



2019 Air Quality Annual Status Report (ASR)

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

October 2019

Babergh and Mid Suffolk District Councils

Local Authority Officer	Nathan Pittam Jennifer Lockington
Department	Environmental Protection
Address	Endeavour House, 8 Russell Road, Ipswich, Suffolk, IP1 2BX
Telephone	0300 123 4000
E-mail	environmental@baberghmidsuffolk.gov.uk
Report Reference number	ASR/2019
Date	October 2019

Executive Summary: Air Quality in Our Area

Air Quality in the Babergh and Mid Suffolk Districts

Air pollution is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas^{1,2}. The annual health cost to society of the impacts of Particulate Matter alone in the UK is estimated to be around £16 billion³.

The Babergh and Mid Suffolk districts are predominantly rural, with several small market towns. The majority of the non-residential area is used for agricultural activity.

Industrial activity in the districts is light in nature with very few large industrial processes. As such, industry has relatively little impact on air quality. No new sources of significant industrial emissions began operation in 2018. A small number of planning applications for industrial uses such as poultry sheds and general industrial units were assessed for air quality purposes, but no significant emissions were predicted.

The main transport routes within the districts are the railway between London and Norwich, and the A12, A14 and A140 roads; none of which have previously been found to be of significance to air quality. No significant changes have been made to transport routes within either district during 2018.

Within the Babergh and Mid Suffolk districts, the main air pollutant of concern is Nitrogen dioxide. The primary source of Nitrogen dioxide within the districts is emissions from road transport. Monitoring is conducted to measure concentrations of Nitrogen dioxide. This monitoring has shown that within specific areas of Cross Street, Sudbury (within the Babergh district), concentrations of Nitrogen dioxide are higher than the health based annual mean Air Quality Objective. As a result of the exceedances of the annual mean Objective for Nitrogen

¹ Environmental equity, air quality, socioeconomic status and respiratory health, 2010

² Air quality and social deprivation in the UK: an environmental inequalities analysis, 2006

³ Defra. Abatement cost guidance for valuing changes in air quality, May 2013

Babergh and Mid Suffolk District Councils

dioxide, an Air Quality Management Area (AQMA) was designated in 2008 for a section of Cross Street, Sudbury. Further information about the AQMA can be found at

https://uk-air.defra.gov.uk/aqma/details?aqma_ref=635 and in Appendix G. This is the only AQMA within the Babergh district.

The exceedances of the Objective at locations on Cross Street are as a result of emissions from road transport, local highways design and local topography. During 2018, the annual mean at three monitoring locations on Cross Street exceeded the Objective. These three monitoring locations have all exceeded the Objective for at least the past 5 years and are within the AQMA. Results at one of these locations has not varied much over the last five years. At the other two locations, there was not much variation in the results between 2014 and 2017, but there has been a significant reduction between 2017 and 2018. There are two other monitoring locations that have shown exceedances of the Objective during the past 5 years, but did not in 2018. There are monitoring locations within the AQMA at which there were not exceedances of the Objective during 2018. These locations are affected to a lesser extent by road transport, owing to highway design allowing free flow of traffic and greater dispersal of exhaust emissions. At most of these locations, Nitrogen dioxide concentrations have reduced over the past 5 years. Overall, the monitoring in 2018 supports the designation of the AQMA.

At monitoring locations within the Babergh district but outside the AQMA, results over the last 5 years have been fairly constant or shown a gradual reduction. No exceedances of the Objective were recorded outside the AQMA in 2018.

Monitoring in the Mid Suffolk district has not historically shown exceedances of the Objective at relevant exposure, (for example residential properties, schools, hospitals, care homes), and there are no designated AQMAs. This remains true for 2018. The locations monitored in 2018 within the Mid Suffolk district have shown a gradual reduction in Nitrogen dioxide concentration over the past 5 years.

In addition to the above monitoring, Babergh and Mid Suffolk District Councils are working with Suffolk County Council to implement a range of policies and strategies that have a positive impact on air quality. This includes actions within Suffolk County Council's Transport Strategy relating to sustainable planning developments⁴. Babergh and Mid Suffolk District

⁴ Suffolk Local Transport Plan 2011 – 2031, Suffolk County Council

Babergh and Mid Suffolk District Councils

Councils are also running a project to install Electric Vehicle charging points in the districts and in locations in Suffolk, Norfolk and Essex via a grant from Highways England.

Actions to Improve Air Quality

Due to the AQMA in Cross Street, Sudbury, an Air Quality Action Plan (AQAP) is in place. The key action from the AQAP that will reduce the concentration of Nitrogen dioxide is to remove the on-street parking bays on Cross Street.

There are currently two sets of parking bays on the southbound lane of Cross Street, allowing six or seven vehicles to park. When either of these bays is occupied by at least one vehicle, traffic has to slow down, and often queue, to pass the bays, as shown in Photograph 1.

Photograph 1: Southbound traffic has had to queue behind the bays until northbound traffic has passed



Traffic then passes the bays by entering the northbound lane. Concentrations of Nitrogen dioxide exceed the Objective at relevant exposure on the west of Cross Street in the area of the parking bays. This is thought to be primarily because both lanes of traffic pass the parking bays in the northbound lane, closest to these properties, as shown in Photograph 2.

Photograph 2: Traffic passes the parking bays by entering the northbound lane



Queuing and accelerating traffic also leads to higher concentrations of Nitrogen dioxide than free flowing traffic. Appendix E shows the annual mean Nitrogen dioxide results for 2018 compared to the location of the parking bays. Exceedances of the Objective are identified in red text.

Officers from Babergh District Council have been working with Suffolk County Council Highways Department to pursue the experimental removal of the on-street parking bays. The impact this has on air quality would then be measured and assessed, with a view to informing a permanent solution.

Conclusions and Priorities

The Nitrogen dioxide monitoring that is conducted within the districts remains relevant. It shows that the AQMA at Cross Street, Sudbury, should remain and no other AQMAs should be designated as exceedances of the Objective are only within the AQMA. In the main, the monitoring has shown a reduction in Nitrogen dioxide concentration in both districts.

The priority is to implement the experimental removal of the on-street parking bays on Cross Street, Sudbury in early 2020, and to monitor the effect this has on the concentration of Nitrogen dioxide. There are resource, logistical and legal challenges relating to this task, but Officers from Babergh District Council are committed to working with Suffolk County Council

Babergh and Mid Suffolk District Councils

to achieve a positive outcome. Once the effect of removing the parking bays has been determined, other actions in the AQAP will be reviewed as appropriate.

The Councils also aim to work with other Suffolk local authorities and the Health Protection team at Suffolk County Council to investigate and implement measures to reduce the emissions of Particulate Matter. There have been delays in this work due to staffing resources at both the District and County Councils, but it is anticipated that this situation will improve in the future.

One of the Councils' priorities is acting as an investor in renewables and energy efficiency. Many of these projects are beneficial to air quality and will be priorities for the foreseeable future.

Photograph 3 An Electric Vehicle charging point installed by the Councils



Local Engagement and How to get Involved

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. Cars are particularly polluting over short journeys, so aim to cut these out first.

Babergh and Mid Suffolk District Councils

- 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.
- Consider purchasing an electric vehicle; the costs are always reducing, and the technology and infrastructure are now supporting this significant change in vehicle technology.
- 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. Please see www.suffolkcarshare.com for details of a Suffolk wide scheme.
- Avoid having bonfires. If you do choose to have a fire, only burn dry garden waste and avoid burning on days that already have high pollution levels.
- Avoid burning solid fuel. If you do choose to burn solid fuel, always ensure the appliance is well maintained and fuel is clean and dry.

