

Annual Progress Report (APR)



2025 Air Quality Annual Progress Report (APR) for Scottish Borders Council

In fulfilment of Part IV of the Environment Act 1995, as amended by the
Environment Act 2021

Local Air Quality Management

August 2025

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Executive Summary: Air Quality in Our Area

Air Quality in the Scottish Borders

Scottish Borders Council carries out a programme of air quality assessment in line with guidance issued by the UK Government and Devolved Administrations. The Scottish Borders region is situated in the south of Scotland, bordered by Dumfries and Galloway to the west; South Lanarkshire and West Lothian to the northwest; the City of Edinburgh, East Lothian, and Midlothian to the north; and the English counties of Northumberland and Cumbria to the south.

According to the 2022 Census, the population of the Scottish Borders was approximately 116,900, placing it among the medium-sized Scottish council areas in terms of population. However, it covers a relatively large geographical area, resulting in a lower population density compared to most other council areas in Scotland. The largest towns in the region are Galashiels and Hawick, each with a population of around 13,000.

The region is known for its mix of rural landscapes and small towns. Historically, parts of the area were heavily industrialised, though much of this activity has since declined. Today, the region is predominantly rural, with key transport routes including the A1, A68, and A7 trunk roads, the East Coast Mainline railway, and the Borders Railway, which links Tweedbank to Edinburgh.

This report presents the findings of air quality monitoring undertaken by Scottish Borders Council during 2024. It evaluates the potential impacts of various emission sources, including road traffic, industrial processes, commercial and domestic fuel use, and fugitive emissions.

No significant air quality issues have been identified within the region. Previous rounds of review and assessment have highlighted nitrogen dioxide (NO₂) from road traffic as the only pollutant requiring further consideration. However, current evidence indicates that annual mean concentrations of NO₂ remain well below the relevant Air Quality Objectives.

In the Scottish Borders, monitoring has shown concentrations of NO₂ to be relatively stable prior to 2020. A reduction in concentrations was seen in 2020, which was generally

maintained in subsequent years. In 2024, there was an average reduction in NO₂ concentrations of 2.2µg/m³.

A review of non-automatic monitoring sites saw changes implemented in 2023, including the re-introduction of monitoring in Hawick. These locations continue to be maintained.

Scottish Borders Council has found no evidence that the levels of any other relevant pollutants may exceed the specific Air Quality Objectives and therefore has not identified the need to designate any Air Quality Management Areas.

Actions to Improve Air Quality

Scottish Borders Council is not currently engaged in any active air quality specific initiatives other than ongoing monitoring.

We have not adopted a local air quality strategy at this time, however we are committed to maintaining good air quality and we will keep this under review.

Across the Council there are a range of policies and strategies that are not specifically directed at improving air quality, however they are expected to have a positive impact. These include the Council's first Active Travel Strategy, a review of the Local Access and Transport Strategy, bus network review and decarbonisation of the Council's fleet.

We recognise the importance of setting an example, encouraging others to take action. The Council has been moving towards a cleaner fleet of vehicles. Staff members now have access to electric cars to use on local business trips. This fleet has recently been increased to ensure improved capacity in locations where there is demand.

Local Priorities and Challenges

Scottish Borders Council has no specific priorities or challenges for the coming year beyond the statutory monitoring and reporting requirements.

How to Get Involved

Members of the public can get involved in improving local air quality by taking alternative modes of transport where possible. This could include joining a cycle to work scheme, walking short distances instead of driving and when driving is unavoidable, taking part in car

sharing schemes. Information on local transport can be obtained from the [Scottish Borders Council](#) website.

The Local Access and Transport Strategy promotes the use of electric vehicles. In the Scottish Borders we have a network of charging points for electric vehicles located throughout the area. Further information on the location of charging points is available on the [Scottish Borders Council](#) website.

Clean Air Day took place in June 2025. It is a chance to find out more about air pollution, share information with others and help make the environment and air quality cleaner for everyone. Further details can be found on the [Clean Air Day](#) campaign website.

Further information can also be obtained by contacting Environmental Health at: PLACEhealth@scotborders.gov.uk.

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1 Local Air Quality Management

This report provides an overview of air quality in the Scottish Borders Council area during 2024. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act 1995, as amended by the Environment Act 2021, and the relevant Policy and Technical Guidance documents.

The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where an exceedance is considered likely, the local authority must declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives. This Annual Progress Report (APR) summarises the work being undertaken by Scottish Borders Council to improve air quality and any progress that has been made. A summary of the Air Quality Objectives is provided in Table 1.1.

Table 1.1 – Summary of Air Quality Objectives in Scotland

Pollutant	Air Quality Objective Concentration	Air Quality Objective Measured as	Date to be Achieved by
Nitrogen dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
Nitrogen dioxide (NO ₂)	40 µg/m ³	Annual mean	31.12.2005
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 7 times a year	24-hour mean	31.12.2010
Particulate Matter (PM ₁₀)	18 µg/m ³	Annual mean	31.12.2010
Particulate Matter (PM _{2.5})	10 µg/m ³	Annual mean	31.12.2021
Sulphur dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
Sulphur dioxide (SO ₂)	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
Sulphur dioxide (SO ₂)	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005
Benzene	3.25 µg/m ³	Running annual mean	31.12.2010
1,3 Butadiene	2.25 µg/m ³	Running annual mean	31.12.2003
Carbon Monoxide	10.0 mg/m ³	Running 8-Hour mean	31.12.2003

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

Air Quality Management Areas (AQMAs) are declared when there is an exceedance or likely exceedance of an air quality objective. After declaration, the authority must prepare, publish and implement an Air Quality Action Plan (AQAP) within the shortest possible time and no later than 12 months of the date of AQMA Designation Order. The AQAP must set out measures the local authority intends to put in place in pursuit of the objectives within the shortest possible time. Measures should be provided with milestones and a final date for completion. The action plan itself should have a timescale for completion and for revocation of the AQMA. Where measures to reduce air pollution may require a longer timescale, an action plan shall be reviewed and republished within five years of initial publication and then five-yearly thereafter.

Scottish Borders Council currently does not have any AQMAs.

2.2 Implementation of Air Quality Action Plan(s) and/or measures to address air quality

2.2.1 Air Quality Strategy

Local authorities do not currently have a statutory obligation to prepare or adopt a local air quality strategy, however we acknowledge that the Scottish Government recommends all authorities, particularly those that have previously designated (now-revoked) AQMAs or who have not had to designate AQMAs but have areas close to the exceedance levels, or recognised air quality issues, should consider developing such a strategy.

As no areas within the Scottish Borders are close to the exceedance levels and there are no recognised air quality issues, Scottish Borders Council has not adopted a local air quality strategy at this time, however we are committed to maintaining good air quality and we will keep this under review. We recognise there are benefits of developing an air quality strategy, including emphasising the local authority's role in delivering cleaner air and, by setting an example, encouraging others to take action.

Across the Council there are a range of policies and strategies that are not specifically directed at improving air quality, however they are expected to have a positive impact. A number of these are included in Table 2.2 and also explained further in this section.

