2025 Air Quality Annual Status Report (ASR)

In fulfilment of Part IV of the Environment Act 1995 Local Air Quality Management, as amended by the Environment Act 2021

Date: June 2025

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Local Responsibilities and Commitment

This ASR was prepared by the Environmental Protection team of Babergh and Mid Suffolk District Councils (BMSDC) with the support and agreement of the following officers and departments:

- Operations and Climate Change, BMSDC
- Communications, BMSDC
- Waste Services, BMSDC
- Public Health and Communities, Suffolk County Council
- Growth, Highways and Infrastructure, Suffolk County Council

This ASR has been approved by:

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This ASR has been signed off by:

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Executive Summary: Air Quality in Our Area

Air Quality in Babergh and Mid Suffolk

Breathing in polluted air affects our health and costs the NHS and our society billions of pounds each year. Air pollution is recognised as a contributing factor in the onset of heart disease and cancer and can cause a range of health impacts, including effects on lung function, exacerbation of asthma, increases in hospital admissions and mortality.

Air pollution particularly affects the most vulnerable in society, children, the elderly, and those with existing heart and lung conditions. Low-income communities are also disproportionately impacted by poor air quality, exacerbating health and social inequalities.

Table ES 1 provides a brief explanation of the key pollutants relevant to Local Air Quality Management and the kind of activities they might arise from.

Table ES 1 - Description of Key Pollutants

Pollutant	Description
Nitrogen Dioxide (NO_2)	Nitrogen dioxide is a gas which is generally emitted from high-temperature combustion processes such as road transport or energy generation.
Sulphur Dioxide (SO_2)	Sulphur dioxide (SO_2) is a corrosive gas which is predominantly produced from the combustion of coal or crude oil.
Particulate Matter (PM_{10} and $PM_{2.5}$)	Particulate matter is everything in the air that is not a gas. Particles can come from natural sources such as pollen, as well as human made sources such as smoke from fires, emissions from industry and dust from tyres and brakes. PM_{10} refers to particles under 10 micrometres. Fine particulate matter or $PM_{2.5}$ are particles under 2.5 micrometres.

The Babergh district is predominantly a rural area, characterised by its picturesque countryside, market towns and villages. The largest town in the district is Sudbury. Other notable settlements within Babergh include Hadleigh, Lavenham, and Long Melford. The Mid Suffolk district is also predominantly rural but with a more diverse landscape. The district is home to several market towns, such as Stowmarket, Needham Market, and Eye. Mid Suffolk is particularly known for its agricultural industry, with a significant portion of the

land dedicated to arable farming and livestock production. The districts are relatively rural and do not have the same level of industrial or transportation-related emissions as more urban areas. However, the presence of busy highways like the A12 and A14 and some small-scale industrial activities and the impact of agricultural practices may contribute to localised air quality emissions that require monitoring and management by the local authorities. Additionally, Sudbury, and other small towns within the districts also experience localised traffic emissions, which need to be monitored and managed by the local authorities.

Industrial activity in the districts is light with very few large industrial processes. As such, industry has relatively little impact on air quality.

The key pollutant of concern within Babergh and Mid Suffolk continues to be NO_2 which can be predominately associated with road vehicle exhaust emissions from the A12 and A14 trunk roads as well as the minor roads between and within different towns.

Monitoring is conducted to measure concentrations of NO_2. In the past, this monitoring has shown that within specific areas of Cross Street, Sudbury (within the Babergh district), concentrations of NO_2 have been higher than the health-based annual mean air quality objective. As a result, an Air Quality Management Area (AQMA) was designated in 2008 encompassing part of the street. Further information about the Cross Street, Sudbury AQMA can be found at AQMA Details - Defra, UK. This is the only AQMA within the Babergh district, and there are no AQMAs within the Mid Suffolk district.

During 2024, Babergh and Mid Suffolk undertook NO_2 diffusion tube monitoring at 15 locations, with the highest concentration, 30.2µg/m^3, recorded in the Cross Street, Sudbury AQMA. Despite this being the highest concentration, it is important to note that all recorded concentrations in 2024 and for the past five consecutive years were significantly below the air quality objective.

The principal measure of the action plan for the Cross Street, Sudbury AQMA was a Traffic Regulation Order in January 2020 to remove two sets of on-street parking bays. This meant that traffic could flow freely in both lanes, rather than being forced into one lane to overtake the vehicles parked in the bays. The photographs below show the difference.

Photograph 1: Traffic passes the parking bays by entering the northbound lane

Photograph 2: Without the bays, traffic no longer needs to enter the northbound lane

By removing these parking bays, traffic was able to flow freely in both directions, rather than being forced into a single lane to overtake parked vehicles. This eliminated the need for vehicles to queue, brake, idle and accelerate, which was a significant contributor to the elevated NO_2 levels previously recorded in the AQMA. While the initial drop in

concentrations from 2019 to 2020 at the AQMA can be explained by the reduction in traffic volumes due to Covid-19 restrictions, the continued low measurements in subsequent years confirm that the removal of the on-street parking has had a significant and lasting impact on reducing NO_2 levels within the AQMA.

Nitrogen dioxide pollution in the wider Babergh and Mid Suffolk districts is generally relatively low and is showing a long-term improvement at monitored locations. During 2024, there were no exceedances of the objective in the districts. The 2024 bias adjusted mean NO_2 concentration at 12 monitoring locations was lower than the 2023 result. Measured concentrations remained the same at a further location and were only marginally higher (less than 1.0µg/m^3) at two further locations.

Particulate pollution is slightly higher than the national average, however, this is not due to local sources but is a result of the disproportionate impact of international particulate pollution on the eastern region. However, the importance of continuing to improve the local air quality is at a higher profile than ever before as more information on the health impacts of air pollution is discovered.

Actions to Improve Air Quality

Whilst air quality has improved significantly in recent decades, there are some areas where local action is needed to protect people and the environment from the effects of air pollution.

The following is a summary of key measures we undertook in 2024 to improve air quality in the districts:

🚗 **Air Quality and Emissions**

- **Cross Street, Sudbury AQMA**: Impact of removal of on-street parking monitored throughout the year.
- **Air Quality Strategy**: Work began on a joint strategy for Babergh and Mid Suffolk, anticipating the revocation of the Cross Street, Sudbury AQMA.
- **Environmental Permits**: 50 of 51 premises with environmental permits rated low risk for emissions; good practices were promoted.
- **Planning Applications**: Assessed for air quality impacts, including several Nationally Significant Infrastructure Projects.

⚡ Electric Vehicle Infrastructure

- **EV Charging Points**: 64 installed in public car parks in 2023–24.
- **Local Electric Vehicle Infrastructure Fund**: £7.3 million awarded to Suffolk County Council for EV infrastructure; planning started for 6,500+ new on-street charge points.

🚶 🚴 Active and Sustainable Travel

- **Cycling and Walking Schemes**: Funding secured for 34 infrastructure projects to promote active travel.
- **Modeshift UK Membership**: Joined to promote sustainable travel in schools, businesses, and communities.
- **E-Bike Rental**: Two subsidised schemes launched in Sudbury and Needham Market to encourage modal shift.
- **Community Events**: Two “Sustainable Travel” events held to promote walking, cycling, and public transport.

🚌 Public and Community Transport

- **New Transport Services**:
  - *Mid Suffolk Taxi Bus*: Pre-bookable and “hop on” services.
  - *Mid Suffolk Rural Connect*: pre-bookable door-to-door service including a fully electric vehicle.
  - Both launched in November 2024 with a two-year monitoring plan for CO_2 savings.
- **Community Rail Partnership**: Established for the Ipswich–Cambridge line to promote train travel over car use.

🅿️ Parking Policy

- **Short Stay Parking Charges**: Reviewed and updated for Sudbury, Hadleigh, and Lavenham; new charges introduced in January 2025.

Conclusions and Priorities

Following continued compliance with the NO_2 annual mean air quality objective since 2020, it is expected that the process to revoke the Cross Street, Sudbury AQMA will be started in 2025, subject to approval of this ASR by the Department for Environment, Food and Rural Affairs (Defra).

Over the last five years, the general trend across the rest of the Babergh and Mid Suffolk districts has been a significant reduction in NO_2 concentrations between 2020 and 2021, then a slight increase in 2022, concentrations remaining similar in 2023, and then falling in 2024. The objective was last exceeded in 2019. It appears that the results in Babergh and Mid Suffolk are in line with national trends, caused by traffic flows settling down after the Covid-19 pandemic, reduced emissions from newer vehicles and increasing numbers of Electric Vehicles.

No new sources of significant industrial emissions began operation in 2024. Applications for a number of major developments were assessed by the Local Planning Authority, but no significant emissions were predicted. These included: large residential developments with associated facilities; mixed industrial uses; an extension to a quarry; a pyrolysis facility to convert solid recovered fuel and sustainable biomass to produce electricity, hydrogen, and synthetic crude oil; and several Nationally Significant Infrastructure Projects associated with the renewable energy sector or upgrading of the electricity grid.

The main transport routes within the districts are the railway between London and Norwich, and the A12, A14, A140 and A131 roads; none of which have previously been found to have caused exceedances of the national air quality objectives. No significant changes have been made to transport routes within either district during 2024.

Our priorities for the year ahead are:

- Revoke the Cross Street, Sudbury AQMA.
- Publish and begin implementing a local Air Quality Strategy for Babergh and Mid Suffolk.
- Expand NO_2 monitoring to more sites for improved data and public reassurance.
- Deploy two new electric food waste collection vehicles.
- Continue delivering the Councils' Local Cycling and Walking Infrastructure Plan.
- Progress actions in the Carbon Reduction Management Plan, aiming for carbon neutrality by 2030, with co-benefits for air quality.

- Increase resources for air quality awareness campaigns.

How to get Involved

Officers from the Environmental Protection team have continued to respond to planning consultations regarding air quality (i.e. engagement with the Development Management team and developers), investigate air quality concerns raised by the public, and participate in the Suffolk Air Quality Network, which is a forum for a range of professionals and members of community groups. There has been positive engagement with schools via 'Anti-idling' campaigns at school gates, Modeshift STARS, and Bikeability schemes, run locally by Suffolk County Council.

As an individual there are many actions that you can take to improve the air quality and reduce air pollution. This will improve the quality of life for everyone, including you and your family. Below are a few suggestions of how to get involved:

- Use your car less. Try to walk, cycle, and use the bus or train wherever possible. Conventionally fuelled cars are particularly polluting over short journeys, so aim to cut these out first.
- Reduce emissions from your car by ensuring it is regularly serviced and well maintained, you only carry the weight you need, and you drive in a gentle, steady manner. Don't idle your vehicle's engine when stationary.
- Consider purchasing an electric vehicle; the costs are always reducing, and the technology and infrastructure are making this technology more practical for more people.
- When buying a traditional fuel vehicle consider the most fuel-efficient petrol vehicle and use cleaner alternative fuels where possible.
- Encourage your employer, school, or college to set up a Green Travel Plan.
- Car share, to reduce emissions and save money. This could be with friends, colleagues or through a car sharing scheme. See the Suffolk Car Share website for further details.
- Avoid having bonfires, try to compost instead.
- Avoid burning solid fuel. If you do choose to burn solid fuel, ensure the appliance is well maintained and that you only burn the cleanest fuels such as well seasoned

wood approved under the ‘Ready to Burn’ scheme. See the Ready to Burn website for more information.

For further information about how you can get involved, please see:

Air Quality - Babergh District Council

Air Quality – Mid Suffolk District Council

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1 Local Air Quality Management

This report provides an overview of air quality in Babergh and Mid Suffolk 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 order to achieve and maintain the objectives and the dates by which each measure will be carried out. This Annual Status Report (ASR) is an annual requirement showing the strategies employed by Babergh and Mid Suffolk District Councils to improve air quality and any progress that has been made.

The statutory air quality objectives applicable to LAQM in England are presented in Table E.1.

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 should prepare an Air Quality Action Plan (AQAP) within 18 months. The AQAP should specify how air quality targets will be achieved and maintained and provide dates by which measures will be carried out.

A summary and description of the AQMA declared by Babergh District Council can be found in Table 2.1. Appendix D: Map(s) of Monitoring Locations and AQMAs provides maps of the AQMA and also the air quality monitoring locations in relation to the AQMA. The air quality objective pertinent to the current AQMA designation is Nitrogen dioxide (NO_2) annual mean.

The impact of removing the on-street parking bays in the Cross Street, Sudbury AQMA has been monitored throughout 2024. Traffic flows have also been monitored to study the relationship between traffic flows and NO_2 concentrations in the area.

The decline in the monitored annual mean NO_2 concentrations within the AQMA, as observed at monitoring locations BDC 1, BDC 2, BDC 3, BDC 5, BDC 7, BDC 8, and BDC 9, can be largely attributed to the implementation of the key measure in the 2023-2028 Air Quality Action Plan. This measure involved the removal of on-street parking bays along Cross Street under a Traffic Regulation Order in January 2020. By removing these parking bays, traffic was able to flow freely in both directions, rather than being forced into a single lane to overtake parked vehicles. This eliminated the need for vehicles to queue, brake, idle and accelerate, which was a significant contributor to the elevated NO_2 levels previously recorded in the AQMA. While the initial drop in concentrations from 2019 to 2020 at the AQMA can be explained by the reduction in traffic volumes due to Covid-19 restrictions, the continued low measurements in subsequent years confirm that the removal of the on-street parking has had a significant and lasting impact on reducing NO_2 levels within the AQMA.