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

www.babergh.gov.uk/environment/air-quality/

www.midsuffolk.gov.uk/environment/air-quality/

Table of Contents

Executive Summary: Air Quality in Our Area	i
Air Quality in the Babergh and Mid Suffolk Districts	i
Actions to Improve Air Quality	iii
Conclusions and Priorities	iv
Local Engagement and How to get Involved	v
1 Local Air Quality Management	1
2 Actions to Improve Air Quality	2
2.1 Air Quality Management Areas	2
2.2 Progress and Impact of Measures to address Air Quality in Babergh and Mid Suffolk District Councils	4
2.3 PM _{2.5} – Local Authority Approach to Reducing Emissions and/or Concentrations.....	12
3 Air Quality Monitoring Data and Comparison with Air Quality Objectives and National Compliance	13
3.1 Summary of Monitoring Undertaken	13
3.1.1 Non-Automatic Monitoring Sites	13
3.2 Individual Pollutants.....	13
3.2.1 Nitrogen Dioxide (NO ₂)	13
Appendix A: Monitoring Results	15
Appendix B: Full Monthly Diffusion Tube Results for 2018	24
Appendix C: Supporting Technical Information / Air Quality Monitoring Data QA/QC	27
Supporting Technical Information	27
Diffusion Tube Bias Adjustment Factors.....	27
Short-term to Long-term Data Adjustment	27
Distance correction to Relevant Receptors.....	27
QA/QC of Diffusion Tube Monitoring.....	27
Appendix D: Maps of Monitoring Locations	28
Within the Babergh district.....	28
Within the Mid Suffolk district	30
Appendix E: Map of Annual Results from Monitoring Locations and Position of Parking Bays on Cross Street, Sudbury	31
Appendix F: Summary of Air Quality Objectives in England	32
Appendix G: Babergh District Council Air Quality Management Order 2008 for Cross Street, Sudbury	33

Glossary of Terms..... 35

List of Tables

Table 2.1 – Declared Air Quality Management Areas..... 3
Table 2.2 – Progress on Measures to Improve Air Quality 7

List of Figures

Figure A.1 - Trends in Annual Mean NO₂ Concentrations for Monitoring Locations in the Babergh district that Exceeded the Objective in 2017..... 20
Figure A.2 - Trends in Annual Mean NO₂ Concentrations for Monitoring Locations in the Babergh district that did not Exceed the Objective in 2017..... 21
Figure A.3 - Trends in Annual Mean NO₂ Concentrations for Monitoring Locations in the Mid Suffolk district..... 22

1 Local Air Quality Management

This report provides an overview of air quality in the Babergh and Mid Suffolk districts during 2018. Babergh District Council and Mid Suffolk District Council are two constitutionally separate local authorities with a shared officer structure. As such, this report is the combined Annual Status Report (ASR) for both districts. It fulfils the requirements of Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995) 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 designate 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 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 can be found in Appendix F.

2 Actions to Improve Air Quality

2.1 Air Quality Management Areas

AQMAs are designated when there is an exceedance or likely exceedance of an Air Quality Objective. After designation, the authority must prepare an AQAP within 12-18 months setting out measures it intends to put in place in pursuit of compliance with the Objectives.

One AQMA has been designated by Babergh District Council and a summary can be found in Table 2.1. Further information related to designated or revoked AQMAs, including maps of AQMA boundaries are available online at:

https://uk-air.defra.gov.uk/aqma/local-authorities?la_id=9 and at Appendix G. Additionally, the first map of Appendix D shows the air quality monitoring locations in and around the AQMA. All other air quality monitoring locations within the Babergh district are also shown in Appendix D.

Mid Suffolk District Council does not currently have any AQMAs. For reference, maps of the monitoring locations are available in Appendix D.

Babergh and Mid Suffolk District Councils

Table 2.1 – Declared Air Quality Management Areas

AQMA Name	Date of Declaration	Pollutants and Air Quality Objectives	City / Town	One Line Description	Is air quality in the AQMA influenced by roads controlled by Highways England?	Level of Exceedance (maximum monitored/modelled concentration at a location of relevant exposure)				Action Plan		
						At Declaration		Now		Name	Date of Publication	Link
Sudbury AQMA	Declared November 2008	NO2 Annual Mean	Sudbury	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	64.0	µg/m3	51.4	µg/m3	Air Quality Action Plan: Babergh District Council – Cross Street, Sudbury AQMA	Oct-11	https://www.babergh.gov.uk/assets/Environment/Air-Quality-Action-Plan.pdf

Babergh District Council confirm the information on UK-Air regarding their AQMA is up to date

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

The 2017 ASR was not submitted within the timeframe for Defra to appraise it.

Defra's appraisal of the 2016 ASR concluded:

1. There are a large number of measures provided in Table 2.2, many of which are not targeted at the AQMA. However, those that have been identified as potentially offering the greatest reduction in Nitrogen dioxide concentrations in Cross Street do not appear to be in the table (i.e. removing the build out, removing car parking bays, redefining lorry routes and considering a bypass)? Future reports should clearly show all measures or state that the table only includes those that are ongoing or future measures rather than those completed.
2. It is also recommended that in the next ASR, Table 2.2 should more clearly identify which measures are more aspirational, for example those with a long-term timescale, those that require funding or those that are the responsibility of the County through the LTP compared to those that are currently being actively pursued.
3. A review of the effectiveness of the experimental removal of on-street parking bays in Cross Street should be included in the next ASR with evidence from measured concentrations at the monitoring sites compared to the objective. These impacts should be related back to the expected improvements modelled as part of the 2011 action plan.

In this year's ASR, Table 2.2 has been divided to show the measures that are targeted at the AQMA and those that are wider measures. Where measures are aspirational, this is shown in the comments.

Babergh and Mid Suffolk District Councils have taken forward a number of direct measures during the current reporting year of 2018 in pursuit of improving local air quality. Details of all measures completed, in progress or planned are set out in Table 2.2, with those targeted at the AQMA listed first.

Babergh and Mid Suffolk District Councils

More detail on these measures can be found in the Action Plan for the AQMA, and sources such as the Local Transport Plan and <https://www.midsuffolk.gov.uk/news/making-east-anglia-miles-better-for-generations-to-come/>

Key completed measures are:

- Installation of Electric Vehicle (EV) charging points. One was installed in 2018 to serve two parking bays, and others are planned for installation in 2019 via a Highways England grant.
- Planning applications that may have an adverse impact on air quality have been assessed, and mitigation recommended where necessary.
- The main office bases of Babergh and Mid Suffolk Districts Councils changed from Hadleigh and Needham Market, respectively, to central Ipswich in September 2017. The previous bases were rural, with limited public transport. Central Ipswich is more easily accessible by public transport, the Councils have signed up to Suffolk County Council's Travel Plan (giving discounted public transport and free use of the Park and Ride buses), and agile and flexible working is encouraged, resulting in fewer car journeys to an office base. Technology has improved during 2018 to allow agile and flexible working to be maximised and travel minimised.
- Most premises that hold environmental permits which control emissions to atmosphere, including Particulate Matter, were rated low risk in 2018. Good practice was encouraged during the inspections to minimise emissions.
- The Suffolk Air Quality Group continued to meet to share knowledge, liaise with other bodies, and has distributed details of funding for EVs to taxi drivers licensed by the districts.

Progress on the experimental removal of the on-street parking bays in Cross Street, Sudbury (within the AQMA), has been slower than expected due to funding and the legal processes that Suffolk County Council, in its capacity as the Highways Authority, must adhere to. However, Babergh and Mid Suffolk District Councils expect the following measures to be completed over the course of the next reporting year:

Babergh and Mid Suffolk District Councils

- A decision by Suffolk County Council Highways as to whether the experimental removal of the on-street parking bays in Cross Street, Sudbury, will progress.
- If a decision is made to progress the experimental removal of the on-street parking bays in Cross Street, Sudbury, a timetable of actions for: Suffolk County Council to implement the necessary traffic regulation order in early 2020; the County Council and Babergh District Council to jointly consult the public on the proposal; and for Babergh District Council to monitor and assess the impact on air quality in order to inform a future decision as to whether the order should be made permanent.

The above actions relating to the AQMA are the priorities for the coming year as they will have the greatest impact on reducing Nitrogen dioxide to below the Objective. The modelling that was conducted when the AQAP was written shows that if the on-street parking bays were removed, the Objective would be met at all but one of the modelled receptor locations. This receptor is in a similar position to the diffusion tube monitoring location at 30 Cross Street (BDC 3). The annual mean at this location for 2018 was more than $4\mu\text{g}/\text{m}^3$ below the baseline (i.e. with the bays present) given in the AQAP. Therefore, it is likely that the Objective would now be met if the on-street parking bays were removed.

Babergh District Council anticipates that the measures stated above and in Table 2.2 will achieve compliance in the Sudbury AQMA. They will also lead to improvements in the air quality in other locations in the Babergh district and throughout the Mid Suffolk district.