2.2.2 Active Travel Strategy

Scottish Borders Council is currently consulting on its first Active Travel Strategy. The Active Travel Strategy sets out the vision to make active travel the natural first choice for everyday journeys across the Scottish Borders, wherever possible.

The strategy defines how active travel contributes to the transport needs of the Scottish Borders whilst incorporating the priorities of the region, in light of the climate emergency and Scotland's commitment to achieving net zero by 2045. It recognises the importance of active travel in supporting economic development, creating stronger local businesses, enhancing community cohesion, improving mental and physical health, reducing car use (wherever possible) and improving air quality.

To complement delivery of the Active Travel Strategy an accompanying Delivery Plan has been prepared. The Delivery Plan is a live document, so stakeholders will continue to inform, question, validate and propose further action during reviews. The actions proposed are categorised into themes that have been created to best reflect our priorities as a region as we take forward the strategy. The four key themes are:

- Connecting people and places – rebalancing our streets and spaces, and connecting our communities
- Behaviour change – unlocking change and enabling everyone to move more actively
- Encouraging, motivating and creating sustained change – altering the approach
- Research and monitoring – compiling information to monitor the progress

This Delivery Plan will serve as a bank of proposed projects and measures that have been informed by desktop reviews, site audits, engagement, data collection and consultation. There is no set timeline and/or process by when each of these projects will be delivered as the majority will depend on external funding. However, it does provide a guide to help promote and drive change to make essential daily destinations accessible by active and sustainable modes including walking, wheeling, cycling and horse-riding.

2.2.3 Climate Change Route Map (CCRM)

The benefits of a joined-up approach to air quality and climate change policy areas are recognised. Air quality and climate change are inextricably linked, with air pollution often originating from the same activities that contribute to climate change.

In September 2020, Scottish Borders Council agreed a series of recommendations contained within the report 'Responding to the Climate Emergency'. This led to the Climate Change Route Map (CCRM) for the Scottish Borders being agreed by the Council in June 2021. This is available to view on the [Scottish Borders Council](#) website. The CCRM sets a strategic direction for the Council and its partners and communities to move to a net zero economy by 2045, in line with the national target set by the Scottish Government. Scottish Borders Council intends to lead by example by controlling its own estate in line with the aims and objectives of the CCRM. It is hoped that this will motivate other individuals and organisations to do likewise. The CCRM is based around 5 themes; Resilience, Transport Use, Nature Based Solutions, Energy and Waste Management.

The CCRM will evolve and be populated with development work streams and action as progress is made. In March 2022 full Council approved the 'Climate Change Route Map – Priority Action Plan 2022/24'. The priority actions respond to the Milestones identified within the themes of CCRM. The Plan recognises that it would not be possible to deliver everything at the same pace or time, so an assessment was undertaken to determine which actions should be prioritised. Additional and subsequent actions will continue to be developed to add to and support the activity reflected in the Plan of Priority Actions, as this is a continually evolving and changing programme of action. Key developments include the roll out of the Council's Place Making Programme.

The CCRM is currently being reviewed in line with Scottish Government updated guidance for public bodies. Priorities around emissions reductions for buildings and transport remain and climate resilience priorities are being formulated.

The Council's commitment to net zero was further underlined in the [Council Plan](#) for 2024/25.

2.2.4 Local Development Plan

The Scottish Government reviewed its national planning policies, National Planning Framework 3 (NPF3) and Scottish Planning Policy (SPP), bringing them together into the

single policy document National Planning Framework 4 (NPF4). The Planning (Scotland) Act 2019 required that the revised National Planning Framework has regard to any national strategy in respect of the improvement of air quality prepared by Scottish ministers.

Scottish Borders Council adopted the updated Local Development Plan on 22nd August 2024, which takes into account the principles of NPF4. The Local Development Plan recognises the area's good air quality and our aim to maintain this standard. Policy EP16 references the Scottish Government's national strategy 'Cleaner Air for Scotland', and aims specifically to protect air quality, which in turn will also help to fulfil the Council's environmental commitments and its contribution to addressing climate change.

The policy applies to business and industrial development that may involve emissions but also to other land uses that, through the generation of traffic, for example, could result in deterioration of local air quality. It refers to a requirement for future communities, workplaces, recreation and retail facilities throughout the Scottish Borders to have access to sustainable transport options and provision for electric vehicle charging. It recognises the importance for any new development and associated road traffic not to have a significant adverse impact on air quality through the introduction of new sources of pollution where they would impact on sensitive receptors. Where possible, the Council has sought to minimise any potential impacts by allocating sites near to local services, although due to the geographic nature of the Scottish Borders, it is acknowledged there will always be reliance on car usage. Transport policies seek to promote the most sustainable means of travel, giving priority to walking and cycling for local journeys, and to public transport in preference to travel by car. New development will also support the change to a low carbon economy by ensuring it does not have a detrimental effect on air quality by encouraging renewable energy options and low emission technologies within the design.

In determining planning applications and preparing document briefs, the Council has regard to sustainability principles, including the preservation of air quality, which underpin all the plan's policies and which developers will be expected to incorporate into their developments. Development proposals that, individually or cumulatively, could adversely affect the quality of air in a locality to a level that could potentially harm human health and wellbeing or the integrity of the natural environment, must be accompanied by provisions that the Council is satisfied will minimise such impacts to an acceptable degree. Where it is considered appropriate the Council may request that an Air Quality Assessment is undertaken to assist determination of an application.

The [Scottish Borders Local Development Plan \(LDP2\)](#) is available on the Scottish Borders Council website.

2.2.5 Regional Transport Strategy

The Regional Transport Strategy (RTS) for the South-East of Scotland has been prepared by the South-East of Scotland Regional Transport Partnership (SEStran) which was set up under the Transport (Scotland) Act 2005. Scottish Borders Council is one of eight constituent local authorities. It is supported by a suite of evidence drawn from published policy documents and data analysis, as well as stakeholder and public consultation.

The strategy's vision is - *A South-East of Scotland, fully integrated transport system that will be efficient, connected and safe; create inclusive, prosperous and sustainable places to live, work and visit; be affordable and accessible to all, enabling people to be healthier; and delivering the region's contribution to net zero emissions targets.*

Four strategy objectives have been identified, including 'Transitioning to a sustainable, post-carbon transport system'. Outcomes include, Climate Change and Net Zero, Air Quality Transformed, and Equitable Access to Transport

The [SEStran 2035 Regional Transport Strategy](#) can be accessed on the SEStran website.