Table 2.1 – Declared Air Quality Management Areas

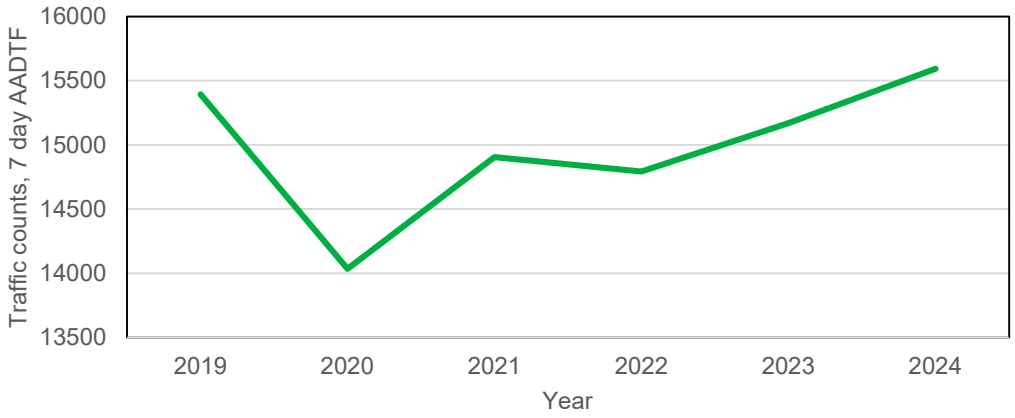
AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance: Declaration	Level of Exceedance: Current Year	Number of Years Compliant with Air Quality Objective	Name and Date of AQAP Publication	Web Link to AQAP
Cross Street, Sudbury	Declared November 2008	NO_2 Annual Mean	An area encompassing properties on Cross Street, with 5 and 90 at the northern boundary and 50 Cross Street and the junction with Church Street at the southern boundary	No	64.0µg/m^3	No exceedance Highest concentration 30.2µg/m^3	5 years (2020 – 2024)	Air Quality Action Plan for Cross Street, Sudbury, March 2024	AQAP 2023-28

☒ **Babergh District Council confirm the information on UK-Air regarding their AQMA(s) is up to date.**

☒ **Babergh District Council confirm that all current AQAPs have been submitted to Defra.**

Cross Street forms part of the A131 passing through Sudbury. Although traffic count data is not available for Cross Street, it is for Ballingdon Street, which it connects with at the southern end of the AQMA. The 7-day Annual Average Daily Traffic flow (AADTF) provided by Suffolk County Council Highways department between 2019 and 2024 is presented in Figure 1. Traffic levels in 2024 were slightly higher than 2023 but have not increased significantly since pre-pandemic 2019 levels, and so there is no expectation that road traffic emissions will increase significantly in coming years.

Figure 1: Traffic data from Ballingdon Street, Sudbury, 2019 – 2024



This key action from the AQAP has been instrumental in bringing annual mean NO_2 concentrations well below the air quality objective, to the point where, subject to approval by Defra of the analysis of monitoring data in this ASR, Babergh District Council intends to revoke the AQMA designation. It is expected that the process to revoke the AQMA will be started in 2025, once this ASR has been published.

2.2 Progress and Impact of Measures to address Air Quality in Babergh and Mid Suffolk

Defra's appraisal of last year's ASR concluded:

- *On the basis of the evidence provided by the local authority the conclusions reached in the report are **accepted** for all sources and pollutants*.

- *Revocation of the Cross Street, Sudbury AQMA should be considered following three consecutive years of compliance with the relevant objective as evidenced through monitoring*.
  This is addressed in the 'Key completed measures' section below.

- *Local authorities that do not have an AQMA should continue to monitor for exceedances and should still have a local Air Quality Strategy in place to ensure air quality remains a high-profile issue*.

  Mid Suffolk currently does not have any declared AQMAs. A local Air Quality Strategy is under development to prevent and reduce polluting activities. This will be a joint strategy for both Mid Suffolk and Babergh. It is anticipated that the local Air Quality Strategy will be published in Autumn 2025.

Babergh and Mid Suffolk District Councils have taken forward a number of direct measures during the current reporting year of 2024 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2. Thirty-two measures are included within Table 2.2, with the type of measure and the progress Babergh and Mid Suffolk District Councils have made during the reporting year of 2024 presented. Where there have been, or continue to be, barriers restricting the implementation of the measure, these are also presented within Table 2.2. Where measures are ongoing, or information is unknown, the table has intentionally been left blank.

More detail on these measures can be found in the AQAP for the Cross Street, Sudbury AQMA, the Carbon Reduction Management Plan, the Suffolk Climate Emergency Plan, the Vision for Sustainable Travel, the Suffolk Local Transport Plan, and the Suffolk County Council Air Quality Strategy.

Measures incorporated in the Cross Street, Sudbury AQAP are identified in Table 2.2, together with progress made in 2024 to implement each action.

Key completed measures are:

- The impact of removing the on-street parking bays in the Cross Street, Sudbury AQMA has been monitored throughout the year.
- 64 Electric Vehicle charging points were installed in 2023-24 in public car parks. As part of the Suffolk Climate Change Partnership's Climate Emergency Plan[1], Suffolk County Council was awarded £7.3million funding from the Government's Local Electric Vehicle Infrastructure fund to support this work. A major consultation exercise was undertaken to engage with communities and commercial partners to identify suitable locations for new infrastructure. Planning commenced for the installation of over 6,500 new public charge points; mostly 'on street'.
- Through action under the Councils' Local Cycling and Walking Infrastructure Plan, funding was secured for the delivery of 34 schemes to enable safer, more accessible and more pleasant active travel, to encourage modal shift.
- Funding was secured for and work commenced on producing a joint Air Quality Strategy for the Babergh and Mid Suffolk districts (in anticipation of the revocation of the Cross Street Air Quality Management Area). A specialist air quality consultant was appointed to produce the strategy in conjunction with the Councils' Environmental Protection team.
- Babergh District Council reviewed its policy on charging for short stay parking in Babergh Council-owned car parks. New parking charges for Sudbury, Hadleigh, and Lavenham were approved in 2024 and introduced in January 2025.
- 50 of 51 premises that hold Environmental Permits to control emissions to atmosphere, including 16 where particulate matter emissions are the main pollutant of concern, were rated low risk in 2024. Good practice was encouraged during the inspections to minimise emissions.
- Planning applications that may have an adverse impact on air quality have been assessed and mitigation recommended where necessary. Planning consultations have included several Nationally Significant Infrastructure Projects, where the impact of the construction and operational phases has been assessed.

[1] Suffolk Climate Change Partnership. Suffolk Climate Emergency Plan, 2023

- The Councils signed up to membership of Modeshift UK, a national organisation dedicated to promoting sustainable and active travel. It works with schools, businesses, and communities to encourage walking, cycling, and public transport use, reducing car dependency and supporting healthier, more environmentally friendly travel choices.
- Two subsidised e-bike rental schemes were implemented in Sudbury and Needham Market, making it affordable for residents and visitors to hire an e-bike, to undertake local journeys and tourist trails without using a car, and enabling people to try and test-ride e-bikes, with the objective that this promotes modal shift to e-bikes more generally.
- Mid Suffolk District Council delivered two 'Sustainable Travel' community engagement events in Needham Market and Eye. These events featured family activities to encourage more cycling and walking, free bicycle safety checks, maintenance and security marking, information about public transport, and advice on how to switch to more sustainable travel options. The aim was to encourage a reduction in short, frequent regular journeys utilising single occupancy car travel.
- Mid Suffolk District Council invested £600,000 into two new passenger transport operations – The Mid Suffolk Taxi Bus, which provides pre-bookable or "hop on" services on timetabled routes in the central and southern part of the district, and Rural Connect, which provides pre-bookable door-to-door transport in the northern part of the district and will utilise a fully electric vehicle as part of the fleet. The aim of both schemes is to reduce single occupancy car journey emissions. Both services launched in November 2024, and usage will be monitored for a two-year period, including an estimation on CO_2 emission savings.
- The Councils helped to establish and fund a Community Rail Partnership for the Ipswich to Cambridge line, with the aim of encouraging the replacement of car journeys with train journeys.
- The Suffolk Air Quality Group, which the Councils are a member of, continued to meet to share knowledge and liaise with other bodies such as Public Health and Communities, Trading Standards, and Growth, Highways and Infrastructure (all within Suffolk County Council), UK Health Security Agency and the University of Suffolk. Anti-idling material produced by the Group was updated and relaunched in March 2024 and promoted through social media in support of Clean Air Day 2024. It is circulated to primary school Junior Road Safety Officers, who may choose to

educate their peers on this topic, and it is available on the Council websites for schools to use as they wish.

Babergh and Mid Suffolk District Councils expect the following measures to be completed over the course of the next reporting year:

- Revocation of the Cross Street, Sudbury AQMA.
- Publication of a local Air Quality Strategy for the Babergh and Mid Suffolk districts and starting to implement this as a proactive means of improving air quality.
- Expansion of the Councils' NO_2 diffusion tube monitoring programme to a larger number of sites across the districts to provide better quality data and information and reassurance to the public.
- Commencement of use of two new electric food waste collection vehicles.

Babergh and Mid Suffolk District Councils' priorities for the coming year are:

- Ongoing delivery of the Councils' Local Cycling and Walking Infrastructure Plan.
- Continuing to implement the actions laid out in the Councils' Carbon Reduction Management Plan that have air quality co-benefits. Achieving a carbon neutral status by 2030 is a priority for the Councils.
- Provide additional resource to more actively engage in promotional campaigns to improve local air quality.

Babergh and Mid Suffolk District Councils worked to implement these measures in partnership with the following stakeholders during 2024:

- Suffolk County Council – Growth, Highways and Infrastructure
- Suffolk County Council – Public Health and Communities
- Suffolk County Council – Trading Standards
- East Suffolk Council, Ipswich Borough Council and West Suffolk Council – Environmental Protection teams
- UK Health Security Agency
- University of Suffolk

The principal challenges and barriers to implementation that Babergh and Mid Suffolk District Councils anticipate facing are:

- Resource limitations with partner organisations.
- Funding for projects and personnel to undertake actions.
- Officer time for implementation of measures.

The measures stated above and in Table 2.2 have achieved compliance in the Cross Street, Sudbury AQMA and enable the revocation of the AQMA.

Table 2.2 – Progress on Measures to Improve Air Quality

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
1	Monitoring the effect of the permanent removal of on-street parking bays within the Cross Street, Sudbury Air Quality Management Area	Traffic management	Other	2020	2025	Babergh-Mid Suffolk District Councils Suffolk County Council	Babergh-Mid Suffolk District Councils	Funded	< £10k	Implementation	Maximum predicted reduction 9.7µg/m3 Nitrogen dioxide, modelled in previous Air Quality Action Plan. Actual maximum reduction 2019-2024; 19.6µg/m^3 Nitrogen dioxide.	Measured concentration of Nitrogen dioxide within Air Quality Management Area, monitoring in line with Department for Environment, Food and Rural Affairs' calendar	Diffusion tube monitoring is continuing until at least the end of 2025	Measure is in the Cross Street, Sudbury Air Quality Action Plan
2	Encourage the use of electric vehicles by providing public charging points	Promoting low emission transport	Procuring alternative Refuelling infrastructure to promote Low Emission Vehicles, Electric Vehicle recharging, Gas fuel recharging	2022	Ongoing	Babergh-Mid Suffolk District Councils Suffolk County Council Suffolk Climate Change Partnership (includes all Suffolk local authorities)	Babergh-Mid Suffolk District Councils Suffolk County Council Office for Zero Emission Vehicles	Funded	£1 million - £10 million	Implementation	Reduced vehicle emissions as encourages use of Electric Vehicles	Number of points installed and their use	64 Electric Vehicle charging points installed in Babergh-Mid Suffolk owned car parks, 2023-24 Suffolk County Council is the first English local authority to successfully award a contract under the Local Electric Vehicle Charging 'Capital' funding allocation. It will secure over 6,500 new public charge points; mostly 'on street'. Public consultation completed to identify suitable locations. Second contract in preparation for 900 charge points on streets within Suffolk's conservation areas.	Measure is in the Cross Street, Sudbury Air Quality Action Plan Poor grid capacity out of main town centres is an inhibitor to rapid charging
3	Identify safe infrastructure improvement through the Local Cycling and Walking Infrastructure Plan	Transport planning and infrastructure	Cycle network	2021	Ongoing (10-year plan)	Babergh-Mid Suffolk District Councils Suffolk County Council	Babergh-Mid Suffolk District Councils Suffolk County Council	Partially funded	Not quantifiable	Implementation	Encourage cycling and walking and Modal Shift	Number of schemes in place	12 schemes in Babergh and 22 schemes in Mid Suffolk secured funding in 2024 Follow the link for detailed progress reports on individual schemes	
4	Encourage active travel through progress of the Vision for Sustainable Travel strategy	Promoting travel alternatives	Intensive active travel campaign and infrastructure	2021	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Partially funded	Not quantifiable	Implementation	Encourage cycling and walking	Increase in the frequency of active travel and people walking or cycling to work, year on year		
5	Improve access to public transport through progress of the Vision for Sustainable Travel strategy	Promoting travel alternatives	Other	2021	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Partially funded	Not quantifiable	Implementation	Facilitate public transport to reduce car journeys	Increase in the frequency of public transport journeys (buses and coach)		
6	Allocation of Community Infrastructure Levy funding for cycling and walking infrastructure	Transport planning and infrastructure	Cycle network Other	2022	Ongoing	Mid Suffolk District Council	Mid Suffolk District Council	Funded	£100k - £500k	Implementation	Encourage cycling and walking and Modal Shift	Number of schemes in place	13 cycling and walking infrastructure projects funded	

