Iceland, High St, G.shiels	Kerbside	349063	636272	NO <sub>2</sub>	No	Y 1m	1.5m	Yes

The tubes are analysed by Edinburgh Scientific Services using 50% TEA in Acetone.

The Council has not compared the diffusion tubes with the reference method in any co-location study and has used the bias adjustment factors provided by the Review and Assessment website.

## **2.2 Comparison of Monitoring Results with Air Quality Objectives**

Over the period covered by this report, Scottish Borders Council has carried out monitoring for Nitrogen Dioxide. A new real-time monitoring station for Nitrogen Dioxide and Ozone has also been established as part of the AURN scheme.

The results of monitoring undertaken by Scottish Borders Council are given in Sections 2.2.1 to 2.2.6 below.

### **2.2.1 Nitrogen Dioxide**

#### **Automatic Monitoring Data**

The Peebles AURN site has only been operating since November 2009, so there is insufficient data available to enable completion of this section of the Report.

Data from this site will be presented in future Reports.

#### **Figure 2.3 Trends in Annual Mean Nitrogen Dioxide Concentration Measured at Automatic Monitoring Sites.**

The Peebles AURN site has only been operating since November 2009, so there is insufficient data available to show any trend in Annual Mean Nitrogen Dioxide concentrations.

#### **Diffusion Tube Monitoring Data**

Scottish Borders Council undertakes monitoring of Nitrogen Dioxide at nineteen sites throughout the Council's area.

The locations of the monitoring points have been chosen in consultation and agreement with SEPA as being representative of public exposure.

Site details for the monitoring points together with results for the last three years, are given in Table 2.3 below.

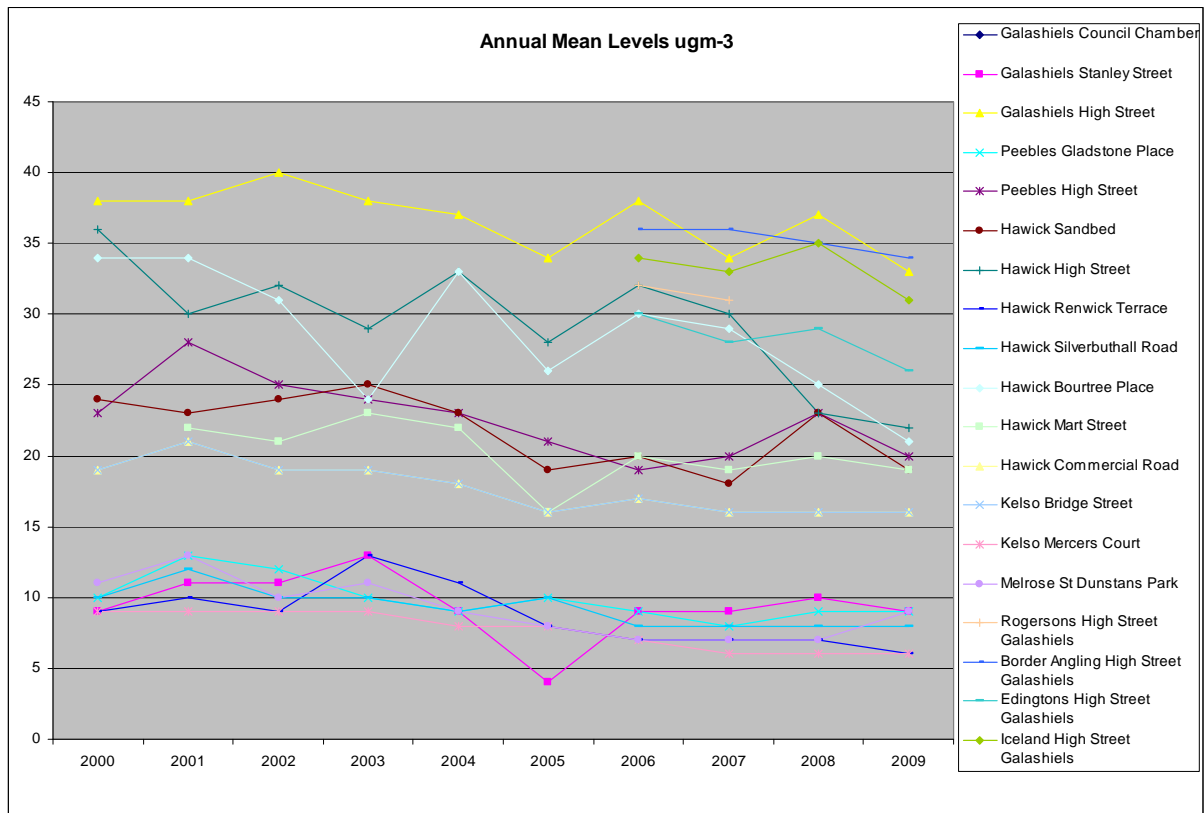
Over 2009, no site within the Scottish Borders has been identified as exceeding the Annual Mean Objective for NO<sub>2</sub>.