Table 2.1 – Progress on Measures to Improve Air Quality

Measure No.	Measure	Category	Expected/Actual Completion year	Organisations Involved	Measure Status	Funding Status	Key Milestones	Progress	Barriers to implementation
1	South of Scotland Public EV Charging Programme	Promoting low emission transport	Ongoing	Scottish Borders Council, City of Edinburgh Council, Dumfries & Galloway, Midlothian Council, West Lothian Council, Fife Council, Falkirk Council, Clackmannanshire Council	In progress	Partially Funded by Transport Scotland, with the majority of the investment anticipated by the private sector	Procurement of up to 2,000 new chargers across the region by 2030 will commence in August 2025. Contract award by July 2026	12 months of partners developing a regional procurement for a concession contract for a Charge Place Operator to invest, maintain and run a comprehensive EV charging network in the region	
2	Implement Active Travel Strategy	Transport planning and infrastructure	2025	Scottish Borders Council	Consultation taking place on draft strategy			Consultation on draft strategy ends on 31 August 2025	
3	Scottish Borders Bus Network Review & Implementation – using actual travel demand data from the Workforce Mobility Project to redesign a bus network based on demand rather than servicing key corridors	Transport planning and infrastructure/ Promoting travel alternatives	Ongoing	Scottish Borders Council & local bus companies	In progress	Partially funded by SBC Revenue budget and Levelling Up, but annual reductions expected to continue	Full Bus Network Review approved by Council Jan 2024. Bus Services changes commenced 2024	Route optimisations have and will continue to take place. Some routes increased in frequency have shown up to a 20% increase in passengers. Some new town and rural services delivered by	Annual reduction in service budgets. Lack of marketing of service. Unintended consequences of Government funding models direct to Bus Operators

								the Council who are now operating significantly more services "in house"	
4	Improved public information on Smoke Control Areas	Public information	2025	Scottish Borders Council	In progress	N/A		Content drafted for SBC website	
5	Improved public information on burning solid fuel and garden bonfires	Public information/Do mestic solid fuel burning	2025	Scottish Borders Council	In progress	N/A		Content drafted for SBC website	
6	Climate Change Route Map	Promoting low emission transport/Transport planning and infrastructure	Ongoing	Scottish Borders Council	Currently being reviewed in line with Scottish Government updated guidance for public bodies			Priorities around emissions reductions for buildings and transport remain, and climate resilience priorities are being formulated.	
7	Review of Local Access and Transport Strategy	Transport planning and infrastructure	2026	Scottish Borders Council					
8	Decarbonisation of council fleet	Vehicle fleet efficiency	Ongoing	Scottish Borders Council	In progress		July 2025 - 10 new pool cars added to the fleet (5 fully electric and 5 hybrid). This expansion brings our total fleet to 44 vehicles.		

9	Active travel behaviour change campaign	Public information	August 2025	Scottish Borders Council	In progress	SEStran People and Place programme funding			
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3 Air Quality Monitoring Data and Comparison with Air Quality Objectives

3.1 Summary of Monitoring Undertaken

This section sets out what monitoring has taken place and how local concentrations of the main air pollutants compare with the objectives.

During 2023 changes were made to the non-automatic air quality monitoring carried out by Scottish Borders Council, including the removal of two NO₂ monitoring locations on *High Street, Galashiels* and the reintroduction of NO₂ monitoring in Hawick on High Street and Bourtree Place. No changes took place during 2024.

3.1.1 Automatic Monitoring Sites

In the Scottish Borders, automatic (continuous) monitoring for NO₂ and O₃ was undertaken at one site in Peebles (CM1) during 2024. This was part of the Automatic Urban and Rural Network (AURN). Table A.1 in Appendix A shows the details of the site. National monitoring results are available at <https://www.scottishairquality.scot/latest>.

Further details on how the monitors are calibrated and how the data has been adjusted are included in Appendix C.

A map showing the location of the monitoring site is provided in Appendix D.

3.1.2 Non-Automatic Monitoring Sites

Scottish Borders Council undertook non-automatic (passive) monitoring of NO₂ at four sites during 2024, including two sites on *High Street, Galashiels* (DT12 & DT14), one site on *Bourtree Place, Hawick* (DT20) and one site on *High Street, Hawick* (DT21). Table A.2 in Appendix A shows the details of the sites.

Further details on Quality Assurance/Quality Control (QA/QC) and bias adjustment for the diffusion tubes are included in Appendix C.

Maps showing the location of the monitoring sites are provided in Appendix D.

During 2020 and 2021 monitoring was not carried out at location DT12 due to building renovation work, however monitoring resumed in January 2022.

The 2023 Air Quality Annual Progress Report provided details of the changes to NO₂ non-automatic monitoring carried out by Scottish Borders Council. As a result of the review, the Council 1) reduced the number of monitoring locations on High Street, Galashiels by two (removing locations DT11 and DT13) and 2) introduced two monitoring locations in Hawick town centre on Bourtree Place (DT20) and High Street (DT21). These changes were implemented in January 2023 after consultation was carried out with the Scottish Government and SEPA. Further detail on the reasoning behind these changes can be found in the 2023 Air Quality Annual Progress Report.

3.1.3 Other Monitoring Activities

No further monitoring activities were undertaken during 2024.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for annualisation and bias. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO₂)

The annual mean concentration of NO₂ at the automatic monitoring site (CM1) has been very stable over the past five years, ranging from 4-5µg/m³ between 2020 and 2024, as illustrated in Figure A.1. In 2024, the annual mean concentration was 4µg/m³; the same as the previous year. Additionally, no exceedances of the NO₂ hourly mean objective were identified in 2024, or indeed within the past five years.

Table A.3 in Appendix A compares the ratified monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40µg/m³ at automatic monitoring sites. Also, Table A.5 in Appendix A compares the ratified continuous monitored NO₂ hourly mean concentrations for the past five years with the air quality objective of 200µg/m³, not to be exceeded more than 18 times per year.

The 2024 annual mean concentrations of NO₂ at all non-automatic monitoring locations are shown to be well within the air quality objective, including the two monitoring locations on *Bourtree Place, Hawick* (DT20) and *High Street, Hawick* (DT21), first introduced in 2023. All

diffusion tube monitoring sites saw a reduction in concentrations when compared to 2023. Across the four locations, there was an average reduction of $2.2\mu\text{g}/\text{m}^3$.