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
7	Production of local Air Quality Strategy for Babergh and Mid Suffolk districts	Policy guidance and development control	Other policy	2023	2025	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	< £10k	Implementation	Reduced emissions from range of sources due to preventative actions and behaviour change	Overall air quality	Specialist air quality consultant appointed to produce strategy. Publication anticipated in Autumn 2025.	
8	Reducing Council staff and fleet transport emissions as part of the Councils' Carbon Reduction Management Plan	Promoting travel alternatives	Workplace travel planning	2020 Reviewed in 2024	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£10k - £50k	Implementation	Reduced vehicle emissions	Reduction in staff business emissions Uptake of salary sacrifice scheme Number of staff car sharing Changes of modes of staff travel (staff surveys)	Electric Vehicle car lease and cycle to work salary sacrifice schemes implemented Free charging for staff with electric vehicles Car sharing scheme promoted Promotion of 'Co Wheels' EV pool cars Support Cycle to Work Day	View the full Carbon Reduction Action Plan
9	Suffolk Climate Emergency Plan	Policy guidance and development control	Other	2019	Ongoing	Suffolk Climate Change Partnership (includes all Suffolk local authorities), Environment Agency, Groundwork Suffolk, University of Suffolk	Babergh-Mid Suffolk District Councils, Suffolk Climate Change Partnership	Partially funded	£1m - £10m	Implementation	Reduced emissions from a range of sources, carbon reduction has an air quality co-benefit	Suffolk Climate Emergency Dashboard	Suffolk Climate Emergency Dashboard Suffolk Climate Emergency Plan – Progress Overview	Measure is in the Cross Street, Sudbury Air Quality Action Plan
10	Review 'free' parking policy for short stay parking in Babergh Council-owned car parks	Traffic management	Other	2024	2025	Babergh District Council	Babergh District Council	Funded	Offset by income generated	Completed	Reduced emissions of Nitrogen dioxide and particulate matter if alternative methods of sustainable travel are used		New parking charges for Sudbury, Hadleigh, and Lavenham approved in 2024 and introduced in January 2025	Measure is in the Cross Street, Sudbury Air Quality Action Plan
11	Councils' refuse fleet run on Hydrotreated Vegetable Oil fuel	Promoting low emission transport	Company vehicle procurement - prioritising uptake of low emission vehicles	2021	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£50k - £100k per annum	Implementation	Nitrogen oxides reduced by up to 30%. Particulate matter reduced by up to 86%.	Emissions from vehicles – reduced compared to older diesel fuelled vehicles	New more efficient vehicles commenced operation in 2023	Measure is in the Cross Street, Sudbury Air Quality Action Plan
12	Purchase of two electric food waste collection vehicles	Promoting low emission transport	Public vehicle procurement - prioritising uptake of low emission vehicles	2024	2025	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£500k - £1m	Implementation	Reduced vehicle emissions	Emissions from vehicles reduced compared to existing diesel fleet	Funding approved. Procurement in process.	
13	Subsidised e-bike rental schemes	Transport planning and infrastructure	Public cycle hire scheme	2024	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£10k - 50k	Implementation	Reduced emissions of Nitrogen dioxide and particulate matter	Reduced emissions due to increase in cycling	2 schemes implemented in Sudbury and Needham Market, making it affordable for residents and visitors to hire an e-bike, to undertake local journeys and tourist trails without using a car, and enabling people to try/test-ride e-bikes	
14	Mid Suffolk Taxi Bus service for rural communities in central/south Mid Suffolk Rural Connect electric bus service for rural communities in north Mid Suffolk	Promoting low emission transport	Public vehicle procurement - prioritising uptake of low emission vehicles	2023	Ongoing	Mid Suffolk District Council Communities Together East Anglia	Mid Suffolk District Council	Funded	£500k - £1m	Implementation	Reduced vehicle emissions	Provision of bus routes User demand Reduction in solo car journeys	3 Taxi Bus routes operating and a further 2 planned Rural Connect pre-bookable door-to-door service implemented and operating	

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
15	Work with Suffolk County Council to ensure that Air Quality is appropriately considered within the Local Transport Plan 4 measures	Policy guidance and development control	Regional groups co-ordinating programmes to develop area-wide strategies to reduce emission and improve air quality	2023	2025	Babergh-Mid Suffolk District Councils Suffolk County Council	Babergh-Mid Suffolk District Councils Suffolk County Council	Funded	£10k - 50k	Completed	Reduced vehicle emissions as alternatives are encouraged	Local Transport Plan 4 adopted; modes of transport used; travel options available. Revocation of Air Quality Management Areas.	Contributed to the development of the Plan through consultation processes. The Local Transport Plan 2025 – 2040 was published in February 2025. Part 1 of the plan highlights the Council's long-term ambitions for the transport network. Part 2 is the implementation plan indicating how the Council will address the issues identified within the longer-term transport strategy. Plan focuses on decarbonising transport with associated benefits for Air Quality. Plan contains a dedicated section on Air Quality. Inclusion of air quality data in area plan assessments, and where an AQMA exists, mitigation measures proposed.	Measure is in the Cross Street, Sudbury Air Quality Action Plan
16	Joint funding of Community Rail Partnership for the Ipswich to Cambridge rail route	Promoting travel alternatives	Promote use of rail	2024	Ongoing	Greater Anglia, Suffolk County Council, Mid Suffolk District Council, Cambridge and Peterborough Combined Authority, West Suffolk Council, Cambridgeshire County Council, Cambridge City Council, Ipswich Borough Council	Greater Anglia, Suffolk CC, Mid Suffolk DC, Cambridge & Peterborough Combined Authority, West Suffolk Council, Cambridgeshire County Council, Cambridge City Council, Ipswich Borough Council	Funded	< £10k	Implementation	Reduced emissions from less reliance on cars. Anti idling campaigns at level crossings.	Use of the train for journeys along this key corridor	Partnership developed in 2024 and launched in February 2025. Roles assigned and Action Plan to be developed.	
17	Regulation of premises with an Environmental Permit	Environmental permits	Other	2018	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£10k - 50k	Implementation	Reduced emissions, especially particulate matter	Emissions measured from premises and risk rating score	Majority of premises were low risk in 2024, no complaints received, advice given regarding particulate matter control	
18	Planning considerations specific to air quality impact assessment and mitigation (e.g. provision of Electric Vehicle charging points and measures/site design to offset adverse impact)	Policy guidance and development control	Air Quality Planning and Policy Guidance	2018	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£100k - £500k	Implementation	Potentially prevent unacceptable emissions or health effects	Appropriate developments granted permission	All relevant planning applications assessed regarding air quality impacts, including Nationally Significant Infrastructure Projects, and appropriate mitigation measures stipulated e.g. Electric vehicle infrastructure,	Measure is in the Cross Street, Sudbury Air Quality Action Plan

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
													parking standards, use of zero emission machinery in construction projects.	
19	Managing and monitoring of developments determined by the Local Planning Authority to ensure that they comply with environmental and air quality requirements of planning permissions	Policy guidance and development control	Air Quality Planning and Policy Guidance	2018	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£10k - 50k	Implementation	Potentially prevent unacceptable emissions or health effects	Enforcement cases and resolution	All reported incidents are investigated by the enforcement team	
20	Provision of travel plans through planning process	Policy guidance and development control	Air Quality Planning and Policy Guidance	2023	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£10k - 50k	Implementation	Reduced emissions of Nitrogen dioxide and particulate matter if alternative methods of sustainable travel are used	Use of sustainable travel	Implemented through local planning and transport authority cooperation	
21	Support Clean Air Day 2024	Public information	Via website	2024	2024	All Suffolk local authorities	All Suffolk local authorities	Funded	£10k - £50k	Completed	Reduced vehicle emissions due to increased awareness	Actions and awareness of the public	Campaign included social media campaign using national resources, walks, bike maintenance and e-bike trials arranged by Suffolk County Council. Anti-idling campaign at school gates.	Measure is in the Cross Street, Sudbury Air Quality Action Plan Limited by officer resources
22	Relaunch the Suffolk (vehicle) Idling Action Campaign	Public information	Other	2024	Ongoing during 2024	All Suffolk local authorities	All Suffolk local authorities	Funded	< £10k	Completed	Reduced vehicle emissions due to increased awareness	Actions and awareness of the public	Campaign resources highlight health impacts more prominently. Expanded range includes free banners, signs, posters, stickers, leaflets, and myth-busting postcards, for schools, businesses, and community groups.	Measure is in the Cross Street, Sudbury Air Quality Action Plan
23	Promote ‘Ready to Burn’ Encouraging residents to refrain from garden bonfires	Public information	Via the internet	2024	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	< £10k	Implementation	Reduced stationary source emissions	Reduction in the number of bonfire complaints received	Use of the Councils’ websites and social media to promote changes in behaviour to move away from burning.	
24	Promotion of sources of information for sustainable travel on the Councils’ websites	Public information	Via the internet	2018	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	< £10k	Implementation	Reduced emissions due to increased awareness	Use of sustainable travel	Information updated regularly	Measure is in the Cross Street, Sudbury Air Quality Action Plan Council websites are unlikely to be where people would search for such information
25	Modeshift STARS	Promoting travel alternatives	Other	2022	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	< £10k	Implementation	Reduced vehicle emissions in locality of schools	Provision and use of sustainable and active travel to and from schools.	During 2024, 9 schools held accreditation, and 4 others started the accreditation process in Babergh-Mid Suffolk	Measure is in the Cross Street, Sudbury Air Quality Action Plan Competing demands on school time

Measure No.	Measure Title	Category	Classification	Year Measure Introduced in AQAP	Estimated / Actual Completion Date	Organisations Involved	Funding Source	Funding Status	Estimated Cost of Measure	Measure Status	Reduction in Pollutant / Emission from Measure	Key Performance Indicator	Progress to Date	Comments / Barriers to Implementation
26	Sustainable travel community engagement events	Promoting travel alternatives	Promotion of cycling Promotion of walking Promote use of rail Other	2024	2024	Mid Suffolk District Council	Mid Suffolk District Council	Funded	< £10k	Implementation	Reduced emissions of Nitrogen dioxide and particulate matter if alternative methods of sustainable travel are used	Increased cycling and walking trips Increased use of public transport Reduction in single occupancy of vehicles	2 events in Needham Market and Eye featured family activities to encourage more cycling and walking, free bicycle safety checks, maintenance and security marking, information about public transport, and advice on how to switch to more sustainable travel options	
27	Cycle training through the 'Bikeability' scheme	Promoting travel alternatives	Promotion of cycling	2023	2024	Suffolk County Council	Suffolk County Council	Funded	< £10k	Implementation	Encourages cycle use	Number of participants in scheme	1,144 students in schools in Babergh and Mid Suffolk were trained to Bikeability Level 2 in 2024	
28	Promoting 'walking buses' in schools	Promoting travel alternatives	Promotion of walking School travel plans	2024	Ongoing	Babergh District Council Suffolk County Council	Babergh District Council Suffolk County Council Schools	Partially funded	< £10k	Implementation	Reduced emissions of Nitrogen dioxide and particulate matter if alternative methods of sustainable travel are used	Number of children walking to school	2 schools engaged. Wider promotion in Sudbury and Hadleigh.	Measure is in the Cross Street, Sudbury Air Quality Action Plan
29	Adoption of flexible working arrangements	Promoting travel Alternatives	Encourage/facilitate home working	2015	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	Within existing resources	Implementation	Reduced emissions from commutes to office and meeting locations	Mileage claims, office use	Operate flexible working arrangements for staff. Allow and encourage employees to work from home when practical to do so.	Recent office redesign encourages office use for specific purposes, but working from home is very common
30	Pool car fleet of electric vehicles	Promoting low emission transport	Company Vehicle Procurement - Prioritising uptake of low emission vehicles	2017	Ongoing	Babergh-Mid Suffolk District Councils	Babergh-Mid Suffolk District Councils	Funded	£100k - £500k	Completed	Ongoing reduced vehicle emissions	Usage and miles driven	All pool cars are electric	Ongoing costs associated with maintenance, servicing of EV but purchase cost has been reported previously
31	The Suffolk Air Quality Group shares knowledge and liaises with other bodies	Policy guidance and development control	Regional groups co-ordinating programmes to develop area wide strategies to reduce emissions and improve air quality	2018	Ongoing	All Suffolk local authorities, UK Health Security Agency, University of Suffolk	All partners	Funded	< £10k	Implementation	Reduced emissions from vehicles, burning, improved awareness of air quality	Development of policies, strategies, projects	Coordination of air quality campaigns in the county such as Clean Air Day, Suffolk Idling Action, solid fuel burning and bonfires	
32	Support and participate in the Suffolk Air Quality Network	Policy guidance and development control	Regional groups co-ordinating programmes to develop area wide strategies to reduce emissions and improve air quality	2024	Ongoing	University of Suffolk, All Suffolk local authorities, Suffolk County Council Public Health, UK Health Security Agency, National Health Service, Suffolk Sustainability Institute, Local community action groups	University of Suffolk	Funded	< £10k	Implementation	Reduced emissions from vehicles, burning, improved awareness of air quality	The University of Suffolk is supported to develop and promote the Suffolk Air Quality Network Development of policies, strategies, projects	Network officially launched in May 2024, led by the University of Suffolk. Brings together a range of partners and stakeholders across Suffolk to share information and best practice. Aims to enhance engagement and promote more joined-up working across the County. Meets twice a year.	