Examples of other measures that are expected to be completed in the Babergh and Mid Suffolk districts over the course of the next reporting year are:

- The installation of EV charging points within the districts and organising the installation in other districts in a project funded by Highways England.
- Investigate anti-idling legislation and campaigns with other Suffolk authorities.
- Continuing to promote sustainable travel options to the public via the Councils' website and other publicity.
- Continue to respond to planning applications to advise on air quality related risks.
- Continue to permit, inspect and advise industries that require environmental permits in terms of emissions to atmosphere.

Table 2.2 – Progress on Measures to Improve Air Quality

Measures 3, 4 and 5 of Table 2.2 detail the three key proposals from the AQAP that warranted further investigation after analysis of all possible measures. The impact of these measures at various receptor locations (some of which tie in with the Nitrogen dioxide monitoring locations) has been modelled. This is presented in the AQAP as the concentration of Nitrogen dioxide at each location without any action, and then the concentration with each individual action being implemented. The ‘Reduction in Pollutant/Emission from measure’ is therefore stated as the difference between these figures. It should be noted that there are uncertainties associated with any modelling and that the figures were derived a number of years ago. The 2018 annual mean from the monitoring locations has been compared with the relevant baseline figures (after the removal of the build out, as this has been completed) in the AQAP, and there are generally quite significant differences, both higher and lower than the figures predicted in the AQAP. This issue will be considered during 2019, but for the purposes of this report, the figures in the AQAP have been used to demonstrate the predicted impact of a measure. Table 2.2 also details two other measures from the AQAP that are specifically focused on the AQMA. Other ‘district wide’ measures are not specifically focused on the AQMA, but in many cases they would benefit the air quality in the AQMA as well as in general.

Measure No.	Measure	EU Category	EU Classification	Organisations involved and Funding Source	Planning Phase	Implementation Phase	Key Performance Indicator	Reduction in Pollutant / Emission from Measure	Progress to Date	Estimated / Actual Completion Date	Comments / Barriers to implementation
AQMA focused measures											
1	Create a bypass that avoids the AQMA - Sudbury Western bypass	Traffic Management	Strategic highway improvements, re-prioritising road space away from cars, including access management, selective vehicle	SCC	Local Transport Plan 2011-2031 states that creating a bypass is a long-term strategic objective	Long-term aim of LTP 2011-2031	Measured concentration of NO2 within AQMA	Not quantified in AQAP	Aspirational	Aspirational	Funding, long-term project, adverse environmental impacts

Babergh and Mid Suffolk District Councils

			priority, bus priority, high vehicle occupancy lane								
2	Redefine the strategic lorry route avoiding the AQMA	Freight and Delivery Management	Route Management Plans/Strategic routing strategy for HGV's	SCC, Essex County Council	Aspirational	Aspirational	Measured concentration of NO2 within AQMA	HGVs contribute 46% of annual mean NO2 emissions (AQAP)	Aspirational	Aspirational	Limited reasonable alternative routes, funding
3	Remove on street parking bays within AQMA	Traffic Management	Other	LA, SCC	Ongoing	ASAP	Measured concentration of NO2 within AQMA	Maximum predicted reduction 9.7µg/m3 NO2	Planning on-going	ASAP	Need to secure commitment from SCC, funding, legal processes to be completed, opposition from residents
4	Implementation of a one-way system in Sudbury, including through the AQMA	Traffic Management	Strategic highway improvements, re-prioritising road space away from cars, including access management, selective vehicle priority, bus priority, high vehicle occupancy lane	SCC	Unlikely to be progressed due to adverse impact on air quality at some locations	Unlikely to be progressed due to adverse impact on air quality at some locations	Measured concentration of NO2 within AQMA	Maximum predicted reduction 12.9µg/m3 NO2	Unlikely to be progressed due to adverse impact on air quality at some locations	Unlikely to be progressed due to adverse impact on air quality at some locations	Practical issues such as safety, alternative route, and adverse impact on air quality at some locations (max 14.4µg/m3 NO2 modelled)
5	Implementation of a one-way system for HGVs through the AQMA	Traffic Management	Strategic highway improvements, re-prioritising road space away from cars, including access management, selective vehicle priority, bus priority, high vehicle occupancy lane	SCC	Unlikely to be progressed due to adverse impact on air quality at some locations	Unlikely to be progressed due to adverse impact on air quality at some locations	Measured concentration of NO2 within AQMA	Maximum predicted reduction 8.0µg/m3 NO2	Unlikely to be progressed due to adverse impact on air quality at some locations	Unlikely to be progressed due to adverse impact on air quality at some locations	Practical issues such as safety, alternative route, and adverse impact on air quality at some locations (max 9.4µg/m3 NO2 modelled)

Babergh and Mid Suffolk District Councils

District wide measures											
6	Working with Highways England to install rapid EV charging points on principal routes	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharging	LA, Highways England funded	2017 - 2018	2018 – 2019	Number of points installed and their use	Reduced vehicle emissions as encourages use of EV	Charging points installed in other districts in 2018	Mar-19	Electrical connections
7	Suffolk Guidance for Parking requires electric vehicle charging points	Policy Guidance and Development Control	Other policy	SCC	Throughout 2015	Ongoing	Number of charging points and use of EV	Reduced vehicle emissions	Not possible to quantify impact of this specific policy	Ongoing	Provision of EV charging points encourages EV vehicles to be purchased
8	Suffolk car share	Alternatives to private vehicle use	Car and lift sharing schemes	SCC, Suffolk Climate Change Partnership - BDC and MSDC are members	Ongoing	Ongoing	Number of participants in scheme	Reduced vehicle emissions	Almost 3,000 members at end of 2018, approx. 200 members gained 2018, new community groups for workplaces	Ongoing	Suffolk wide scheme, not possible to quantify benefit in one district
9	Installation of EV charging points	Promoting Low Emission Transport	Procuring alternative refuelling infrastructure to promote Low Emission Vehicles, EV recharging, gas fuel recharging	LA, own funds	2016 onwards	First charging point installed September 2017	Number of points installed and their use	Reduced vehicle emissions as encourages use of EV	Two points installed	Currently unknown	LA funds limit number of charging points
10	An Energy from Waste incinerator within the Mid Suffolk district has significantly lower emissions than required by the IPPC permit	Environmental Permits	Measures to reduce pollution through IPPC Permits going beyond BAT	EA regulated, privately funded and operated	Facility began operating December 2014		Emissions of NOX, SO2 and PM compared to the permit limit	Lower emissions of NOX, SO2 and PM than is legally required	Emissions are well below the permit limit	Ongoing	
11	Responding to planning consultations regarding air quality impacts	Policy Guidance and Development Control	Air Quality Planning and Policy Guidance	LA	Ongoing	Ongoing	Number of consultations responded to within timeframe	Potentially prevent unacceptable emissions	Approx. 120 consultations responded to within timeframe in 2018	Ongoing	

Babergh and Mid Suffolk District Councils

12	Green travel plan implemented as part of Council office move	Promoting Travel Alternatives	Workplace travel planning	LA (SCC travel plan)	2016	Sep 2017	Use of alternative travel	Reduced vehicle emissions	Approximately 92 journeys made daily in 2018 on Park and Ride via free ticket system	Ongoing	Figures include other organisations that have access to the SCC travel plan
13	Encourage good practice regarding control of PM	Environmental Permits	Other	LA	Ongoing	Ongoing	Number of complaints received regarding PM from permitted premises	Reduced emissions of PM	No complaints received regarding PM from permitted premises	Ongoing, in-line with inspection regime	Particularly regarding concrete crushers, use of water suppression
14	Majority of LA permitted premises are low risk, reflecting low emissions. No pollution incidents in 2018	Environmental Permits	Introduction/ increase of environment charges through permit systems and economic instruments	LA	Fee based risk rating scheme operational each year	Fee based risk rating scheme operational each year	Variation in risk rating each year	Reduced PM emissions, and chemicals such as VOCs	45 out of 47 permitted premises are low risk	Fee based risk rating scheme operational each year	
15	Suffolk Climate Change Partnership provides information about journey planning	Promoting Travel Alternatives	Personalised travel planning	Suffolk Climate Change Partnership	Information available prior to 2015	Ongoing	Use of travel alternatives	Reduced vehicle emissions	Unknown	Ongoing	
16	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	LA	Ongoing	Ongoing meetings, knowledge sharing, promotion of EV grant for taxi drivers	Development of policies, strategies, projects	Reduced emissions, particularly PM	Continued good links, EV grant information given to approx. 150 taxi drivers, uptake unknown	Ongoing	
17	Officers at both Councils are increasingly working from home	Promoting Travel Alternatives	Encourage / facilitate home-working	LA	Since 2015	Ongoing	Number of officers working from home	Reduced vehicle emissions from reduced journeys	Majority of officers whose jobs allows it, work from home on occasions	Ongoing	Difficult to quantify as there are day to day variations
18	London Road Park and Ride, reducing vehicles driving into central Ipswich	Alternatives to private vehicle use	Bus based Park and Ride	SCC, Private bus operator	Ongoing	Ongoing	Number of users of scheme	Reduced vehicle emissions	Observations suggest increased use of recent years	Ongoing	More beneficial to Ipswich Borough Council, only small section of route is through BDC