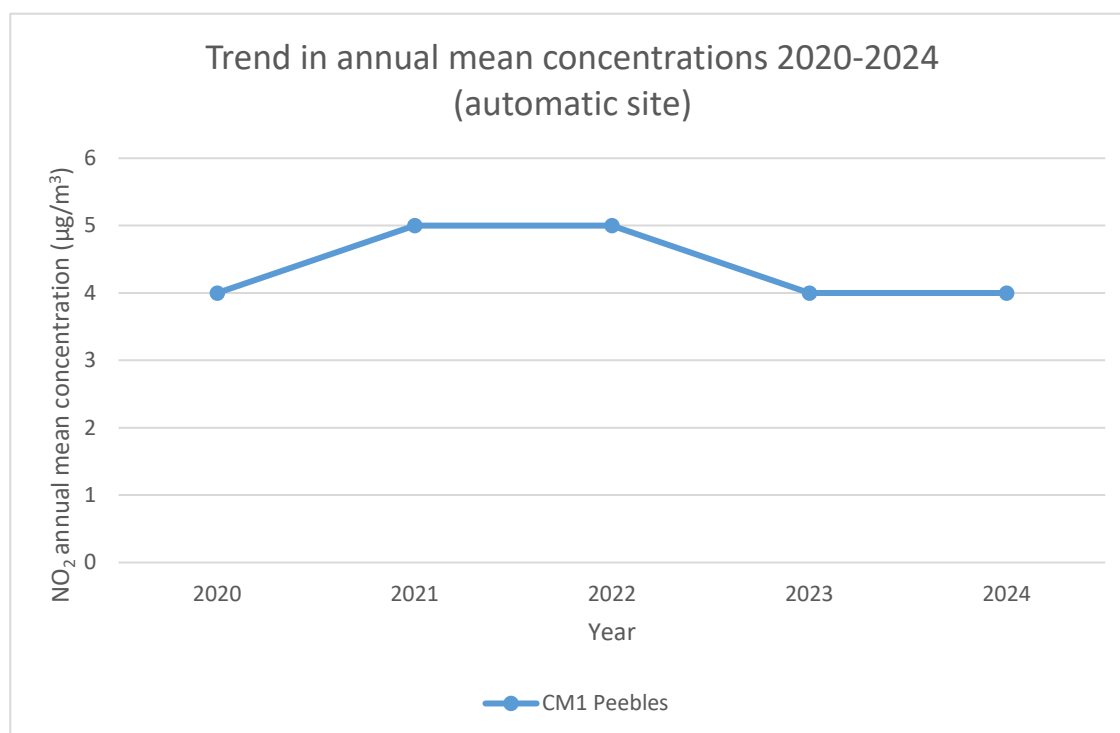


Figure A.1 - Trend in measured annual mean 2020-2024 (automatic site)

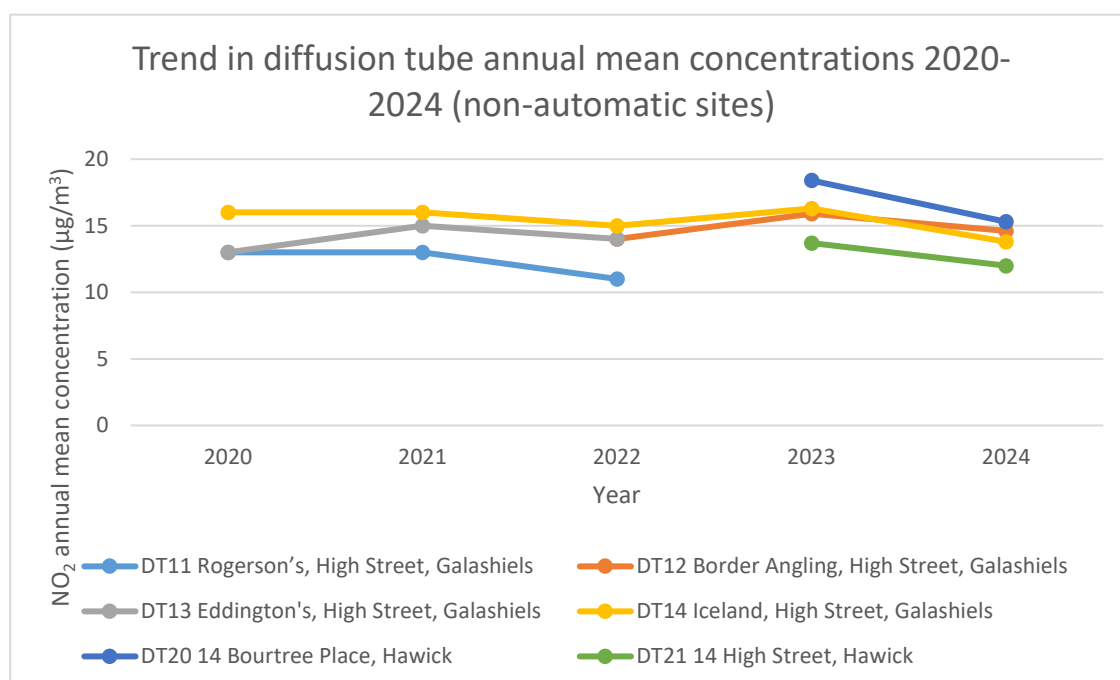


Figure A.2 - Trend in diffusion tube measured annual mean 2020-2024 (non-automatic sites)

Diffusion tube monitoring results over the past 5 years are illustrated in Figure A.2.

Non-automatic monitoring results from *High Street, Galashiels* over the past five years have consistently shown no exceedances of the nitrogen dioxide (NO₂) annual mean objective. Prior to 2020, concentrations remained relatively stable across all monitoring locations. In 2020, a notable average reduction of 5µg/m³ was observed compared to 2019 levels. This reduction was maintained in 2021, with the exception of location DT13, which recorded an increase of 2µg/m³ compared to 2020. The monitoring locations are situated in a kerbside town centre environment, and the observed reduction in NO₂ concentrations was likely attributable to decreased vehicle movements resulting from COVID-19 restrictions in place between March 2020 and April 2021.

In 2022, locations DT11, DT13, and DT14 recorded decreases of 1–2µg/m³ compared to 2021. In 2023, the two remaining *High Street, Galashiels* monitoring locations showed a slight increase of 1–2µg/m³, bringing concentrations closer to levels seen in 2020 and 2021. However, monitoring in 2024 showed reductions of 1.3µg/m³ and 2.5µg/m³ at these sites.

Results of non-automatic monitoring on *Bourtree Place, Hawick* and *High Street, Hawick* saw a reduction of 1.7µg/m³ and 3.1µg/m³ respectively when compared to 2023.

Table A.4 in Appendix A compares the adjusted monitored NO₂ annual mean concentrations for the past five years with the air quality objective of 40µg/m³ at non- automatic monitoring sites. The full 2024 diffusion tube dataset of monthly mean values is provided in Appendix B.

3.2.2 Particulate Matter (PM₁₀)

Scottish Borders Council currently does not monitor PM₁₀ and has no plans to do so in the future.

3.2.3 Particulate Matter (PM_{2.5})

Scottish Borders Council currently does not monitor PM_{2.5} and has no plans to do so in the future.

3.2.4 Sulphur Dioxide (SO₂)

Scottish Borders Council currently does not monitor SO₂ and has no plans to do so in the future.

3.2.5 Carbon Monoxide, Lead and 1,3-Butadiene

Scottish Borders Council currently does not monitor Carbon Monoxide, Lead or 1,3-Butadiene and has no plans to do so in the future.

3.2.6 Ozone (O₃)

Automatic (continuous) monitoring for O₃ was undertaken at one site in Peebles during 2024 as part of the Automatic Urban and Rural Network (AURN). The results have been compared with the Air Quality Strategy Objective which states the running 8-hour mean should not exceed 100µg/m³ on more than 10 days per year. No exceedances were identified in 2024, or indeed within the last five years.

Table A.6 in Appendix A compares the ratified monitored O₃ 8-hour mean concentrations for the past five years with the air quality objective.

4 New Local Developments

This section considers new developments in the Scottish Borders that may affect air quality.

4.1 Road Traffic Sources

No new road traffic sources have been identified.

4.2 Other Transport Sources

No new transport sources have been identified.

4.3 Industrial Sources

Scottish Borders Council has considered data provided by SEPA in order to identify any new industrial installations, or any existing installations which have increased substantially. No new, or substantially changed, industrial sources which might impact on local air quality have been identified.

4.4 Commercial and Domestic Sources

Any planning applications in respect of new biomass boilers and stoves are routinely screened using the approved Screening Tool and no installations have been identified as impacting adversely on local air quality.