2.3 $PM_{2.5}$ – Local Authority Approach to Reducing Emissions and/or Concentrations

As detailed in Policy Guidance LAQM.PG22 (Chapter 8) and the Air Quality Strategy[2], local authorities are expected to work towards reducing emissions and/or concentrations of fine particulate matter ($PM_{2.5}$). There is clear evidence that $PM_{2.5}$ (particulate matter smaller 2.5 micrometres) has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

Babergh and Mid Suffolk District Councils do not undertake $PM_{2.5}$ or PM_{10} monitoring. Background annual mean $PM_{2.5}$ concentrations were obtained from Defra's background mapping[3] resource for the 2023 calendar year. The average total $PM_{2.5}$ at 614 locations (centre points of 1km x 1km grids) across the districts was 6.10µg/m^3. The minimum background concentration was 5.75µg/m^3 in 2023 and was located within Erwarton, in Babergh (1km x 1km grid square: 622500 233500). The maximum background concentration was 8.90µg/m^3 in 2023 and was located within Brantham in Babergh (1km x 1km grid square: 610500 233500). This indicates that $PM_{2.5}$ concentrations within the districts are below the proposed annual average limit value for $PM_{2.5}$ target of 10µg/m^3 to be met across England by 2040.

The Public Health Outcomes Framework[4] data tool created by Public Health England quantifies the mortality burden of $PM_{2.5}$ within England on a county and local authority scale. The fraction of mortality attributable to particulate air pollution was 5.2% within both the Babergh and Mid Suffolk districts, compared to 5.4% as the average figure for the East of England Region and 5.2% as the England average. It is understood from local contacts at the UK Health Security Agency, that this mortality figure varies based on the weather as well as based on emissions.

There are no smoke control areas in the Babergh or Mid Suffolk districts. This is because the districts are largely rural with small market towns, and do not have densely populated urban areas where significant solid fuel burning is prevalent.

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[2] Defra. Air Quality Strategy – Framework for Local Authority Delivery, August 2023

[3] Defra. Background Mapping Data for Local Authorities

[4] DHSC. Public Health Outcomes Framework

Babergh and Mid Suffolk District Councils are taking the following measures to address $PM_{2.5}$:

- The Councils' refuse fleet has been run on Hydrotreated Vegetable Oil since 2021. This fuel has up to 86% reduced particulate matter emissions. In 2023-2024, 22 refuse lorries were upgraded to new vehicles, also run on Hydrotreated Vegetable Oil.
- Sixty-four EV charging points have been installed in Council car parks in 2023-2024. Providing Electric Vehicle charging points encourages the uptake of Electric Vehicles and reduces particulate matter emissions from traditional fuel vehicles.
- Throughout 2024, inspections of premises that hold an Environmental Permit found that installations that are likely to emit $PM_{2.5}$, for example concrete crushers and cement batching plants, were operating in line with best practice. Control measures such as water spraying, sideboards on conveyors and low drop heights were implemented.
- The Environmental Protection team continues to recommend planning conditions regarding the control of $PM_{2.5}$, for example by compliance with a construction management plan. Such conditions typically stipulate the use of the cleanest construction equipment available, the use of zero emission machinery, HGVs serving the site avoiding routes through Air Quality Management Areas, and prohibitions on vehicles/machinery idling.
- Discouraging wood-burning and promoting the use of only approved wood-burning stoves and burning of approved products if wood-burning is necessary.
- Promoting travel alternatives through the development and implementation of the Local Cycling and Walking Infrastructure Plan, installation of additional pedestrian facilities, reducing the Council staff and fleet transport through the Carbon Reduction Management Plan.

All measures taken that reduce $PM_{2.5}$ have links to the Public Health Outcomes Framework, as they reduce the percentage of all-cause adult mortality attributable to anthropogenic particulate air pollution, which is measured as $PM_{2.5}$.

3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance

This section sets out the monitoring undertaken within 2024 by Babergh and Mid Suffolk District Councils and how it compares with the relevant air quality objectives. In addition, monitoring results are presented for a six-year period between 2019 and 2024 to allow monitoring trends to be identified and discussed.

3.1 Summary of Monitoring Undertaken

3.1.1 Automatic Monitoring Sites

Babergh and Mid Suffolk District Councils do not operate any automatic monitoring sites in the districts.

3.1.2 Non-Automatic Monitoring Sites

Babergh and Mid Suffolk District Councils undertook non-automatic (i.e. passive) monitoring of NO_2 at 15 sites during 2024. Babergh and Mid Suffolk District Councils do not undertake any automatic monitoring.

Table A.2 in Appendix A presents the details of the non-automatic sites.

Maps showing the location of the monitoring sites are provided in Appendix D. Further details on Quality Assurance/Quality Control (QA/QC) for the diffusion tubes, including bias adjustments are included in Appendix C.

3.2 Individual Pollutants

The air quality monitoring results presented in this section are, where relevant, adjusted for bias, annualisation (where the annual mean data capture is below 75% and greater than 25%), and distance correction. Further details on adjustments are provided in Appendix C.

3.2.1 Nitrogen Dioxide (NO_2)

Table A.4 in Appendix A compares the ratified and adjusted monitored NO_2 annual mean concentrations for the past six years with the air quality objective of 40µg/m^3. Note that the

concentration data presented represents the concentration at the location of the monitoring site, following the application of bias adjustment and annualisation, as required (i.e. the values are exclusive of any consideration to fall-off with distance adjustment).

For diffusion tubes, the full 2024 dataset of monthly mean values is provided in Appendix B. It has not been necessary to distance correct any results, as only one location is not at relevant exposure, and the bias adjusted mean was below 36µg/m^3. At many monitoring locations, including all sites in the AQMA, two diffusion tubes are positioned close to each other to improve the accuracy of the results. The monthly results are presented with the highest result first for each monitoring location e.g. BDC 1a, and then the lower result as BDC 1b.

The annual mean did not exceed 60µg/m^3 at any monitoring location. Therefore, it is not considered likely that there was an exceedance of the 1 hour mean objective at any location.

There were no exceedances of the air quality objective in 2024. Concentrations of NO_2 were similar to the 2020 - 2023 results both within and outside the AQMA. The results are lower than those in 2019. It is thought that this is because of reduced traffic flows compared to 2019, the removal of the on-street parking bays within the AQMA, improved engine technology causing reduced emissions, and an increase in Electric Vehicles.

Figure A.1 shows the annual mean NO_2 concentration over the last six years at monitoring locations that exceeded the objective in 2019. This is the last year that the objective was exceeded. It was thought that the exceedances were due to the effect of the on-street parking bays, which were removed in early 2020. Significant reductions of 16.4µg/m^3, 14.5µg/m^3 and 15.5µg/m^3 were measured between 2019 and 2020 at these locations. Although the annual mean increased slightly at two of the locations between 2020 and 2021, it remained the same at the other location between 2020 and 2021. The annual mean decreased slightly at all three locations between 2021 and 2022, and then again between 2022 and 2023. This ties in with a slight reduction in traffic flows at a nearby traffic monitoring site between 2021 and 2022 - see Figure 1. Now that traffic flows can be considered to have reached a ‘new normal’, these results indicate that removing the on-street parking bays caused a significant reduction in NO_2 at these locations. The annual mean for all three locations was lower in 2024 than 2020.

Figure A.2 shows the annual mean NO_2 concentration over the last six years at monitoring locations within the Babergh district that did not exceed the objective in 2019. There was a maximum reduction of 8µg/m^3 (at BDC 6) between 2019 and 2020 within these locations. At all but two locations, there was a slight increase in NO_2 concentration between 2020

and 2021. This was thought to be due to increased traffic flows. It is not known why there was a further decrease in NO_2 concentration at two locations between 2020 and 2021, but the concentrations at both locations increased between 2021 and 2022. At nine of the ten locations, there was a slight decrease in NO_2 concentration between 2023 and 2024, with the concentration remaining constant at the tenth location. At all locations, the annual mean for 2024 was lower than it was in 2019, by between 3.6µg/m^3 and 9.7µg/m^3.

Figure A.3 shows the annual mean NO_2 concentration over the last six years at all monitoring locations within the AQMA. All these locations are covered by Figures A.1 or A.2, but Figure A.3 draws together all data within the AQMA. The more significant reductions between 2019 and 2020 were at the locations that removing the on-street parking bays was expected to have a positive impact on. There was a slight increase at all locations between 2020 and 2021 (except one which has the same mean for the two years). This is thought to be because of increased traffic flows. However, the similar increase across all monitoring locations supports the view that the on-street parking bays were the reason for the exceedance of the objective. The annual mean results for 2022 are similar to 2021, and then there is a reduction at all locations in 2023 and again in 2024.

The monitoring results confirm that compliance in the AQMA has been achieved in three consecutive years since 2022 and so Babergh District Council will be seeking to revoke the AQMA in 2025, subject to approval by Defra of the analysis of monitoring data in this ASR.

Figure A.4 shows the annual mean NO_2 concentration over the last six years at monitoring locations within the Mid Suffolk district. One of the locations (MSDC 1) is at a busy crossroad in Stowmarket town and the other (MSDC 2) is close to the A14 in Stowmarket for reference purposes. Both show a reduction between 2019 and 2024; however, the reduction was more significant between 2019 and 2020 than between any other years, at 6.4µg/m^3 and 5.3µg/m^3 respectively. After an increase between 2020 and 2021, the concentration at both locations has fallen between 2021 and 2024.

The monitoring locations in both districts remain appropriate and will continue in 2024.

No new monitoring locations will be added in 2024. Traffic flows and other factors that determine monitoring locations will be kept under review.

3.2.2 Particulate Matter (PM_{10})

Babergh and Mid Suffolk District Councils do not monitor for this pollutant.

3.2.3 Particulate Matter ($PM_{2.5}$)

Babergh and Mid Suffolk District Councils do not monitor for this pollutant.

3.2.4 Sulphur Dioxide (SO_2)

Babergh and Mid Suffolk District Councils do not monitor for this pollutant.

Appendix A: Monitoring Results

Table A.1 – Details of Automatic Monitoring Sites

Babergh and Mid Suffolk District Councils do not undertake any automatic monitoring.

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

Diffusion Tube ID [1]	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) [2]
BDC 1a, BDC 1b	9 Cross Street, Sudbury	Roadside	586848	241133	NO2	Yes - Cross Street	0.0
BDC 2a, BDC 2b	17 Cross Street, Sudbury	Roadside	586836	241089	NO2	Yes - Cross Street	0.0
BDC 3a, BDC 3b	30 Cross Street, Sudbury	Roadside	586808	241015	NO2	Yes - Cross Street	0.0
BDC 4a, BDC 4b	36 Cross Street, Sudbury	Roadside	586790	240944	NO2	No	0.0
BDC 5a, BDC 5b	58 Cross Street, Sudbury	Roadside	586798	241010	NO2	Yes - Cross Street	0.0
BDC 6a, BDC 6b	70 Cross Street, Sudbury	Roadside	586818	241068	NO2	Yes - Cross Street	0.0
BDC 7a, BDC 7b	78 Cross Street, Sudbury	Roadside	586829	241104	NO2	Yes - Cross Street	0.0
BDC 8a, BDC 8b	82 Cross Street, Sudbury	Roadside	586835	241123	NO2	Yes - Cross Street	0.0

Diffusion Tube ID (1)	Site Name	Site Type	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Pollutants Monitored	In AQMA? Which AQMA?	Distance to Relevant Exposure (m) (2)	Distance to kerb of nearest road (m)	Tube Co-located with a Continuous Analyser?	Tube Height (m)
BDC 9a, BDC 9b	87 Cross Street, Sudbury	Roadside	586842	241148	NO2	Yes - Cross Street	0.0	1.1	No	2.3
BDC 10	5 Ballingdon Street, Sudbury	Roadside	586721	240879	NO2	No	0.0	3.6	No	2.3
BDC 11	54 Church Street, Sudbury	Roadside	586930	241058	NO2	No	0.0	1.7	No	2.6
BDC 12	7 Gainsborough Street, Sudbury	Roadside	587253	241256	NO2	No	0.0	2.8	No	2.5
BDC 13	31 Friars Street, Sudbury	Roadside	587257	241110	NO2	No	0.0	2.9	No	2.3
MSDC 1a, MSDC 1b	Station Road West, Stowmarket	Roadside	604972	258745	NO2	No	0.0	2.2	No	2.3
MSDC 2	Cottage Farmhouse, Stowmarket	Roadside	606049	259307	NO2	No	4.0	15.7	No	1.9

Notes:

(1) BDC = Babergh District Council, MSDC = Mid Suffolk District Council.