Babergh and Mid Suffolk District Councils

19	Council websites encourage car sharing, walking, cycling	Public information		LA	Ongoing	Ongoing	Number of participants in Suffolk car share	Reduced vehicle emissions	Suffolk car share - Almost 3,000 members at end of 2018, approx. 200 members gained 2018, new community groups for workplaces	Ongoing	Council website is unlikely to be where people would search for such information
20	Cycle training through the 'Bikeability' scheme	Public information		SCC	Ongoing	Ongoing	Number of users of scheme	Encourages cycle use	Approximately 60 groups of 12 school children attended in 2018, 720 children trained	Ongoing	
21	Council pool cars are EV	Promoting Low Emission Transport	Company vehicle procurement - prioritising uptake of low emission vehicles	LA	2017	Ongoing	Miles driven in EV	Reduced vehicle emissions	All pool cars are electric	Completed	

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

As detailed in Policy Guidance LAQM.PG16 (Chapter 7), local authorities are expected to work towards reducing emissions and/or concentrations of PM_{2.5} (particulate matter with an aerodynamic diameter of 2.5µm or less). There is clear evidence that PM_{2.5} has a significant impact on human health, including premature mortality, allergic reactions, and cardiovascular diseases.

In the last ASR, it was stated that Officers from the Suffolk Local Authorities would be meeting with Officers from the Health Protection team at Suffolk County Council. This has been delayed due to staff resources but is hoped to take place soon.

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

- Throughout 2018, inspections that were conducted under the Environmental Permitting (England and Wales) Regulations 2016, 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. Through taking these matters into account in the risk rating and subsequent annual subsistence charge, good practice is encouraged to continue. (Measures 13 and 14 of Table 2.2).
- Recommending planning conditions regarding the control of PM_{2.5}, for example by compliance with a construction management plan. (Measure 11 of Table 2.2).

Within the Babergh and Mid Suffolk districts, the percentage of mortality in those aged over 30 years, due to fine Particulate Matter is 5.3 in both districts⁵. This is very similar to the average figure for the East of England Region (5.5%), and the England average of 5.1%⁵.

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}.

There are no smoke control areas in the Babergh or Mid Suffolk districts.

⁵ Public Health Outcomes Framework, Health Protection, <http://www.phoutcomes.info/public-health-outcomes-framework#page/0/gid/1000043/pat/6/par/E12000006/ati/101/are/E07000200/iid/30101/age/230/sex/4>

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

3.1 Summary of Monitoring Undertaken

This section sets out what monitoring has taken place and how it compares with the Objectives.

3.1.1 Non-Automatic Monitoring Sites

Babergh and Mid Suffolk District Councils undertook non-automatic (passive) monitoring of NO₂ at 16 sites during 2018; 14 within the Babergh district and 2 within the Mid Suffolk district. Table A.2 in Appendix A shows the details of the 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 and any other adjustments applied (e.g. “annualisation” and/or distance correction), are included in Appendix C. All monitoring locations are at relevant exposure.

The monitoring locations used in 2017 remained relevant and were used in 2018. No amendments to the AQMA are necessary as a result of the monitoring. One monitoring location within the Babergh district will be removed in 2019 as it is no longer necessary.

3.2 Individual Pollutants

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

3.2.1 Nitrogen Dioxide (NO₂)

Table A.3 in Appendix A compares the ratified and adjusted monitored NO₂ annual mean concentrations for the past 5 years with the air quality objective of 40µg/m³.

For diffusion tubes, the full 2018 dataset of monthly mean values is provided in Appendix B.

The annual mean has not exceeded 60µg/m³ at any monitoring location. Therefore, it is not considered likely that there will be an exceedance of the 1 hour mean Objective at any location.

Babergh and Mid Suffolk District Councils

Figure A.1 shows the annual mean NO₂ concentration over the last five years at monitoring locations that exceeded the Objective in 2018. These locations are all within the AQMA. Results at one of these locations has not varied much over the last five years. At the other two locations, there has not been much variation in the results between 2014 and 2017, but there has been a 5.4 µg/m³ and 8.2 µg/m³ reduction between 2017 and 2018. There are only two other monitoring locations that have shown exceedances of the Objective during the past five years, but they did not in 2018.

Figure A.2 shows the annual mean NO₂ concentration over the last five years at monitoring locations within the Babergh district that did not exceed the Objective in 2018. At most locations there has been a reduction in Nitrogen dioxide concentration over the past five years.

Figure A.3 shows the annual mean NO₂ concentration over the last five years at monitoring locations within the Mid Suffolk district. There has been a gradual reduction in Nitrogen dioxide concentration over the past five years at these locations.

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

Site ID	Site Name	Site Type	X OS Grid Ref	Y OS Grid Ref	Pollutants Monitored	In AQMA?	Distance to Relevant Exposure (m) ⁽¹⁾	Distance to kerb of nearest road (m) ⁽²⁾	Tube collocated with a Continuous Analyser?	Height (m)
BDC 1	9 Cross Street, Sudbury	Roadside	586848	241133	NO2	YES	0	1.74	NO	2.25
BDC 2	17 Cross Street, Sudbury	Roadside	586836	241089	NO2	YES	0	2.10	NO	2.25
BDC 3	30 Cross Street, Sudbury	Roadside	586808	241015	NO2	YES	0	1.38	NO	2.25
BDC 4	36 Cross Street, Sudbury	Roadside	586790	240944	NO2	NO	0	1.49	NO	2.30
BDC 5	58 Cross Street, Sudbury	Roadside	586798	241010	NO2	YES	0	1.93	NO	2.25
BDC 6	70 Cross Street, Sudbury	Roadside	586818	241068	NO2	YES	0	1.50	NO	2.30
BDC 7	78 Cross Street, Sudbury	Roadside	586829	241104	NO2	YES	0	1.25	NO	2.25
BDC 8	82 Cross Street, Sudbury	Roadside	586835	241123	NO2	YES	0	1.60	NO	2.20
BDC 9	87 Cross Street, Sudbury	Roadside	586842	241148	NO2	YES	0	1.09	NO	2.25

Babergh and Mid Suffolk District Councils

BDC 10	5 Ballingdon Street, Sudbury	Roadside	586721	240879	NO2	NO	0	3.60	NO	2.25
BDC 11	7 Ballingdon Street, Sudbury	Roadside	586723	240941	NO2	NO	0	2.00	NO	2.25
BDC 12	54 Church Street, Sudbury	Roadside	586930	241058	NO2	NO	0	1.70	NO	2.55
BDC 13	7 Gainsborough Street, Sudbury	Roadside	587253	241256	NO2	NO	0	2.79	NO	2.45
BDC 14	31 Friars Street, Sudbury	Roadside	587257	241110	NO2	NO	0	2.86	NO	2.25
MSDC 1	Station Road West, Stowmarket	Roadside	604972	258745	NO2	NO	0	2.24	NO	2.30
MSDC 2	Cottage Farmhouse, Stowmarket	Roadside	606049	259307	NO2	NO	4	15.7	NO	1.90

Notes:

(1) 0m if the monitoring site is at a location of exposure (e.g. installed on/adjacent to the façade of a residential property).

(2) N/A if not applicable.