No site has been identified as exceeding 60 µg/m<sup>3</sup> monthly mean value.

Since 2000, the bias adjusted levels for all sites in the Scottish Borders have shown an overall decrease and this information is displayed in Figure 2.2 below.

The full dataset of monthly mean values for Nitrogen Dioxide is included in Appendix B at the end of this Report. The values shown are quoted to the nearest whole number with decimal values of 5 and above being rounded up.

Figure 2.2 Trends in Annual Mean Nitrogen Dioxide Concentration Measured at Diffusion Tube Monitoring Sites.





**Table 2.3 Results of Nitrogen Dioxide Diffusion Tubes**

Site ID	Location	Within AQMA?	Data Capture for monitoring period <sup>a</sup> %	Data Capture for full calendar year 2009 <sup>b</sup> %	Annual mean concentrations (µg/m <sup>3</sup> ) Adjusted for bias 2007 Factor - 0.88 2008 Factors- 0.96 Jan/Mar 0.92 Apr/Dec 2009 Factor 0.95		
					2007 <sup>c, d</sup>	2008 <sup>c, d</sup>	2009 <sup>c</sup>
1	Council Chamber, Galashiels	No		100	23	23	18
2	Stanley / Meikle St., Galashiels	No		91.66	9	10	10
3	High St., Galashiels	No		100	34	37	35
4	Gladstone Pl., Peebles	No		100	8	9	9
5	High St., Peebles	No		100	20	23	21
6	Sandbed, Hawick	No		100	18	23	20
7	High St., Hawick	No		100	30	23	23
8	Renwick Terr., Hawick	No		100	7	7	7
9	Silverbuthall Rd., Hawick	No		91.66	8	8	9
10	Bourtree Pl., Hawick	No		100	29	25	22
11	Mart St., Hawick	No		100	19	20	20
12	Commercial Rd., Hawick	No		100	13	17	17
13	Bridge St., Kelso	No		100	16	16	17
14	Mercer's Ct., Kelso	No		100	6	6	6
15	St. Dunstan's Park, Melrose	No		83.3	7	7	10
16	Rogerson's High St Galashiels	No	100	33.3	31	No Data	33
17	Border Angling, High St, Galashiels	No		100	36	35	36
18	Edingtons, High St, Galashiels	No		91.66	28	29	28
19	Iceland, High St, Galashiels	No		100	33	35	33

<sup>a</sup> i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

<sup>b</sup> i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%).

<sup>c</sup> Means should be "annualised" as in Box 3.2 of TG(09), if monitoring was not carried out for the full year.

<sup>d</sup> Annual mean concentrations for previous years are optional.

The site in Table 2.3 above marked in red was reinstated during the year. This site had been out of use for over a year, following the removal of the lighting column on which the diffusion tube was mounted, following a road traffic accident.