(2) 0m if the monitoring site is at a location of exposure (e.g. installed on the façade of a residential property).

Table A.3 – Annual Mean NO_2 Monitoring Results: Automatic Monitoring (µg/m^3)

Babergh and Mid Suffolk District Councils do not undertake any automatic monitoring.

Table A.4 – Annual Mean NO_2 Monitoring Results: Non-Automatic Monitoring (µg/m^3)

Diffusion Tube ID (1)	X OS Grid Ref (Easting)	Y OS Grid Ref (Northing)	Site Type	Valid Data Capture for Monitoring Period (%) (2)	Valid Data Capture 2024 (%) (3)	2019	2020	2021	2022	2023	2024
BDC 1a, BDC 1b	586848	241133	Roadside	92.0	92.0	28.1	24.8	25.8	25.5	24.0	22.9
BDC 2a, BDC 2b	586836	241089	Roadside	92.0	92.0	28.7	27.1	27.9	29.4	27.6	25.1
BDC 3a, BDC 3b	586808	241015	Roadside	92.0	92.0	34.8	28.7	30.0	31.7	29.4	25.5
BDC 4a, BDC 4b	586790	240944	Roadside	92.0	92.0	29.4	22.0	23.2	25.2	21.8	20.2
BDC 5a, BDC 5b	586798	241010	Roadside	92.0	92.0	36.0	30.4	32.3	31.9	31.0	30.2
BDC 6a, BDC 6b	586818	241068	Roadside	92.0	92.0	31.2	23.2	24.9	24.6	23.0	21.5
BDC 7a, BDC 7b	586829	241104	Roadside	92.0	92.0	**47.5**	31.1	33.3	31.8	30.1	28.7
BDC 8a, BDC 8b	586835	241123	Roadside	92.0	92.0	**47.3**	32.8	33.2	32.8	30.4	27.7
BDC 9a, BDC 9b	586842	241148	Roadside	92.0	92.0	**47.0**	31.5	31.5	30.6	29.4	27.8
BDC 10	586721	240879	Roadside	92.0	92.0	27.6	23.7	23.1	24.5	22.3	21.1
BDC 11	586930	241058	Roadside	92.0	92.0	22.4	14.7	17.2	17.9	15.8	15.2
BDC 12	587253	241256	Roadside	92.0	92.0	28.0	22.5	20.2	24.1	22.7	22.7
BDC 13	587257	241110	Roadside	92.0	92.0	18.8	14.6	18.0	14.9	12.8	11.8
MSDC 1a, MSDC 1b	604972	258745	Roadside	83.0	83.0	31.2	24.8	28.4	28.0	26.8	22.3
MSDC 2	606049	259307	Roadside	92.0	92.0	21.4	16.1	17.4	17.8	14.6	14.5

☐ **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:

The annual mean concentrations are presented as µg/m^3.

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

NO_2 annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO_2 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.

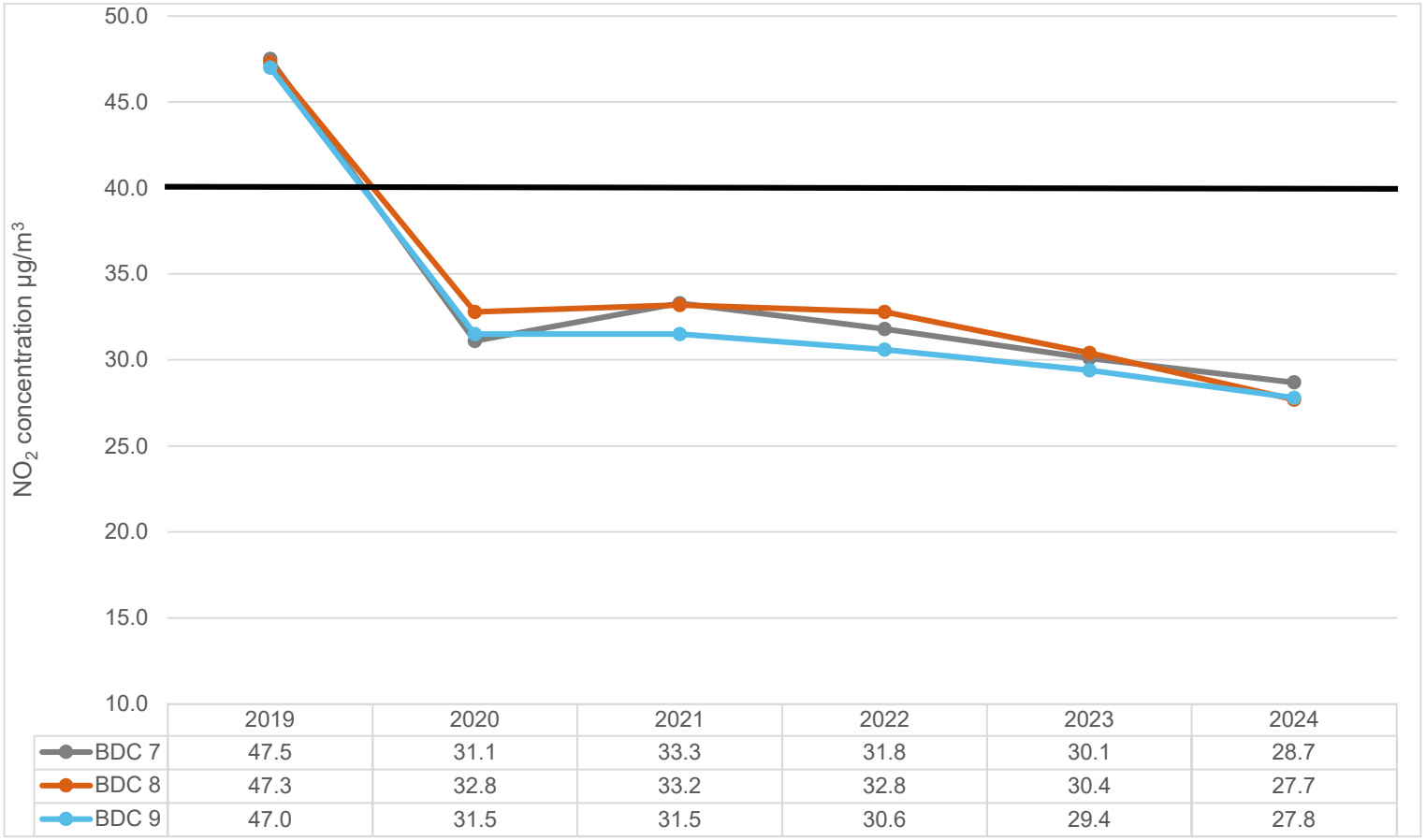
Concentrations are those at the location of monitoring and not those following any fall-off with distance adjustment.

(1) BDC = Babergh District Council, MSDC = Mid Suffolk District Council.

(2) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

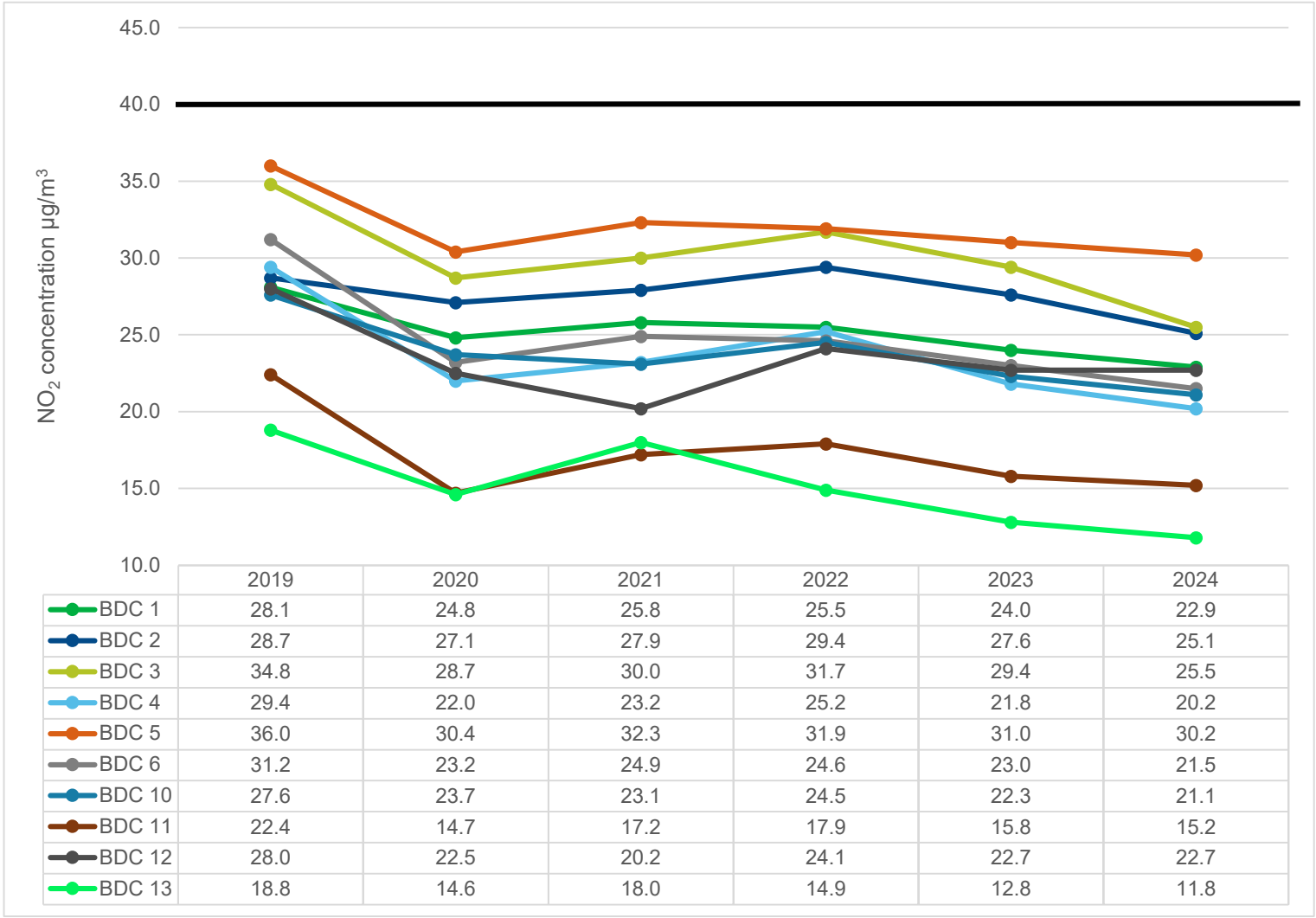
(3) Data capture for the full calendar year (e.g. if monitoring was carried out for 6 months, the maximum data capture for the full calendar year is 50%).

Figure A.1 – Trends in Annual Mean NO_2 Concentrations for Monitoring Locations in the Babergh district that Exceeded the Objective in 2019