Table A.3 – Annual Mean NO₂ Monitoring Results

Site ID	Site Type	Monitoring Type	Valid Data Capture for Monitoring Period (%) ⁽¹⁾	Valid Data Capture 2018 (%) ⁽²⁾	NO ₂ Annual Mean Concentration (µg/m ³) ⁽³⁾				
					2014	2015	2016	2017	2018
BDC 1	Roadside	Diffusion Tube	92	92	34.7	32.8	32.0	30.2	31.0
BDC 2	Roadside	Diffusion Tube	100	100	34.2	33.1	32.8	30.7	30.3
BDC 3	Roadside	Diffusion Tube	100	100	41.2	38.7	39.9	37.0	37.7
BDC 4	Roadside	Diffusion Tube	100	100	32.1	31.5	30.7	28.8	30.6
BDC 5	Roadside	Diffusion Tube	100	100	39.8	42.0	40.9	41.3	38.1
BDC 6	Roadside	Diffusion Tube	100	100	34.7	34.7	36.7	34.5	34.0
BDC 7	Roadside	Diffusion Tube	100	100	50.0	53.2	53.7	52.7	51.4
BDC 8	Roadside	Diffusion Tube	92	92	52.8	53.8	54.8	55.1	49.7
BDC 9	Roadside	Diffusion Tube	100	100	52.7	52.7	52.7	54.5	46.3
BDC 10	Roadside	Diffusion Tube	100	100	36.0	35.1	33.4	30.6	29.4
BDC 11	Roadside	Diffusion Tube	100	100	38.5	36.4	37.1	33.4	32.4
BDC 12	Roadside	Diffusion Tube	92	92	24.3	24.6	24.3	24.4	22.2
BDC 13	Roadside	Diffusion Tube	100	100	33.2	33.3	31.5	31.3	29.8
BDC 14	Roadside	Diffusion Tube	100	100	20.7	20.1	18.7	18.0	18.0

Babergh and Mid Suffolk District Councils

MSDC 1	Roadside	Diffusion Tube	92	92	33.6	31.3	36.1	35.8	30.8
MSDC 2	Roadside	Diffusion Tube	100	100	26.9	25.5	24.2	22.2	22.2

Diffusion tube data has been bias corrected

Annualisation has been conducted where data capture is <75%

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**.

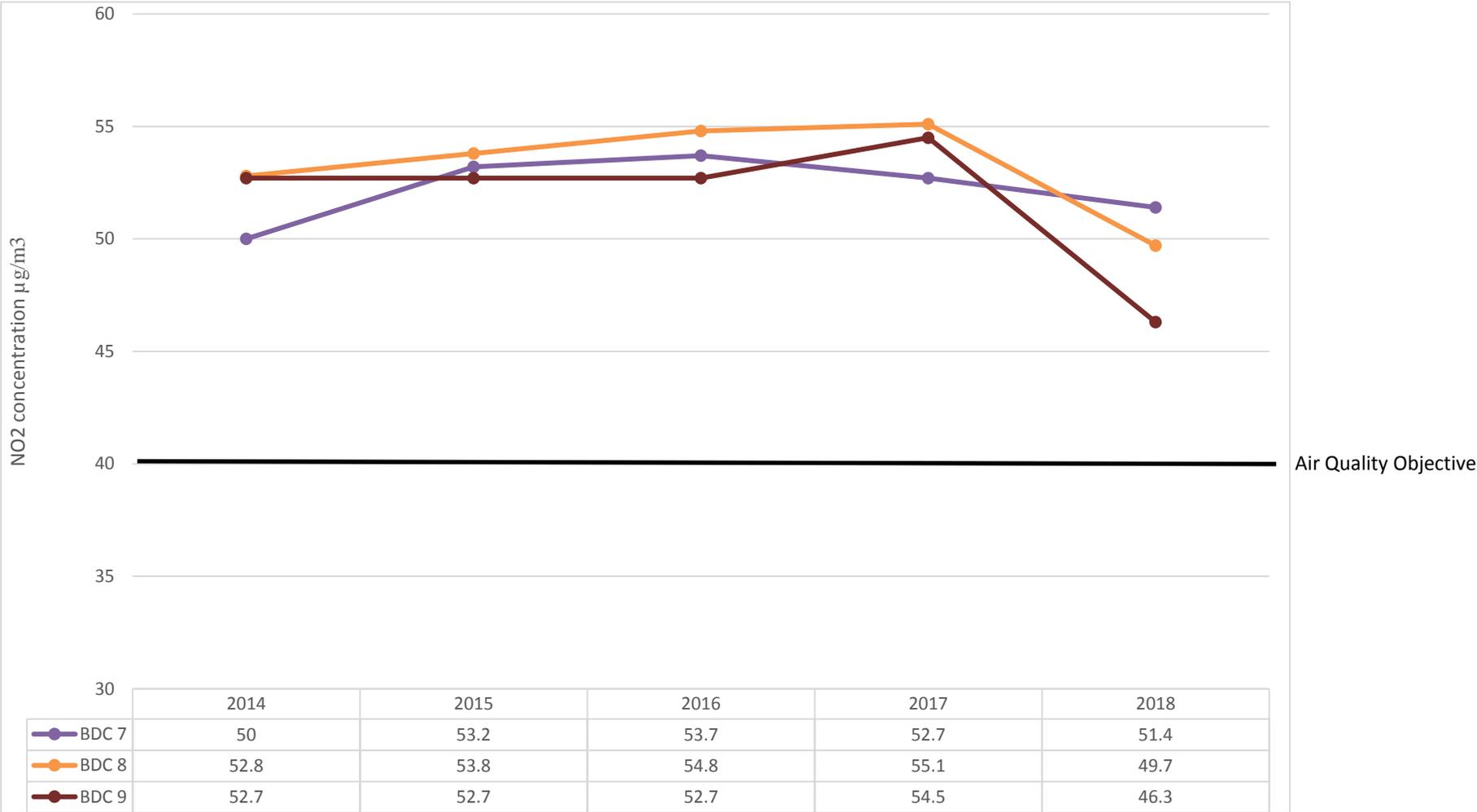
(1) Data capture for the monitoring period, in cases where monitoring was only carried out for part of the year.

(2) 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%).

(3) Means for diffusion tubes have been corrected for bias. All means have been “annualised” as per Boxes 7.9 and 7.10 in LAQM.TG16 if valid data capture for the full calendar year is less than 75%. See Appendix C for details.

Babergh and Mid Suffolk District Councils

Figure A.1 Trends in Annual Mean NO₂ Concentrations for Monitoring Locations in the Babergh district that Exceeded the Objective in 2018 (µg.m³)



Babergh and Mid Suffolk District Councils

Figure A.2 - Trends in Annual Mean NO₂ Concentrations for Monitoring Locations in the Babergh district that did not Exceed the Objective in 2018 (µg.m³)