Data collection from this site only recommenced in August 2009. The data gathered to date do not show any significant deviation from the last full year's dataset and is in keeping with data gathered from three similar sites along the same stretch of road. It was therefore not considered necessary to "annualise" this information.

A full set of data from this site will be available for the Council's next Report.

### **2.2.2 PM<sub>10</sub>**

Previous Review and Assessment work has indicated that there are no areas within the Borders that are at risk of exceeding the Air Quality Objective for PM<sub>10</sub>.

The estimated background maps for the Council's area, produced by the Review and Assessment Helpdesk indicate that PM<sub>10</sub> levels will not be exceeded at any location within the Council's area.

### **2.2.3 Sulphur Dioxide**

Previous Review and Assessment work has indicated that there are no areas within the Borders that are at risk of exceeding the Air Quality Objective for Sulphur Dioxide.

The assessment work undertaken for the production of this report has not revealed any new sources or increased emissions from existing sources.

### **2.2.4 Benzene**

Previous Review and Assessment work has indicated that there are no areas within the Borders that are at risk of exceeding the Air Quality Objective for Benzene.

The assessment work undertaken for the production of this report has not revealed any new sources or increased emissions from existing sources.

### **2.2.5 Other pollutants monitored**

Previous rounds of Review and Assessment have indicated that Scottish Borders Council does not need to monitor any other pollutants.

As mentioned above, the new AURN station at Peebles carries out monitoring for Ozone. This station has only been operating since November 2009 but results will be provided in future Air Quality reports.

The assessment work undertaken for the production of this report has not revealed any new sources or increased emissions from existing sources.

### **2.2.6 Summary of Compliance with AQS Objectives**

Scottish Borders Council has examined the results from monitoring in the Council's Area. Concentrations are all below the objectives, therefore there is no need to proceed to a Detailed Assessment.

Delete box if not applicable. Otherwise add local authority name, amend the text as appropriate and leave box in the report.

### **3 New Local Developments**

#### **3.1 Road Traffic Sources**

Scottish Borders Council confirms that there are no new or newly identified road traffic sources which may have an impact on air quality within the Local Authority area.

Delete box if not applicable. Otherwise add local authority name and leave in.

#### **3.2 Other Transport Sources**

Scottish Borders Council confirms that there are no new or newly identified other transport sources which may have an impact on air quality within the Local Authority area.

Delete box if not applicable. Otherwise add local authority name and leave in.

#### **3.3 Industrial Sources**

Information has been received from the Scottish Environmental Protection Agency to indicate that there have been no new industrial or commercial developments that might adversely affect local air quality within the Council's area. SEPA also confirmed that there were no sources within the area that they wished the Council to address in the current round of assessment.

A number of new industrial /commercial Planning Applications were lodged with the Local Authority in 2009 and were highlighted in the Council's Updating and Screening Assessment. So far as is known to date, none of these developments have proceeded.

Scottish Borders Council confirms that there are no new or newly identified industrial sources which may have an impact on air quality within the Local Authority area.

Delete box if not applicable. Otherwise add local authority name and leave in.

### 3.4 Commercial and Domestic Sources

The lists of applications made to the Council for Planning Consent and Building Warrant have been scrutinised throughout the year for any developments involving biomass combustion plant.

In 2009 the Council received 3370 applications for Planning and Building consent. Of this total only 64 applications involved installation of individual domestic biomass combustion apparatus. These small installations are situated throughout the Council's area and are judged to have no significance on local air quality

A further 6 applications have been received for housing developments involving either biomass district heating or zero carbon emission heating systems. Air Quality Impact Assessments have been requested for these six developments. If these Applications proceed, details of the results of the Impact Assessments will be included in future Reports.

Scottish Borders Council confirms that there are no new or newly identified Commercial and Domestic sources which may have an impact on air quality within the Local Authority area.

Delete box if not applicable. Otherwise add local authority name and leave in.