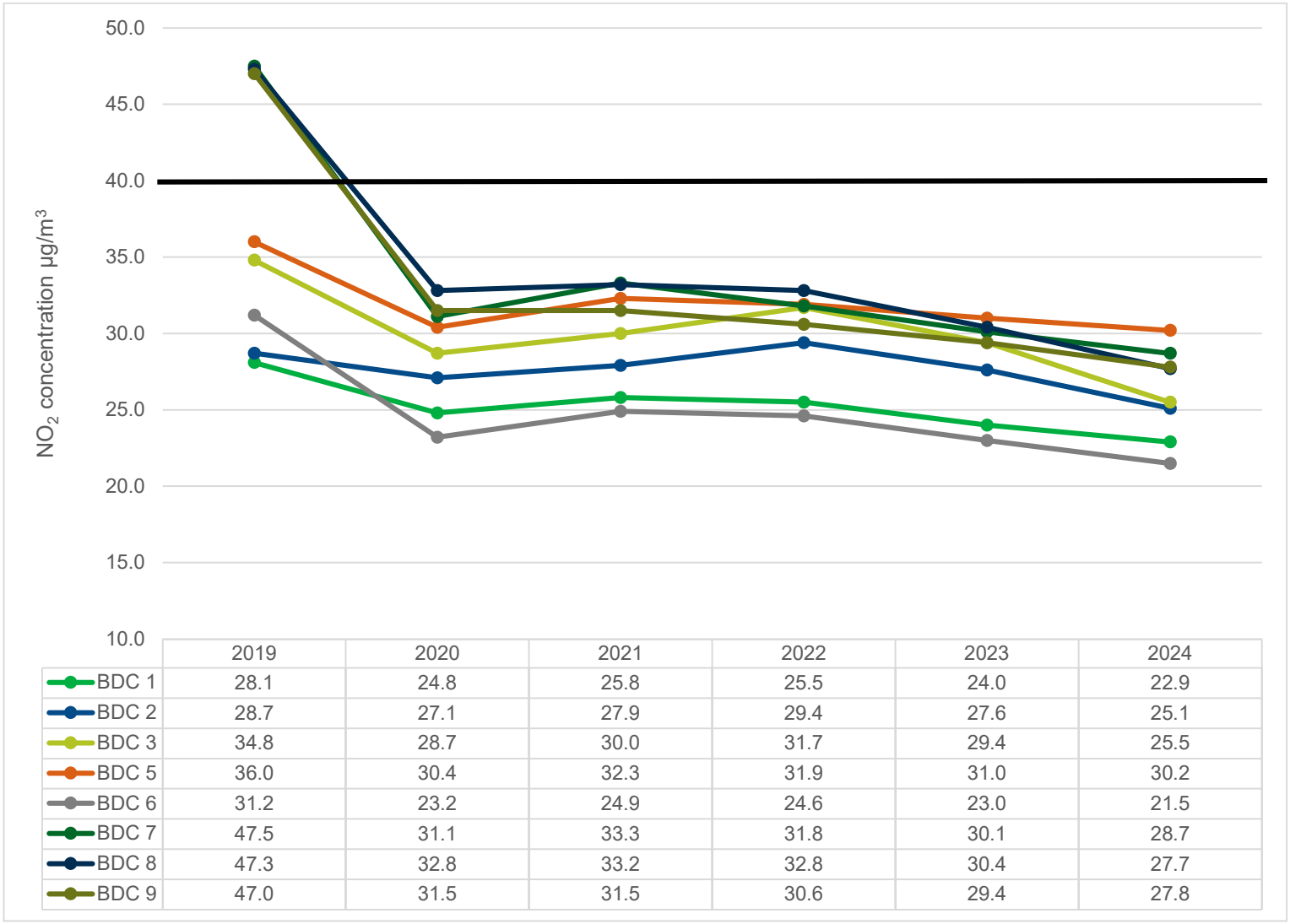
	2019	2020	2021	2022	2023	2024
BDC 7	47.5	31.1	33.3	31.8	30.1	28.7
BDC 8	47.3	32.8	33.2	32.8	30.4	27.7
BDC 9	47.0	31.5	31.5	30.6	29.4	27.8

Figure A.2 – Trends in Annual Mean NO_2 Concentrations for Monitoring Locations in the Babergh district that did not Exceed the Objective in 2019



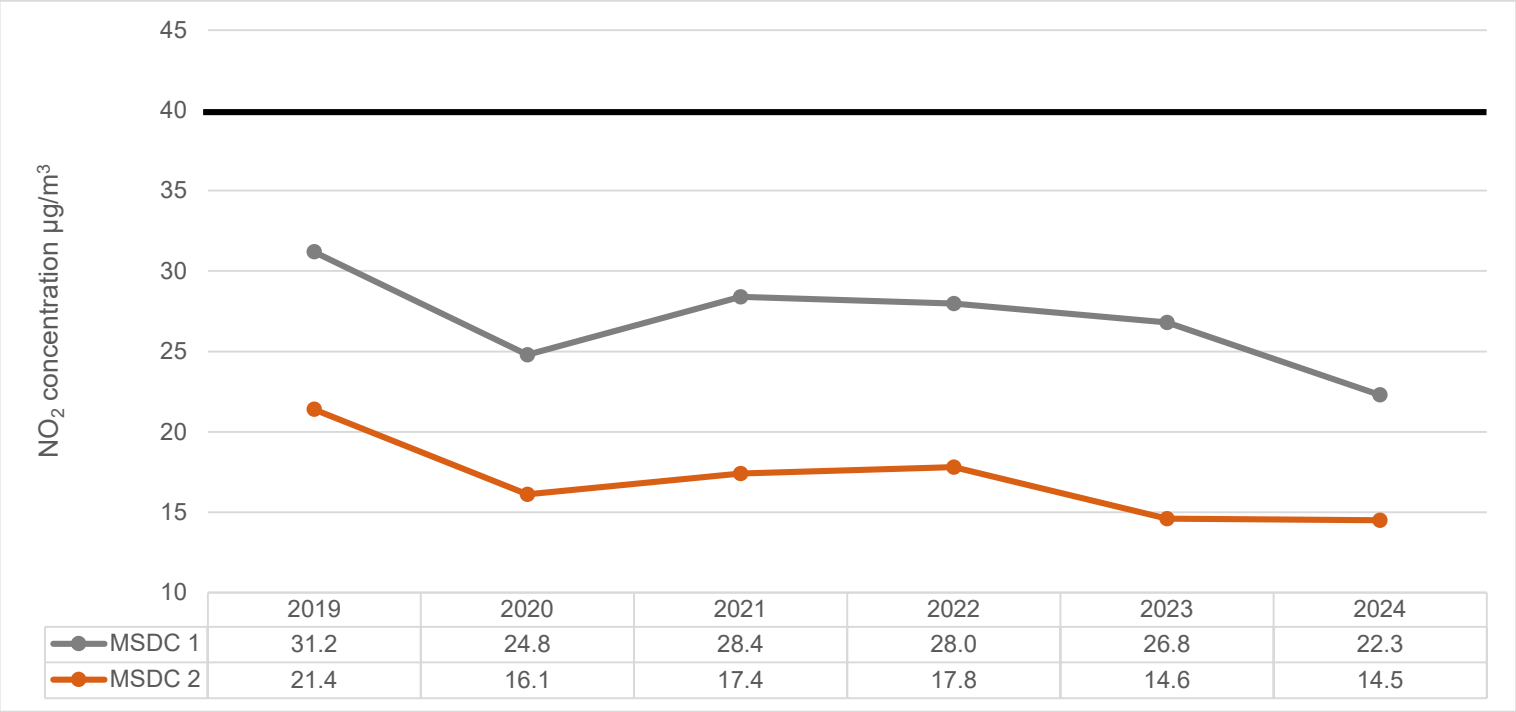
	2019	2020	2021	2022	2023	2024
BDC 1	28.1	24.8	25.8	25.5	24.0	22.9
BDC 2	28.7	27.1	27.9	29.4	27.6	25.1
BDC 3	34.8	28.7	30.0	31.7	29.4	25.5
BDC 4	29.4	22.0	23.2	25.2	21.8	20.2
BDC 5	36.0	30.4	32.3	31.9	31.0	30.2
BDC 6	31.2	23.2	24.9	24.6	23.0	21.5
BDC 10	27.6	23.7	23.1	24.5	22.3	21.1
BDC 11	22.4	14.7	17.2	17.9	15.8	15.2
BDC 12	28.0	22.5	20.2	24.1	22.7	22.7
BDC 13	18.8	14.6	18.0	14.9	12.8	11.8

Figure A.3 – Trends in Annual Mean NO_2 Concentrations for Monitoring Locations within the Cross Street, Sudbury AQMA



	2019	2020	2021	2022	2023	2024
BDC 1	28.1	24.8	25.8	25.5	24.0	22.9
BDC 2	28.7	27.1	27.9	29.4	27.6	25.1
BDC 3	34.8	28.7	30.0	31.7	29.4	25.5
BDC 5	36.0	30.4	32.3	31.9	31.0	30.2
BDC 6	31.2	23.2	24.9	24.6	23.0	21.5
BDC 7	47.5	31.1	33.3	31.8	30.1	28.7
BDC 8	47.3	32.8	33.2	32.8	30.4	27.7
BDC 9	47.0	31.5	31.5	30.6	29.4	27.8

Figure A.4 – Trends in Annual Mean NO_2 Concentrations for Monitoring Locations in the Mid Suffolk district



	2019	2020	2021	2022	2023	2024
MSDC 1	31.2	24.8	28.4	28.0	26.8	22.3
MSDC 2	21.4	16.1	17.4	17.8	14.6	14.5

Table A.5 – 1-Hour Mean NO_2 Monitoring Results, Number of 1-Hour Means > 200µg/m^3

Babergh and Mid Suffolk District Councils do not undertake any automatic monitoring.

Table A.6 – Annual Mean PM_{10} Monitoring Results (µg/m^3)

Babergh and Mid Suffolk District Councils do not undertake any automatic monitoring.

Table A.7 – 24-Hour Mean PM_{10} Monitoring Results, Number of PM_{10} 24-Hour Means > 50µg/m^3

Babergh and Mid Suffolk District Councils do not undertake any automatic monitoring.

Table A.8 – Annual Mean $PM_{2.5}$ Monitoring Results (µg/m^3)

Babergh and Mid Suffolk District Councils do not undertake any automatic monitoring.

Table A.9 – SO_2 2024 Monitoring Results, Number of Relevant Instances

Babergh and Mid Suffolk District Councils do not undertake any automatic monitoring.

Appendix B: Full Monthly Diffusion Tube Results for 2024

Table B.1 – NO_2 2024 Diffusion Tube Results (µg/m^3)

Diffusion Tube ID (1)	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 (0.78)	Annual Mean: Distance Corrected to Nearest Exposure	Comment
BDC 1a	586848	241133	33.3	35.9	37.9	29.5	28.3	25.3	25.7	32.5	27.4	36.1	29.8	-	31.1	24.2	-	Duplicate site with BDC 1b
BDC 1b	586848	241133	30.7	35.5	30.6	28.1	25.0	23.9	22.5	27.8	25.6	32.3	22.4	-	27.7	21.6	-	Duplicate site with BDC 1a
BDC 2a	586836	241089	36.5	40.6	29.1	33.0	30.2	32.1	30.9	31.9	39.1	35.7	32.7	-	33.8	26.4	-	Duplicate site with BDC 2b
BDC 2b	586836	241089	35.6	34.3	24.7	30.3	29.3	27.5	26.9	30.2	32.0	34.9	29.7	-	30.5	23.8	-	Duplicate site with BDC 2a
BDC 3a	586808	241015	38.1	39.5	31.9	33.5	33.7	34.9	34.6	35.5	39.5	38.3	36.8	-	36.0	28.1	-	Duplicate site with BDC 3b
BDC 3b	586808	241015	35.6	32.7	25.6	32.4	33.3	31.2	26.4	30.6	31.1	29.3	16.0	-	29.5	23.0	-	Duplicate site with BDC 3a
BDC 4a	586790	240944	28.8	32.1	30.4	25.7	24.2	23.1	23.3	26.0	26.3	33.6	25.1	-	27.1	21.2	-	Duplicate site with BDC 4b
BDC 4b	586790	240944	27.6	24.6	25.9	24.1	23.2	21.8	21.4	23.8	25.8	30.3	23.7	-	24.7	19.3	-	Duplicate site with BDC 4a
BDC 5a	586798	241010	46.6	46.6	35.1	43.9	40.2	37.7	34.0	35.9	41.2	39.0	40.0	-	40.0	31.2	-	Duplicate site with BDC 5b
BDC 5b	586798	241010	41.1	42.9	33.0	34.7	38.8	37.2	34.0	35.3	39.0	38.6	36.0	-	37.3	29.1	-	Duplicate site with BDC 5a
BDC 6a	586818	241068	33.5	29.6	24.1	30.9	28.2	27.1	26.6	23.2	31.0	30.4	27.6	-	28.4	22.1	-	Duplicate site with BDC 6b
BDC 6b	586818	241068	32.4	27.3	22.2	30.4	27.4	25.6	25.7	22.9	29.8	29.3	22.2	-	26.8	20.9	-	Duplicate site with BDC 6a
BDC 7a	586829	241104	43.8	38.7	34.0	44.2	38.9	38.1	36.4	34.4	41.8	44.0	27.2	-	38.3	29.9	-	Duplicate site with BDC 7b
BDC 7b	586829	241104	41.7	34.9	34.0	37.2	35.4	37.8	35.9	32.7	37.6	35.5	26.0	-	35.3	27.6	-	Duplicate site with BDC 7a
BDC 8a	586835	241123	45.1	39.5	31.8	36.8	36.2	37.6	30.7	35.0	35.8	37.4	37.7	-	36.7	28.6	-	Duplicate site with BDC 8b
BDC 8b	586835	241123	43.1	38.3	31.1	35.6	33.5	31.6	29.1	32.1	33.9	36.9	33.7	-	34.4	26.9	-	Duplicate site with BDC 8a
BDC 9a	586842	241148	42.3	42.5	33.9	37.2	35.4	35.9	33.5	35.7	34.2	40.2	34.7	-	36.9	28.8	-	Duplicate site with BDC 9b
BDC 9b	586842	241148	39.6	37.0	31.1	35.4	30.6	34.9	32.0	34.3	33.6	37.9	31.0	-	34.3	26.8	-	Duplicate site with BDC 9a
BDC 10	586721	240879	29.1	31.2	29.0	27.3	24.3	23.8	23.6	25.2	24.1	31.6	27.8	-	27.0	21.1	-	
BDC 11	586930	241058	22.0	22.8	18.5	20.4	18.3	18.9	15.5	17.0	17.6	21.2	22.6	-	19.5	15.2	-	
BDC 12	587253	241256	25.6	34.3	31.6	27.8	27.3	29.0	26.3	28.9	26.1	31.6	31.3	-	29.1	22.7	-	
BDC 13	587257	241110	20.8	20.6	14.7	14.1	12.2	12.4	12.4	12.7	13.3	19.3	14.6	-	15.2	11.8	-	
MSDC 1a	604972	258745	-	35.6	26.1	31.6	31.3	22.9	28.0	25.0	31.4	29.8	31.7	-	29.3	22.9	-	Duplicate site with MSDC 1b
MSDC 1b	604972	258745	-	31.6	24.9	31.4	30.7	17.3	26.7	24.4	28.3	31.4	32.3	-	27.9	21.8	-	Duplicate site with MSDC 1a
MSDC 2	606049	259307	20.3	21.5	19.0	19.9	17.3	13.7	15.9	12.2	21.1	24.8	18.8	-	18.6	14.5	-	

☒ **All erroneous data has been removed from the NO_2 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.**

☒ **Babergh and Mid Suffolk District Councils confirm that all 2024 diffusion tube data has been uploaded to the Diffusion Tube Data Entry System.**

Notes:

Exceedances of the NO_2 annual mean objective of 40µg/m^3 are shown in **bold**.