4.5 New Developments with Fugitive or Uncontrolled Sources

No new potential sources of fugitive or uncontrolled particulate matter have been identified.

5 Planning Applications

The Council continues to routinely assess the impact of proposed developments.

In July 2025, a planning application was submitted by Center Parcs Scotland Limited for: *The development and use of land as a holiday village including lodges, apartment building, central buildings incorporating swimming pool, indoor leisure facilities, spa facility, retail shops, bars, coffee shops and restaurant facilities, outdoor leisure facilities, staff welfare facilities, ancillary buildings, car park, main access from and onto the A7, engineering operations, creation of lochs, energy centre, hard and soft landscaping, woodland planting and forest management works, demolition of Huntlaw Farm Buildings along with all other associated infrastructure works and activities.*

The development site lies approximately 4km to the north of the principal town of Hawick, and to the east of the A7 which links the town with Selkirk.

An Environmental Impact Assessment accompanies the application and is currently being appraised by officers.

6 Conclusions and Proposed Actions

6.1 Conclusions from New Monitoring Data

The monitoring undertaken by Scottish Borders Council has not identified any potential or actual exceedances of the Air Quality Objectives at any relevant locations, including at the reintroduced NO₂ monitoring locations in Hawick. NO₂ concentrations in 2024 were found to be lower at all locations when compared to the previous year.

6.2 Conclusions relating to New Local Developments

A review has identified no new developments which might impact on local air quality.

A current planning application for a new holiday village in the area is being considered by the Council and the Environmental Impact Assessment is currently being appraised by officers.

6.3 Proposed Actions

Scottish Borders Council will continue to carefully consider future planning applications which may have the potential to impact on air quality.

The 2024 Annual Progress Report recognised there has been an increase in the use of solid fuel appliances, such as wood burning stoves, in domestic and commercial premises in recent years and the impact this can have on local air pollution. We identified an action to increase the awareness of this by improving the information the Council provides to those considering installing a solid fuel appliance. This was to include providing information on the Council's website on factors that should be considered before an appliance is installed to ensure is right for their property or business, and on Smoke Control Areas. This was due to be completed by December 2024, however it is still in progress and will be completed during the current calendar year.

The Council will continue to advance a range of policies and strategies which, although not specifically aimed at improving air quality, are expected to have a positive impact.

The results of air quality monitoring and other air quality work will be included in the 2026 Annual Progress Report.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Which AQMA?	Monitoring Technique	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m)	Inlet Height (m)
CM1	Peebles	Urban background	324812	641083	O ₃ ; NO ₂	NO	N/A	UV Absorption; Chemiluminescent	5	N/A	2.8

Table A.2 – Details of Non-Automatic Monitoring Sites

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m)	Distance to kerb of nearest road (m)	Tube co-located with a Continuous Analyser?	Tube Height (m)
*DT11	38-40 High Street, Galashiels (formerly Rogerson's, High Street, Galashiels)	Kerbside	349063	636287	NO ₂	NO	1	1.5	NO	2.4
DT12	97 High Street, Galashiels (formerly Border Angling, High Street, Galashiels)	Kerbside	348976	636371	NO ₂	NO	0	1.5	NO	2.4
*DT13	26 High Street, Galashiels (formerly Edingtons, High Street, Galashiels)	Kerbside	348982	636384	NO ₂	NO	1	1.5	NO	2.4
DT14	29-31 High Street, Galashiels (formerly Iceland, High Street, Galashiels)	Kerbside	349063	636272	NO ₂	NO	1	1.5	NO	2.4
^DT20	14 Bourtree Place, Hawick	Kerbside	350473	614835	NO ₂	NO	0	1.5	NO	2.4
^DT21	14 High Street, Hawick	Kerbside	350249	614507	NO ₂	NO	0	1.5	NO	2.4

Notes:

- The Site Names for DT11-DT14 have been altered to include only the street name and number, and town.
- * Indicates sites which were discontinued in December 2022, however they continue to be included as reference is made to them within the report.
- ^ Indicates sites introduced in January 2023.

Table A.3 – Annual Mean NO₂ Monitoring Results: Automatic Monitoring (µg/m³)

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%)	Valid Data Capture 2024 (%)	2020	2021	2022	2023	2024
CM1	Urban background	Automatic	99	99	4	5	5	4	4

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in bold.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG22 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Table A.4 – Annual Mean NO₂ Monitoring Results: Non-Automatic Monitoring (µg/m³)

Diffusion Tube ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)	Valid Data Capture 2024 (%)	2020	2021	2022	2023	2024
DT11	349063	636287	Kerbside	N/A	N/A	13	13	11		
DT12	348976	636371	Kerbside	100	100	-	-	14	15.9	14.6
DT13	348982	636384	Kerbside	N/A	N/A	13	15	14		
DT14	349063	636272	Kerbside	91.7	91.7	16	16	15	16.3	13.8
DT20	350473	614835	Kerbside	91.7	91.7				18.4	15.3
DT21	350249	614507	Kerbside	100	100				13.7	12.0

☒ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.

☒ Diffusion tube data has been bias adjusted.

☒ Reported concentrations are those at the location of the monitoring site (bias adjusted and annualised, as required), i.e. prior to any fall-off with distance correction.

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in bold.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per LAQM.TG(22) if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Shaded cells show the years when no monitoring was carried out at these sites. Monitoring ceased at DT11 and DT13 in 2023.

Monitoring commenced at DT20 and DT21 in 2023.

From 2023, concentrations will be reported in one decimal point to improve consistency.

(-) indicates no data being available due to the removal of erroneous data or problems experienced during the monitoring period.

Table A.5 – 1-Hour Mean NO₂ Monitoring Results, Number of 1-Hour Means > 200µg/m³

Site ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%)	Valid Data Capture 2024 (%)	2020	2021	2022	2023	2024
CM1	324812	641083	Urban Background	94	94	0	0	0	0	0

Notes:

Exceedances of the NO₂ 1-hour mean objective (200µg/m³ not to be exceeded more than 18 times/year) are shown in bold.

If the period of valid data is less than 85%, the 99.8th percentile of 1-hour means is provided in brackets.

Table A.6 – 8-Hour Mean O₃ Monitoring Results, Number of 8-Hour Means > 100µg/m³

Site ID	Site Name	Site Type	Valid Data Capture 2024 (%)	Number of 8-hour Means > 100 µg/m ³				
				2020	2021	2022	2023	2024
CM1	Peebles	Urban Background	99	0	0	0	0	0

Notes:

- Exceedances of the O₃ objective are shown in red and bold.

Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B.1 – NO₂ 2024 Monthly Diffusion Tube Results (µg/m³)

DT ID	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean: Raw Data	Annual Mean: Annualised and Bias Adjusted (0.86)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
DT12	348976	636371	24.7	22.1	18.3	12.6	15.5	18.2	11.7	9.3	13.9	16.7	23.5	18.0	17.0	14.6	N/A	
DT14	349063	636272	14.7	18.7	16.1	-	15.9	10.8	12.9	11.2	13.0	18.3	23.6	20.4	16.0	13.8	N/A	Erroneous data removed.
DT20	350473	614835	17.3	19.7	21.6	-	21.5	13.8	13.5	13.1	14.1	17.6	22.8	20.9	17.8	15.3	N/A	Erroneous data removed.
DT21	350249	614507	19.4	17.0	13.6	13.3	15.6	10.2	10.2	8.0	13.5	12.9	20.5	13.9	14.0	12.0	N/A	

- ☒ All erroneous data has been removed from the NO₂ diffusion tube dataset presented in Table B.1
- ☒ Annualisation has been conducted where data capture is <75% and >25% in line with LAQM.TG22.
- ☒ Local bias adjustment factor used.
- ☒ National bias adjustment factor used.
- ☒ Where applicable, data has been distance corrected for relevant exposure in the final column.
- ☒ Scottish Borders Council confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.

Notes:

Exceedances of the NO₂ annual mean objective of 40µg/m³ are shown in **bold**.

NO₂ annual means exceeding 60µg/m³, indicating a potential exceedance of the NO₂ 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC

New or Changed Sources Identified Within Scottish Borders Council During 2024

Scottish Borders Council has not identified any new sources relating to air quality within the reporting year of 2024.

Additional Air Quality Works Undertaken by Scottish Borders Council During 2024

Scottish Borders Council has not completed any additional works within the reporting year of 2024.

QA/QC of Diffusion Tube Monitoring

All diffusion tubes used by the Council are mounted and handled in accordance with the guidance contained in LAQM Technical Guidance (TG22). Sites have been selected in consultation with the Scottish Government and SEPA to be representative of human exposure.

The laboratory used for the analysis of the Council's diffusion tubes was Edinburgh Scientific Services. The laboratory is United Kingdom Accreditation Service (UKAS) accredited and is listed as 'satisfactory' in the AIR NO₂ Proficiency Testing Scheme. The analytical method of 50% TEA in Acetone is used.

Monitoring has been completed in adherence with the 2024 Diffusion Tube Monitoring Calendar. In accordance with Chapter 7 of the LAQM Technical Guidance (TG22) the results have been reviewed for erroneous data.

Diffusion Tube Annualisation

All diffusion tube monitoring locations within the Scottish Borders Council area recorded data capture of 75% therefore it was not required to annualise any monitoring data.

Diffusion Tube Bias Adjustment Factors

Scottish Borders Council has applied a national bias adjustment factor of 0.86 to the 2024 monitoring data. Seven studies are applicable to this factor. Supporting evidence is provided in Figure C.1 in the form of a screen capture from the National Diffusion Tube Bias Adjustment Spreadsheet (Version 6/25). A summary of bias adjustment factors used by Scottish Borders Council over the past five years is presented in Table C.1.

National Diffusion Tube Bias Adjustment Factor Spreadsheet							Spreadsheet Version Number: 06/25				
Follow the steps below in the correct order to show the results of relevant co-location studies							This spreadsheet will be updated at the end of September 2025				
Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods							LAQM Helpdesk Website				
Whenever presenting adjusted data, you should state the adjustment factor used and the version of the spreadsheet											
This spreadsheet will be updated every few months; the factors may therefore be subject to change. This should not discourage their immediate use.											
The LAQM Helpdesk is operated on behalf of Defra and the Devolved Administrations by Bureau Veritas, in conjunction with contract partners AECOM and the National Physical Laboratory.							Spreadsheet maintained by the National Physical Laboratory. Original compiled by Air Quality Consultants Ltd.				
Step 1:		Step 2:		Step 3:		Step 4:					
Select the Laboratory that Analyses Your Tubes from the Drop-Down List		Select a Preparation Method from the Drop-Down List		Select a Year from the Drop-Down List		Where there is only one study for a chosen combination, you should use the adjustment factor shown with caution. Where there is more than one study, use the overall factor ¹ shown in blue at the foot of the final column.					
If a laboratory is not chosen, we have no data for this laboratory.		If a preparation method is not chosen, we have no data for this method at this laboratory.		If a year is not chosen, we have no data.		If you have your own co-location study then see footnote ¹ . If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQM-Helpdesk@bureauveritas.com or 0800 0327953					
Analysed By ¹		Method <small>70% TEA in scotones, please select from the pop-up list</small>	Year ² <small>To make your selection, please select</small>	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m ³)	Automatic Monitor Mean Conc. (Cm) (µg/m ³)	Bias (B)	Tube Precision ³	Bias Adjustment Factor (A) ((Cm/Dm))
Edinburgh Scientific Services		50% TEA in scotones	2024	KS	Murraybone Road Intercomparison	11	41	36	16.8%	P	0.86
Edinburgh Scientific Services		50% TEA in scotones	2024	RI	Sirling Council	12	17	14	23.5%	G	0.81
Edinburgh Scientific Services		50% TEA in scotones	2024	RI	City Of Edinburgh	11	15	15	11.5%	G	0.83
Edinburgh Scientific Services		50% TEA in scotones	2024	RI	City Of Edinburgh	12	26	22	17.1%	G	0.85
Edinburgh Scientific Services		50% TEA in scotones	2024	RI	City Of Edinburgh	12	28	24	19.0%	G	0.84
Edinburgh Scientific Services		50% TEA in scotones	2024	RI	City Of Edinburgh	11	18	16	12.2%	P	0.83
Edinburgh Scientific Services		50% TEA in scotones	2024	KS	City Of Edinburgh	10	33	28	16.7%	G	0.86
Edinburgh Scientific Services		50% TEA in scotones	2024	Overall Factor ¹ (7 studies)						Use	0.86

Figure C.1 - Screen capture of National Diffusion Tube Bias Adjustment Spreadsheet

Table C.1 – Bias Adjustment Factor

Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	06/25	0.86
2023	National	06/24	0.87
2022	National	03/23	0.81
2021	National	03/22	0.87
2020	National	03/21	0.88

NO₂ Fall-off with Distance from the Road

No diffusion tube NO₂ monitoring locations within the Scottish Borders required distance correction during 2024.

QA/QC of Automatic Monitoring

The QA/QC work on the Peebles site is carried out under the auspices of the Automatic Urban and Rural Network (AURN) system. 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 and no significant issues were identified in 2024.

Live and historic monitoring data is available on the Air Quality in Scotland website (<http://www.scottishairquality.scot/>).

Automatic Monitoring Annualisation

All automatic monitoring locations within Scottish Borders Council recorded data capture of greater than 75% therefore it was not required to annualise any monitoring data.

NO₂ Fall-off with Distance from the Road

No automatic NO₂ monitoring locations within the Scottish Borders required distance correction during 2024.