### 3.5 New Developments with Fugitive or Uncontrolled Sources

Scottish Borders Council confirms that there are no new or newly identified local developments with Fugitive or Uncontrolled sources which may have an impact on air quality within the Local Authority area.

Delete box if not applicable. Otherwise add local authority name and leave in.

## **4 Local / Regional Air Quality Strategy**

At the time of writing Scottish Borders Council has not identified any areas that are close to the Air Quality objectives.

The Council does not have a Local Air Quality Strategy but the need to produce a Strategy will be reviewed annually on the production of our Air Quality Reports.

## **5 Planning Applications**

Details of planning applications received are posted on the Council's web-based Public Access system.

The Planning Lists are reviewed weekly to identify applications which may impact on local air quality.

As mentioned in Section 3.4 above, any applications which may have an impact of local air quality are identified and if the impact is likely to be significant, the Applicants are required to produce an Air Quality Impact Assessment for their proposal.

Over the last year, Assessments have been requested for Quarry developments, small concrete batching plant, supermarket development and areas where new housing is proposed. The conclusions of these Assessments will be included in future Reports.

In the case of smaller or individual developments, advice letters detailing steps to be taken to avoid pollution problems are issued to all Planning Applicants.



## **6 Air Quality Planning Policies**

Scottish Borders Council has no specific Air Quality Planning Policy.

However a major restructuring review of the Council's Planning and Development and Technical Services Departments is currently underway, which will result in the Environmental Health and Planning functions being under one Environment and Infrastructure Directorate.

It is envisioned that formalising an Air Quality Planning Policy will be addressed once the new structure is in operation.

## **7 Local Transport Plans and Strategies**

Following publication of the Scottish Integrated White Paper (Travel Choices for Scotland) in 1998 Scottish Borders Council produced a Local Transport Policy in 2001. The most recent version was produced in 2007/2008 and is intended to be valid for a period of three years.

The Council has been progressing work to re-establish the Waverley Rail Line to the central Borders and has initiated more frequent bus services to and from Edinburgh. The Council has also introduced an element of demand responsive travel in some of our more rural areas.

Road transport continues to play an important role in the Council area. It is therefore vital that the Council continues to improve the road network and adequately maintain this asset so that locals and visitors can travel easily and more safely on their chosen routes.

There have been upgrades to certain sections of road to improve traffic flow and thus reduce vehicle emissions. In particular, the Galashiels A7 traffic relief scheme is expected to be completed in the autumn 2010. This will divert all through traffic on the A7 trunk road away from the street canyon on Galashiels High Street.

The Council is aware of the environmental issues associated with the promotion of the private car and is keen to introduce more sustainable means of transport where possible. It is noted that the introduction of more advanced technology such as faster broadband delivery and more flexible working could also significantly reduce the need to travel in the future.

Cycling and walking are also important elements within the Strategy and the Council will continue to promote off-road cycling routes and develop the Core Path Network throughout the area to encourage the people of the Scottish Borders to have a healthier and more environmentally conscious lifestyle.

Progress is also being made in promoting healthier travel options, through the Safer Routes to School Policy which tries to get more children to walk and cycle to school.

The strategy acknowledges that there is a great deal of work still to be done. The existence of the Strategy however, will help to identify where Council funding priorities should be in the future and highlight the schemes and proposals that will help to achieve these transport related goals.

## **8 Climate Change Strategies**

At the present time, Scottish Borders Council is in the course of preparing a Climate Change Strategy. Details of this Policy and its impact on Local Air Quality work will be made available in future reports.

## **9 Implementation of Action Plans**

At the time of writing, Scottish Borders Council has no Action Plans in place.

## **10 Conclusions and Proposed Actions**

### **10.1 Conclusions from New Monitoring Data**

The monitoring undertaken by Scottish Borders Council has not identified any potential or actual exceedences of the Air Quality Objectives at any relevant locations.

Accordingly a Detailed Assessment is not required for any pollutant.

### **10.2 Conclusions relating to New Local Developments**

Scottish Borders Council has not identified any new local developments that require more detailed consideration in the next Updating and Screening Assessment.