NO_2 annual means exceeding 60µg/m^3, indicating a potential exceedance of the NO_2 1-hour mean objective are shown in **bold and underlined**.

See Appendix C for details on bias adjustment and annualisation.

(1) BDC = Babergh District Council, MSDC = Mid Suffolk District Council.

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

New or Changed Sources Identified Within Babergh and Mid Suffolk District Councils During 2024

Babergh and Mid Suffolk District Councils have not identified any significant new sources relating to air quality within the reporting year of 2024.

Additional Air Quality Works Undertaken by Babergh and Mid Suffolk District Councils During 2024

The Air Quality Action Plan for the Cross Street, Sudbury was revised in March 2024. The key priority of the revised plan was to assess the ongoing impact on NO_2 concentrations of removing the on-street parking bays in the AQMA, with a view to revoking the AQMA once compliance with the annual mean objective has been achieved in three consecutive years since 2022. The impact of the Action Plan measures has been assessed through the Council's routine diffusion tube monitoring programme, rather than through a detailed assessment or modelling – with the results presented in this ASR.

QA/QC of Diffusion Tube Monitoring

Diffusion tubes are supplied and analysed by Socotec, Didcot. The preparation method is 50% TEA in acetone. The analysis of diffusion tube samples to determine the amount of Nitrogen dioxide present on the tube is within the scope of Socotec's UKAS schedule. The samples are analysed in accordance with Socotec's standard operating procedure, which meets the guidelines set out in DEFRA's 'Diffusion Tubes for Ambient NO_2 Monitoring: Practical Guidance'. In the AIR-PT inter-comparison scheme for comparing spiked Nitrogen dioxide diffusion tubes, Socotec is ranked as a 'satisfactory' laboratory. Regarding precision results, Socotec, 50% TEA in acetone obtained good results for 30 studies, and poor results for 3 studies in 2024. The diffusion tubes were changed in line with the 2024 monitoring calendar, apart from the month of December when no tubes were exposed due to staffing problems.

Diffusion Tube Annualisation

All diffusion tube monitoring locations within Babergh and Mid Suffolk District Councils recorded data capture of at least 75%. Therefore, it was not necessary to annualise any monitoring data.

Diffusion Tube Bias Adjustment Factors

The diffusion tube data presented within the 2024 ASR have been corrected for bias using an adjustment factor. Bias represents the overall tendency of the diffusion tubes to under or over-read relative to the reference chemiluminescence analyser. LAQM.TG22 provides guidance with regard to the application of a bias adjustment factor to correct diffusion tube monitoring. Triplicate co-location studies can be used to determine a local bias factor based on the comparison of diffusion tube results with data taken from NO_x/NO_2 continuous analysers. Alternatively, the national database of diffusion tube co-location surveys provides bias factors for the relevant laboratory and preparation method.

Babergh and Mid Suffolk District Councils have applied a national bias adjustment factor of 0.78 to the 2024 monitoring data. A summary of bias adjustment factors used by Babergh and Mid Suffolk District Councils over the past five years is presented in Table C..

The Councils do not conduct automatic monitoring so there are no collocation studies, and the national factor has been used rather than a local factor. For 2024, national spreadsheet version 04/25 has been used, which included 33 studies to derive the bias factor, as shown below.

National Diffusion Tube Bias Adjustment Factor Spreadsheet — Spreadsheet Version Number: 04/25

Follow the steps below **in the correct order** to show the results of **relevant** co-location studies

Data only apply to tubes exposed monthly and are not suitable for correcting individual short-term monitoring periods

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.

This spreadsheet will be updated at the end of June 2025

LAQM Helpdesk Website

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[3] shown in blue at the foot of the final column.
If a laboratory is not shown, we have no data for this laboratory.	If a preparation method is not shown, we have no data for this method at this laboratory.	If a year is not shown, we have no data[2]	If you have your own co-location study then see footnote[4]. If uncertain what to do then contact the Local Air Quality Management Helpdesk at LAQMHelpdesk@bureauveritas.com or 0800 0327953

Analysed By[1]	Method (To undo your selection, choose (All) from the pop-up list)	Year[2] (To undo your selection, choose (All))	Site Type	Local Authority	Length of Study (months)	Diffusion Tube Mean Conc. (Dm) (µg/m³)	Automatic Monitor Mean Conc. (Cm) (µg/m³)	Bias (B)	Tube Precision[4]	Bias Adjustment Factor (A) (Cm/Dm)
SOCOTEC Didcot	50% TEA in acetone	2024		Overall Factor[3] (33 studies)				Use		0.78

Table C.1 – Bias Adjustment Factor

Monitoring Year	Local or National	If National, Version of National Spreadsheet	Adjustment Factor
2024	National	03/25	0.78
2023	National	03/24	0.77
2022	National	03/23	0.76
2021	National	06/22	0.78
2020	National	06/21	0.76

NO_2 Fall-off with Distance from the Road

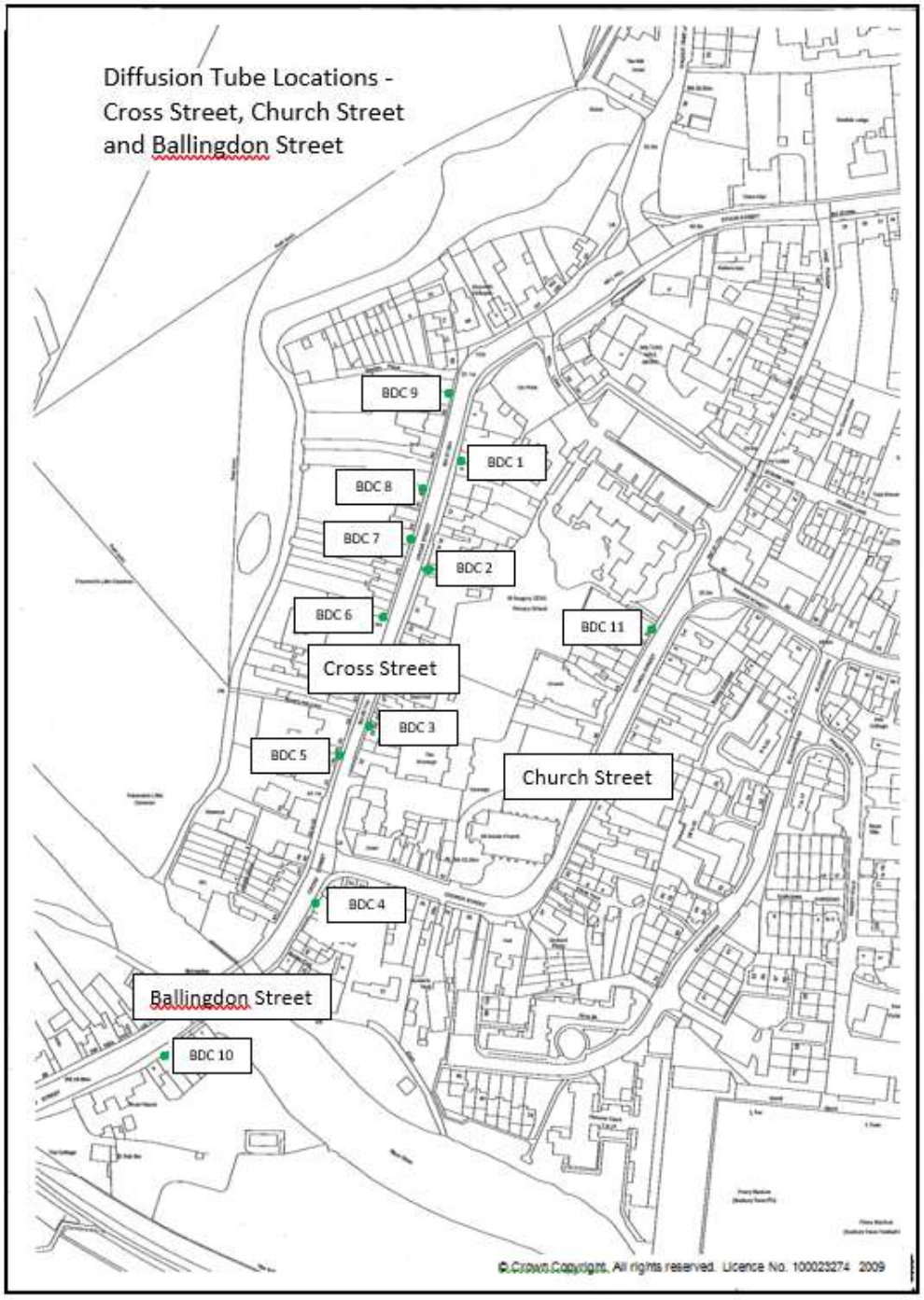
Wherever possible, monitoring locations are representative of exposure. However, where this is not possible, the NO_2 concentration at the nearest location relevant for exposure can be estimated using the Diffusion Tube Data Processing Tool/NO_2 fall-off with distance calculator available on the LAQM Support website.

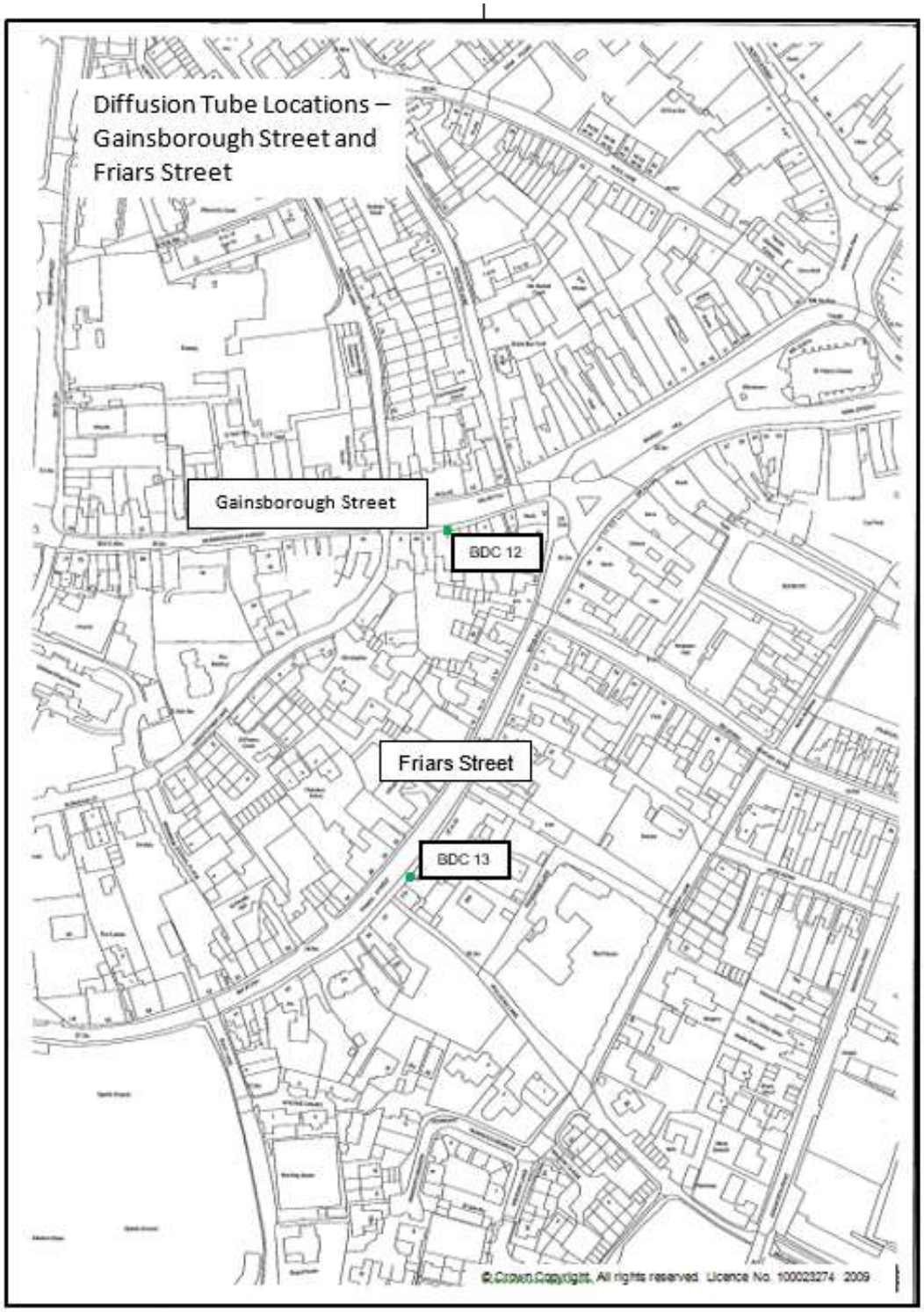
There is only one monitoring location that is not at relevant exposure. However, distance correction should only be considered where the annual mean concentration is greater than 36µg/m^3 and the monitoring is not located at a point of relevant exposure. The annual mean at this location was 14.5µg/m^3, hence no diffusion tube NO_2 monitoring locations within Babergh and Mid Suffolk District Councils required distance correction during 2024.