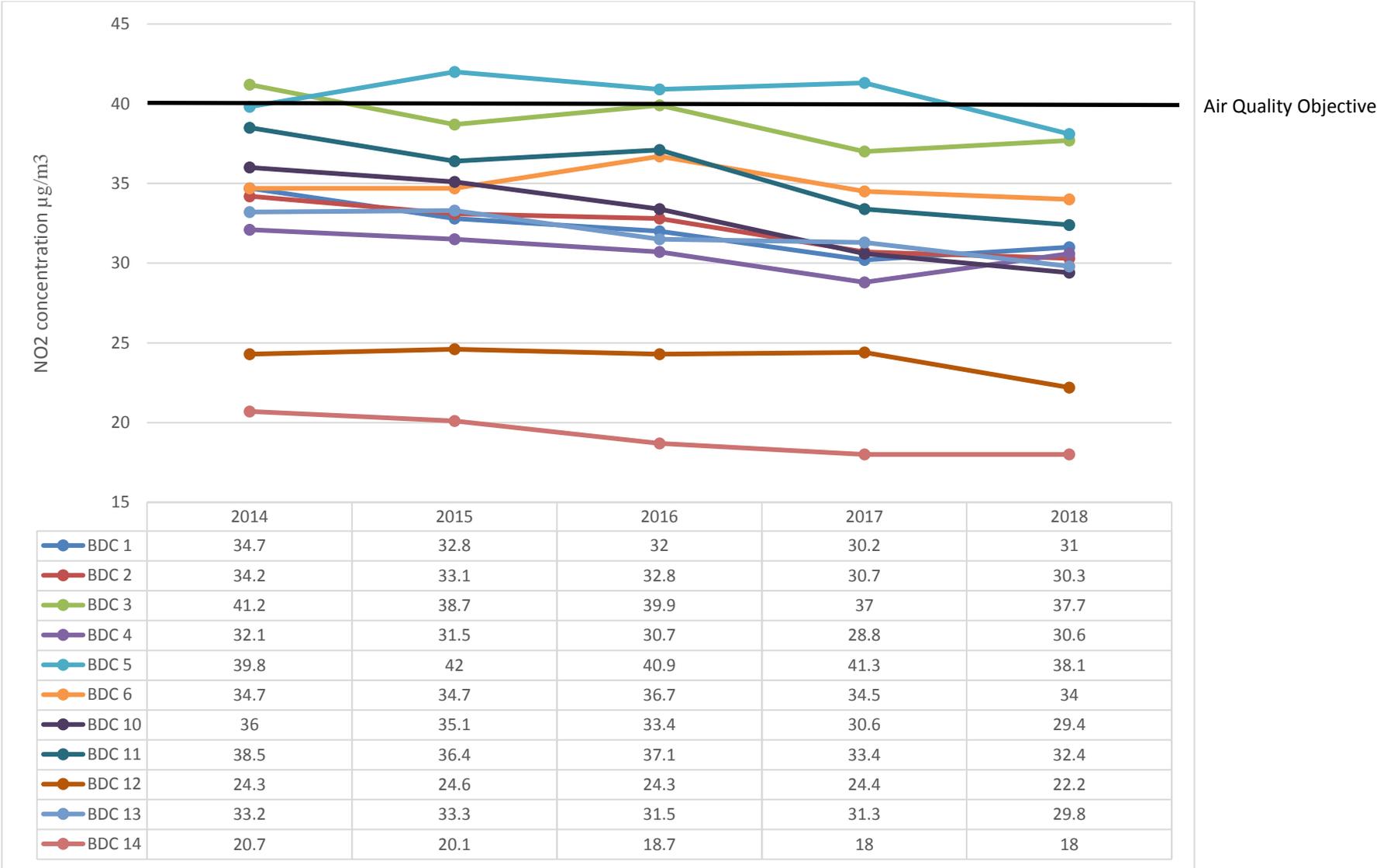


Figure A.3 - Trends in Annual Mean NO₂ Concentrations for Monitoring Locations in the Mid Suffolk district (µg.m³)

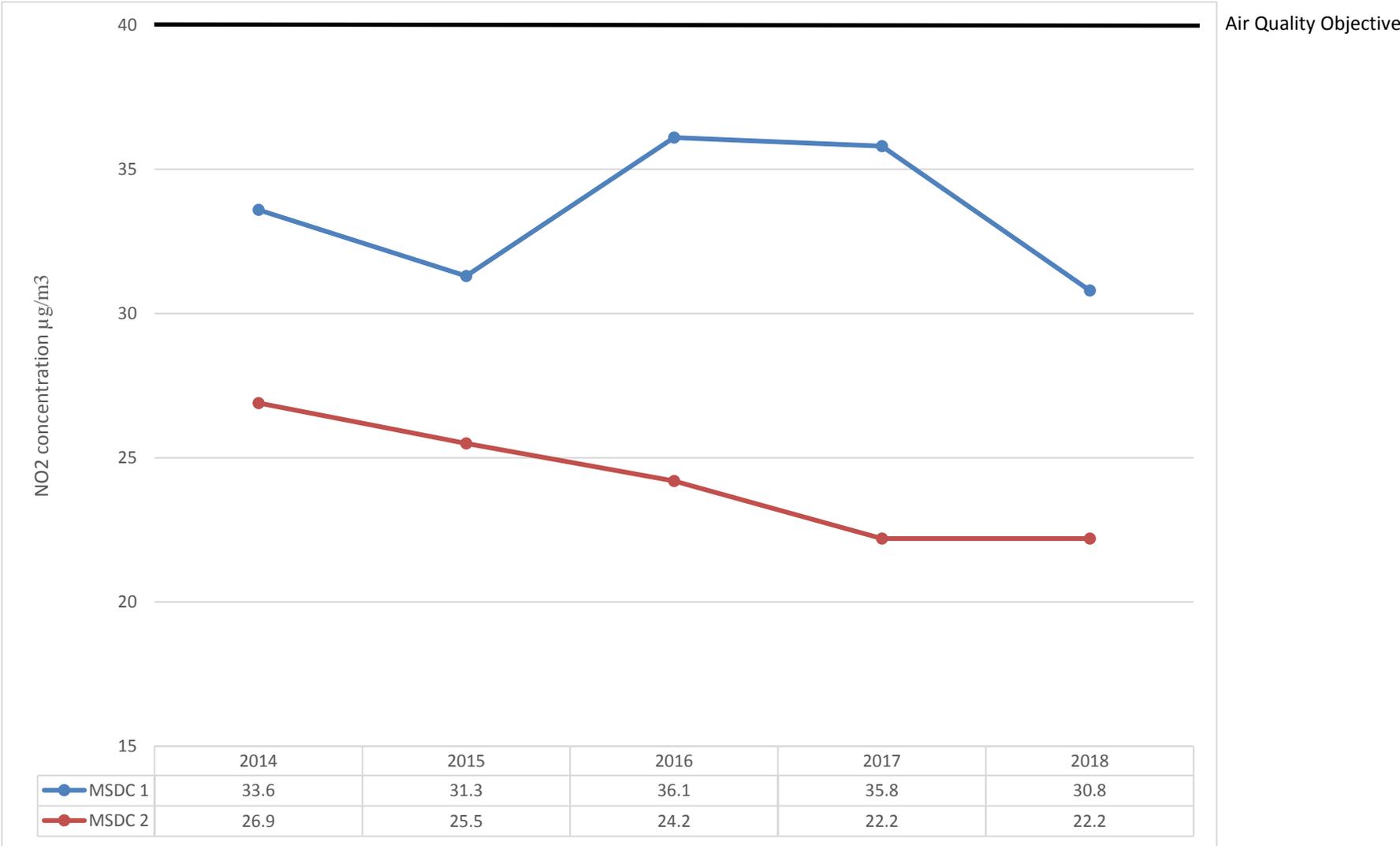


Table A.4 – 1-Hour Mean NO₂ Monitoring Results

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

Table A.5 – Annual Mean PM₁₀ Monitoring Results

Babergh and Mid Suffolk District Councils do not undertake any PM10 monitoring.

Table A.6 – 24-Hour Mean PM₁₀ Monitoring Results

Babergh and Mid Suffolk District Councils do not undertake any PM10 monitoring.

Table A.7 – PM_{2.5} Monitoring Results

Babergh and Mid Suffolk District Councils do not undertake any PM2.5 monitoring.

Table A.8 – SO₂ Monitoring Results

Babergh and Mid Suffolk District Councils do not undertake any SO2 monitoring.

Appendix B: Full Monthly Diffusion Tube Results for 2018

Table B.1 – NO₂ Monthly Diffusion Tube Results - 2018

Site ID	NO ₂ Mean Concentrations (µg/m ³)												Annual Mean		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Raw Data	Bias Adjusted (0.76) and Annualised ⁽¹⁾	Distance Corrected to Nearest Exposure ⁽²⁾
BDC 1a	46.9	41.8	54.1	43.7	36.6	35.1	38.5		36.6	44.6	54.6	37.4	42.7		
BDC 1b	41.2	39.9	47.7	41.0	35.6	34.4	33.8		33.1	38.4	46.3	35.9	38.8		
BDC 1 mean	44.1	40.9	50.9	42.4	36.1	34.8	36.2		34.9	41.5	45.5	36.7	40.8	30.99	
BDC 2a	36.0	48.1	48.9	46.2	44.7	38.8	43.9	30.9	35.3	43.7	49.0	37.2	41.9		
BDC 2b	35.4	45.4	36.1	38.2	44.4	37.7	41.6	29.8	32.2	36.0	46.5	31.9	37.9		
BDC 2 mean	35.7	46.8	42.5	42.2	44.6	38.3	42.8	30.4	33.8	39.9	47.8	34.6	39.9	30.33	
BDC 3a	55.1	49.2	61.8	52	56.1	49.6	49.0	34.4	45.8	53.8	61.2	46.4	51.2		
BDC 3b	54.4	47.8	56.0	51.9	47.2	45.5	8.6	33.9	43.4	50.2	54.5	41.0	47.9		
BDC 3 mean	54.8	48.5	58.9	52.0	51.7	47.6	48.8	34.2	44.6	52.0	57.9	43.7	49.5	37.65	
BDC 4a	41.2	43.7	48.3	41.5	37.4	33.4	46.5	37.7	37.0	41.4	49.2	36.9	41.2		
BDC 4b	40.4	42.1	46.0	39.4	37.1	30.7	44.9	36.2	35.0	38.3	47.3	34.7	39.3		
BDC 4 mean	40.8	42.9	47.2	40.5	37.2	32.1	45.7	37.0	36.0	39.9	48.3	35.8	40.3	30.60	
BDC 5a	52.6	50.3	60.6	51.5	59.8	47.9	51.8	37.2	53.8	56.5	48.7	48.3	51.6		