Appendix D: Location of monitoring sites

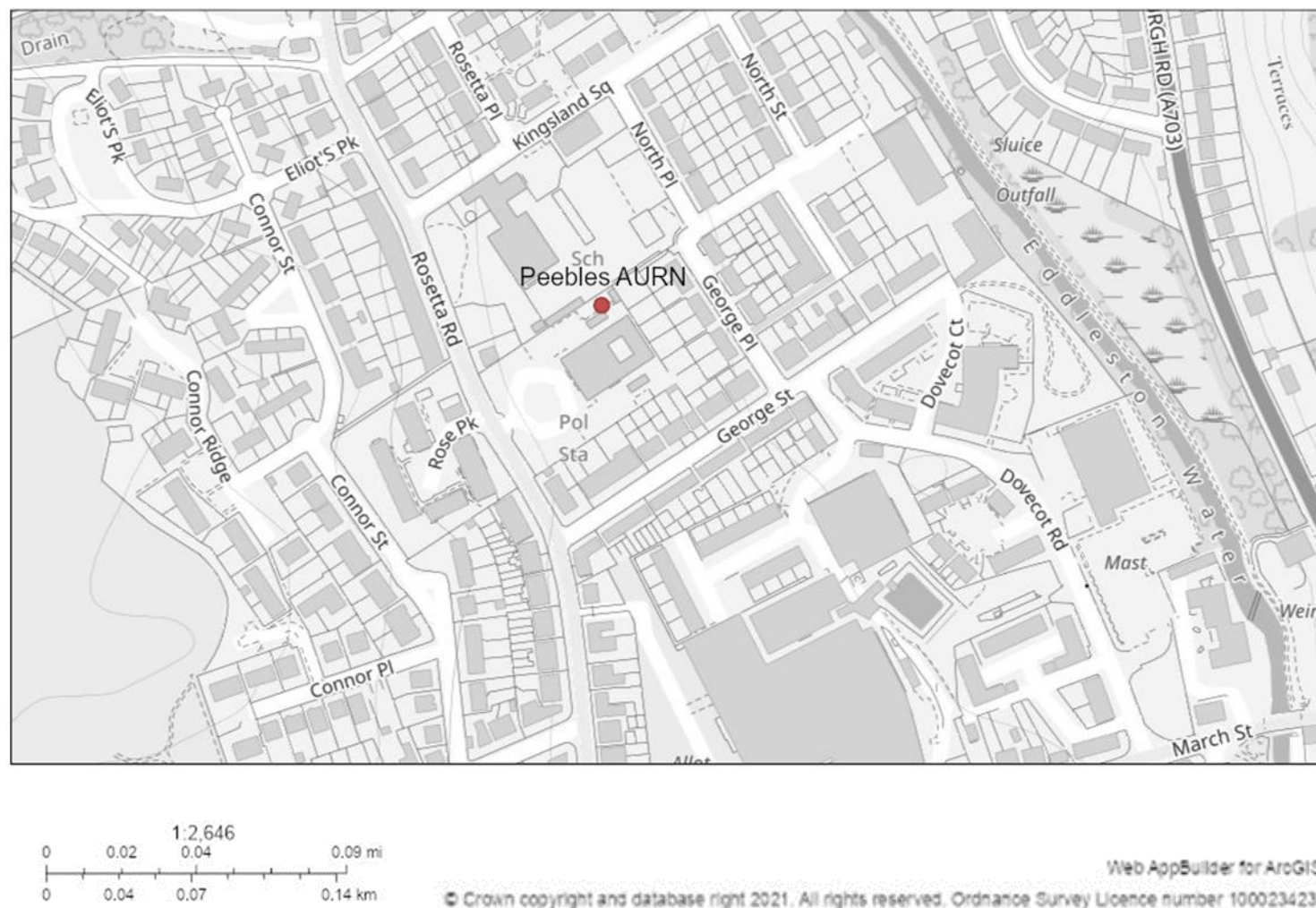


Figure D.1 – Map showing location of automatic monitoring site (AURN)

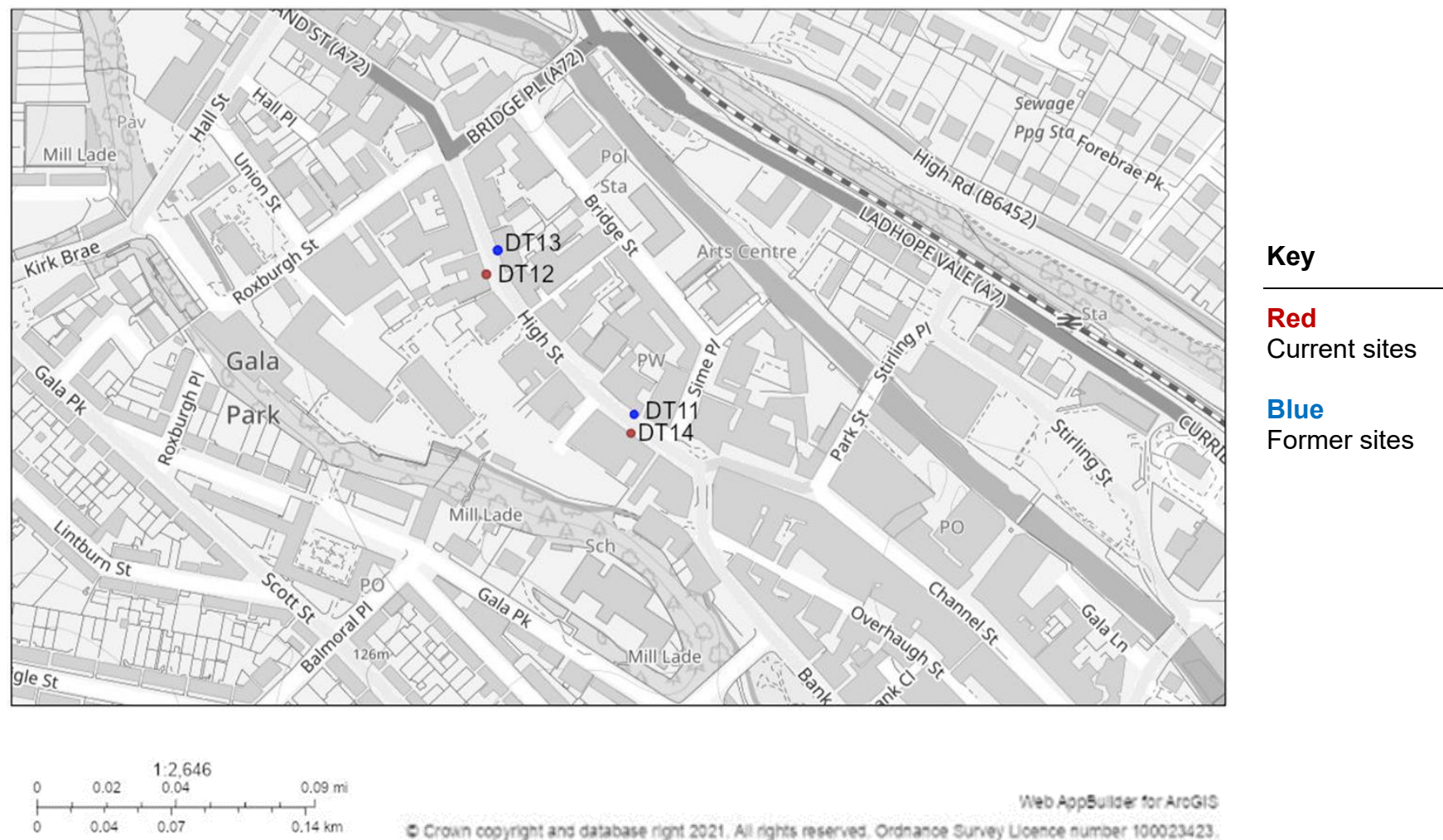


Figure D.2 – Map showing location of diffusion tube monitoring sites - Galashiels