The Planning Applications mentioned in Section 3.3 above will be monitored and re-assessed during production of the Council's next Progress Report in 2011.

### **10.3 Other Conclusions**

None

### **10.4 Proposed Actions**

The new monitoring data collected by Scottish Borders Council during the year has not identified the need to proceed to a Detailed Assessment for any pollutant.

At the time of writing, the Council has not identified the need to undertake any additional monitoring. The traffic flow patterns on the new A7 Relief Road will be reviewed to establish whether or not any additional monitoring is required.

The Council has not identified the need to relocate any of the existing monitoring sites.

The Council's review and assessment work will continue and a further Progress Report will be submitted in 2011.

## 11 References

- 1). Local Air Quality Management  
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## **Appendices**

Appendix A: QA/QC Data

Appendix B: 2009 NO<sub>2</sub> Monthly Mean Dataset

Appendix C: Maps of Diffusion Tube Sites

Map of Scottish Borders Council

## **Appendix A: QA:QC Data**

### **Diffusion Tube Bias Adjustment Factors**

Bias and precision factors have been obtained from the spreadsheet tool on the Review and Assessment website.

Edinburgh Scientific Services was the laboratory used for the supply and analysis of the Councils diffusion tubes during the year. The tubes are prepared using 50% TEA in Acetone.

A bias adjustment figure of 0.95 has been used for the results from this laboratory.

### **QA/QC of automatic monitoring**

Routine calibrations are undertaken every four weeks by Council Staff as Local Site Operatives.

Data validation and ratification is undertaken by Bureau Veritas, Contractors appointed by DEFRA/Scottish Government.

Site audits are undertaken at regular intervals by AEA Technology.

### **QA/QC of diffusion tube monitoring**

Over the year Edinburgh Scientific Services participated in two co-location studies. Tube precision as given on the spreadsheet was rated as “Good” for both of these studies.



## Appendix B: NO<sub>2</sub> Monthly Mean Dataset 2009

Jan	30	16	49	13	24	33	32	10	14	29	30	24	22	14	12		42		42
Feb	25	11	38	9	24	23	28	7	11	26	22	18	22	7	8		39	29	42
Mar	13	9	17	4	9	21	23	4	5	13	10	26	13	3	4		29	30	33
Apr	25	7	37	7	23	14	21	6	7	19	18	15	17	5			32	31	38
May	24	6	29	5	21	19	23	4		21	19	14	16	4	4		30	24	34
Jun	7	6	34	5	25	19	20	5	5	21	16	17	13	3	5		37	37	30
Jul	10	6	26	4	18	19	22	4	3	21	18	14	15	4	1		34	7	13
Aug	9		31	5	<1.0	18	22.	5	6	20	18	10	16	5	5		33	20	32
Sept	10	7	34	5	19	22	23	5	5	19	18	14	16	5		25	35	26	34
Oct	32	13	46	23	30	28	27	10	13	27	26	23	22	10	12	38	46	39	38
Nov	20	15	40	18	29	27	22	13	16	29	26	20	14	10	34	37	37	39	47
Dec	21	19	55	23	20	14	29	11	16	31	30	22	23	12	17	39	55	38	37
Site	Galashiels Council Chamber	Galashiels Stanley Street	Galashiels High Street	Peebles Gladstone Place	Peebles High Street	Hawick Sandbed	Hawick High Street	Hawick Renwick Terrace	Hawick Silverbuthall Road	Hawick Bourtrees Place	Hawick Mart Street	Hawick Commercial Road	Kelso Bridge Street	Kelso Mercers Court	Melrose St Dunstan's Park	Galashiels High Street Rogersons	Galashiels High Street Borders Angling	Galashiels High street Edingtons	Galashiels High Street Iceland

The values in Appendix B are quoted to the nearest whole number, with decimal values of 5 or more being rounded up.

## Appendix C: Maps of Diffusion Tube Sites