Babergh and Mid Suffolk District Councils

BDC 5b	52.0	49.1	59.4	51.0	56.0	47.9	45.5	36.7	44.5	53.2	44.0	45.7	48.8		
BDC 5 mean	52.3	49.7	60.0	51.3	57.9	47.9	48.7	37.0	49.2	54.9	46.4	47.0	50.2	38.13	
BDC 6a	44.8	40.7	54.3	41.1	59.2	42.2	49.5	37.3	43.0	49.8	43.3	43.0	45.7		
BDC 6b	43.7	39.9	53.1	40.9	54.5	41.7	46.2	36.3	39.0	45.8	41.1	40.2	43.8		
BDC 6 mean	44.3	40.2	53.7	41.0	56.9	42.0	47.9	36.8	41.0	49.3	42.2	41.6	44.7	33.99	
BDC 7a	81.4	62.7	57.9	68.6	81.6	65.8	70.1	57.6	75.3	93.7	53.0	66.3	72.8		
BDC 7b	70.7	59.9	54.4	65.8	74.4	61.3	57.7	46.5	64.9	73.0	57.8	62.5	62.4		
BDC 7 mean	76.1	61.3	71.2	67.2	78.0	53.6	63.9	52.1	70.1	83.4	60.4	64.4	67.6	51.39	
BDC 8a		66.2	81.2	62.5	77.7	60.7	70.7	55.8	77.7	74.8	62.6	66.4	68.8		
BDC 8b		64.0	72.3	61.8	61.98	51.9	61.8	52.6	63.9	68.9	61.7	62.4	62.1		
BDC 8 mean		65.1	76.8	62.2	69.8	56.3	66.3	54.2	70.8	71.9	62.2	64.4	65.4	49.73	
BDC 9a	68.9	59.5	71.2	61.3	65.5	54.1	61.5	52.1	71.6	67.6	60.8	63.5	63.1		
BDC 9b	66.8	52.3	70.2	59.0	64.7	45.7	59.0	47.8	68.8	60.5	60.2	49.7	58.7		
BDC 9 mean	67.9	55.9	70.7	60.2	65.1	49.9	60.3	50.0	70.2	64.1	60.5	56.6	60.9	46.30	
BDC 10	50.7	35.3	43.5	43.1	30.3	29.7	40.5	36.0	33.1	34.0	44.4	43.3	38.7	29.40	
BDC 11	46.4	42.2	54.8	46.2	38.0	32.8	46.5	40.6	41.2	40.3	47.3	35.4	42.6	32.40	
BDC 12	31.5	29.8	26.6		25.0	21.2	28.9	35.3	31.4	30.4	26.1	34.6	29.2	22.20	
BDC 13	47.8	40.1	43.6	42.9	31.7	28.3	37.6	35.4	38.0	37.2	44.9	43.4	39.2	29.80	
BDC 14	23.6	17.5	29.0	27.1	20.4	18.5	21.9	22.4	20.0	26.6	29.9	27.7	23.7	18.00	
MSDC 1a	40.8	42.6	56.7		43.1	34.9	41.2	39.4	43.2	49.3	31.3	41.0	42.1		
MSDC 1b	39.7	38.7	45.9		40.9	62.2	40.8	38.4	41.8	42.4	27.3	38.4	38.8		
MSDC 1 mean	40.3	40.7	51.3		42.0	33.6	41.0	38.9	42.5	45.9	29.3	39.7	40.5	30.75	
MSDC 2	26.6	36.7	31.9	28.5	40.1	29.0	32.3	21.2	18.9	23.6	34.0	27.3	29.2	22.17	21.1

- National bias adjustment factor used
- Annualisation has been conducted where data capture is <75%
- Where applicable, data has been distance corrected for relevant exposure

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**.

(1) See Appendix C for details on bias adjustment and annualisation.

(2) Distance corrected to nearest relevant public exposure.

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

Supporting Technical Information

No significant changes to relevant sources have occurred during 2018 in either district.

This has not resulted in any change in monitoring or consideration of an AQMA.

Diffusion Tube Bias Adjustment Factors

As there are no collocated studies, the national bias adjustment factors have been used. Diffusion tubes are supplied and analysed by Socotec Didcot. The preparation method is 50% TEA in acetone. The bias adjustment factor used for 2018 is 0.76 from spreadsheet version number 3/19. The bias adjustment factors that have been used for previous years are 2014: - 0.81 from spreadsheet version number 03/15, 2015 – 0.79 from spreadsheet version number 6/16, 2016 – 0.78 from spreadsheet version number 6/17, and 2017 – 0.77 from spreadsheet version number 3/18.

Short-term to Long-term Data Adjustment

Data was collected from all monitoring locations for at least eleven months. Therefore, no short-term to long-term data adjustment is necessary.

Distance correction to Relevant Receptors

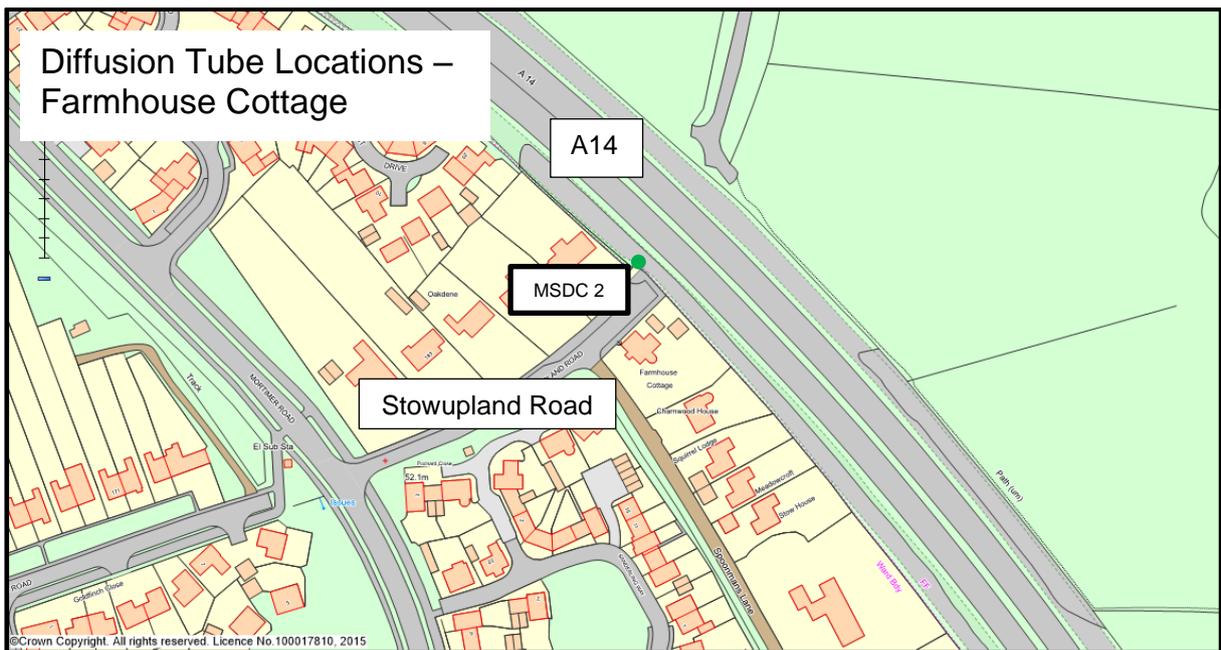
All but one of the diffusion tubes are located at monitoring sites that are representative of public exposure. Therefore, distance correction was only undertaken for one site, MSDC 2.