Appendix D: Map(s) of Monitoring Locations and AQMAs

Figure D.1 – Maps of Non-Automatic Monitoring Sites

Within the Babergh District




Diffusion Tube Locations – Gainsborough Street and Friars Street
Gainsborough Street
BDC 12
Friars Street
BDC 13
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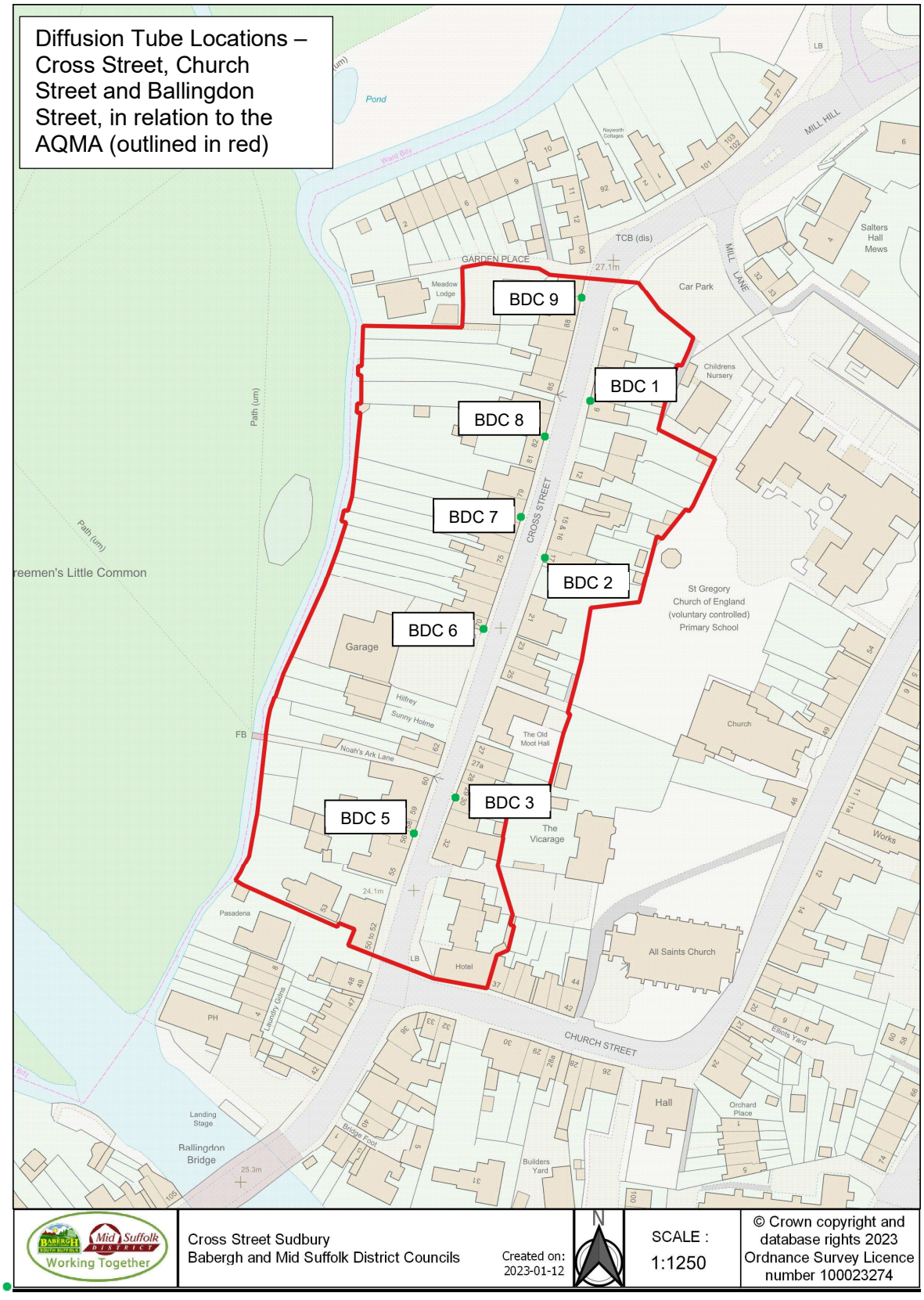
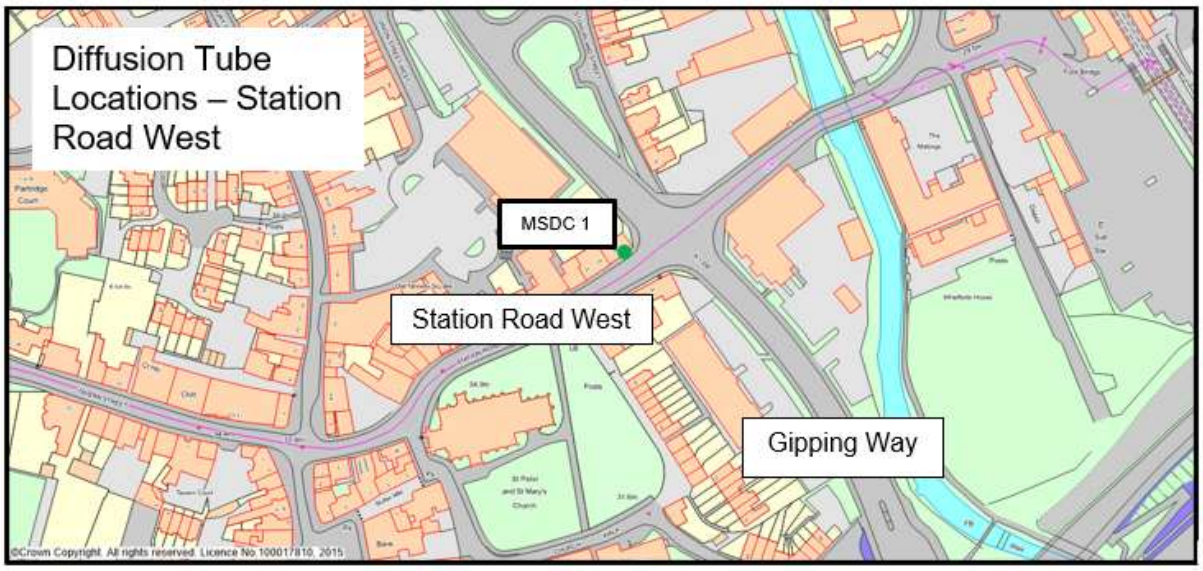
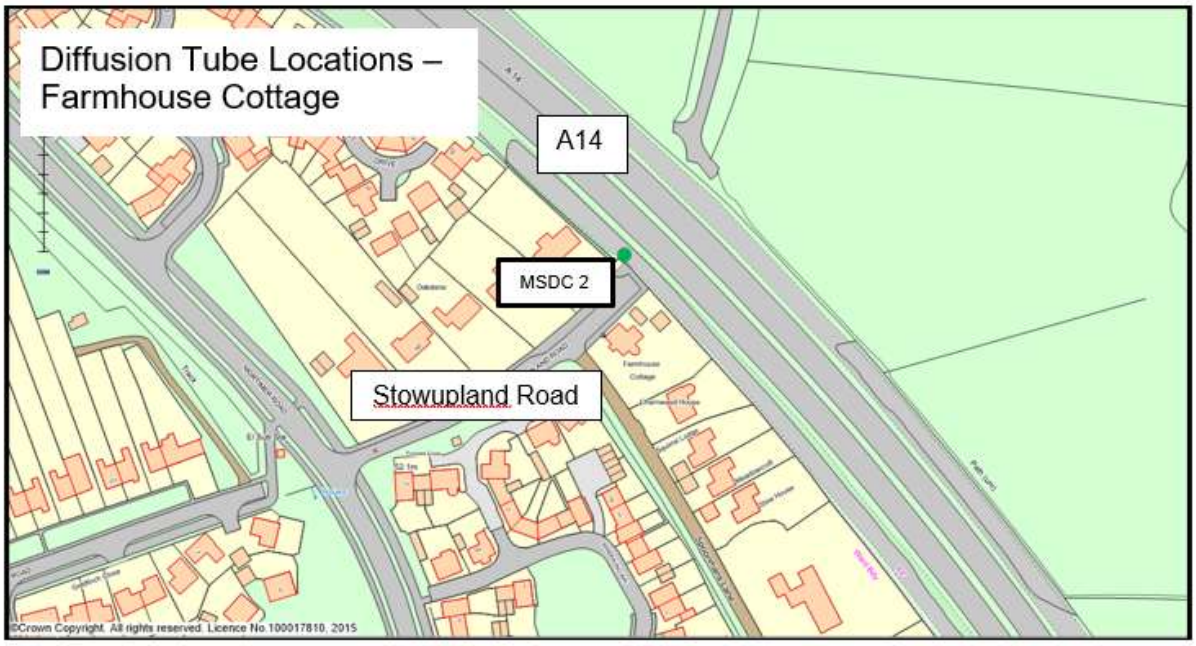

Diffusion Tube Locations – Cross Street, Church Street and Ballingdon Street, in relation to the AQMA (outlined in red)
BDC 9
BDC 1
BDC 8
BDC 7
BDC 2
BDC 6
BDC 3
BDC 5
CROSS STREET
CHURCH STREET
GARDEN PLACE
MILL HILL
MILL LANE
Pond
Car Park
Childrens Nursery
St Gregory Church of England (voluntary controlled) Primary School
Church
The Vicarage
The Old Moot Hall
Garage
Hilfrey
Sunny Holme
Noah's Ark Lane
Pasadena
Hotel
All Saints Church
Hall
Salters Hall Mews
Meadow Lodge
Ballingdon Bridge
Landing Stage
Builders Yard
Orchard Place
Elliots Yard
Works
PH
Laundry Cleans
Bridge Foot
Path (um)
FB
TCB (dis)
27.1m
24.1m
25.3m
Cross Street Sudbury
Babergh and Mid Suffolk District Councils
Created on: 2023-01-12
N
SCALE : 1:1250
© Crown copyright and database rights 2023 Ordnance Survey Licence number 100023274
Working Together

Within the Mid Suffolk District





Appendix E: Summary of Air Quality Objectives in England

Table E.1 – Air Quality Objectives in England[5]

Pollutant	Air Quality Objective: Concentration	Air Quality Objective: Measured as
Nitrogen Dioxide (NO_2)	200µg/m^3 not to be exceeded more than 18 times a year	1-hour mean
Nitrogen Dioxide (NO_2)	40µg/m^3	Annual mean
Particulate Matter (PM_{10})	50µg/m^3, not to be exceeded more than 35 times a year	24-hour mean
Particulate Matter (PM_{10})	40µg/m^3	Annual mean
Sulphur Dioxide (SO_2)	350µg/m^3, not to be exceeded more than 24 times a year	1-hour mean
Sulphur Dioxide (SO_2)	125µg/m^3, not to be exceeded more than 3 times a year	24-hour mean
Sulphur Dioxide (SO_2)	266µg/m^3, not to be exceeded more than 35 times a year	15-minute mean

[5] The units are in microgrammes of pollutant per cubic metre of air (µg/m^3).

Glossary of Terms

Abbreviation	Description
AADTF	Annual Average Daily Traffic flow
AQAP	Air Quality Action Plan - A detailed description of measures, outcomes, achievement dates and implementation methods, showing how the local authority 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
ASR	Annual Status Report
BMSDC	Babergh and Mid Suffolk District Councils
CO_2	Carbon Dioxide
CC	County Council
DC	District Council
Defra	Department for Environment, Food and Rural Affairs
EV	Electric Vehicle
LAQM	Local Air Quality Management
LAQM.TG22	Local Air Quality Management Technical Guidance (TG22)
Modeshift STARS	STARS: Sustainable Travel Accreditation and Recognition for Schools A national awards scheme that recognises schools and other organisations that excel at promoting and implementing sustainable, active, and safer travel to and from their sites, with the goal of improving health, safety, and the environment
NHS	National Health Service
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
PM_{10}	Airborne particulate matter with an aerodynamic diameter of 10µm 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
TEA	Triethanolamine
µg/m3	micrograms per cubic metre

References

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- Local Air Quality Management Policy Guidance LAQM.PG22. August 2022. Published by Defra in partnership with the Scottish Government, Welsh Assembly Government and Department of the Environment Northern Ireland.
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- Background Mapping Data for Local Authorities. Defra, 2023.
- Public Health Outcomes Framework. Department of Health and Social Care, 2023.