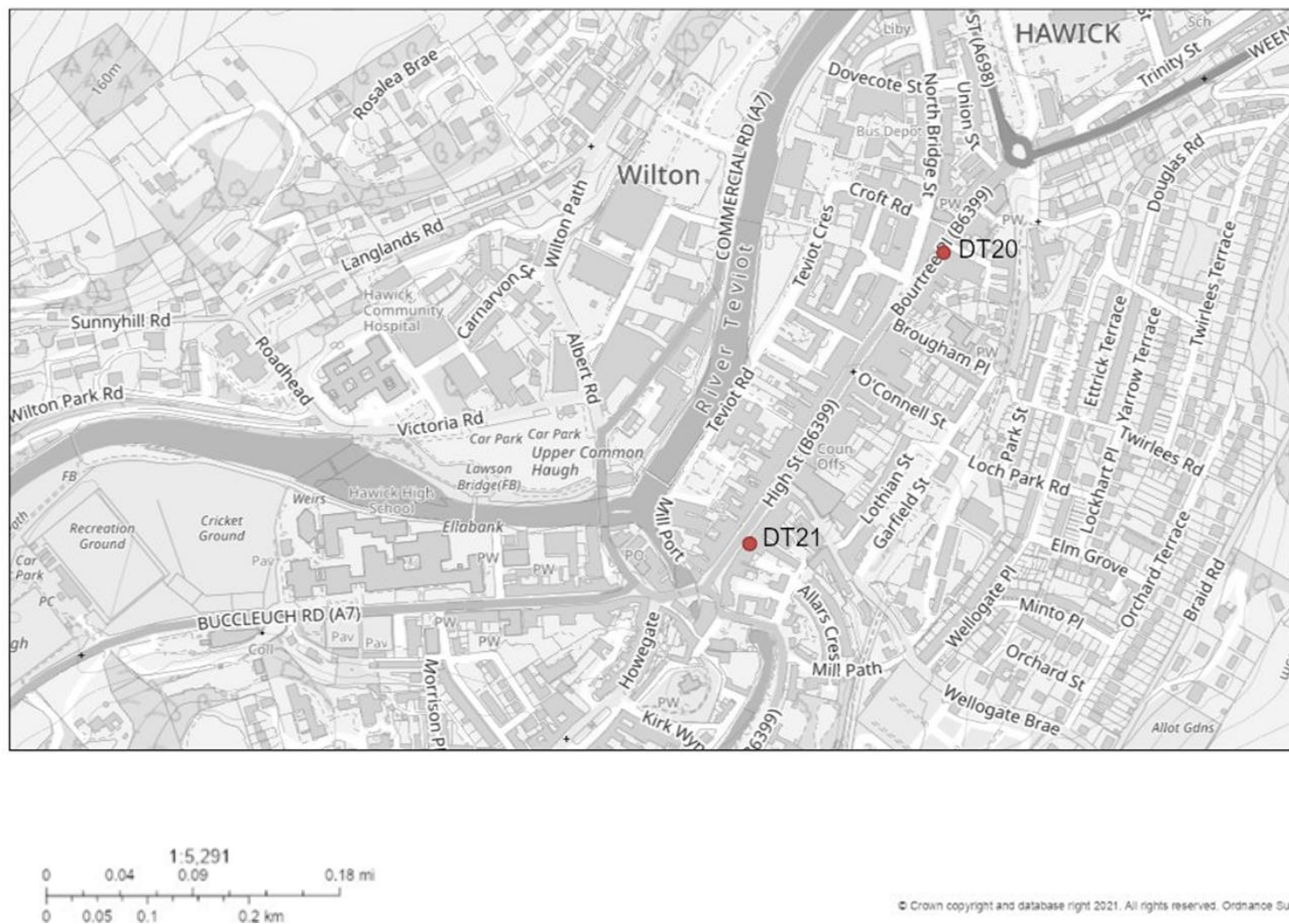


Figure D.3 – Map showing location of diffusion tube monitoring sites - Hawick

Glossary of Terms

Abbreviation	Description
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the LA intends to achieve air quality limit values'
AQMA	Air Quality Management Area – An area where air pollutant concentrations exceed / are likely to exceed the relevant air quality objectives. AQMAs are declared for specific pollutants and objectives
APR	Annual Progress Report
AURN	Automatic Urban and Rural Network (UK air quality monitoring network)
CCRM	Climate Change Route Map
Defra	Department for Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges – Air quality screening tool produced by Highways England
DT	Diffusion Tube
FDMS	Filter Dynamics Measurement System
LAQM	Local Air Quality Management
LDP	Local Development Plan
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
PM ₁₀	Airborne particulate matter with an aerodynamic diameter of 10µm (micrometres or microns) or less
PM _{2.5}	Airborne particulate matter with an aerodynamic diameter of 2.5µm or less
QA/QC	Quality Assurance and Quality Control
SO ₂	Sulphur Dioxide

References

Defra (2022) Local Air Quality Management Technical Guidance (TG22). Accessed at: <https://laqm.defra.gov.uk/air-quality/featured/uk-regions-exc-london-technical-guidance/>

Scottish Borders Council (2024) Council Plan. Accessed at: <https://www.scotborders.gov.uk/downloads/file/12710/council-plan-2024-25>

Scottish Borders Council (2021) Climate Change Route Map – Priority Actions. Accessed at: <https://www.scotborders.gov.uk/environment/net-zero-climate-change>

Scottish Borders Council (2024) Local Development Plan. Accessed at: <https://www.scotborders.gov.uk/plans-guidance/local-development-plan>

Scottish Borders Council (2025) Draft Active Travel Strategy. Accessed at <https://scottishborders.moderngov.co.uk/documents/s90977/Item%20No.%2012%20-%20Active%20Travel%20Strategy%202025-2035%20-%20Council%20-%202022%20May%202025.pdf>

Scottish Borders Council (2025) Research and data in the Scottish Borders. Accessed at <https://www.scotborders.gov.uk/strategies-plans-policies/research-data-scottish-borders-topic>

Scottish Government (2021) Cleaner Air for Scotland 2 – Towards a Better Place for Everyone. Accessed at: <https://www.gov.scot/publications/cleaner-air-scotland-2-towards-better-place-everyone/>

Scottish Government (2023) Local Air Quality Management Policy Guidance. Accessed at: <https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2023/03/local-air-quality-management-policy-guidance/documents/part-iv-environment-act-1995-local-air-quality-management-policy-guidance/part-iv-environment-act-1995-local-air-quality-management-policy-guidance/govscot%3Adocument/part-iv-environment-act-1995-local-air-quality-management-policy-guidance.pdf>

SEStran (2023) SEStran 2035 Regional Transport Strategy. Accessed at: <https://sestran.gov.uk/wp-content/uploads/2023/07/SEStran-2035-Regional-Transport-Strategy.pdf>