QA/QC of Diffusion Tube Monitoring

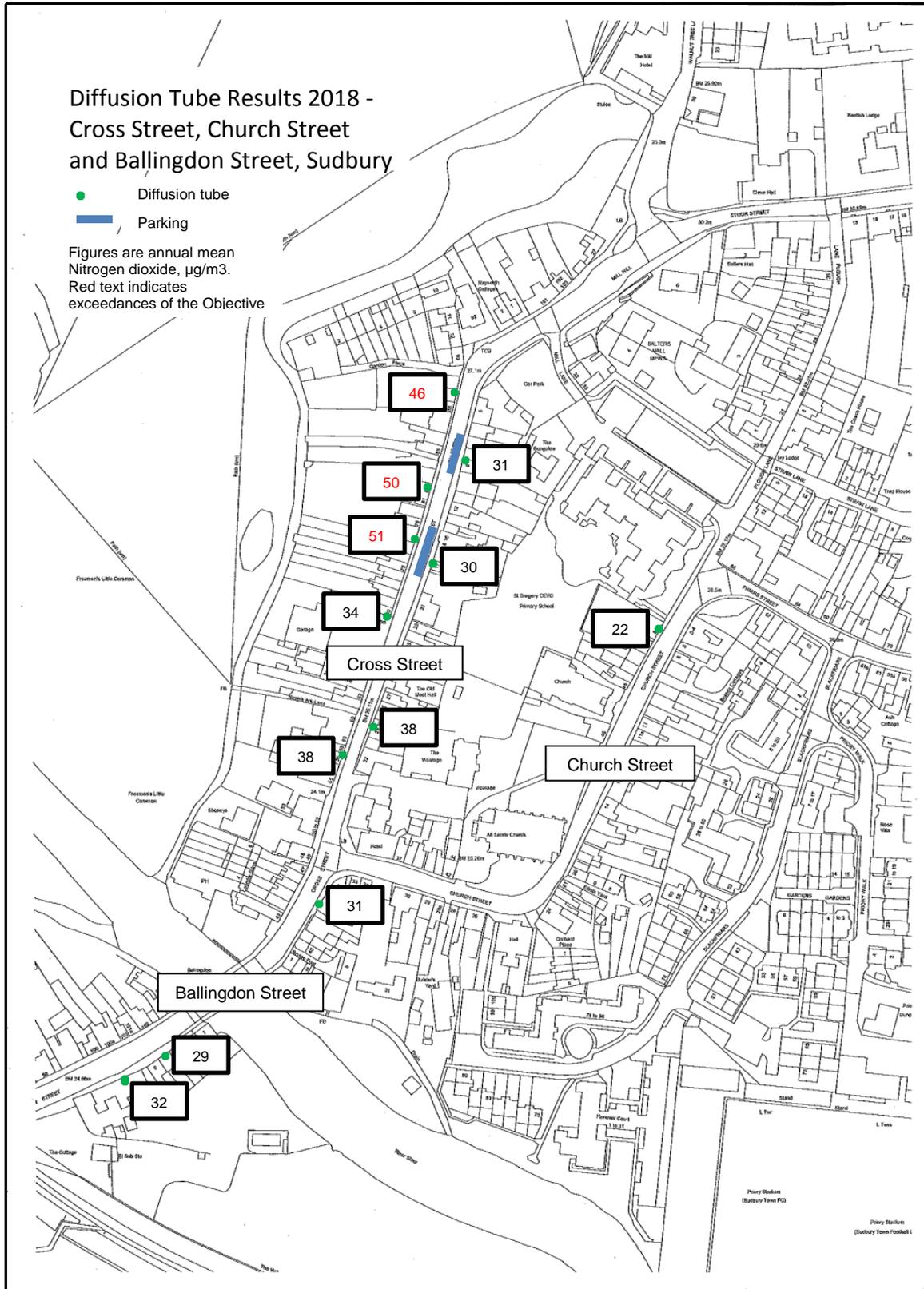
The analysis of diffusion tube samples to determine the amount of Nitrogen dioxide present on the tube is within the scope of Socotec's UKAS schedule. The samples are analysed in accordance with Socotec's standard operating procedure, which meets the guidelines set out in DEFRA's 'Diffusion Tubes for Ambient NO₂ Monitoring: Practical Guidance'. In the AIR-PT inter-comparison scheme for comparing spiked Nitrogen dioxide diffusion tubes, Socotec is ranked as a 'satisfactory' laboratory. With regard to precision results, Socotec, 50% TEA in acetone obtained 21 good results and no poor results in 2018.



Within the Mid Suffolk district



Appendix E: Map of Annual Results from Monitoring Locations and Position of Parking Bays on Cross Street, Sudbury



Appendix F: Summary of Air Quality Objectives in England

Air Quality Objectives in England

Pollutant	Air Quality Objective ⁶	
	Concentration	Measured as
Nitrogen Dioxide (NO ₂)	200 µg/m ³ not to be exceeded more than 18 times a year	1-hour mean
	40 µg/m ³	Annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ , not to be exceeded more than 35 times a year	24-hour mean
	40 µg/m ³	Annual mean
Sulphur Dioxide (SO ₂)	350 µg/m ³ , not to be exceeded more than 24 times a year	1-hour mean
	125 µg/m ³ , not to be exceeded more than 3 times a year	24-hour mean
	266 µg/m ³ , not to be exceeded more than 35 times a year	15-minute mean

⁶ The units are in microgrammes of pollutant per cubic metre of air (µg/m³).

Appendix G: Babergh District Council Air Quality Management Order 2008 for Cross Street, Sudbury

BABERGH DISTRICT COUNCIL
AIR QUALITY MANAGEMENT ORDER 2008



Babergh District Council ("the Council") of Corks Lane, Hadleigh, Ipswich, Suffolk IP7 6SJ, has made the following Order, in exercise of its powers under Section 83 of the Environment Act 1995:

1. This Order may be cited as the "Babergh District Council Air Quality Management Order 2008". It will come into operation on 21 November 2008.
2. The Council declares that it has designated an area situated on either side of a section of Cross Street, Sudbury, Suffolk, as an Air Quality Management Area ("the Designated Area"). The Designated Area comprises the land hatched red on the attached map, which is indexed in Schedule 1. The Order and map have been prepared and sealed with the Common Seal of the Council and deposited at the offices of the Council at Corks Lane, Hadleigh, Ipswich, Suffolk IP7 6SJ. An explanatory note is included in Schedule 2.
3. The Order may be varied or revoked by a subsequent Order.
4. The Council may revise the Designated Area from time to time.

Schedule 1 – Designated Area

Air Quality Management Area: Map reference No. AQMA1/08

Schedule 2 – Explanatory Note

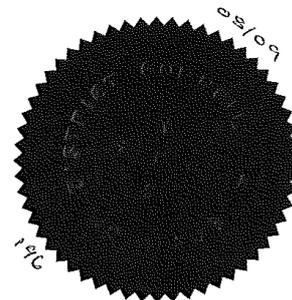
The Air Quality Management Order 2008 designates an area situated on either side of a section of Cross Street, Sudbury, Suffolk, shown hatched red on Map reference No. AQMA1/08, as an Air Quality Management Area. This is an area in which the Government's annual mean air quality objective for nitrogen dioxide is unlikely to be achieved. The area will be subject to an Action Plan in order to pursue the achievement of the annual mean objective for nitrogen dioxide in the Designated Area.

Dated 20 November 2008

THE COMMON SEAL OF BABERGH
DISTRICT COUNCIL was hereunto
affixed in the presence of:

Solicitor to the Council

.....





Air Quality Management Order 2008, Schedule 1		
Air Quality Management Area: Map reference No. AQMA1/08		
 <p>BABERGH DISTRICT COUNCIL Corks Lane, Hadleigh, Ipswich, IP7 6SJ Telephone : 01473 822801 minicom : 01473 825878 www.babergh.gov.uk</p>		SCALE 1:1250
	<p><small>This map is based on Ordnance Survey mapping with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office (c) Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Babergh District Council Licence number : 100023274 2006</small></p>	

Date Printed : 06/11/2008

Glossary of Terms

Abbreviation	Description
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	Air quality Annual Status Report
Defra	Department for Environment, Food and Rural Affairs
EV	Electric Vehicle
LAQM	Local Air Quality Management
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